

Leeds City Region Housing Affordability and Need Study

Technical Report 1: Housing Market Baseline



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All errors and omissions of course remain entirely the responsibility of the authors.

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Executive Summary

Introduction

1. West Yorkshire Combined Authority (WYCA) commissioned the Centre for Regional Economic and Social Research (CRESR) at Sheffield Hallam University, together with North Housing Consulting, in January 2020 to undertake the *Leeds City Region Housing Affordability and Need Study*
2. The project's overarching aim is to provide an in-depth understanding on a range of issues related to housing affordability and need within the Leeds City Region (LCR). The project is intended to contribute to the strategic development of the LCR Connectivity Strategy; to shape future housing and infrastructure priorities in the city region, and to form a part of a refreshed city regional evidence base to support economic and transport policy.
3. The analysis undertaken within the report predates the emergence of the Covid-19 (Coronavirus) pandemic and associated public health emergency within the UK. It can be considered as an up-to-date strategic assessment of the housing market up to this critical time.
4. Some fundamental principles relating to the housing market guide this study. These include: the heterogeneity of housing, the housing market, and demand groups; the existence of multiple overlapping housing markets and submarkets; and that housing need and demand operate differently.
5. Specifically, because groups have different constraints in the housing market, housing affordability must be understood in the context of the different costs that households face, for example, transport or childcare. Some of these are essential and cannot be easily traded off against housing costs.
6. Housing and place lie at the centre of a 'doughnut model' of related policy domains, each of which interacts to have an effect on housing affordability – these include transport, the labour market, and the wider city-regional economy.

Context

7. The specific spatial structure of the Leeds City Region provides important context for understanding the spatial development of the area's economies and housing markets, and for framing discussion about policy. LCR has polycentric characteristics, with overlapping influences of several important settlements each with distinctive economies and labour markets.
8. There has been a distinctive pattern to the historic development of the city region since the Industrial Revolution and throughout the 20th Century, which shapes the way we see it now. There was a sequence to the successive phases of economic growth and

contraction, first in the west of the city region (Bradford, Calderdale and Kirklees, associated with textiles), then later in the growth and contraction of the coal mining industry in the eastern flank (Barnsley, Wakefield, Selby).

9. Leeds has always played an important role in supporting these phases of regional economic development, but in recent decades has strengthened its role and influence as a result of growth in sectors like financial services, and investment in infrastructure and city centre regeneration. The North Yorkshire economies of Craven, Harrogate and York have distinctive historic strengths, but also complement the predominant role of Leeds and reinforce the economic and housing market significance of the north of the city region generally.
10. Together, these historic developments give rise to four spatial economies, each with distinctive characteristics and inter-relationships with each other.
11. Leeds City Region has suffered from a relatively low level of policy attention from central government over the long term. This is because (a) the sequence of economic change outlined above moderated any sense of crisis at any one time, even though the impacts of change on specific places within the city region was profound; (b) local government reorganisation gave rise to ‘overbounded’ settlements, where suburban affluence offset core deprivation thus providing an averaging effect on key measure of socioeconomic conditions; (c) there has not been history of precipitous depopulation of the urban core; and (d) polycentricity has made it difficult to develop a cohesive narrative for intervention across the city region. On each of these factors LCR stands by way of contrast to many other UK city regions.

Households and housing

Household growth

12. In the 12 years the number of households in Leeds City Region increased by around 101,000, an increase of 8.4%. Within the city region, West Yorkshire grew at a slower rate of 7.5%, suggesting ongoing processes of decentralisation. Growth has been strongest in Selby and Barnsley.
13. The number of households in the city region is projected to continue to grow, albeit at a slightly slower rate.
14. The composition of households has been changing. There has been an increase in the growth of households with one dependent child, but a decline in households with more than one child. The biggest increase (20.2%) is in single person male households.
15. There is a geography to household change. Harrogate and Craven in particular will see further widening of the gap in growth rates between households with children and those without. This is consistent with high levels of housing unaffordability in those areas. Selby, Wakefield and York are expected to continue to see slight increases in family-forming households.

Tenure change

16. Household tenure varies quite significantly across the city region. Owner-occupation is highest in Selby and Craven; whilst around 40% of households in Leeds rent their home. The Private Rented Sector has grown significantly in recent years and now houses over one-fifth of households in Bradford, Harrogate and Leeds.
17. As well as growing, the Private Rented Sector has continued to diversify, with new products like Built to Rent, growing sectors like Purpose Built Student Accommodation,

and conversion of non-residential property under permitted development rights all contributing to this.

New housing supply

18. The rate of new housing supply has now exceeded pre-crash levels, with over 12,000 net housing additions in 2018/19. The recovery in new housing supply has been strongest in Harrogate, Selby, York and Wakefield – the north and eastern flanks of the city region.
19. Sources of new housing supply vary. Changes of use and permitted development have been particularly significant in Bradford, Calderdale and York. In contrast, new-build housing has been almost entirely responsible for new supply in Barnsley, Selby and Wakefield.
20. These recent trends in new housing supply constitute a distinctive era in the spatial development of the city region – with relaxation of planning policy and an infrastructure-led approach having particular impacts in the eastern flank.

Incomes and affordability

21. Leeds City Region has a particularly pronounced geography of household income, with the ‘golden triangle’ (Harrogate, York and Leeds) home to the highest incomes. It lies at the heart of a regional wage economy which is strongly tilted to the north and east of the city region. As well as enjoying good access to Leeds, these areas also have strong local economies in their own right.
22. Over the past 12 years wages have fallen in real terms in much of the city region. Indeed, the only district to record real terms wage growth was Harrogate.
23. District averages mask important variation, however. There is a strong neighbourhood dimension to housing affordability, as well as a strong relationship between concentrations of private rented sector housing and low income groups facing acute housing affordability problems.

Employment, population and spatial structure

24. There are important path dependencies to the direction of spatial development in the city region, which reflect the distinctive eras of economic and housing developments outlined in sections 3 and 4. Whilst the economy and labour market have evolved, the structure of the city region’s residential footprint has been more fixed. Planning policy has tended to consider housing and jobs independently, with a philosophical commitment to separation of land uses.
25. The decades since the 1990s have seen a bifurcation of the city region’s labour market. The overall position of the principle central business district (Leeds) has weakened as jobs – particularly lower-wage jobs – have relocated to peripheral estates, whilst there has been an increased cultural appetite for out-of-town retailing and services.
26. The changes have paralleled processes of the spatial sorting of population. The location of jobs in higher socioeconomic classes (generally, north-east facing) differs greatly from those in lower socioeconomic classes (south-west facing).
27. There are very large gaps in employment density across the city region. As well as Leeds and York, Craven and Harrogate have high jobs density which means they function as labour market magnets in their own right. These gaps yield large differences in job availability: despite having similar populations, York has over 25,000 more jobs than Calderdale, for example.

28. Population growth has occurred in a number of different ways. Natural population change (births, deaths) and international in-migration are important in replacing population in Bradford and Leeds, whilst internal (UK) migration is more important in Craven, Harrogate and York.
29. Central areas have seen high levels of population growth arising from ongoing urban renaissance but also intensification in the way that the private rented housing stock is used. At the same time, there has been significant population growth as a result of migration to areas of new housing, including in Wakefield, Selby and York. Net population flows from Leeds to Wakefield are now around six times higher than they were in 2013, for instance. Despite distance, Kirklees now exports a similar population to Selby as does neighbouring Leeds and York
30. On the whole, however, population change is strongly associated with social deprivation, with growth disproportionately occurring in more deprived neighbourhoods.

Future trends

31. The extent to which the trends and dynamics of the period since the global financial crisis will continue is open to question. Even before Covid-19 there were questions about the ongoing sustainability of the growth of private renting, for example – especially as a result of an uncertain EU exit agreement.
32. There are long term shifts in the economic geography of the city region, which have been nearly a century in the making. The last 70 years have witnessed a relentless process of decentralisation and suburbanisation – both of population *and* jobs – initially encouraged through public sector intervention but more recently as a result of private sector investment.
33. As well as the broad shift of the city region's tectonic plates over the long term, important and rapid changes appear to be occurring within local authority areas, particularly as these tend to be 'over bounded' and therefore contain a wide diversity of social, economic and housing market circumstances within them.
34. Intense processes of spatial sorting through these long *and* short term processes have resulted in widening inequalities. To a great extent these explain the emergence of housing affordability issues throughout a city region which is not characterised by very high housing costs – in other words, income and cost of living (including transport costs) contribute to housing unaffordability.
35. Transport infrastructure has played a key role in shaping outcomes. It will continue to do so, although the specific outcomes will depend on the nature and location of new developments and investments in transport, as well as strategic decisions about the location of housing and – especially – employment land.
36. Selective migration – i.e. the ability of certain sections of the population to move – will also fundamentally shift the age profile of the city region in the future. Partly as a result of affordability problems, the north of the city region will have a disproportionately older population – the ratio of retirees in the north to young people will increase to 1.5 by 2034. The proportion of young people will also fall in the west of the city region, whilst in Leeds and the east (Selby, Wakefield) key family-forming age groups (20-34) will increase.
37. Emergent policy issues will likely include: the need to shift to a higher productivity economy to support a growing number of older people with fewer workers; the carbon implications of the city region's long-run spatial decentralisation; housing adaptations

in the light of an ageing population and the need for carbon reduction; and challenges to social cohesion and inclusion that the Covid-19 pandemic will present.

Introduction and Context

About this report

- 1.1 West Yorkshire Combined Authority (WYCA) commissioned the Centre for Regional Economic and Social Research (CRESR) at Sheffield Hallam University, together with North Housing Consulting, in January 2020 to undertake the *Leeds City Region Housing Affordability and Need Study*.
- 1.2 The project's overarching aim is to provide an in-depth understanding on a range of issues related to housing affordability and need within the Leeds City Region (LCR). The project is intended to contribute to the strategic development of the LCR Connectivity Strategy; to shape future housing and infrastructure priorities in the city region, and to form a part of a refreshed city regional evidence base to support economic and transport policy.
- 1.3 As such this is a study which transcends many policy areas. Within this report, the housing market is considered to lie at the intersection of economic, spatial and infrastructure policy. The housing market is also a key motor of economic growth as well as possessing the potential to either worsen or promote key socioeconomic outcomes (such as inequalities in access to opportunities), inclusive growth and environmental sustainability.

The impact of Covid-19

- 1.4 The analysis undertaken within the report predates the emergence of the Covid-19 (Coronavirus) pandemic and associated public health emergency within the UK. It can be considered as an up-to-date strategic assessment of the housing market up to this critical time. However, trajectories and trends that are apparent within the data cannot be considered a reliable guide to the future. It is impossible, at the time of writing, to assess the likely impacts of Covid-19 on key markets and conditions, especially within the LCR economy, and demand for market and public goods such as housing and transport may alter markedly over the short- to medium-term. Longer-term impacts will persist for decades at a minimum.
- 1.5 In response to the uncertain economic and public policy landscape as a result of Covid-19 and following consultation with WYCA, we have organised the findings of this project into four key outputs:
 1. A baseline of housing market and related conditions across the city region, including assessment of past trends (**this report, Technical Report 1**).
 2. An affordability model which provides a detailed examination of the capacity of different household groups to afford housing within the ownership and rental tenures within different localities (**Technical Report 2: Affordability**).

3. A discussion of key policy challenges arising from the baseline and affordability model overlain with our understanding of key economic, spatial, transport and housing strategies within the city region (**Discussion Paper**).
4. In autumn 2020, once the likely medium- to long-term economic and policy impacts of Covid-19 are slightly clearer, a discussion of key policy implications and recommendations set within the landscape of post-Covid recovery (**Policy Paper**).

Framework for analysis

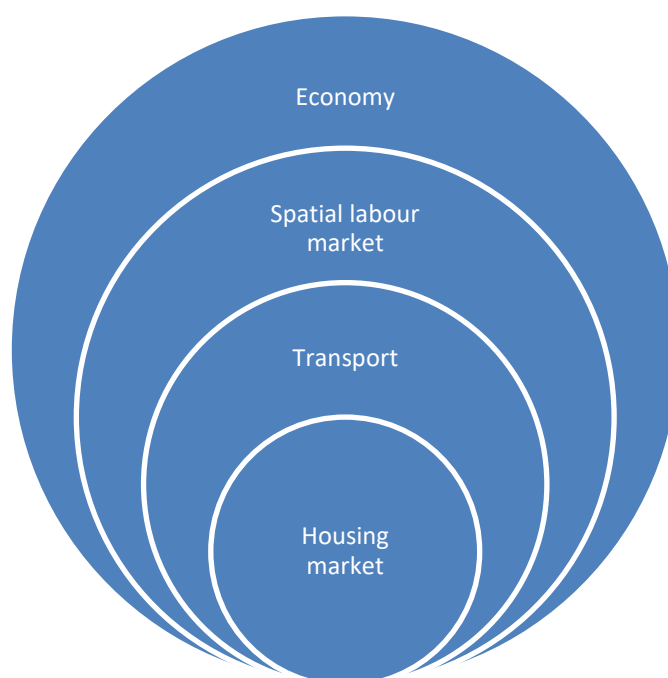
1.6 We start with some fundamental principles relating to the housing market:

- **The market is heterogeneous** – in other words, it comprises distinctive yet overlapping segments. There is a high degree of product differentiation within the market. Not all supply within the market is capable of meeting needs, irrespective of the price.
- **Demand varies** according to the socio-economic, demographic, and geographic characteristics of households.
- **Housing is a complex commodity**. Those who ‘consume’ housing are in effect consuming a varying blend of three attributes: the physical dwelling, its status (or otherwise) as a fungible asset, and what it *affords* the consumer (e.g. in terms of access to services, jobs, or neighbourhoods of a particular character).
- **Demand and need are not the same thing**. Demand is the total quantity of housing at a given quality level which will transact at a given price. Need, on the other hand, refers specifically to adequate housing (and appropriate access to services and social goods which housing affords) that cannot be sourced within the market, be that as a result of supply shortage, affordability problems, inability to access the market or other reasons.
- **The market is comprised of a number of submarkets**, which may overlap. Submarkets exist where different types of housing (the combination of the attributes above) are substitutable to some extent for one another and, as a consequence, have an influence on each other’s price formation. For example, properties as different as penthouse apartments, period properties, and large new-build suburban homes may, to some extent, be part of the same submarket if they are considered as viable prospects by similar demand groups (e.g. affluent workers in this case).
- **The geography of submarkets is therefore complex and multi-scalar**. Some submarkets – for example, for so-called ‘executive housing’ – might operate across the city region or beyond, constrained only by transport and amenity tradeoffs that households are willing to countenance. Other submarkets – e.g. those for student housing – may be much more geographically specific, and likely to operate in a more defined spatial area.
- **Groups operate with different constraints**. Whatever the group, the housing market that they operate within is constrained by the intersection of: price, resources, and the requirement to access particular facilities or amenities. Affordability is, therefore, a product not only of housing costs but of other essential costs (especially transport), and must be understood with reference to income.
- **Need mostly arises, and should be met, locally**. Whilst many submarkets operate over wide geographies where market actors can choose to trade accessibility off against other attributes, many housing needs are particular to the places in which they arise. Households may only have limited ability to move long distances to meet their housing needs, owing to factors like caring responsibilities,

schooling, and the importance of local social networks and communities of interest. Enhancing population mobility should not be the sole solution to affordability problems.

- **The market exists within a wider ‘housing system’.** Whilst sometimes referred to as ‘non-market’ housing, social housing and affordable housing nevertheless do have a relationship to the wider housing market and can be seen as part of it, albeit with special conditions to entry.

1.7 For the purposes of our analysis we see housing and place at the centre of a ‘doughnut’ model of related policy domains, each with its own distinctive geography within and across the city region.



1.8 For the majority of (but not all) households in the city region, the relationship between where they live and where the members of household do (or might be able to) work is critical.

1.9 The labour market, like the housing market, is inherently spatial. Employers must locate in areas that provide an optimum blend of access to resources, markets and labour. For different sectors, this optimum blend differs markedly. Like housing, the release of land for employment is regulated through the planning system, and there is a complex and dynamic interplay between the two. To some extent, this is also moderated by the availability or otherwise of transport infrastructure, although this of differential importance to different sectors within the economy.

1.10 Employment, of course, occupies a critical (and majority) role within the overall economy of the city region and its productivity. But the city region’s economy and its labour market are not the same thing. The housing market itself exerts an influence on the economy; wealth can be built up in housing and land, for example, and this may be productively utilised (or not) within the city regional economy (or indeed, it may leak out of the city region – for example, institutional ownership of built-to-rent apartments could generate returns for international investors or sovereign wealth funds. As a rule, housing markets tend to generate and capture returns relatively locally, but the

increasing involvement of institutional finance and instruments such as Real Estate Investment Trusts (REITs) means that the economic leakage of city regional housing markets increases. There is a mature literature on the financialisation of housing,¹ showing how the commoditisation of residential property increases its exposure to broader financial trade-winds and increases its distance from the economic fundamentals of households, land, bricks and mortar.

Structure of this report

1.11 This report is structured as follows:

- Chapter 2 presents a discussion of the historical context for the urban development of the Leeds City Region. This establishes a broad analysis of successive eras of economic development and associated housing market change.
- Chapter 3 presents a baseline assessment of recent trends within households and the housing stock.
- Chapter 4 extends this analysis by considering income, affordability, and economic and labour market change.
- Finally, Chapter 5 offers a discussion which attempts to distil key points and chart out some possible future trends.

1.12 This baseline and the associated Affordability model (which is fully discussed in Technical Report 2) provide the basic material for a separate discussion paper which examines the potential impacts of housing market change, connectivity and transport investments on a typology of different neighbourhoods.

¹ See, for example, Aalbers, M. (2016) *The financialization of housing: A political economy approach*. London: Routledge.

Context and the historical development of the city region

Summary of key points

- The specific spatial structure of the Leeds City Region provides important context for understanding the spatial development of the area's economies and housing markets, and for framing discussion about policy. **LCR has polycentric characteristics**, with overlapping influences of several important settlements each with distinctive economies and labour markets.
- **There has been a distinctive pattern to the historic development of the city region since the Industrial Revolution and throughout the 20th Century**, which shapes the way we see it now. There was a sequence to the successive phases of economic growth and contraction, first in the west of the city region (Bradford, Calderdale and Kirklees, associated with textiles), then later in the growth and contraction of the coal mining industry in the eastern flank (Barnsley, Wakefield, Selby).
- Leeds has always played an important role in supporting these phases of regional economic development, but in recent decades has strengthened its role and influence as a result of growth in sectors like financial services, and investment in infrastructure and city centre regeneration. **The North Yorkshire economies of Craven, Harrogate and York have distinctive historic strengths, but also complement the predominant role of Leeds** and reinforce the economic and housing market significance of the north of the city region generally.
- Together, these historic developments give rise to **four spatial economies**, each with distinctive characteristics and inter-relationships with each other.
- Leeds City Region has suffered from a relatively **low level of policy attention from central government over the long term**. This is because (a) the sequence of economic change outlined above moderated any sense of crisis at any one time, even though the impacts of change on specific places within the city region was profound; (b) local government reorganisation gave rise to 'overbounded' settlements, where suburban affluence offset core deprivation thus providing an averaging effect on key measure of socioeconomic conditions; (c) there has not been history of precipitous depopulation of the urban core; and (d) polycentricity has made it difficult to develop a cohesive narrative for intervention across the city region. On each of these factors LCR stands by way of contrast to many other UK city regions.

Introduction

- 2.1 The Leeds City Region (LCR) is one of the three largest residential and economic agglomerations in England outside of London, which include Greater Manchester and the conurbation of Birmingham and the West Midlands. Greater Manchester and the West Midlands are of a similar size and each has a sizable residential and employment hinterland based around a single significant Central Business District (CBD). In Greater Manchester this CBD is based on fragments of two cities (Salford and Manchester) which originally provided financial, legal and distribution services (via the port) to the vast textiles industry which surrounded it. This CBD has now been restructured around retail, offices and a new residential market, again across the local authority boundaries. Whilst developing later than Manchester, the commercial powerhouse centred on Birmingham was built on an agglomeration of end-to-end supply chains drawing on raw materials and extraction in the Black Country, manufacturing and distribution.

2

Polycentricity and urban competition

- 2.2 Unlike Greater Manchester the Leeds City Region does not have a Central Business District where a symbiotic relationship exists between the conjoined commercial districts of two cities. In respect of Leeds and Bradford there is an apparent lack of synergy between the city centre offers to investors and consumers which extends across boundaries. The spatial structure of the city region is also relatively polycentric, especially in comparison with Manchester, Birmingham and Glasgow. Patterns of spatial development do not accord precisely with the traditional concentric zones of related neighbourhoods which is so common in North America and Britain – instead, the overlapping influence of several important settlements, each with distinct functional economies and labour markets, has resulted in a complex interacting spatial structure with competitive internal forces in addition to interdependence and complementarity. As such, important and historic cities like Wakefield and York have their own traditional economic base; whilst the industries which harnessed the power of water from the Pennines led to the substantial independent growth of textile-based economies in Bradford, Calderdale and Kirklees.
- 2.3 This relatively polycentric form has developed rapidly since 1945 and like other areas of the north and midlands, was subject to seismic economic shocks in the 20th Century. These shocks were, however, sequenced differently from those which impacted on the Greater Manchester and Birmingham conurbations. So, for example, whilst the western flank of the LCR (Bradford, Calderdale and Kirklees) was impacted by the retraction of the textile industry from the 1920s and 1930s, this decline was offset to a degree by the consolidation of the coal mining industry into “Super Pits” after the war in the eastern flank from Barnsley through Wakefield to Selby. The subsequent

decimation of this industry in the 1980s and 1990s created a localised economic crisis, but this did not coincide with the earlier phases of deindustrialisation (especially in the 1970s) which had left considerable dereliction and underused buildings as its main legacy elsewhere.

2.4 Leeds, as with all the major English cities, struggled to retain cohesion during the post-war redevelopment period. The city centre was badly impacted by factory closures along the Aire Valley with its dereliction defining the fringe of the commercial district to the south. The protracted clearance of dense rows of back-to-back housing in the surrounding neighbourhoods such as Little London also detracted considerably from the city centre offer whilst renewal was underway. Ultimately, however, the lack of commercial interest in Leeds city centre in the 1960s and 70s saved many fine buildings, and the land which was still available for development in the old coalfield areas, and on the fringe of the city centre has subsequently facilitated a revival of the local economies and residential markets on a scale which has not been experienced elsewhere in post-industrial Yorkshire over the last thirty years.

Expansion of Leeds's influence

2.5 Leeds's comparatively well-developed suburban railway network along with its high capacity road infrastructure (being unusual among English cities to have the terminus of several motorways in the city centre) has facilitated to some extent the development of successful residential and labour markets at scale as the orbit of Leeds's influence expanded outwards.

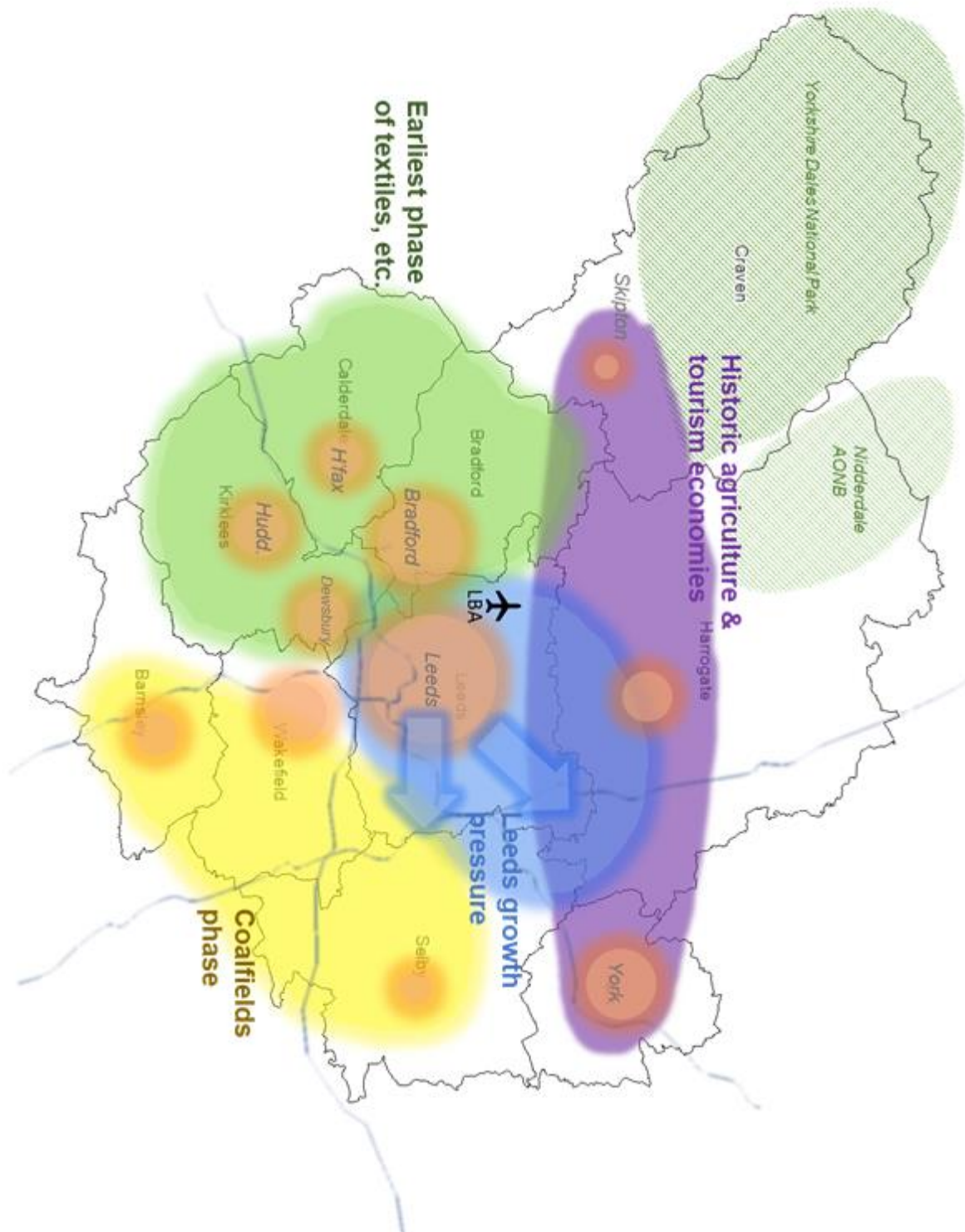
2.6 This polycentric economy has also grown through this period through the development of labour market and residential linkages primarily between the City of Leeds and the northern hinterland comprising of Craven, Harrogate and York. It could be argued therefore that there are at least four large interlinked urban economic geographies which define the Leeds City Region, each with a different economic and residential trajectory and history (Figure 2.1):

- The western flank of water-powered urban economies taking hold following the industrial revolution (Bradford, Calderdale, Kirklees).
- The eastern coalfields (Barnsley, Wakefield, Selby).
- The growth and expansion of Leeds itself, with its influence growing as a result of its strengths in financial services and facilitated by transport infrastructure.
- The North Yorkshire economies of Craven, Harrogate and York, each with its distinctive historic strengths but all having emerged as strong agricultural and tourism centres.

2.7 This research identifies a series of complex spatial relationships which have resulted from the interaction of housing and labour markets, capital flows, public policy, consumer preferences and economic change in the study area during the seven decades since 1945.

2.8 As described briefly above, however, the contemporary urban footprint of the Leeds city region reflects successive waves of growth, decline and renewal over an even longer period since the inception of the industrial revolution. The area has been characterised by a continuous dynamism which has been accompanied by shifts in economic form and function that has in recent decades bolstered the competitiveness of some parts of the geography whilst leaving others struggling to maintain prosperity.

Figure 2.1: The development of four spatial economies in Leeds City Region



- 2.9 As this report will show, unequal development, investment flows, rapid housing market change and social and economic polarisation can be observed at neighbourhood level, within districts, and between larger economic geographies. A single narrative which explains neatly how all these patterns have formed is not possible, and this research addresses this complexity where appropriate by referring to history, the impact of national and international drivers of change, the emergence of new markets and an assessment of how successive shocks to the housing and economic system have shaped the linked towns and cities which have developed since the industrial revolution in West and North Yorkshire.
- 2.10 A schematic which chronologically sets out how the housing stock and neighbourhood form has developed over time is included in chapter 3 of this report. But it is also important to nest the local understanding which emerges from mapping neighbourhood and housing market characteristics within the bigger context of economic and social change, taking into account the distinctive features of West Yorkshire and the Leeds City Region.

A history of central government policy inattention?

- 2.11 The research in respect of housing and neighbourhood change and characteristics outlined in this report, as well as some of the findings from the affordability report (**REF**) show that intra district manifestations of deprivation, exclusion and segregation are often more pressing issues than the slow divergence of four larger economic geographies. These slowly evolving disparities in socio-economic performance are important from a long term public policy perspective, but have to be seen in the context of very significant polarisation between affluent and deprived neighbourhoods within local authority districts, particularly in West Yorkshire. A review of major national regeneration initiatives since the 1977 Urban Policy White Paper shows a relative lack of priority in terms of central government resource allocation for regeneration in West Yorkshire (as with South Yorkshire) compared to Greater Manchester and Birmingham. There are four principle reasons why this lack of priority at the national level developed these being:
- *The lack of a sense of crisis.* The staged collapse of basic industries and subsequent recoveries meant that the Leeds City Region did not present as an emergency to central Government like Manchester and Birmingham. For example, in Greater Manchester the decline of industry started in the 1930s (as with the western side of LCR), but the collapse became progressive with the port closing in 1983 and a large part of the city centre becoming derelict. The centre of the conurbation also suffered a population collapse, with east Manchester losing 200,000 residents alone (see planning below).
 - *Over-bounded Local Authorities captured some impacts of suburbanisation.* The Local Government reorganisation of 1974 produced under-bounded local authorities in the centre of Greater Manchester and Birmingham, which meant that suburbanisation tended to occur outside of the city's new boundaries. This was not the case in West Yorkshire where Local Authorities were over-bounded in 1974, meaning they recaptured previous suburbanisation as well as some new independent settlements in some cases. The significance of this is that since the 1977 White Paper the official measurements of Local Authority deprivation have always shown other areas particularly in the North West, West Midlands and London to have greater priority, despite the extensive deprivation in the old core of Bradford and the severe concentrations in central and east Leeds as examples. This national government assessment of need is a direct result of local government being recast in West Yorkshire with over bounded administrative geographies which tend to dilute district wide deprivation scores.

- *The Absence of a Planning Disaster:* In the North West of England during the 1960s regional planners overestimated the growth of population by over one million residents. This led to an aggressive policy of population dispersal from the core of Greater Manchester, with the city of Manchester building thousands of council houses outside its boundaries over a 40-mile radius. By the mid-1990s large parts of Salford and east Manchester were depopulated and abandoned. In Birmingham and the West Midlands the process was different, as a part of the national policy of assisting the northern economies, growth was redirected from the industrial West Midlands, but just at the point when its employment base was about to collapse. Between the mid-1970s and late 1980s the car and engineering industry was decimated, leading to the highest unemployment rate in England by 1984 (26% in Birmingham). There are no similar and hugely significant miscalculations in West Yorkshire, which was by comparison relatively well planned through its post war transition. However the remedial investment needed to address the resulting impact of planning failures elsewhere undoubtedly had a knock on impact on the level of resources available to West Yorkshire to address its own pressing social and economic restructuring issues.
- *A narrative to support Government funded intervention in housing and the economy-* Compared to Greater Manchester and Birmingham it has been difficult for the reasons outlined above to develop a clear and mutually supportive narrative for such a large polycentric sub region. The types of backwards and forwards supply linkages between production processes which existed between Birmingham and the Black Country for example were never as prominent in the Leeds City Region, although it can be argued that economic relationships across geography are now becoming more similar in England's three largest provincial city regions.

2.12 Over the last 25 years the local economies of England's largest metropolitan cities have restructured around high quality assets and transport infrastructure. This pattern of change has generated economic and residential growth within the Central Business District of bigger cities, and reoriented residential districts and employment nodes around universities, airports, and road and rail infrastructure. The LCR is broadly speaking northward facing – reflecting to some extent the location of four of the city region's major universities: University of Leeds and Leeds Beckett University, both just north of the Leeds inner ring road; Leeds Trinity University in the northern Leeds suburb of Horsforth; and the University of York). Complementing this northern pull from Leeds city centre is a vibrant eastern development corridor which abuts major road infrastructure (especially the M1-A1 link since its completion in 1999). This separation of high value assets and growth from lower value locations is evident in the income data which is mapped at neighbourhood level in the Affordability Study, as well as in patterns of population migration which we discuss in section 4 of this report.

2.13 This study looks in more detail at the big geographic shifts in housing and labour markets as well as the small area changes in tenure, employment and deprivation. A separate Policy Discussion Paper looks at the relationship between the housing market, affordability and proposed transport improvements, while an overarching Policy paper will summarise how the housing, social and economic outcomes evident in this evidence paper relate to the new directions of travel emerging from the Governments levelling up agenda, the 2020 budget and subsequent fiscal events and the initial challenges evident from Covid-19.

Households and housing

Summary of key points

Household growth

- In the 12 years the number of households in Leeds City Region increased by around 101,000, an increase of 8.4%. Within the city region, West Yorkshire grew at a slower rate of 7.5%, suggesting ongoing processes of decentralisation. Growth has been strongest in Selby and Barnsley.
- The number of households in the city region is projected to continue to grow, albeit at a slightly slower rate.
- The composition of households has been changing. There has been an increase in the growth of households with one dependent child, but a decline in households with more than one child. The biggest increase (20.2%) is in single person male households.
- There is a geography to household change. Harrogate and Craven in particular will see further widening of the gap in growth rates between households with children and those without. This is consistent with high levels of housing unaffordability in those areas. Selby, Wakefield and York are expected to continue to see slight increases in family-forming households.

Tenure change

- Household tenure varies quite significantly across the city region. Owner-occupation is highest in Selby and Craven; whilst around 40% of households in Leeds rent their home. The Private Rented Sector has grown significantly in recent years and now houses over one-fifth of households in Bradford, Harrogate and Leeds.
- As well as growing, the Private Rented Sector has continued to diversify, with new products like Built to Rent, growing sectors like Purpose Built Student Accommodation, and conversion of non-residential property under permitted development rights all contributing to this.

Continued overleaf

Summary of key points (continued)

New housing supply

- The rate of new housing supply has now exceeded pre-crash levels, with over 12,000 net housing additions in 2018/19. The recovery in new housing supply has been strongest in Harrogate, Selby, York and Wakefield – the north and eastern flanks of the city region.
- Sources of new housing supply vary. Changes of use and permitted development have been particularly significant in Bradford, Calderdale and York. In contrast, new-build housing has been almost entirely responsible for new supply in Barnsley, Selby and Wakefield.
- These recent trends in new housing supply constitute a distinctive era in the spatial development of the city region – with relaxation of planning policy and an infrastructure-led approach having particular impacts in the eastern flank.

Incomes and affordability

- Leeds City Region has a particularly pronounced geography of household income, with the ‘golden triangle’ (Harrogate, York and Leeds) home to the highest incomes. It lies at the heart of a regional wage economy which is strongly tilted to the north and east of the city region. As well as enjoying good access to Leeds, these areas also have strong local economies in their own right.
- Over the past 12 years wages have fallen in real terms in much of the city region. Indeed, the only district to record real terms wage growth was Harrogate.
- District averages mask important variation, however. There is a strong neighbourhood dimension to housing affordability, as well as a strong relationship between concentrations of private rented sector housing and low income groups facing acute housing affordability problems.

Introduction

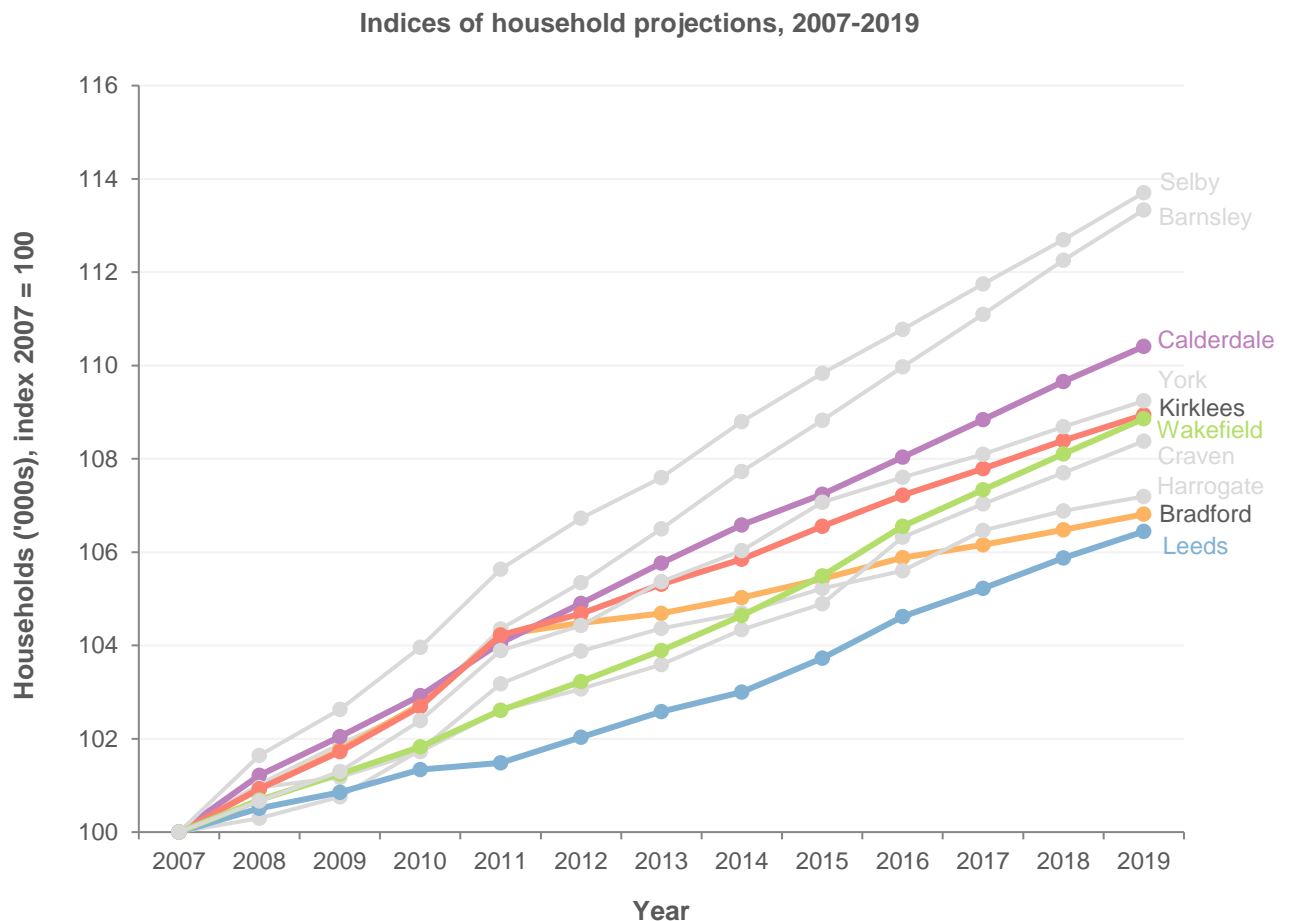
- 3.1 The fundamental unit of demand within the housing market is the household. Of course, households are not static – they are routinely formed, combine and dissolve in response to life events as well as a result of market conditions.
- 3.2 This section of the report sets out the baseline and recent trends in terms of household characteristics within the city region, and changes in the physical profile of the city region’s housing stock and how it manifests as supply.

Households

- 3.3 In the 12 years between 2007 and 2019, the number of households in the Leeds City region increased by around 101,000, an increase of just over 8.4%. Within West Yorkshire, between the same years there was an increase of 56,000. This equates to an increase 7.5%.

- 3.4 A similar number of additional households – 102,000 -- is projected to materialise within the city region in the 15 years to 2034. This represents a marginal decline in the expected growth rate to 7.9%.
- 3.5 As Figure 3.1 shows, household growth has been strongest in Selby and Barnsley, whilst the metropolitan districts in West Yorkshire have exhibited slightly weaker growth – especially in Leeds and Bradford.

Figure 3.1: Household projections, 2007-2019 (indexed to 2007)



Source: ONS Household Projections (2016-based, principal projection, table 406).

Table 3.1: Household projections, mid-2007 to mid-2034

Area name	Number of households (thousands)				% change 2007-2019	% change 2019-2034
	2007	2019	2034	Change 2007-2034		
Barnsley	96	109	122	13	13.3	11.9
Bradford	190	203	215	12	6.8	6.1
Calderdale	85	94	101	7	10.4	7.8
Craven	24	26	28	2	8.4	7.1
Harrogate	65	70	74	4	7.2	5.6
Kirklees	166	181	196	15	8.9	8.3
Leeds	313	333	358	25	6.4	7.4
Selby	33	37	41	4	13.7	11.2
Wakefield	136	148	161	13	8.9	9.0
York	80	87	94	7	9.2	7.7
West Yorkshire	748	804	863	59	7.5	7.4
Leeds City Region	1,187	1,288	1,390	102	8.4	7.9

Source: ONS Household Projections (2016-based, principal projection, table 406).

Table 3.2. Projected change in households by household type, 2007-2019.

	Households with one dependent child	Households with two dependent children	Households with three or more dependent children	One person households: Male	One person households: Female	Other households with two or more adults	All households
Barnsley	11.8	-2.1	3.4	34.8	11.0	13.0	13.3
Bradford	5.8	-5.7	12.1	23.9	4.0	5.0	6.8
Calderdale	8.1	-5.4	-10.4	32.0	12.8	9.3	10.4
Craven	3.4	-12.3	-22.8	26.7	15.4	9.7	8.4
Harrogate	12.4	-7.5	-22.5	18.8	5.7	10.2	7.2
Kirklees	11.9	-1.4	-3.5	22.6	1.4	11.1	8.9
Leeds	14.9	-8.1	-9.4	22.9	16.9	18.5	13.7
Selby	9.9	-6.5	-8.1	23.6	4.5	4.7	6.4
Wakefield	6.7	-7.1	-3.2	23.7	8.2	10.6	8.9
York	17.5	-5.1	-11.2	18.9	0.8	12.5	9.2
West Yorkshire	8.6	-5.3	-0.4	24.3	5.2	7.3	7.7
Leeds City Region	9.7	-5.4	-2.2	24.5	5.8	8.8	8.4
England	14.4	0.3	-1.3	20.2	6.2	11.3	10.2

Source: ONS Household Projections for England (2016-based, principal projection, S2 Households).

Note: colour coding relates to the highest and lowest values within each column.

3.6 Table 3.2 breaks down the increase in households seen in between 2007 and 2019 by household type. Between 2007 and 2019 across the Leeds City Region there has been a notable trend for an increase in the numbers of households with one dependent child. In contrast, households with more than one dependent child dropped. Craven and Harrogate have seen the largest decreases, particularly for larger households. Whilst

the increase in one dependent child households have largely followed the national average, many districts far exceed the national average for declining larger households. Across all household types Barnsley, Leeds, and Calderdale have had the largest increases (above the national average). Bradford and Selby have the lowest increases, impacted by only small increases in one-person female households and households with two or more adults.

- 3.7 Table 3.3 below shows the expected composition of household change to 2041. Whilst projections must always be taken with a degree of caution, as they are to an extent conditioned by recent observed trends, the key finding is that patterns of difference in household change that were observed in the previous decade or so across the city are expected to become further entrenched. Barnsley is expected to grow its stock of households by over one-fifth (20.5%) with growth in all household types. Indeed, Barnsley is expected to have the highest growth rates in the city region for all household types except single female households. The decline in households with more than one dependent child is expected to continue across the city region, with falls projected in all districts except Barnsley and Wakefield.
- 3.8 Harrogate and Craven in particular are expected to see further widening of the gap in growth rates between households with children and those without. This suggests that, in the absence of significant change to housing affordability, families are being priced out of those districts, or are finding for competitively priced accommodation for their needs in other districts (likely a combination of both of these factors).
- 3.9 Significant changes in the expected pattern of household growth are projected in Leeds and Bradford. Whereas in the previous decade Leeds had one of the highest growth rates for single female households and households with no dependent children but two or more adults, it is expected that other districts will have higher growth rates for these groups.

Table 3.3: Projected change in households by household type and district, 2016-2041

	One dependent child	Two dependent children	Three or more dependent children	One person households: Male	One person households: Female	Other households with two or more adults	All households
Barnsley	9.4	6.3	9.3	30.5	31.7	20.8	20.5
Bradford	-3.9	-10.1	-5.1	17.0	22.1	15.5	9.5
Calderdale	-2.9	-6.9	-7.5	21.5	27.1	16.0	13.1
Craven	-8.5	-13.1	-15.6	17.9	27.7	13.8	11.3
Harrogate	-10.4	-17.2	-22.3	16.0	28.1	14.7	9.3
Kirklees	2.1	-2.8	-2.3	19.2	22.5	17.9	13.3
Leeds	3.6	-2.6	-2.5	20.3	20.1	14.3	12.7
Selby	3.8	-2.7	-2.0	28.4	38.3	19.8	18.1
Wakefield	3.0	-0.3	1.9	24.5	27.1	16.4	15.3
York	4.7	-1.1	-2.5	19.7	16.5	14.8	12.5
West Yorkshire	1.0	-4.5	-3.3	20.2	22.7	15.7	12.6
Leeds City Region	1.3	-4.2	-3.3	20.9	23.8	16.1	13.2
England	5.3	0.3	-0.3	24.4	27.5	21.0	17.3

Source: ONS Household Projections for England (2016-based, principal projection, S2 Households).

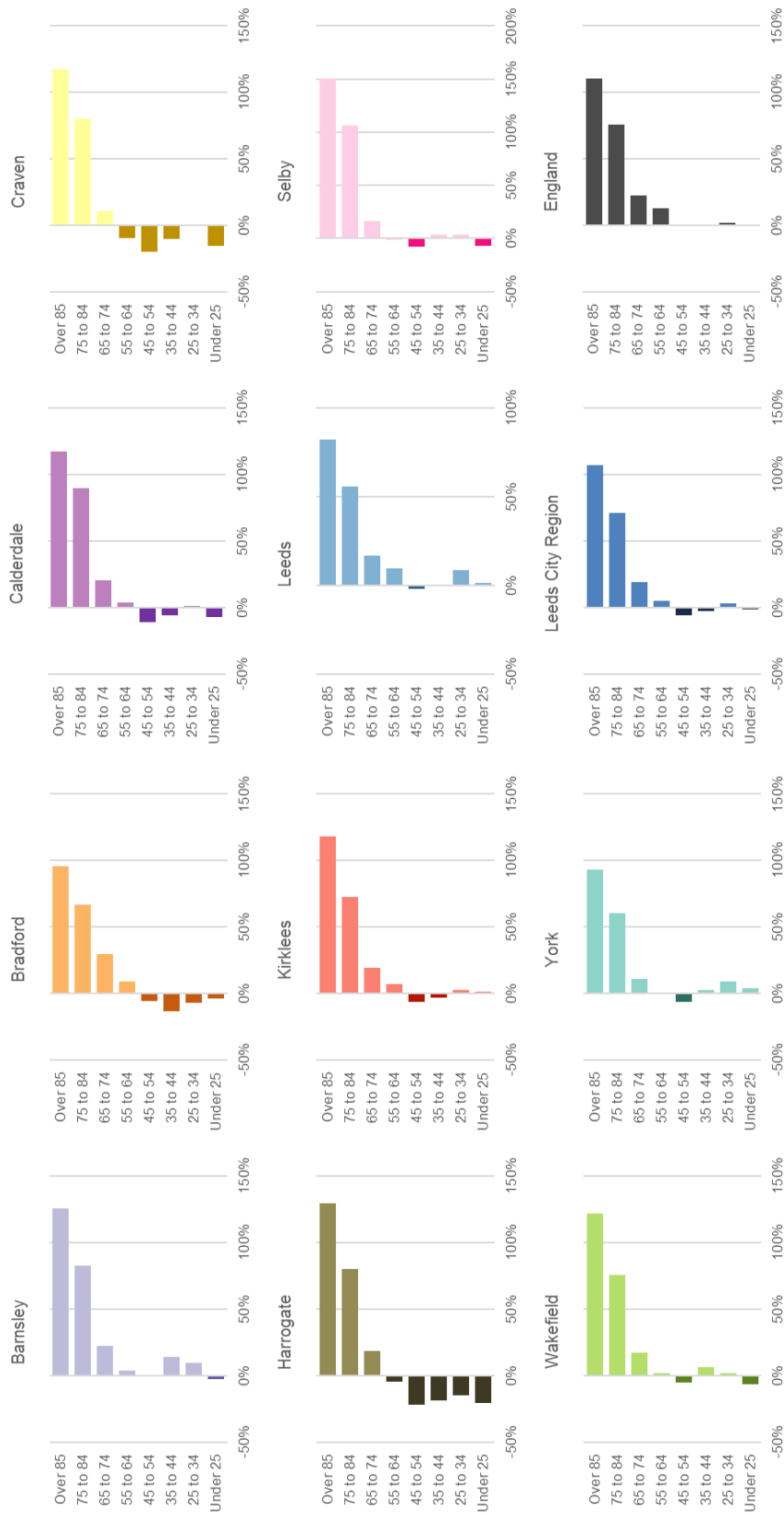
Note: colour coding relates to the highest and lowest values within each column.

- 3.10 Over the coming two decades, the projected growth in the number of households is not evenly distributed by place or by type of household. With the exception of households with one dependant child (which are expected to increase by a modest 1.3%), the number of households with children are projected to decline in most parts of the city region. This is not reflective of the projected national picture, which is neutral in terms of multi-child households, and expects a 5.3% increase in single-child families. The expected decline in households with dependant children applies to all districts within the city region with the exception of Barnsley and Wakefield. Very significant declines in households with children are projected in Craven and Harrogate – presumably as a result of intense affordability issues changing the composition of effective demand for housing in those areas in the past decade. Levels of household growth are also expected to be comparatively low in Bradford although this may reflect a wider set of issues including economic connection and opportunity, place competitiveness and the housing market offer.
- 3.11 Continuing recent trends, the growth in households will be disproportionately driven by an increase in single person households. Nationally the number of single person households is expected to increase by around a quarter over the next two decades. Most parts of the city region will see similar increases, with the number of single person households being expected to rise significantly in Barnsley and Selby.
- 3.12 Older age groups are projected to disproportionately drive the increase in households, as is confirmed in

3.13 Figure 3.2. This shows that, overwhelmingly, rates of positive growth in the number of households increases as the age of the household reference person² increases. Beyond this relationship, however, it is also the case that the age profile of projected growth and decline in households differs between places. Barnsley, Leeds, Wakefield and York exhibit the most balanced profile of growth, in which there is expected to be a growth in the number of households in most, if not all, age groups. By contrast, other areas will become more polarised in the future as households with a household reference person in a younger age bracket – this is especially the case in Bradford, Calderdale, Craven and Harrogate. A slight increase in households with an HRP in the key family forming age groups (25-44) is expected in Selby, Wakefield and York – possibly associated with recent new housing supply within, and consequent migration to, those districts (see also Chapter 4 in this report).

² The household reference person (HRP) is the eldest economically active person in the household.

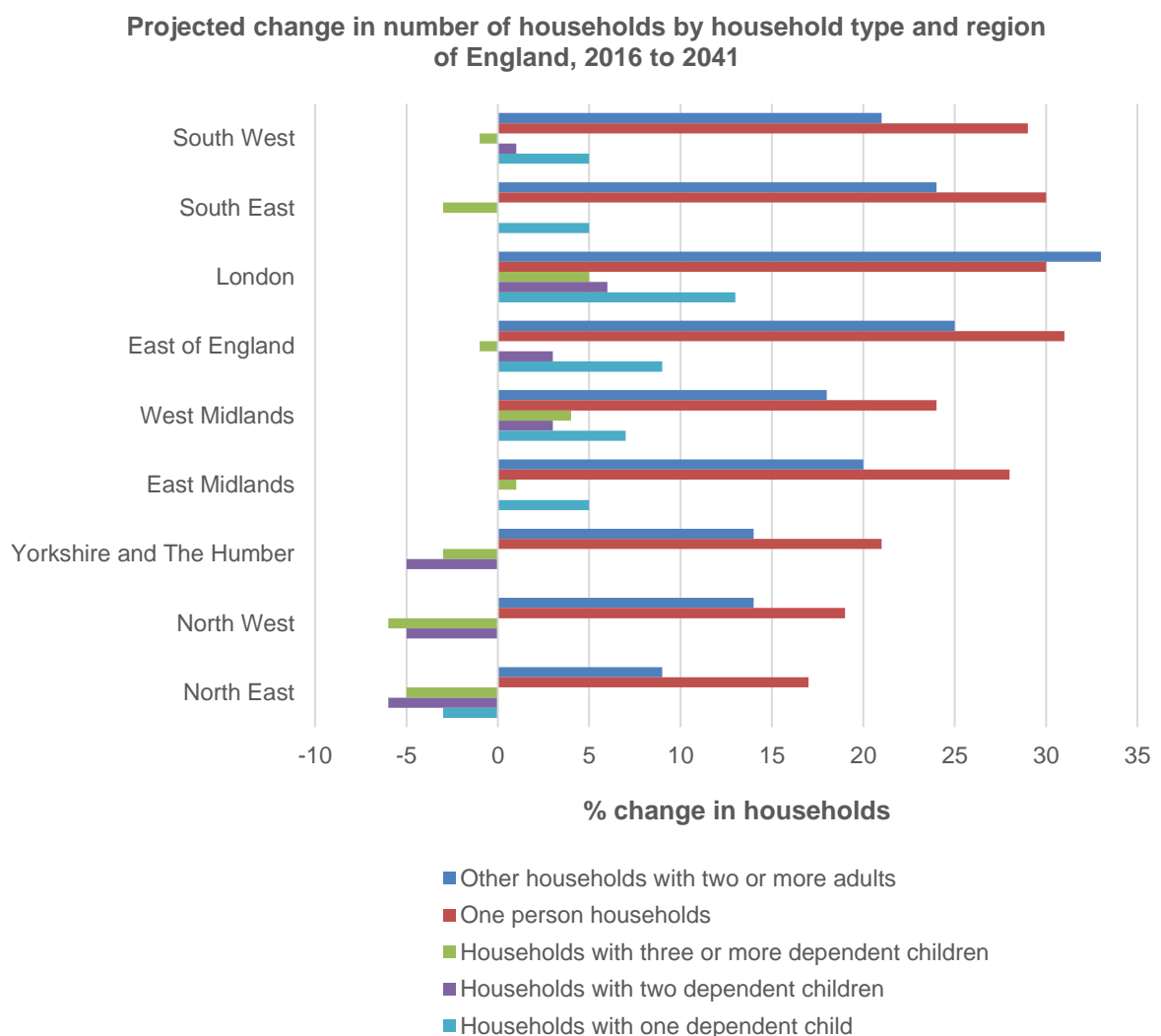
Figure 3.2: Projected percentage change in households by age of household reference person and district, 2016-2041.



Source: ONS 2016-based household projections for LA and higher administrative areas in England, Table 414: Household projections by age and district, England, mid-2016 and mid-2041

3.14 The final important point to make about household projections is that there is a very apparent regional dimension to the expected composition of household change in the coming two decades. Figure 3.3 shows household projections by household type and region. All the northern regions are expected to have a reduction in the numbers of households with dependent children, whereas the balance is positive throughout the midlands and southern regions, and especially in London. Although the recent phenomenon of ‘north shoring’ has emerged as a potential counter to this trend, it seems that the economic prospects within the capital and southern regions coupled with the outcome of at least a decade of intense policy support for market and affordable housing in those regions has begun to mitigate previous patterns of inter-regional migration. The result will likely be further entrenched polarisation at two geographic scales: the widening of a ‘north south’ divide in the age profile of households, and similar process of spatial sorting playing out within the city region.

Figure 3.3: Projected change in households by household type and region, 2016-2041



Source: ONS Household Projections for England (2016-based, principal projection, S2 Households).

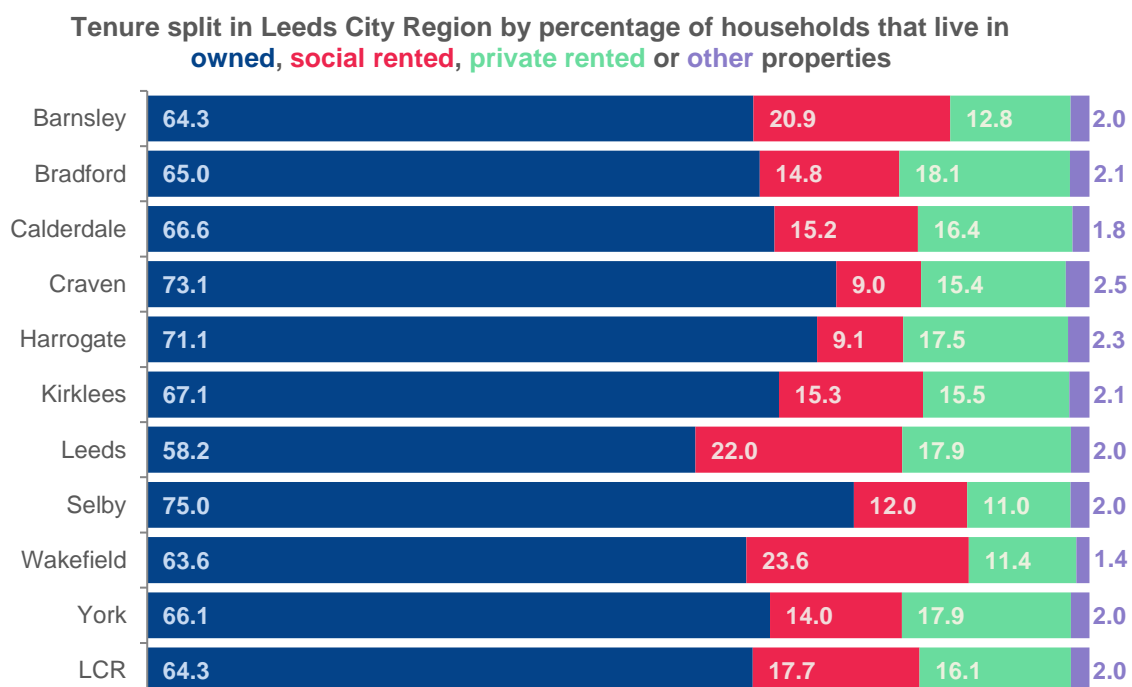
Tenure and Housing Stock

3.15 At the time of the 2011 Census just over 63% of households in the Leeds City Region own their own home or are buying it with a mortgage. This baseline tenure distribution provides an indication of the composition of the city region’s housing system just as a

new policy regime for housing and planning was beginning to be established. A number of policies put in place in the 2010s, including changes to the funding regime for social and affordable housing, welfare reforms (especially removal of the ‘spare room subsidy’), and planning reforms (especially those aimed at liberalising the private rented sector), will have had a profound impact on tenurial composition, especially at the level of individual neighbourhoods. We deal with these changes a little later.

- 3.16 At the baseline, then, it can be seen from Figure 3.4 below that there were important differences in tenure between districts. Not surprisingly, Leeds has the lowest levels of owner occupation, reflecting its longstanding role as destination for international and domestic migration, more youthful population, and its significant student population. As a city, Bradford’s role is different to that of Leeds and, whilst having a similarly youthful population structure [check], it plays less of a role as a destination for national population mobility and has a smaller student population. As such, and reflecting long-standing preferences among some population groups in Bradford, the level of owner-occupation is high at 65% – higher, indeed, than the city regional average.
- 3.17 The low levels of social housing provision on the west are evident in this graph for Calderdale, Bradford and Kirklees which are all under the national average. This spatial pattern reflects structural patterns of historic investment and political priorities. For these reasons, Bradford has a lower level of social housing in comparison to other large metropolitan areas, whereas the pattern in Leeds and Wakefield reflects their historically more extensive provision of council housing. The low proportions of social housing in Craven, Harrogate and Selby can also be explained by the comparatively low numbers of council houses that were historically built in rural areas, together with the disproportionate impact of the Right to Buy on these areas.³

Figure 3.4: Housing tenure by district as at 2011 Census.



Source: 2011 Census of Population

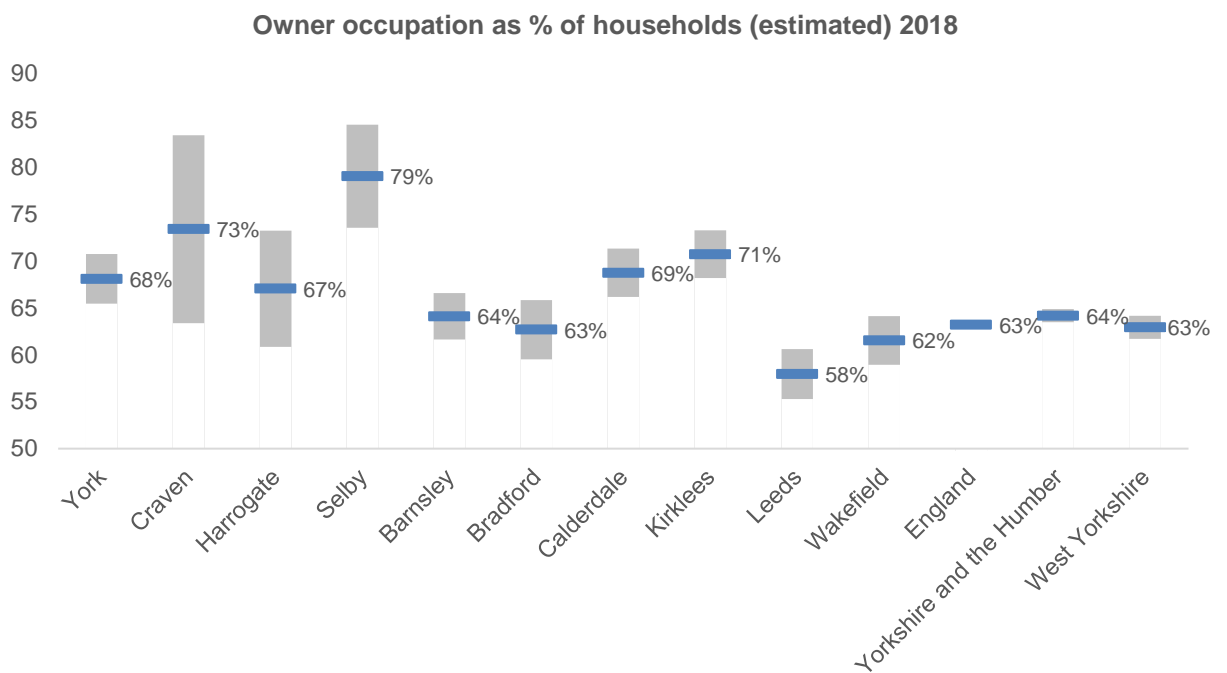
³ See for example Bevan, M., Cameron, S., Coombes, M., Merridew, T. and Raybould, S. (2001) *Social Housing in Rural Areas*, York: Joseph Rowntree Foundation.

- 3.18 The financial crisis of 2007-8 and subsequent recession had a significant impact on tenure patterns. It marked the high watershed of owner-occupation in many parts of the country. Pressure on incomes, relative price robustness, and widespread problems in accessing affordable mortgage finance led to a decline in owner occupation rates, particularly for first time buyers. At the same time, policy encouragement – including the development of new types of product such as Built-to-Rent – has led to significant increases in private renting.

Figure 3.5 and

- 3.19 Figure 3.6 show the most recent tenure estimates for owner-occupation and private renting. Whilst there is a margin of error associated with the estimates (shown by the grey bars, which indicate the upper and lower 95% confidence intervals), they demonstrate clearly the extent of tenure change in the period since the 2011 Census. For example, whilst owner-occupation in Leeds and Barnsley has been relatively stable, it has declined in Bradford, Wakefield and York. Rates of owner-occupation have estimated to have increased in Calderdale, Kirklees, Harrogate and Selby.
- 3.20 In terms of private renting there have been significant increases. Although there are uncertainties with the estimates, it seems likely that the size of the private rented sector has increased by as much as a quarter in Craven, Harrogate, Bradford and, especially, Wakefield. The private rented sector is now estimated to house over one-fifth of households in Bradford, Leeds and Harrogate. The private rented sector is now larger than the social rented sector in York, Craven, Harrogate, Bradford, Calderdale, Kirklees. More renters still rent socially in Barnsley, Selby and Wakefield. In Leeds, 42% of households rent – divided equally between the private rented sector and the social rented sector.
- 3.21 Whilst low levels of provision of social housing in parts of the city region (such as Craven, north Leeds and Harrogate) may be offset by higher levels of provision in the PRS, rent levels in these locations remain very problematic for the low paid (see Technical Report 2: Affordability).

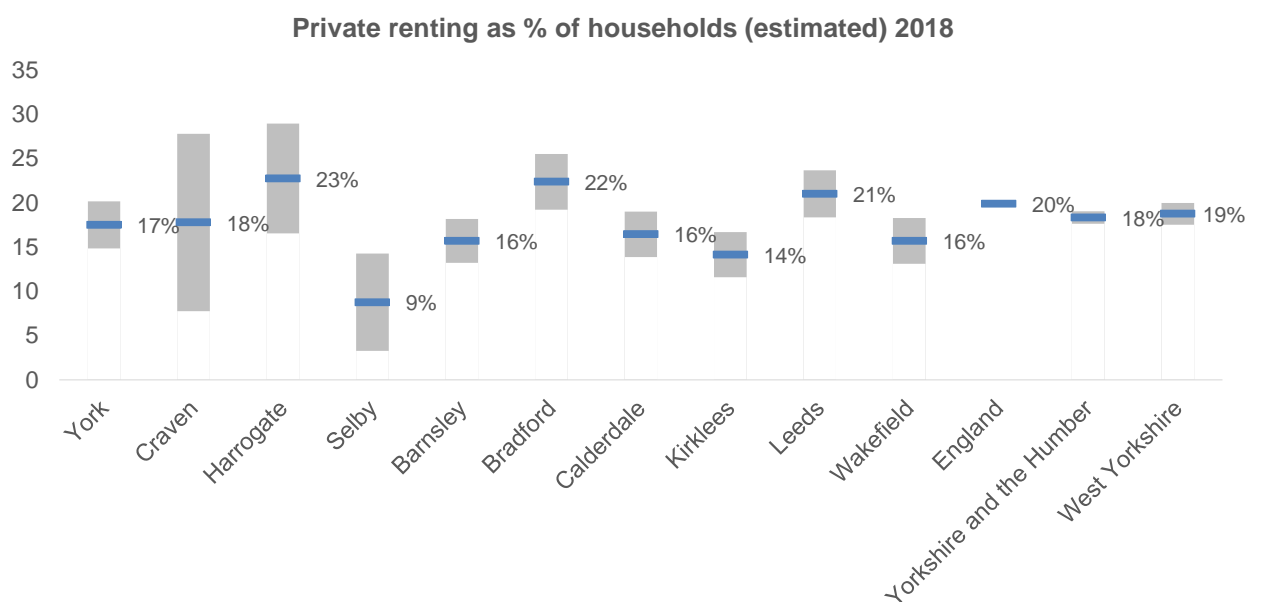
Figure 3.5: Owner occupation as % of households (estimated), by district, 2018



Source: ONS subnational estimates of dwelling tenure, November 2019.

Note: Grey bars represent the upper and lower confidence intervals at the 95% level.

Figure 3.6: Private renting as % of households (estimated), by district, 2018.



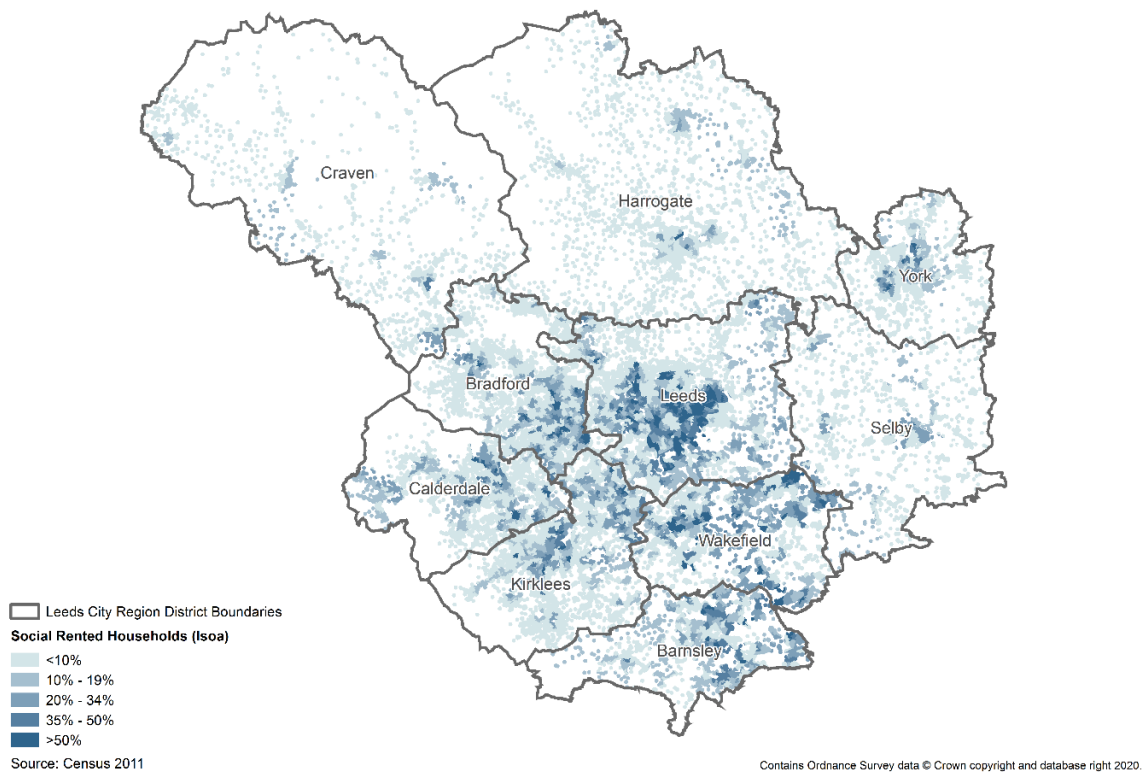
Source: ONS subnational estimates of dwelling tenure, November 2019.

Note: Grey bars represent the upper and lower confidence intervals at the 95% level.

As the map in

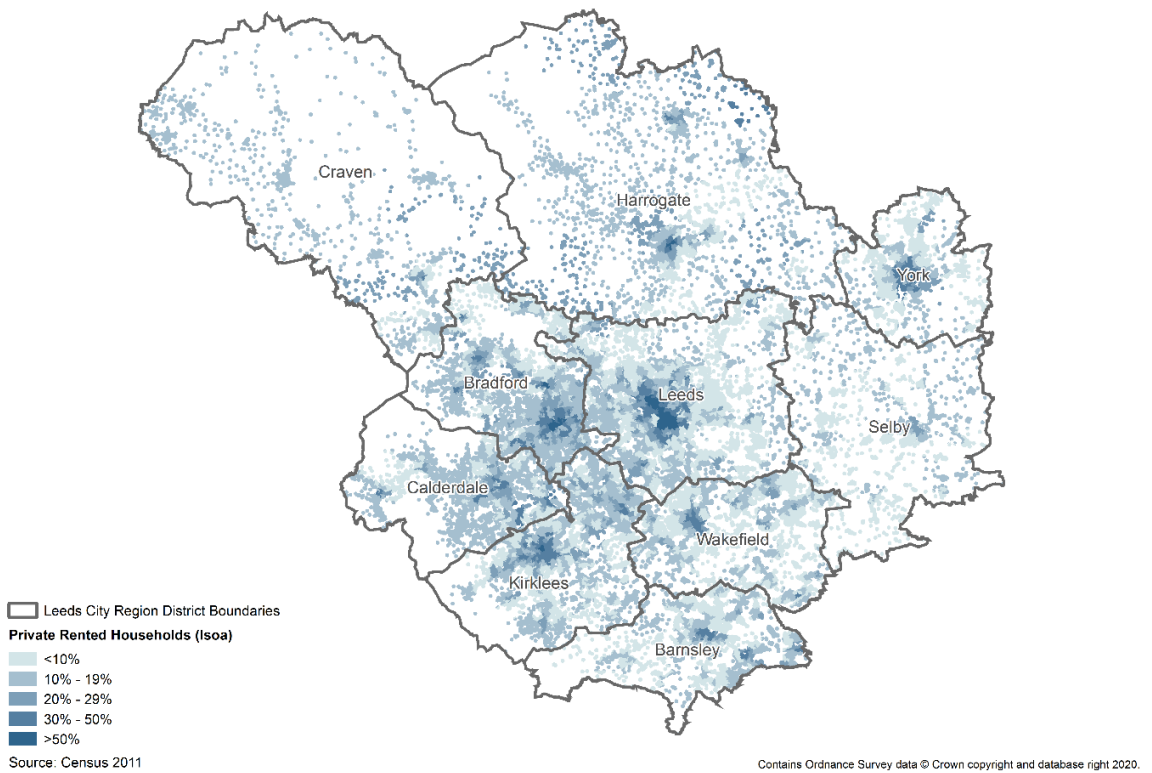
- 3.22 Figure 3.7 shows, the highest concentrations of social housing are in the urban east of West Yorkshire – Leeds, especially to the east and south; south and east of Bradford, throughout Wakefield (especially towns in the former coalfields) – and to the east of Barnsley. There are also significant areas of social rented housing in York, especially to the north and east.
- 3.23 Although these broad patterns are evident, the mosaic of tenure across the city region reveals that there are significant localised pockets of social housing provision which are very significant, especially in north Halifax, peripheral estates of Bradford and throughout the former coalfield settlements. These areas have very different characteristics but are all areas where transport connectivity is likely to be a significant policy issue.

Figure 3.7: Map of social housing concentrations, 2011



Source: 2011 Census of Population

Figure 3.8: Map of private rented housing concentrations, 2011



Source: 2011 Census of Population

3.24 The map in Figure 3.8 shows the key concentrations of housing rented from a private landlord. This reflects the footprint of that sector at the time of the Census in March 2011. Reflecting that this has been the sector which has grown most rapidly in the intervening nine years, it is important to anticipate the various ways that this geography is likely to have changed since.

3.25 Whilst there has been an increase in households renting privately in all districts in the city region – mirroring a national trend – it is important to consider the increasing heterogeneity of rental accommodation and the various existing and new sources that have contributed to the sector’s expansion. These include:

- **Build to Rent.** The emergence of Build to Rent in selected markets, especially Leeds which, alongside other major regional cities such as Manchester, Birmingham and Cardiff, has been identified as a national hotspot for new urban schemes.⁴ There is also increasing investor interest in a suburban Build-to-Rent model, capitalising on demand from 30-40 year age groups with children or aspiring to start a family. This reflects affordability problems that can face this group in some market areas. There are suburban Build to Rent schemes in Wakefield and Bradford, for example.⁵
- **Student accommodation.** Although Covid-19 presents significant uncertainty for the student market, at the time of this market baseline the student market – especially for purpose-built student accommodation (PBSA) was strong in many University cities across the UK. Such schemes have likely contributed to increases in the PRS in Bradford and Leeds.
- **Former RTB housing.** Ongoing tenure diversification on larger former council estates, especially as former Right-to-Buy housing is rented out privately
- **Buy to Let.** Although the market for Buy to Let has softened in recent years as a result of changes to the tax treatment of property and widening competition, it has played a significant role in expanding the PRS throughout a broadening set of locality types in the last decade. It is estimated that throughout much of the decade over 15% of home purchases were made by landlord, reducing from around 2016 to a present level of around 11%.⁶
- **LA and PRP sales to the private sector.** Social housing disposals have increased nationally over the past decade, although it is difficult to obtain precise data on how this is affecting specific localities and property types.
- **Permitted Development.** Further relaxation of planning regulations, especially in terms of Permitted Development Rights for office-to-residential conversions. There is evidence that this has added to the stock of PRS dwellings within the Leeds city region, although it has not disrupted or biased the market to the extent found in some other cities (especially London).⁷

3.26 This multi-faceted expansion of the PRS gives rise to several different policy concerns. In general, whilst in 2011 the spatial footprint of the PRS was strongly correlated with the existence of student markets, city centre development, and inner-city neighbourhoods characterised by pre-1919 terraced housing, these relationships have since softened. The above relationships still hold, but a higher number of private

⁴ Savills (2020) *UK Build to Rent Market Update - Q4 2019*. 10 January 2020. Available at https://www.savills.co.uk/research_articles/229130/294569-0

⁵ Savills (2020) *Suburban Build to Rent – April 2020*. Available at https://www.savills.co.uk/research_articles/229130/299211-0

⁶ Hamptons International and FT. See *Financial Times* (2019) Dwindling numbers of buy-to-let property purchases, 27 February 2019.

⁷ RICS (2018) *Assessing the impacts of extending permitted development rights to office-to-residential change of use in England*.

tenants can now be found in a broader set of property types and neighbourhoods. Arguably, questions around transport, employment accessibility and the provision of local services were previously a lower-order concern for the PRS, given its historic spatial characteristics (more centrally located). The emergence of a more diverse PRS, with tenants in need across a broader range of neighbourhood archetypes, brings with it increased challenges around spatial disconnection from services and opportunity.

Dwelling stock and supply

- 3.27 This section of the report turns to consider the broad nature of the city region's housing stock, how this has changed in recent years, and how it manifests itself as a supply.
- 3.28 There are just over 1 million dwellings in West Yorkshire, and a further approximately 350,000 dwellings in the rest of the Leeds City Region (Table 3.4). The majority of these are in private ownership, either owned by their occupiers or by a private landlord. That said, ownership by local authorities and private registered providers (PRPs) is very significant, with local authorities owning over 111,000 dwellings, and PRPs owning a further approximately 120,000 dwellings. Across the city region, just over 17% of dwellings are owned by local authorities or PRPs, very slightly biased towards the combined authority districts within West Yorkshire (18% of dwellings).
- 3.29 The main differences in ownership, however, are between districts. The rate of public ownership of dwellings in the districts where this is highest (Barnsley, Leeds and Wakefield) is well over twice that in the lowest (Craven and Harrogate).⁸ The ability therefore of social and affordable housing to meet needs varies significantly across the city region, and in some districts may place significant pressure on the role of the PRS to meet needs.

Table 3.4: Dwelling stock estimates by district, 2019

	Local Authority (incl. owned by other LAs)	Private Registered Provider	Other public sector	Private sector (P) ¹	Total	% owned by LA or PRP
Barnsley	18,400	3,897	0	89,083	111,380	20.0
Bradford	289	31,855	0	184,216	216,360	14.9
Calderdale	0	14,021	0	81,462	95,483	14.7
Craven	21	2,444	1	26,045	28,511	8.6
Harrogate	3,869	2,988	0	66,198	73,055	9.4
Kirklees	22,407	5,862	0	160,913	189,182	14.9
Leeds	55,382	17,287	17	277,838	350,524	20.7
Selby	3,052	1,839	0	35,010	39,901	12.3
Wakefield	54	35,340	9	121,893	157,296	22.5
York	7,573	4,973	348	77,133	90,027	13.9
West Yorkshire	78,132	104,365	26	826,322	1,008,845	18.1
Leeds City Region	111,047	120,506	375	1,119,791	1,351,719	17.1

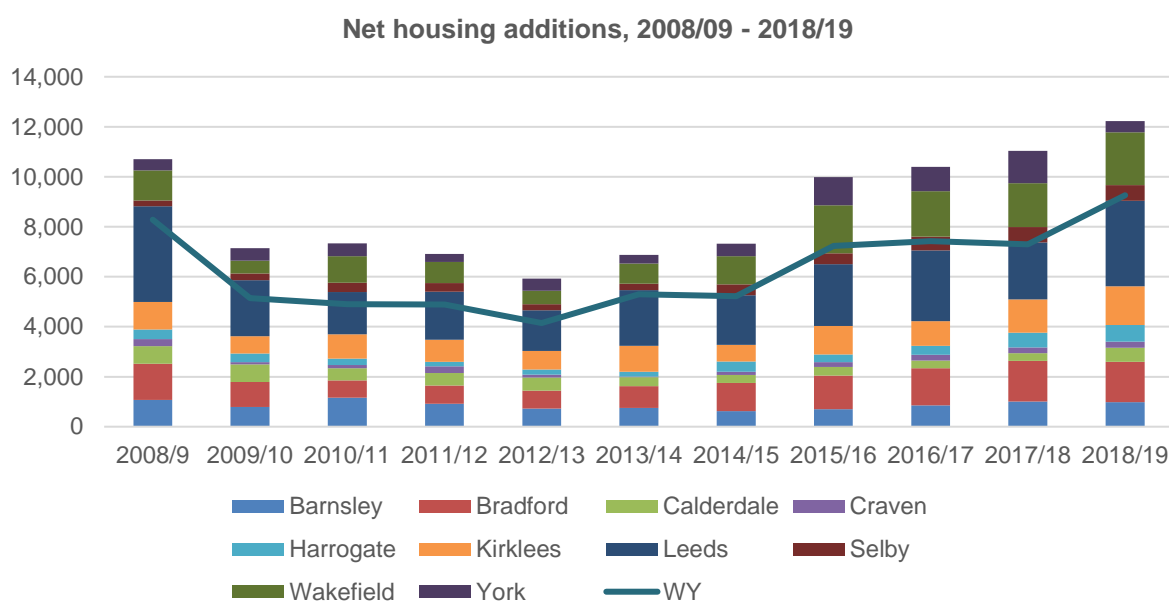
Source: MHCLG Live Table 100. Note: data are provisional and subject to revision in future years.

⁸ This section presents statistics on the estimated ownership of *dwellings* as opposed to *household tenure*, which is discussed in paragraph 3.17.

3.30 Net additions to the housing stock are driven by a combination of housebuilding and conversions of property to dwellings (including the subdivision of larger houses to apartments), together with reductions from demolitions and deconversions.

3.31 In the immediate aftermath of the 2008 financial crisis the level of housebuilding, and therefore net additions to stock, fell sharply to around 7,000 units per annum. This level was maintained for a few years, declining further to less than 6,000 in 2012/13. Since then, the level of new housing additions has steadily increased. The most recent data (which remain provisional at the time of writing) suggest that the level of net additions has recovered to, and indeed exceeded, that of 2008/09, at over 12,000 additional units in 2018/19 (Figure 3.9).

Figure 3.9: Net housing additions, 2008/09-2018/19

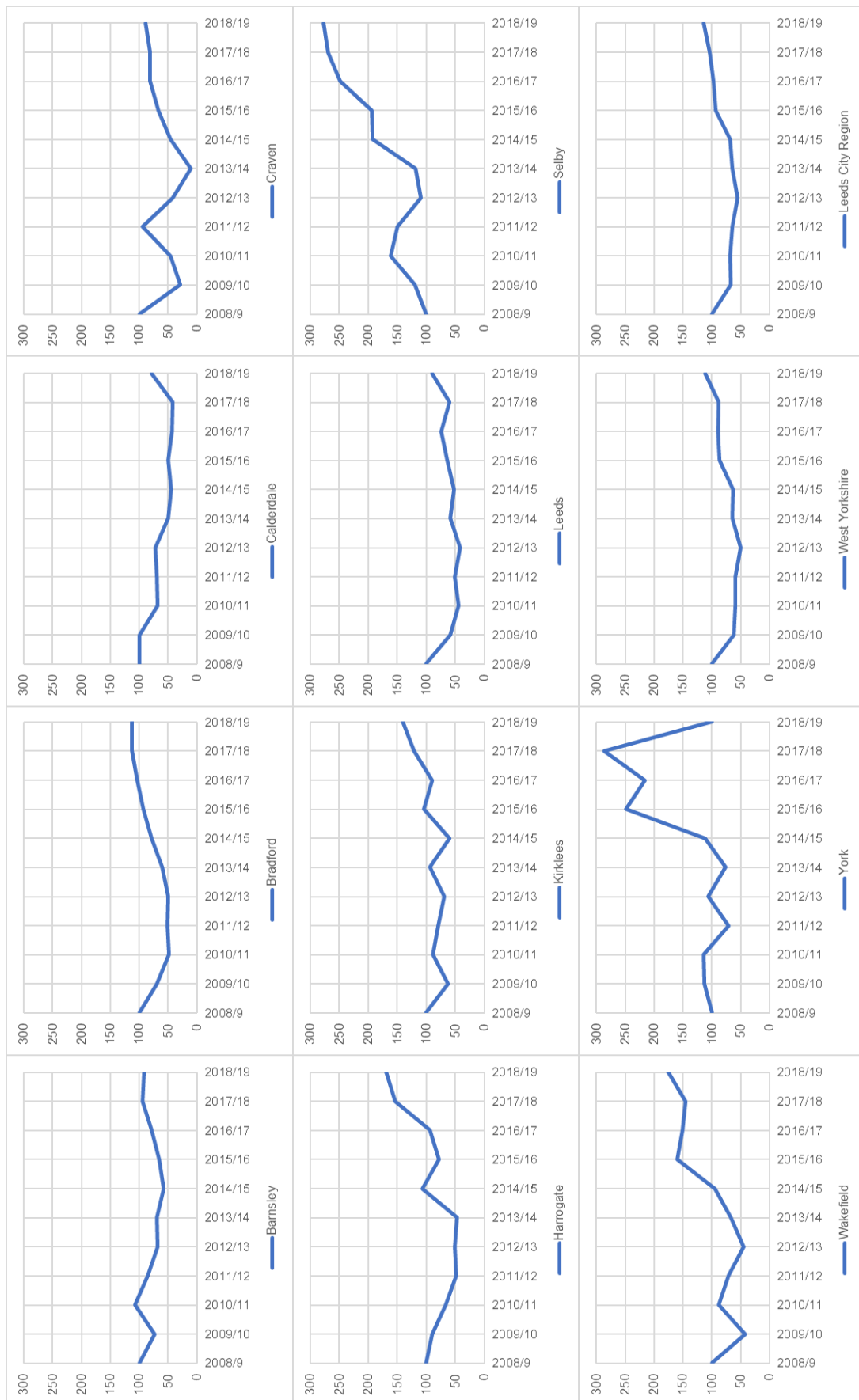


Source: Leeds City Region Annual Monitoring Report 2019; MHCLG Live Table 122

The panels in

- 3.32 Figure 3.10 show the profile of change in net housing additions over time for each local authority. Most local authorities saw the rate of new housing additions fall by around half following the financial crisis. In some areas, such as Barnsley, Calderdale and Harrogate, the decline was relatively gradual, with the rate of new supply falling to its lowest levels over 5 years after the crash. In other areas, the fall and subsequent recovery in supply rates was quicker – for example, in Bradford and Leeds. Most notably, perhaps, are the local authorities where new supply continued to increase in the year following the crisis, notably Selby and York.
- 3.33 Areas where new supply rates have recovered most highly include Harrogate, Selby, York and Wakefield. In York and Selby in particular, the rate of annual net housing additions reached over three times the level in 2008/09, although in York there appears to have been a very marked slowdown in the most recent year (2018/19). Steady growth has been most apparent in Selby and Wakefield and, as we show later in this chapter, these are areas where there are large clusters of new housebuilding which has taken place over the last decade.

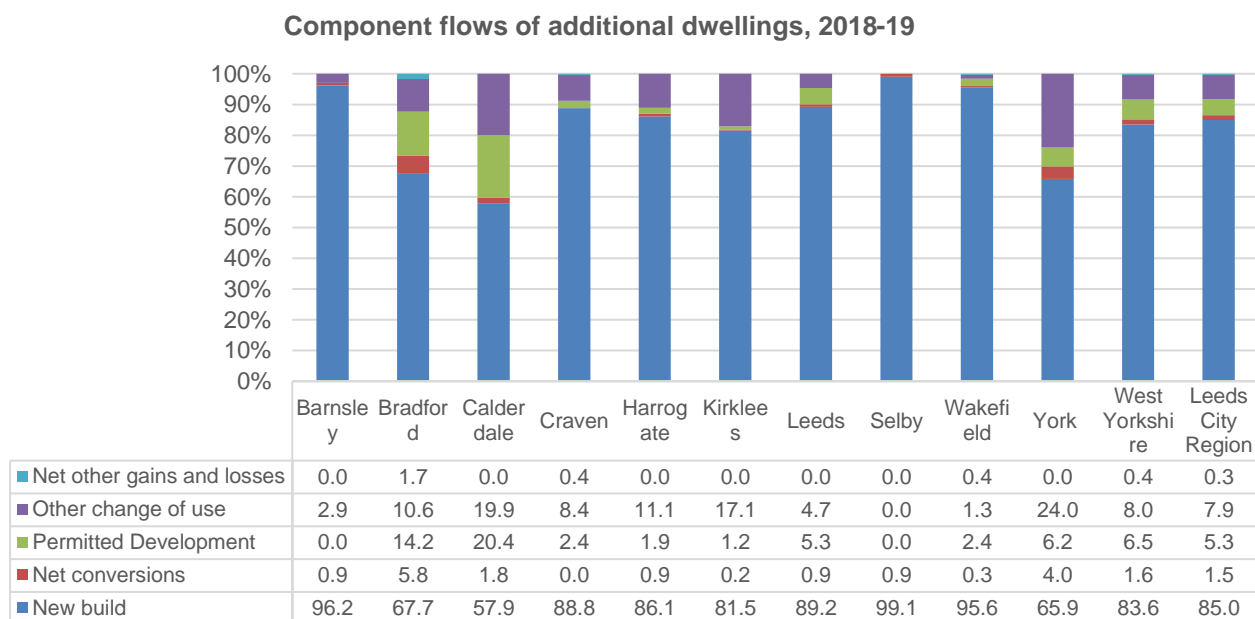
Figure 3.10: Indexed change in annual net housing additions, 2008/09 to 2018/19 by district (2008/09 = 100)



Source: Leeds City Region Annual Monitoring Report 2019; MHCLG Live Table 122

3.34 The components of additional supply vary throughout the city region (Figure 3.11). On average, in 2018/19 around 85% of additions to the dwelling stock were as a result of new housebuilding, with the remaining 15% made up mainly of conversions and changes of use (including Permitted Development). Housebuilding was most important in Selby (99%), Wakefield (96%) and Barnsley (96%), whilst changes of use were responsible for around a quarter or more of additional supply in Calderdale (40%), York (30%) and Bradford (25%). The conversion of other land uses to residential under Permitted Development rights has been a significant contributor to supply in Calderdale (20%) and Bradford (14%) – over half of all additions arising from changes of use in those districts.

Figure 3.11: Component flows of additional dwellings, 2018/19



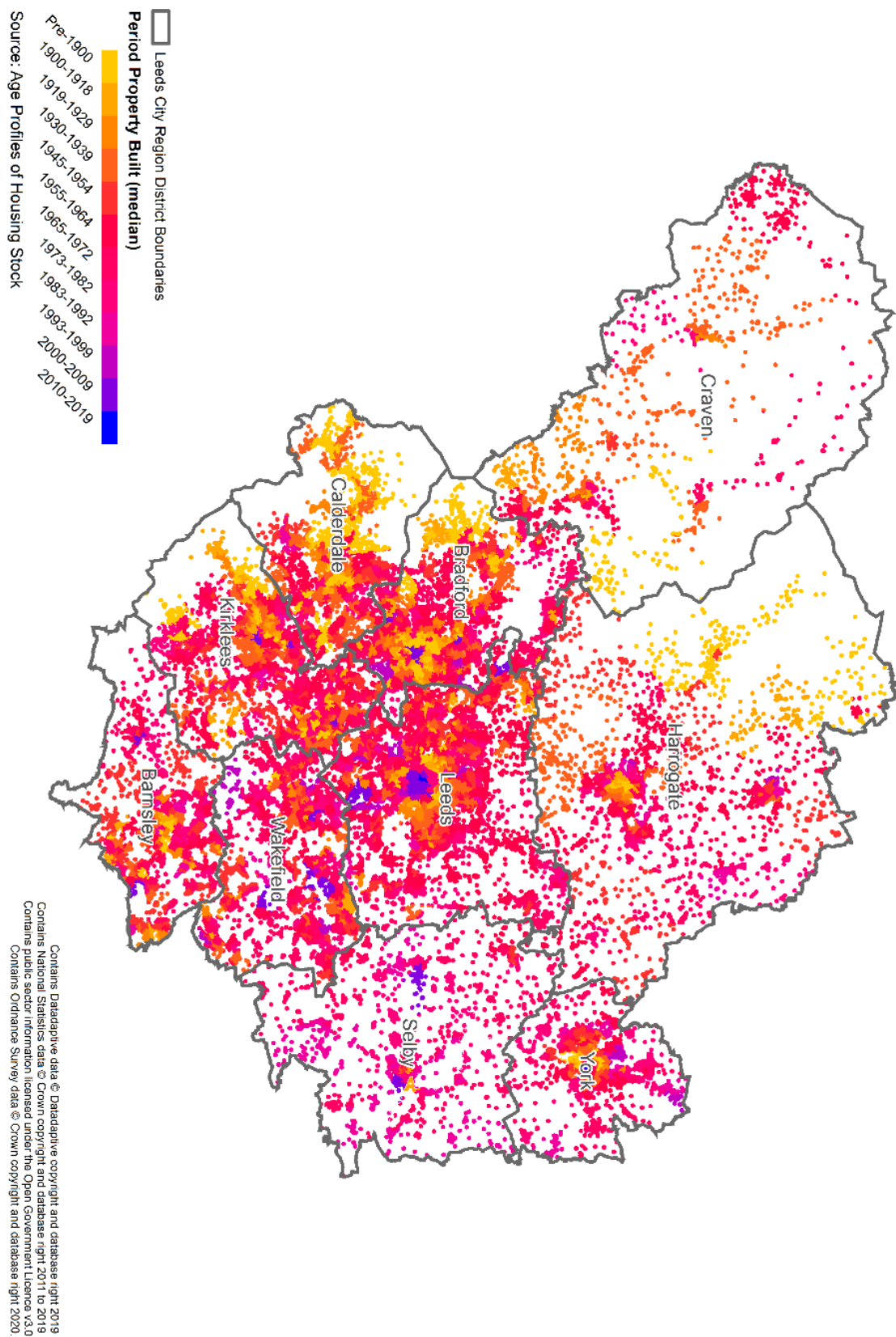
Source: MHCLG live table 123 Component flows of net additional dwellings

Age of dwelling

3.35 These recent patterns of new housing supply overlay on successive eras of new housing development which have affected different areas through time. This results in a substantially differentiated age profile of the housing stock across the city region. The map in Figure 3.12 demonstrates this.

3.36 The impact of different successive eras of housing development on the spatial structure of the city region can be clearly discerned. The present structure is, broadly speaking, a result of the waves and patterns of development summarised in Box 3.1 overleaf.

Figure 3.12: Median age of dwelling

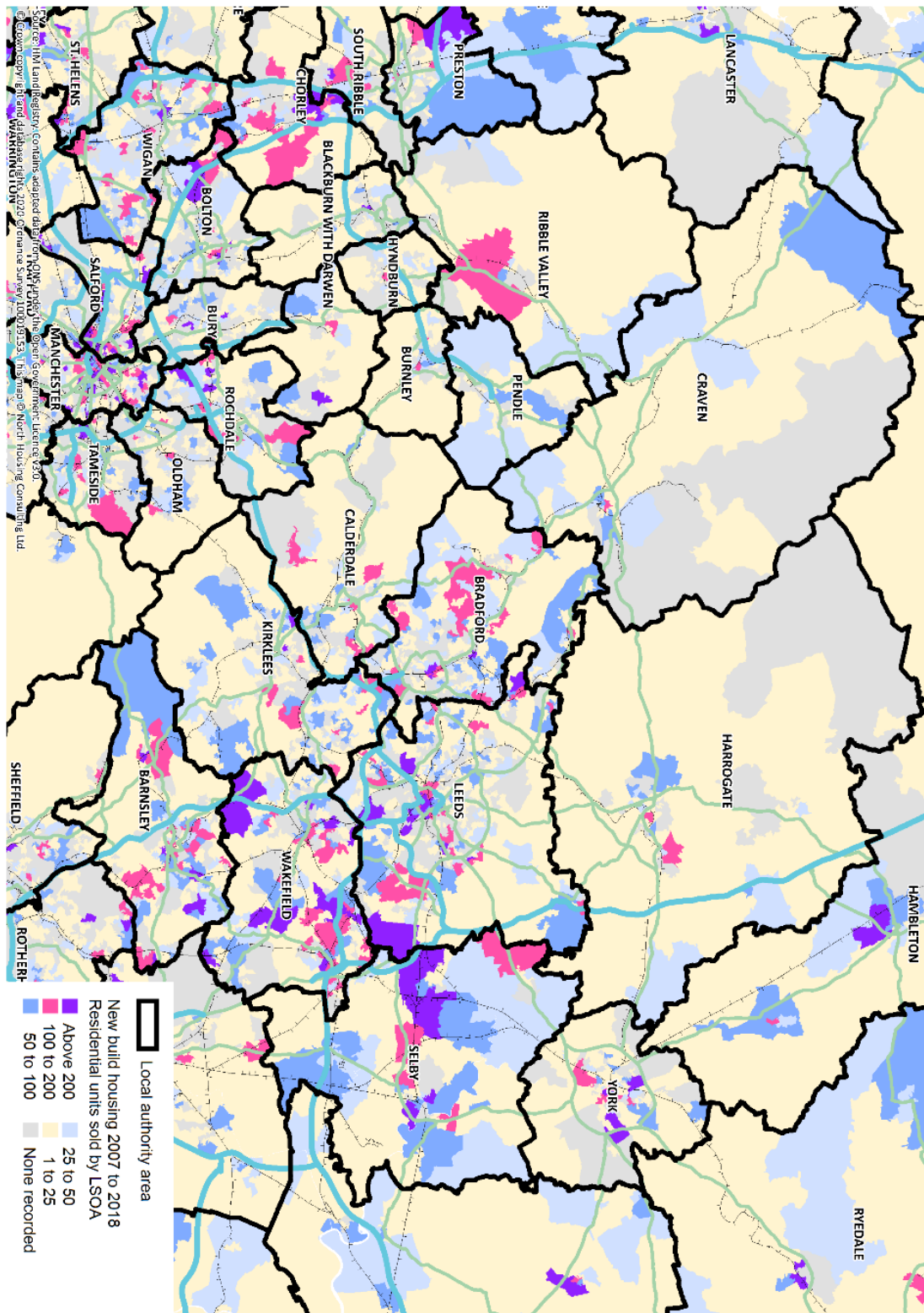


Box 3.1: Eras of housing development in the Leeds City Region

<p>Pre-1919</p> <ul style="list-style-type: none"> • Pre-1919 housing predominant at the core of most major settlements (e.g. Harrogate, York, Halifax, Huddersfield, Barnsley), although in the larger settlements (especially in Leeds and to a lesser extent Bradford and Huddersfield) the central areas have been extensively redeveloped • An inner ring of early suburban (now inner-city) development, again largely pre-1919, surrounding Leeds and Bradford. The housing stock of inner-city Bradford is older on average than in Leeds, possibly on account of having less renewal and redevelopment of inner-city neighbourhoods in Bradford in contrast to Leeds • A further archetype of largely pre-1919 neighbourhoods in the industrial valleys of Bradford, Calderdale and Kirklees • Older rural settlements largely undeveloped throughout the 20th Century, such as in Nidderdale (Harrogate) and within the Yorkshire Dales National Park (Craven).
<p>Inter-war (1919-1938)</p> <ul style="list-style-type: none"> • The first wave of council housing developments, including central districts in many cities and towns where new Council walk-up flats were provided as part of slum-clearance schemes, and Cottage-style council estates on green field sites. • Private suburban developments, including those in middle-ring suburbs like Chapel Allerton to the north of Leeds
<p>Post-war (1945-1964)</p> <ul style="list-style-type: none"> • Areas of housing, including large new planned council housing estates, that characterise a big expansion of the suburban footprint of Leeds, Bradford, York. • Significant development and expansion within coalfield towns, especially in Wakefield and Barnsley • Growth of towns, many now particularly desirable, such as Ilkley, Harrogate, • Initial phases of systematic development within villages throughout the city region, such as throughout Selby • Systems-built, high rise and medium-rise local authority estates, some as part of large planned townships such as Seacroft in Leeds
<p>Late 20th Century development</p> <ul style="list-style-type: none"> • Periods of significant private housebuilding in the 1970s and 1980s, leading to new estates in many districts, often associated with infill between the extents of existing settlements • Urban renewal schemes in the 1980s and 1990s, many facilitated by regeneration programmes (City Challenge, SRB, Estates Renewal Challenge Fund) • New medium-density housing association-led developments
<p>Post 2000s</p> <ul style="list-style-type: none"> • Urban renaissance especially in central Leeds and Bradford, characterised by large private apartment complexes and purpose built student accommodation • Medium- to large-scale brownfield development sites, with substantial new communities (especially in Wakefield and Barnsley) • Regeneration projects on large former council estates, such as Middleton • Greenfield housing and 'sustainable urban extensions' in a variety of places, including north York and Selby • Infrastructure-led suburban expansion, such as east Wakefield

3.37 In general, the focus of new housing provision in recent decades has been tilted toward the east of the city region, especially within areas that benefit from existing or planned transport road infrastructure. Figure 3.13 highlights the key clusters of new housebuilding in the last decade. The significance of high levels of new build housing in the east of the city region is clear, especially areas focused on the M1, M62 and A1(M) corridors.

Figure 3.13: New build housing 2007-2018.



Affordability

- 3.38 A separate technical report (Technical Report 2) provides full details of modelled affordability across the city region. In this report, a discussion is provided of how household incomes vary before the key spatial dimensions of affordability are summarised. Technical Report 2 should be consulted for full details of the model and how affordability varies according to different household groups.⁹

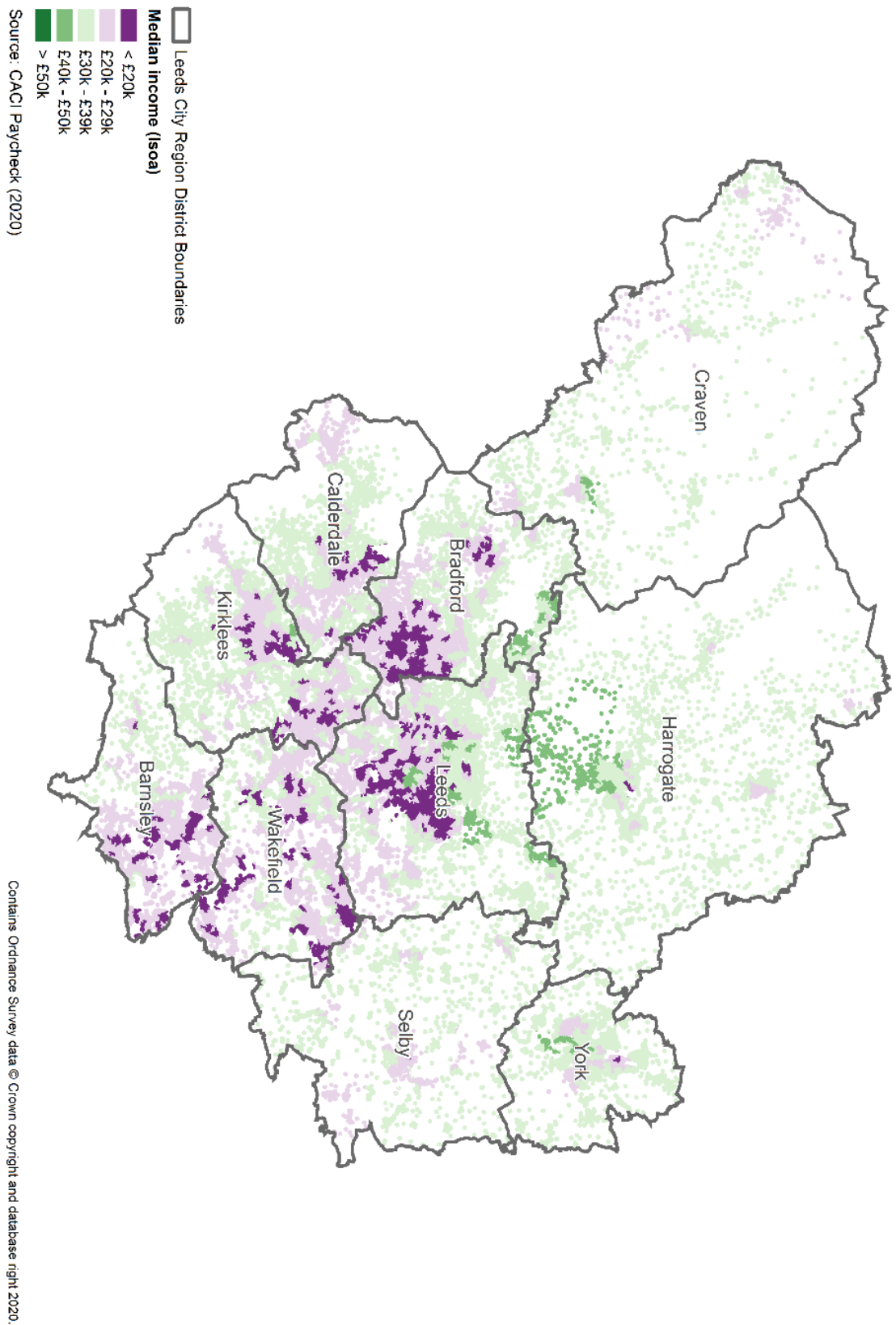
Income

As with most metropolitan areas and city regions there are strong income gradients in Leeds City Region. These map onto a range of other social and economic indicators.

⁹ The household groups considered in the model are: (a) private rented sector tenants; (b) social rented sector tenants; (c) owner occupiers; (d) first time buyers; (e) households in poverty; (f) in-work households in poverty; and (g) newly formed households.

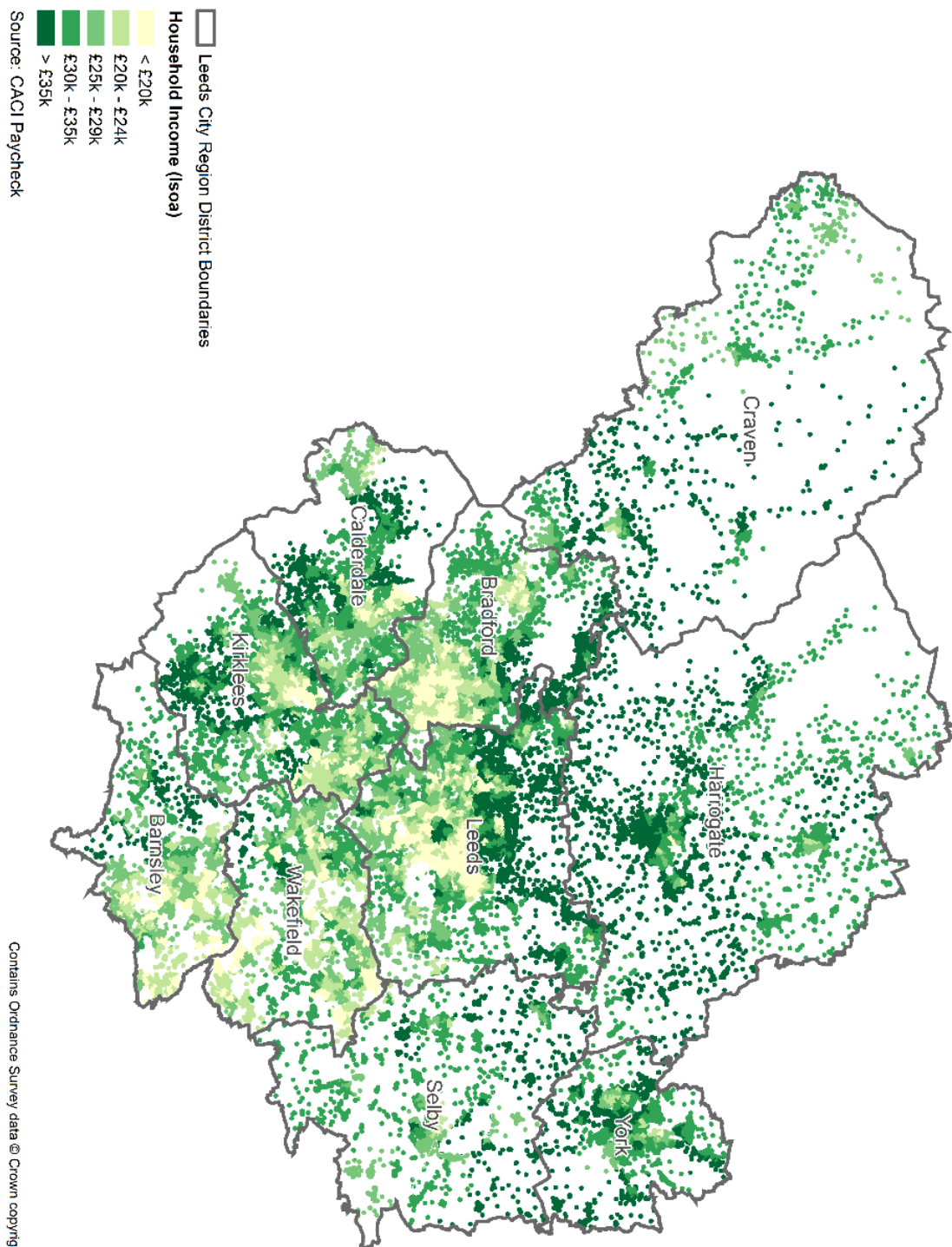
- 3.39 Figure 3.14 provides a map of median income at the neighbourhood level across the city region.
- 3.40 LCR is characterised by having particularly pronounced geography of household income. The north of the city region forms the so-called 'golden triangle' between Harrogate, York and Leeds and this area is home to the highest household incomes in the city region and some of the highest in the north of England. The median income in many neighbourhoods is in excess of £40,000 p.a., meaning that over half of *all* households in these areas, irrespective of their economic activity, have an income of well over £3,000 per month before tax.
- 3.41 Despite the focus of new housebuilding and urban policy, it is not the resurgent city centres of Leeds and Bradford that are home to the highest household incomes. There are two key explanations for this. First is that, as is historically the case, high income jobs induce longer commutes and so the income potential generated by city centre labour markets is exported to surrounding districts, facilitated by radial transport infrastructure. Second, is the 'sharing model' whereby young people setting out in the labour market seek to reduce housing costs by sharing, while maintaining access to central amenities and a more vibrant locale. Students, and the robust (pre-Covid) market for student accommodation, also exhibit this pattern.

Figure 3.14: Median gross household income by neighbourhood, 2020 (map)



Source: CACI PayCheck (2020)

Figure 3.15: Median gross household equivalised income by neighbourhood, 2020 (map)



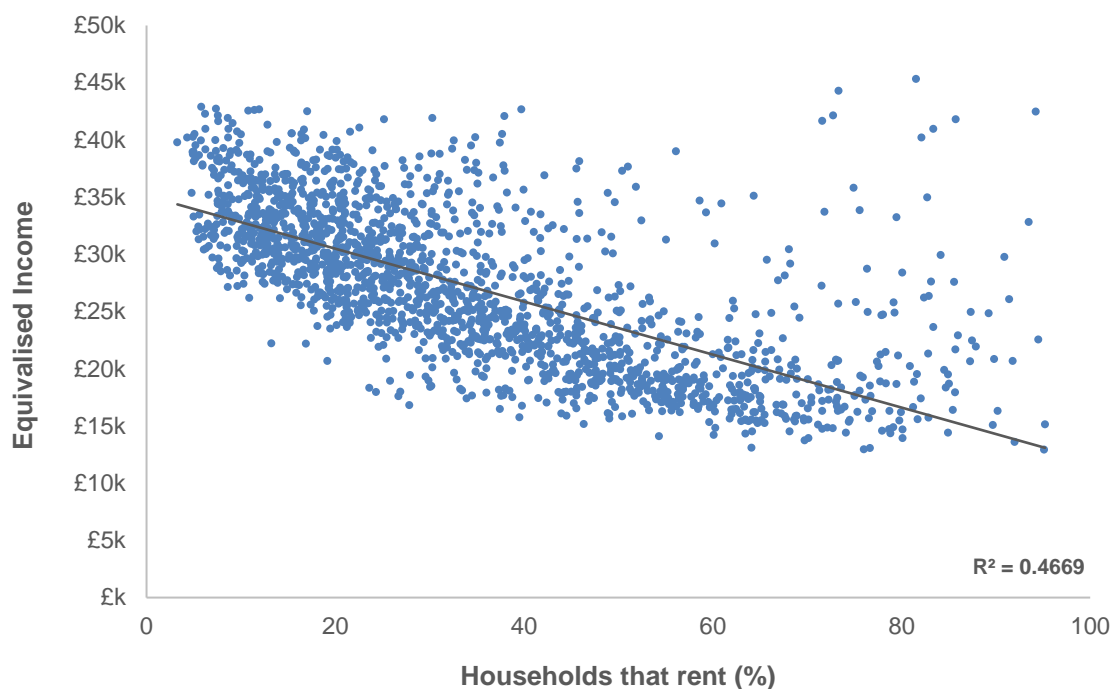
Contains Ordnance Survey data © Crown copyright and database right 2020.

Source: CACI PayCheck (2020).

3.42 There are several additional points that can be made from our spatial analysis of income patterns:

- The LCR wage economy is largely north east facing. Neighbourhoods and settlements that enjoy good radial transport access to Leeds, and which are located within proximity to Harrogate and York, have the highest equivalised incomes. Other than these locations, it is the Pennine settlements in Calderdale and Kirklees which are the most affluent.
- Higher incomes in the North are only partly explained by commuting into Leeds – there has also been significant growth in the Harrogate and York economies in their own right, for example (see Chapter 4). This means that residents within the ‘golden triangle’ to the north of Leeds benefit not only from accessibility to the wider Leeds labour market but also to opportunities within Harrogate and York’s own growing economies.
- Low income in its concentrated form is strongly associated with renting. As the scatterplot in Figure 3.16 demonstrates, there is a strong correlation between tenure and income at the neighbourhood level.

Figure 3.16: Scatterplot of neighbourhoods by equivalised income and tenure



Source: CACI PayCheck and Census 2011.

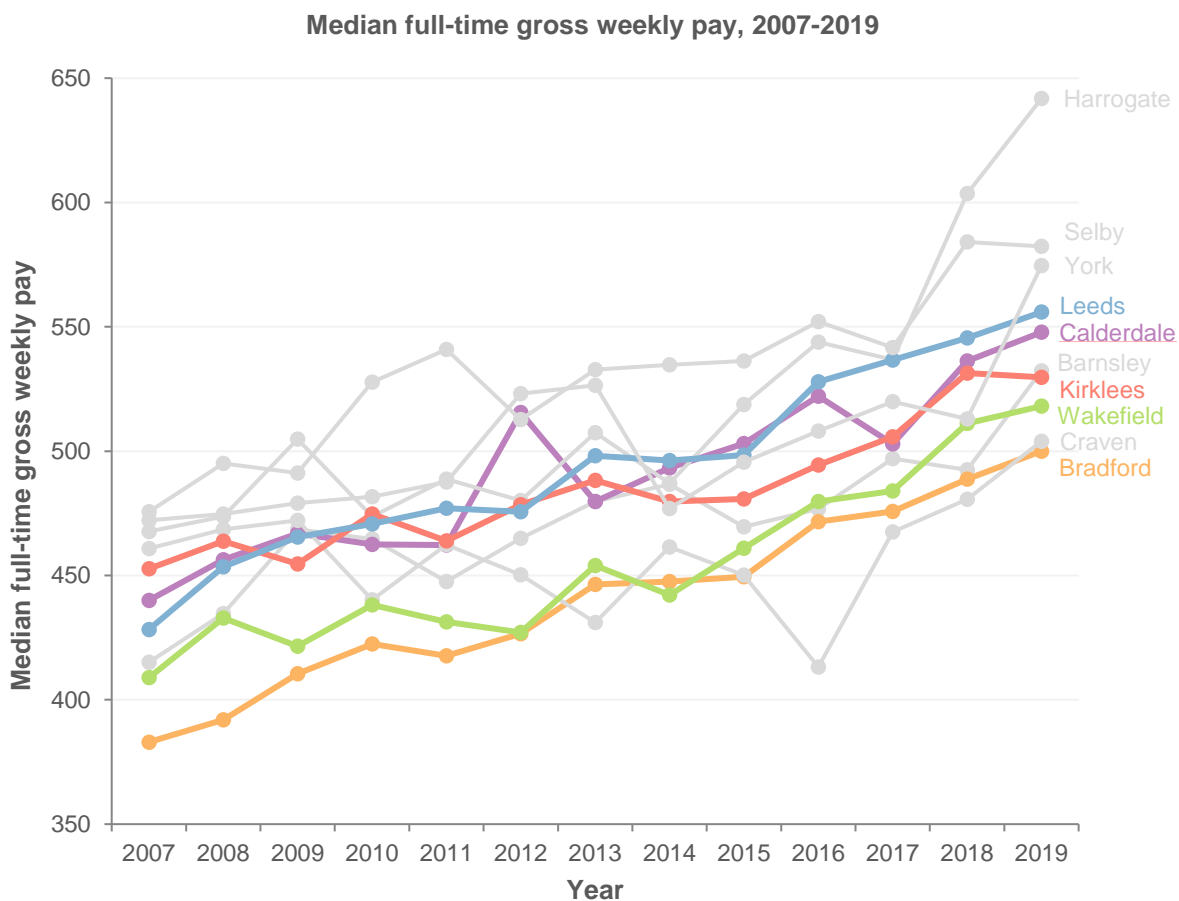
Note: this analysis is indicative; it should be borne in mind that, owing to data limitations at the neighbourhood (LSOA) level, the tenure measure (x axis) is drawn from 2011 data, whilst the income data (y axis) is contemporary.

- The rural fringes of Calderdale and Kirklees have higher income, and – especially for households able to afford the commute by rail – enjoy comparatively fast access to the Greater Manchester economy.
- But there are smaller pockets of low income throughout the peripheries of the city region, such as in York, Skipton, Harrogate, Selby and Todmorden.

3.43 Despite significant pressure on wages since the Global Financial Crisis, median full-time gross weekly pay increased in nominal terms all districts of the city region (Figure 3.17). This increase has occurred only recently in some districts, such as Craven where incomes declined in nominal terms until as recently as 2016. There are evidently

large differences in real terms wages between the highest earning areas (Harrogate, Selby and York), where median gross weekly pay is in the range £575-650 p.w., and the lowest in Craven and Bradford (£500 p.w.). This suggests that despite strength in some housing market conditions, some rural areas such as Craven have comparatively low incomes.

Figure 3.17: Median full-time gross weekly pay by district, 2007-2019



Source: Annual Survey for Hours and Earnings

3.44 As Table 3.5 demonstrates, nominal increases in pay across the city region have not kept pace with increases in the cost of living. Only in Harrogate are incomes higher than they were in 2007 when indexed against 2007 prices using the Consumer Prices Index (CPI). Incomes have fallen most in real terms in Craven and Kirklees, and more modestly in Bradford and Leeds. These district level averages are likely to conceal a wide degree of variation in real-terms income growth, however.

Table 3.5: Nominal and real median full-time gross weekly pay by district, 2007-2019

	Nominal (£)			Real (£)		
	2007	2019	% change 2007-2019	2007	2019	% change 2007-2019
Barnsley	415.1	532.3	28.2	415.1	403.9	-2.7
Bradford	383.0	500.0	30.5	383.0	379.4	-0.9
Calderdale	440.0	547.8	24.5	440.0	415.7	-5.5
Craven	460.8	504.0	9.4	460.8	382.4	-17.0
Harrogate	467.7	641.8	37.2	467.7	487.0	4.1
Kirklees	452.7	529.7	17.0	452.7	401.9	-11.2
Leeds	428.3	555.9	29.8	428.3	421.8	-1.5
Selby	475.6	582.4	22.5	475.6	441.9	-7.1
Wakefield	408.9	518.1	26.7	408.9	393.1	-3.9
York	472.2	574.6	21.7	472.2	436.0	-7.7

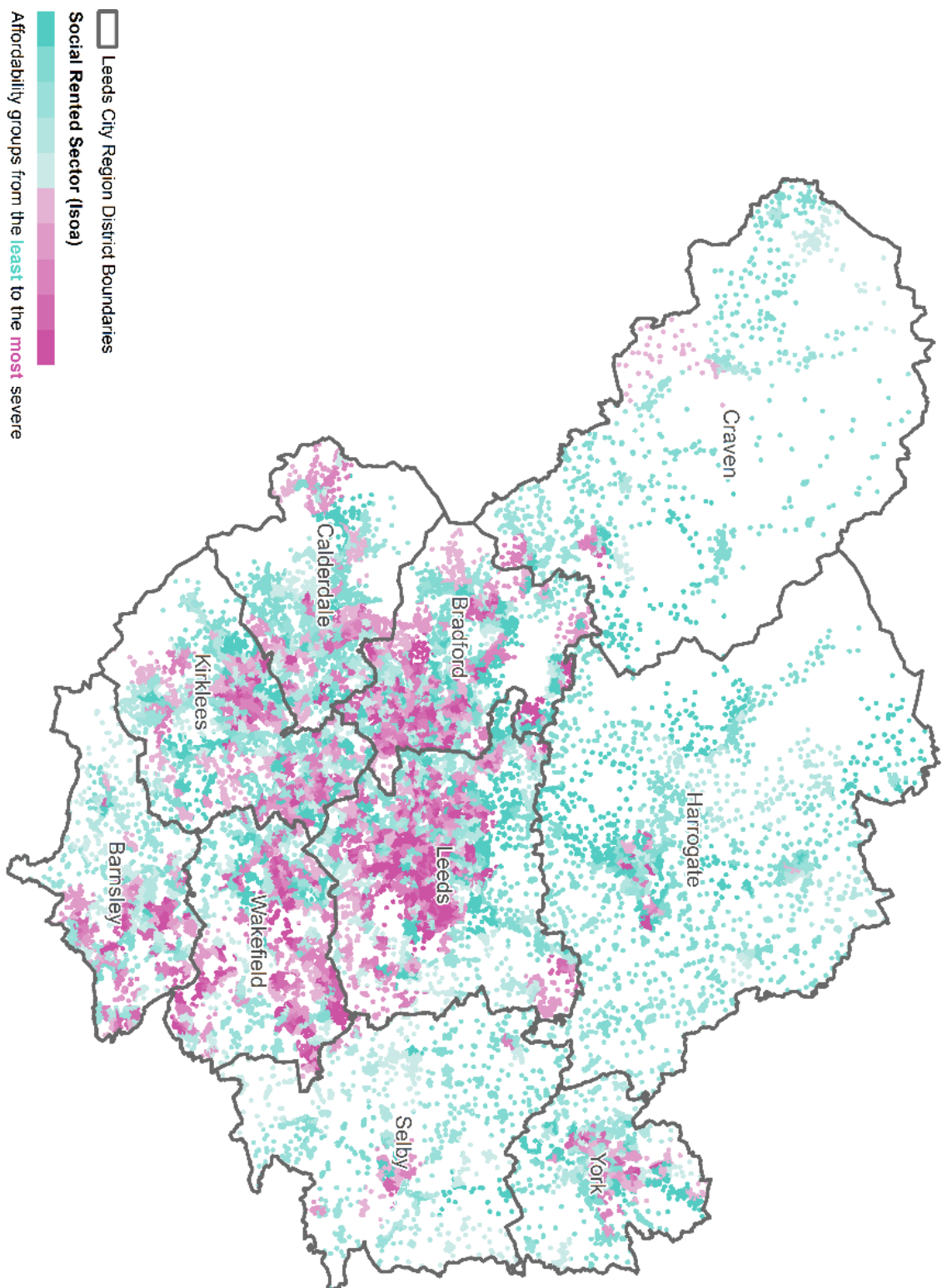
Source: Annual Survey for Hours and Earnings, authors' calculations using ONS CPI statistics (table 20a).

Summary of key affordability pressures

- 3.45 There is a strong neighbourhood dimension relating to the incidence of households which experience difficulties with housing affordability in the LCR. There is also a strong relationship with the concentrations of low value private rented sector dwellings and clusters of low income groups which experience serious problems associated with affordability. This finding is supported by the findings of the Affordable Housing Commission which modelled the tenure impacts of the affordability crisis at a national level.

3.46 Figure 3.18 shows the distribution of households in the Private Rented Sector who experience affordability challenges. This shows some neighbourhood-level concentrations of poor affordability in Bradford, Calderdale and Kirklees. These concentrations reflect the large stock of pre 1919 terraced housing retained during the post war clearance programmes, and conversely, the lower provision historically of council housing in these areas. This stock has always absorbed a greater level of housing need than in areas with a larger social sector provision. There is also a very significant cluster of private renters in central Leeds, which reflects a housing function which acts as a reception area for international migration, students and younger households which experience welfare restrictions and rely on the “room rate” payment through Housing Benefit to secure accommodation. It should be noted that wherever there are concentrations of older low value terraced houses throughout the city region there are also private renters who are experiencing affordability problems (see for example, York, Harrogate, Wakefield mining villages and central Barnsley).

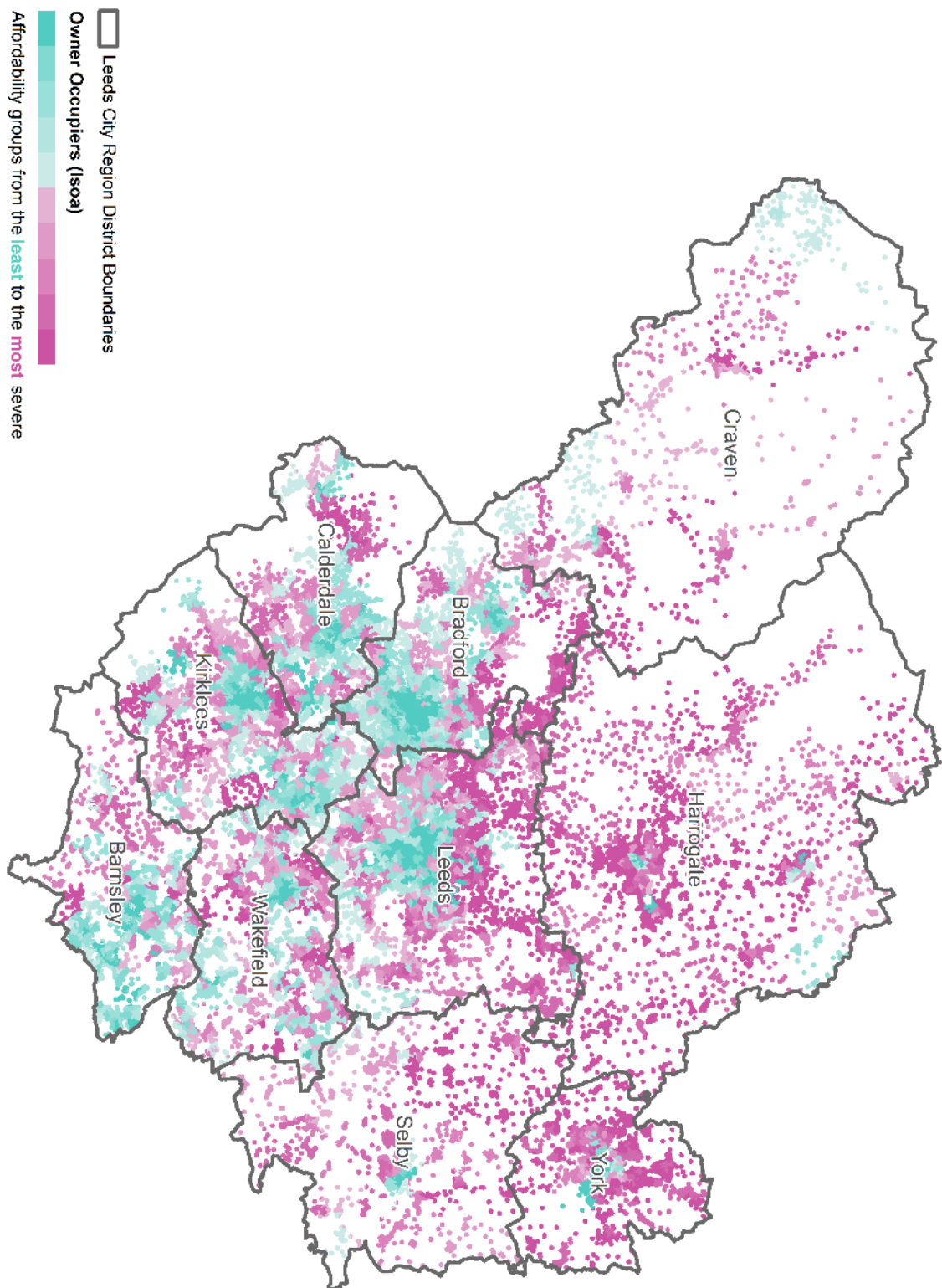
Figure 3.18: Affordability problems for households in the social rented sector (map)



Source: ONS 2011 Census Tables QS405EW and QS110EW, MHCLG Live Table 100, DSS Statexplore, ONS House price statistics for small areas dataset 48 lower quartile price by LSOA. Contains Ordnance Survey data © Crown copyright and database right 2020.

- 3.47 The neighbourhood dimension to housing affordability among social renters presents differently (Figure 3.18). This shows the widespread distribution of affected households. Technical Report 2 shows that the issue is not as extensive and severe as that in the private rented sector, although it represents a significant social issue when such high proportions of those who have access to sub-market rents may find even those unaffordable. This points to systemic failures in the Welfare and Housing Benefit systems which is an issue explored in more detail in the Overarching policy paper produced in tandem with this paper.
- 3.48 Finally, in this summary, Figure 3.19 plots the affordability pressures faced by households currently in home ownership. This shows the most intense pressures being located to the north of Leeds City Centre, in the “Golden Triangle” and increasingly the north of Selby which is absorbing a significant outflow of households from York (see Chapter 4). An expensive suburban fringe to the east of the city region is also evident in Bradford, Calderdale and Kirklees but is of much smaller scale than that to the north.

Figure 3.19: Affordability problems for households in the owner-occupied sector (map)



Source: ONS 2011 Census Tables QS404EW and QS405EW, MHCLG Live Table 100, CACI Paycheck, ONS House price statistics for small areas dataset 48 lower quartile price by LSOA. Contains Ordnance Survey data © Crown copyright and database right 2020.

4

Employment, Population and Spatial Structure

Summary of key points

- There are important path dependencies to the direction of spatial development in the city region, which reflect the distinctive eras of economic and housing developments outlined in sections 3 and 4. Whilst the economy and labour market have evolved, the structure of the city region's residential footprint has been more fixed. Planning policy has tended to consider housing and jobs independently, with a philosophical commitment to separation of land uses.
- The decades since the 1990s have seen a bifurcation of the city region's labour market. The overall position of the principle central business district (Leeds) has weakened as jobs – particularly lower-wage jobs – have relocated to peripheral estates, whilst there has been an increased cultural appetite for out-of-town retailing and services.
- The changes have paralleled processes of the spatial sorting of population. The location of jobs in higher socioeconomic classes (generally, north-east facing) differs greatly from those in lower socioeconomic classes (south-west facing).
- There are very large gaps in employment density across the city region. As well as Leeds and York, Craven and Harrogate have high jobs density which means they function as labour market magnets in their own right. These gaps yield large differences in job availability: despite having similar populations, York has over 25,000 more jobs than Calderdale, for example.
- Population growth has occurred in a number of different ways. Natural population change (births, deaths) and international in-migration are important in replacing population in Bradford and Leeds, whilst internal (UK) migration is more important in Craven, Harrogate and York.
- Central areas have seen high levels of population growth arising from ongoing urban renaissance but also intensification in the way that the private rented housing stock is used. At the same time, there has been significant population growth as a result of migration to areas of new housing, including in Wakefield, Selby and York. Net population flows from Leeds to Wakefield are now around six times higher than they were in 2013, for instance. Despite distance, Kirklees now exports a similar population to Selby as does neighbouring Leeds and York.
- On the whole, however, population change is strongly associated with social deprivation, with growth disproportionately occurring in more deprived neighbourhoods.

- 4.1 The chapter of the report considers the context in which the housing market sits: the labour market and broader patterns of population migration flows. As we discussed briefly in Chapter 2, the historic development of the city region's economic geography has given rise to a distinctive spatial structure which is:
- Relatively polycentric in its overall character, despite the evident strength of Leeds as a national growth pole.
 - The product of long-term phases of economic development and urbanisation, in which the focus of successive growth sectors has shifted around the city region rather than replaced sectors in situ.
 - Has been increasingly shaped by long term investments in transport connectivity, focusing mainly on the development of the city region's motorway network, but also recognising the importance of suburban rail and the absence of a city-regional mass transit network.
- 4.2 There are therefore significant path dependencies to the direction of spatial development in the city region. The current spatial structure has been over a century in the making and has developed an urban fabric and structure (including patterns of density) that, notwithstanding some regeneration interventions, has been rather persistent. Put simply, as the economy has evolved, the structure of the residential footprint of the city region has been more fixed. Starting with the first wave of council and speculative suburban developments, new housing estates have largely been additive to this footprint rather than renewing it.
- 4.3 Notwithstanding our earlier point that LCR has been rather underserved by direct policy attention from Whitehall, it is nevertheless important to note that national policy, especially as regard economic policy, regional policy (or lack thereof), regeneration, transport and planning have all left indelible imprints on the development of LCR's spatial structure, as they have elsewhere in England. As such, the current pattern of spatial development in the city region must be seen as:
- (a) local context overlain by shifting national policy priorities; and
 - (b) having embedded a set of markets which themselves entail long-term processes and outcomes.
- 4.4 Any intervention or change within these markets will not deliver a systematic impact on broader conditions (e.g. affordability, social inequalities, conditions) for a long time, as effects work themselves through the process of housing turnover. Over the last 70 years, the key observed changes – which have led to perhaps 3-4 generational shifts in outcomes – can perhaps be summarised as: Transport infrastructure and land release policies since World War II have facilitated the process of suburbanisation and decentralisation – and, since 2012, a national policy framework has been put into place that weakens mitigations and supports development based on established market trends. To date, policies aimed at recentralisation or urban renaissance have been comparatively short lived, or selective in their application and impact.
- As will be elaborated upon in this chapter, population and migration trends have tended to reinforce deprivation in low value housing areas, while new build and intra-regional population flows are strongly related to the successive structural shifts in economy, labour and housing markets noted above.
 - Given the restructuring of place and space there are now evident issues relating to transport and accessibility of employment, as well as considerable concerns about the environmental sustainability of the present urban structure.

- 4.5 To exemplify these broad structural trends and outcomes, this section will now examine the geography of the labour market and skills before examining the dynamic system of population mobility within the city region.

Employment, education and the labour market

- 4.6 One of the key structural underpinning factors in the housing market is the geography of the labour market. Planning policy has tended to consider the question of land use development for housing and jobs separately, often in competition with one another and with a philosophical commitment to separation. This reflects a post-war consensus around enhanced levels of population mobility, transport improvements and innovation, and social and cultural trends which have weakened the importance of proximity between housing and labour market opportunities.
- 4.7 As households with means have been able to overcome the tyranny of distance, policies that reflect choice in the provision and consumption of public services (such as education and healthcare) have become more important within housing market decisions. These processes have enhanced the role that spatial sorting plays in determining socioeconomic outcomes at the neighbourhoods level and have contributed to emergent patterns of socio-spatial inequality.
- 4.8 Over several decades, but particularly since the 1990s, there has been an emergent bifurcation of the geography of the labour market. The overall position of the city region's central business districts (e.g. Leeds city centre) has weakened in response to two processes:
- (a) a benign regulatory framework for land use release which has reflected land economics in encouraging the development of low-wage, land-hungry employment uses (e.g. manufacturing and logistics) in new peripheral estates.
 - (b) a cultural appetite for decentralised services such as retailing. The public sector has generally been complicit in this trend, often seeking to consolidate and relocate schools, hospitals and council offices largely in pursuit of efficiencies.
- 4.9 These forces have both shaped and responded to increased car ownership across most, although not all, population groups.
- 4.10 At least three factors have protected the strongest town and city centres in the city region from collapse in the face of these considerable forces of decentralisation. These are:
- That the investment in housing made by those on the highest incomes and employed in knowledge intensive sectors has been dependent on easily accessing central business districts which remain disproportionately the location of the highest waged jobs.
 - The importance of agglomerations for some types of economic activity, especially in the creative, knowledge intensive and professional sectors which rely on human capital rather than fixed factors of production.
 - The continued importance of a vital cultural and social milieu for some classes and population groups, especially students and young professionals that have formed the backbone of resilience for urban centres over the past few decades (particularly over the years that higher education expanded).
- 4.11 Each of these factors is highly selective in terms of the population groups. Educational attainment and skills are likely to be key determinants of the extent to which these factors translate into housing market demand.

4.12 As these processes have played out over several decades there has been an emergence of deep structural inequalities across the city region. These are deeply embedded because they are reflected so clearly in terms of the occupational structure of the labour market. As the maps in Figure 4.1 and Figure 4.2 clearly show, there is a distinct geography to the socio-economic classification of employment across the city region:

- Professional, managerial and intermediate jobs dominate the labour market in central Leeds, Bradford, York, and in Harrogate (Figure 4.1).
- Routine, supervisory, and 'own account' workers dominate areas throughout metropolitan West Yorkshire (outside central Leeds), as well as in Barnsley and Craven (Figure 4.2).

Figure 4.1: Jobs in higher socio-economic classes (NSSEC 1-3), 2011 (map)

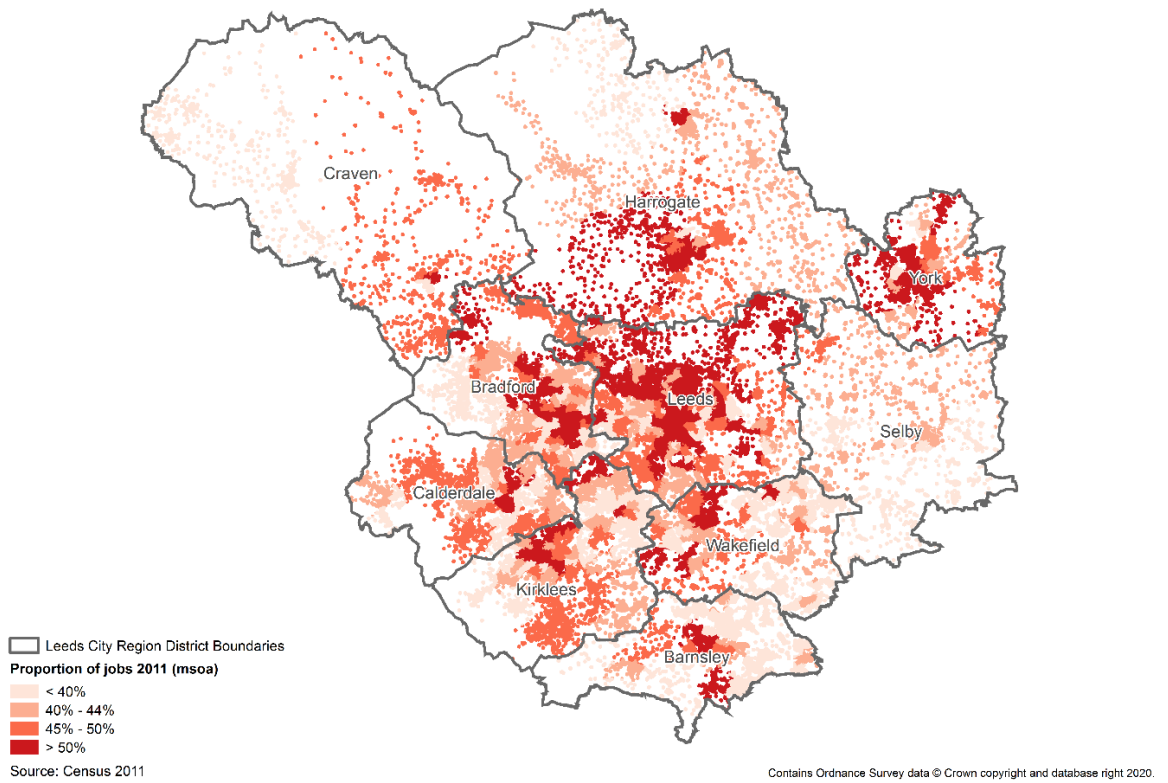
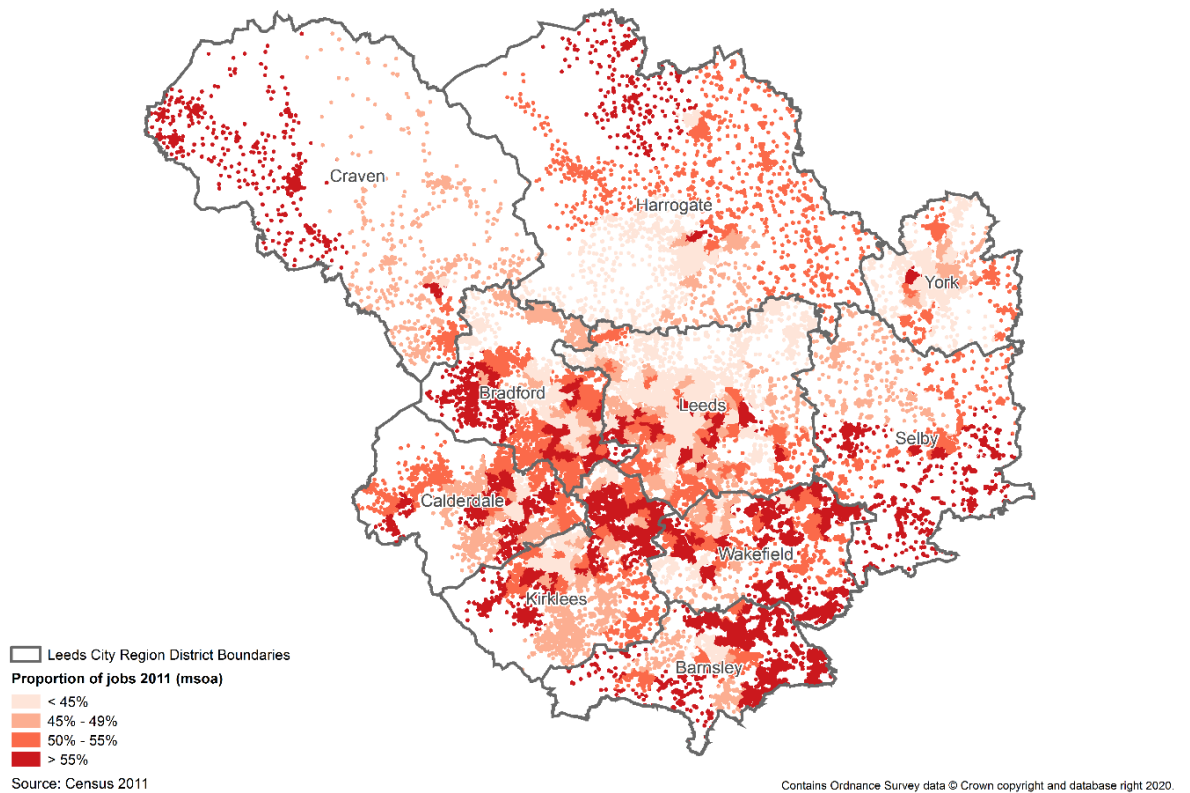


Figure 4.2: Jobs in lower socio-economic classes (NSSEC 4-7), 2011 (map)

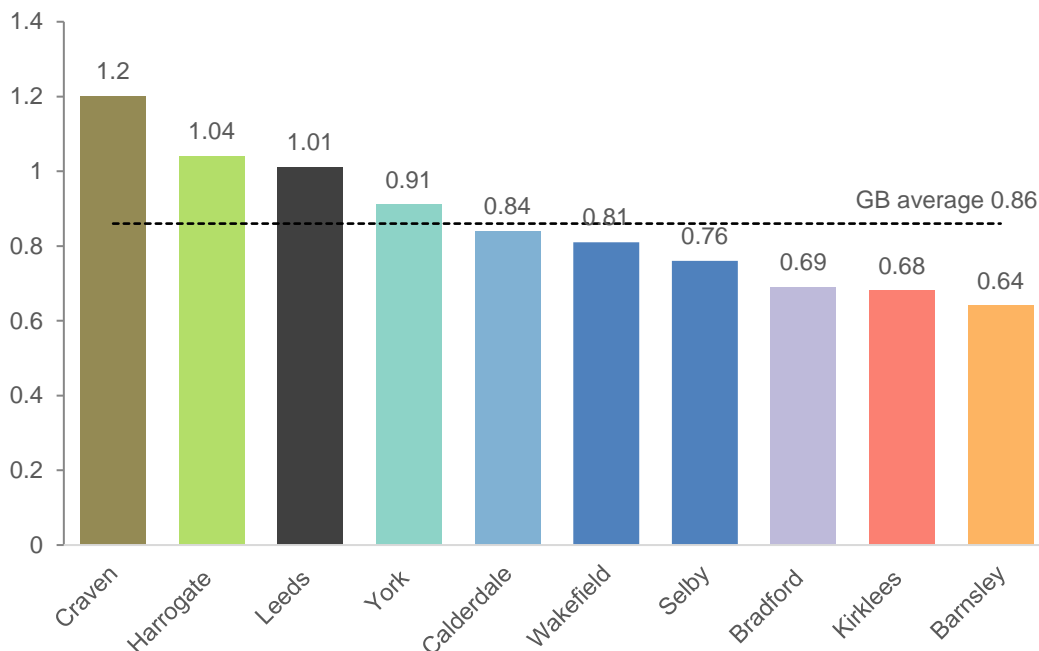


Source (both maps): Census 2011 workplace statistics.

Employment density

- 4.13 Another way of analysing the labour market structure of the city region is by looking at employment density, as expressed by the number of jobs per working age population of a given area (Figure 4.3).

Figure 4.3: Jobs density by district, 2018

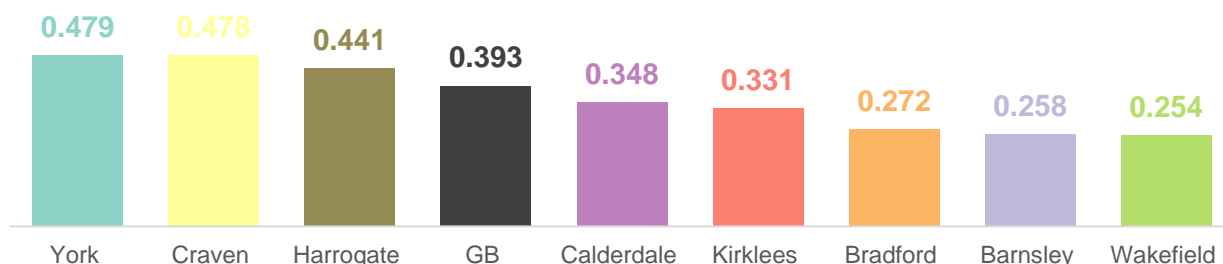


- 4.14 Analysis of workplace jobs reveals that there are very wide structural gaps in employment density. Barnsley, despite having a population that is over 50% greater, has over 1,000 fewer jobs than in Harrogate. Similarly, the populations of York and Calderdale are almost equal (at just over 200,000 inhabitants each), whilst York has over 25,000 more jobs.
- 4.15 In terms of jobs density, there is a 54 percentage point difference between Craven (which has 1.2 jobs for every person of working age) and Barnsley (which has 0.64 jobs per working age person).

It is clear that whilst Leeds is an employment engine which fuels prosperity in the north of the city region, it also has its own indigenous high value sectors as well. As such, Craven, Harrogate and York all generate net in-commuting to service their labour markets as well as supplying labour to Leeds. This dual role as both high-amenity dormitory locations for Leeds as well as inducing inward commuting in their own right is one of the main reasons why the housing market in the north of the city region has a high structure of housing costs. This is assisted by good transport infrastructure to access the regional centre, high skills (see

- 4.16 Figure 4.4) and a vibrant local economy and aspirational market offer – these attributes are less consistently evident elsewhere in the city region.

Figure 4.4: Proportion of residents with qualifications at NVQ 4+



Source:

Population Changes

- 4.17 Table 4.1 provides a summary of the key population change statistics for each district in the city region. This reveals the comparative importance of natural population change (births and deaths) and migration – both UK and international – on changes to the population.
- 4.18 All districts in the city region are growing in population terms although the rate of growth and the sources of that growth vary considerably. In 2018 the population of the city region is estimated to be 3.08 million. It grew by around 0.6% in the year to 2018. In Selby and Wakefield, the rate of population growth was more than double the city regional average, whilst in Calderdale, Harrogate, Kirklees Craven and Bradford the rate was less than half the average.
- 4.19 Natural change is particularly important in replacing population in the cities of Bradford and Leeds. These districts along with York and Kirklees also have the highest rates of international in-migration – it is notable that these four districts between them account for the city region’s seven universities. Net UK migration is more important to Craven, Harrogate and York.

Table 4.1: Population estimates and components of population change by district, 2017-2018

	Population		Change 2017-2018		Population gains 2017-2018				Population losses 2017-2018				Ratio of gains to losses		
	2017	2018	Net change	%	% of gains			Total gains	% of losses			Total losses	Natural change	UK mig.	Int'l mig.
					Births	UK mig.	Int'l mig.		Deaths	UK mig.	Int'l mig.				
Barnsley	243341	245199	1858	0.76	22.59	68.28	9.00	12000	25.38	70.21	4.41	10142	1.05	1.15	2.42
Bradford	534800	537173	2373	0.44	25.98	61.65	12.40	28310	17.90	75.83	6.27	25937	1.58	0.89	2.16
Calderdale	209454	210082	628	0.30	21.35	71.73	6.66	11116	19.82	77.75	2.43	10488	1.14	0.98	2.90
Craven	56604	56832	228	0.40	12.03	83.15	4.77	3839	18.11	79.81	2.08	3611	0.71	1.11	2.44
Harrogate	160044	160533	489	0.31	13.55	76.18	9.74	10238	17.46	75.35	7.19	9749	0.81	1.06	1.42
Kirklees	437145	438727	1582	0.36	21.93	66.05	11.87	23281	18.48	77.28	4.23	21699	1.27	0.92	3.01
Leeds	784846	789194	4348	0.55	15.62	69.11	15.45	63034	11.93	78.52	9.56	58686	1.41	0.95	1.74
Selby	87887	89106	1219	1.39	14.04	82.06	3.88	6626	14.89	82.47	2.64	5407	1.16	1.22	1.80
Wakefield	340790	345038	4248	1.25	21.51	71.52	7.09	18710	23.75	71.81	4.44	14462	1.17	1.29	2.07
York	208163	209893	1730	0.83	8.92	77.33	13.57	20866	9.78	83.28	6.93	19136	0.99	1.01	2.13
West Yorkshire	2307035	2320214	13179	0.57	19.87	67.67	12.52	144451	16.13	76.98	6.89	131272	1.36	0.97	2.00
Leeds City Region	3063074	3081777	18703	0.61	18.21	69.94	11.83	198020	16.05	77.41	6.55	179317	1.25	1.00	2.00

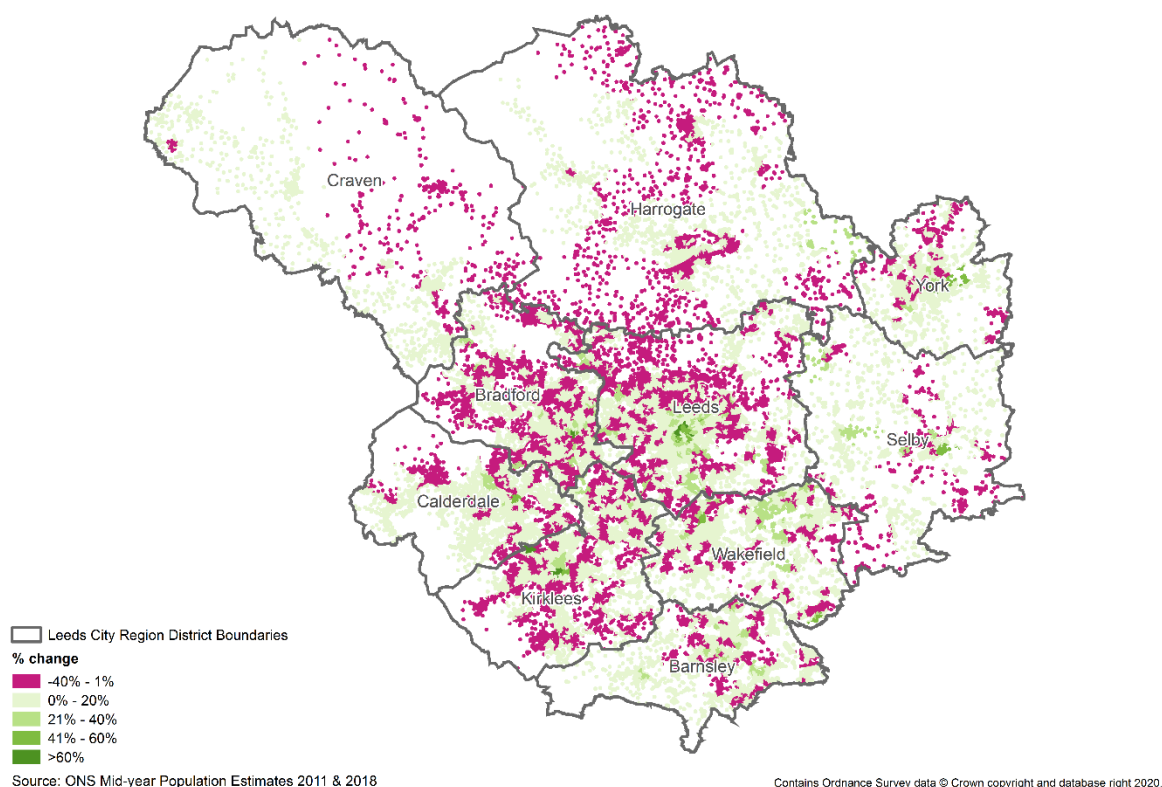
Source: ONS Mid-year population estimates 2018.

4.20 Figure 4.5 shows estimated population growth rates at the neighbourhood level across the city region. This reveals that population growth appears to have been highest in central areas, possibly as a result of various urban processes:

- Regeneration and urban renaissance (generating new supply where there was previously none).
- Intensification and sub-division of existing housing, particularly in the PRS or as a process of tenure transfer from owner occupation (e.g. Buy to Let).
- Overcrowding, especially within the PRS.

4.21 As will be discussed shortly, there is an important link with social deprivation in that neighbourhoods that have witnessed the highest levels of population growth over the last decade are disproportionately deprived.

Figure 4.5: Neighbourhood level population change, Leeds City Region, 2011-2018



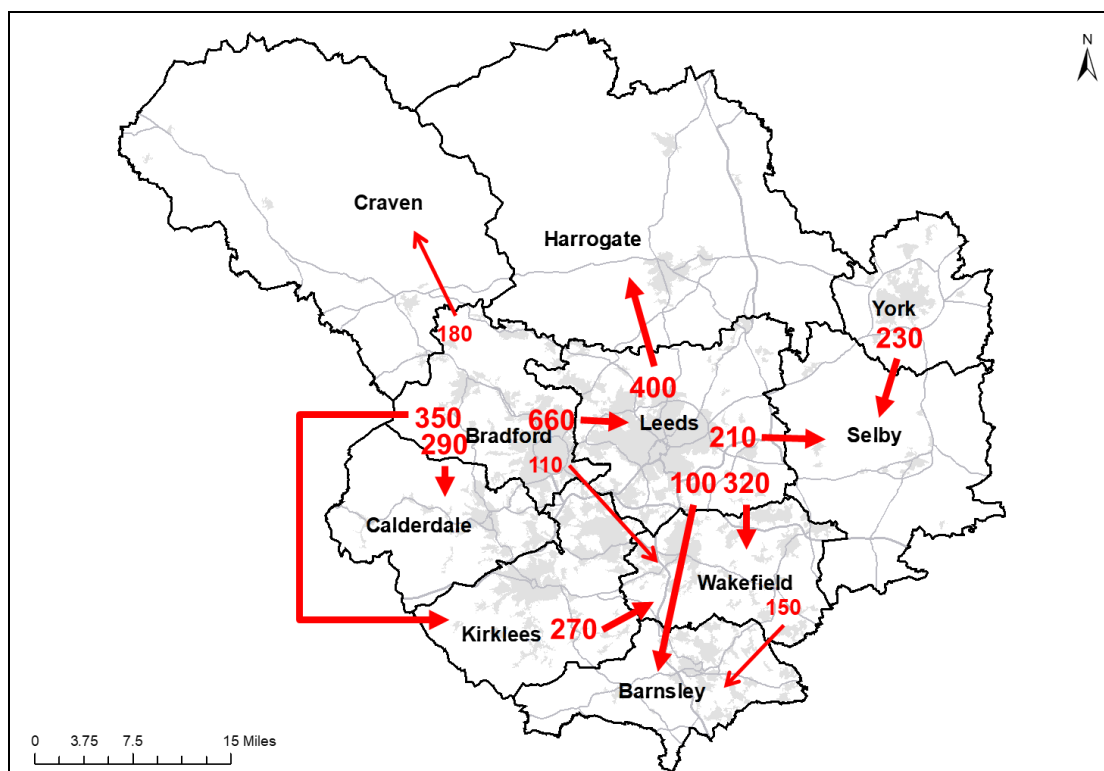
- 4.22 As the summary of population change components discussed earlier suggests, there is a complex and dynamic system of population mobility within the city region. As the summary of components of population change suggests, the major settlements – especially Leeds – disproportionately act as destinations for long distance UK and international migration. Given the overall younger profile of these areas, they also tend to have positive natural change resulting from births outweighing deaths. In turn, population then filters out to surrounding districts, largely as a result of empirically well-proved processes of ‘adjustment moves’ within the housing market, whereby established households seek to optimise their housing situation within the parameters of their economic situation (including employment, where relevant).

Figure 4.6 and

4.23 Figure 4.7 present a graphical summary of the principle net migration flows between districts, in 2013 and in 2018. A number of significant changes in this period can be discerned. These include:

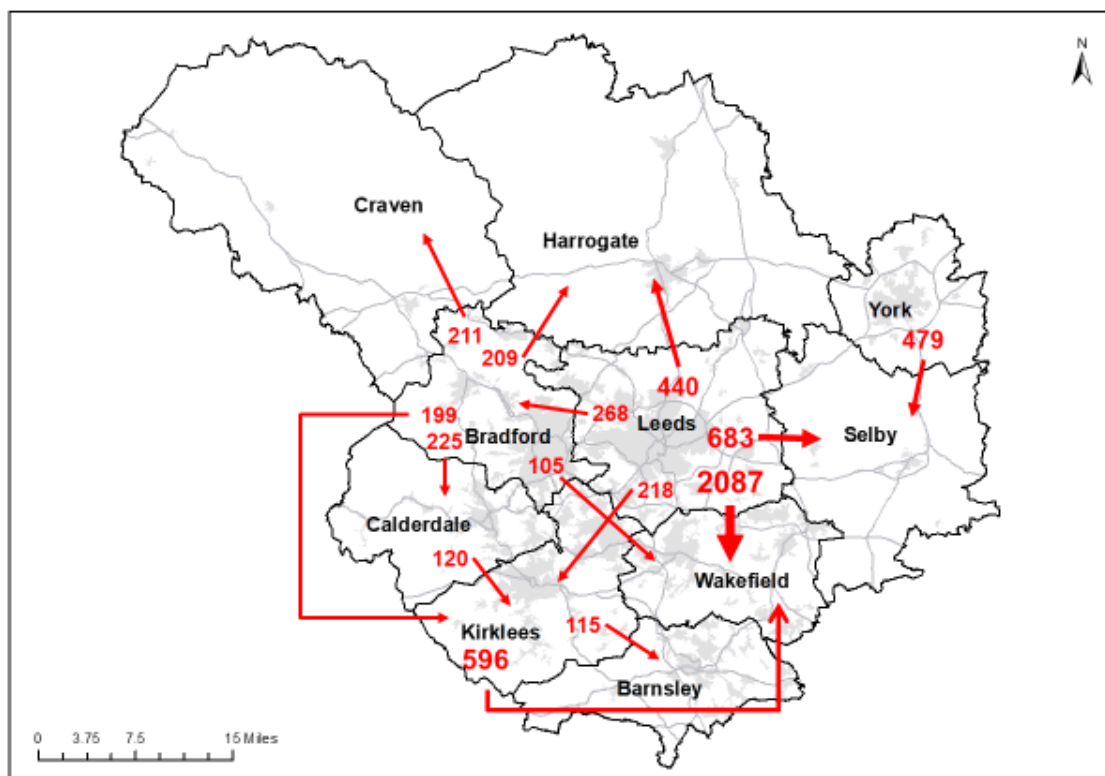
- A reversal of net flows between Bradford and Leeds. Bradford historically tended to lose population to Leeds, but by 2018 this net effect had been reversed.
- The establishment of very significant population flows into Wakefield and Selby, from Leeds and other neighbouring districts, including a net flow of nearly 600 persons from Kirklees. These increased flows to Wakefield and Selby are consistent with data in Table 4.1 showing the importance of UK migration to population growth in those districts, and also to earlier data presented on levels of new housebuilding.

Figure 4.6: Net internal population migration, Leeds City Region, year to mid-2013 (map)



Source: ONS, Internal migration: detailed estimates by origin and destination local authorities, age and sex, 2018.

Figure 4.7: Net internal population migration, Leeds City Region, year to mid-2018 (map)



Source: ONS, Internal migration: detailed estimates by origin and destination local authorities, age and sex, 2018.

4.24 It is important to stress that the patterns revealed in Figure 4.7 are not anomalous or temporary in nature, but reflect trends that have been established over at least the last six years. Table 4.2 and Figure 4.8 demonstrate this by showing the net migration flows out of Leeds for all districts in the Leeds City Region from 2013 to 2019. In particular:

- The reversal of net flows from Kirklees to Leeds occurred in 2017 following consistent decline.
- Net flows from Leeds to Selby and Wakefield have been increasing each year, although it seems that 2018 may have represented a peak.

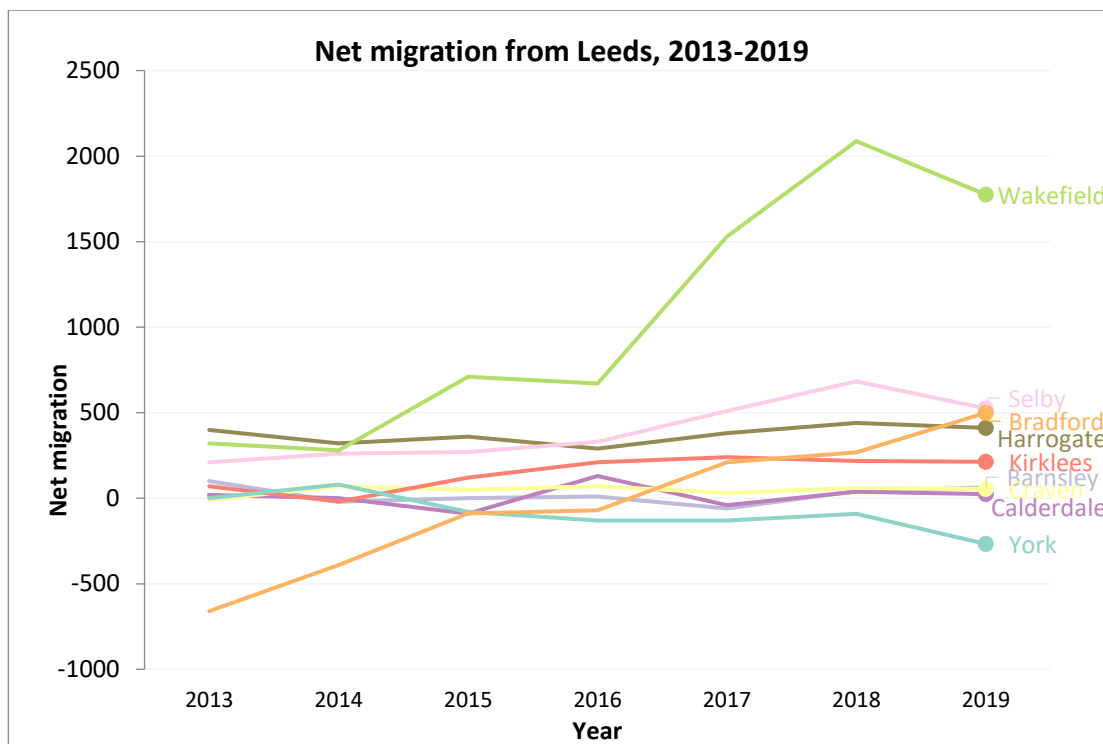
Table 4.2: Net population flows from Leeds to LCR districts, 2013-2019.

Destination	2013	2014	2015	2016	2017	2018	2019
Barnsley	100	-20	0	10	-60	41	62
Bradford	-660	-390	-90	-70	210	268	499
Calderdale	20	0	-90	130	-40	38	24
Craven	-10	70	50	70	30	60	54
Harrogate	400	320	360	290	380	440	411
Kirklees	70	-20	120	210	240	218	213
Selby	210	260	270	330	510	683	525
Wakefield	320	280	710	670	1530	2087	1775
York	0	80	-80	-130	-130	-91	-267

Source: ONS, Internal migration: detailed estimates by origin and destination local authorities, age and sex, 2018.

Key: red cells denote a negative figure (i.e., a net flow to Leeds); green cells denote a positive figure (i.e., a net flow from Leeds); amber denotes a zero net flow (i.e. inflows and outflows are matched).

Figure 4.8. Net population flows from Leeds to LCR districts, 2013-2019.



Source: ONS, Internal migration: detailed estimates by origin and destination local authorities, age and sex, 2018.

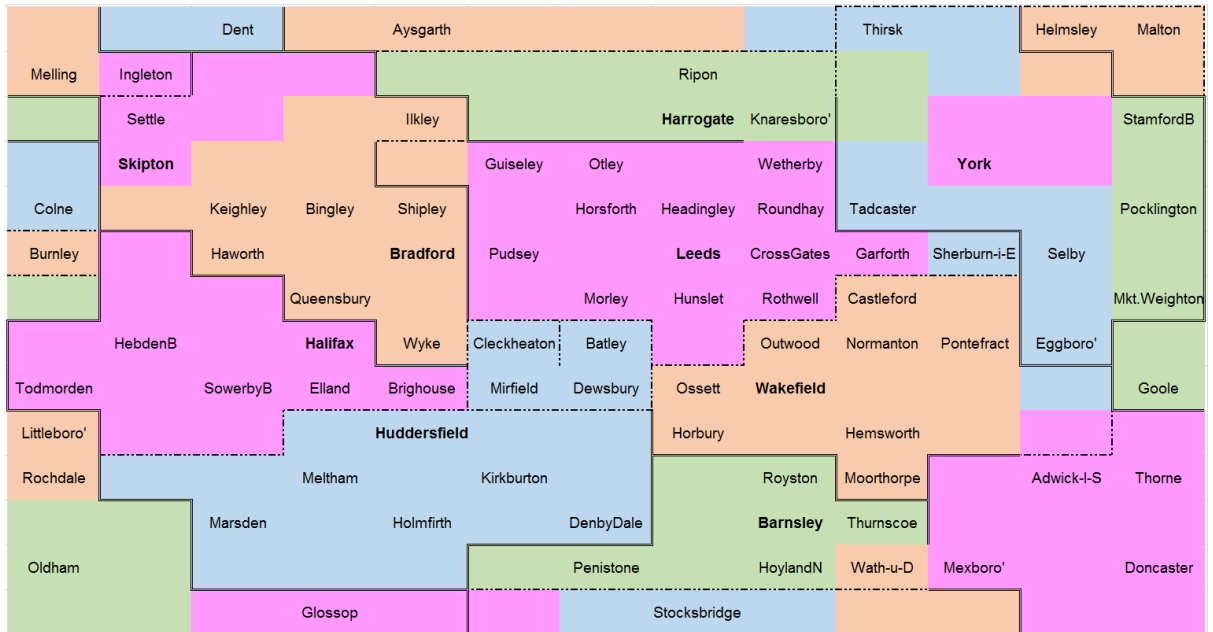
Although it remains to be seen how long into the future these new trends may persist, at the very least they are highly suggestive of a key (lagged) effect between rates of new housebuilding, population increases through migration, and subsequent inflation of forward household projections (see

4.25 Table 3.1).

These new patterns may call into the question the veracity of analytical Housing Market Areas (HMAs) in the Leeds City Region. The 2016 CURDS study commissioned by the city region resulted in a series of HMAs summarised in

- 4.26 Figure 4.9. These HMAs indicate the strength of CURDS' evidence that pairs of adjacent areas were in different HMAs according to 2011 migration patterns. Recent data might suggest that the Selby HMA is now less localised and more strongly connected to Leeds and Wakefield. There may be enough evidence to suggest that Leeds's HMA now extends further to the north, south and east of the city than was the case in 2011

Figure 4.9: Spatial diagram showing synthesis of 2011-based HMAs

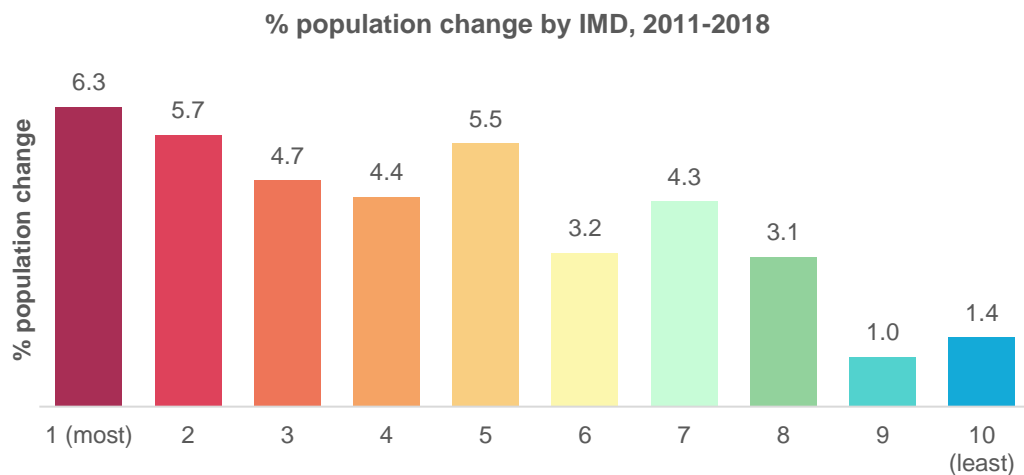


Source: Leeds City Region Housing Market Areas (2016) CURDS, Newcastle

Deprivation and Growth

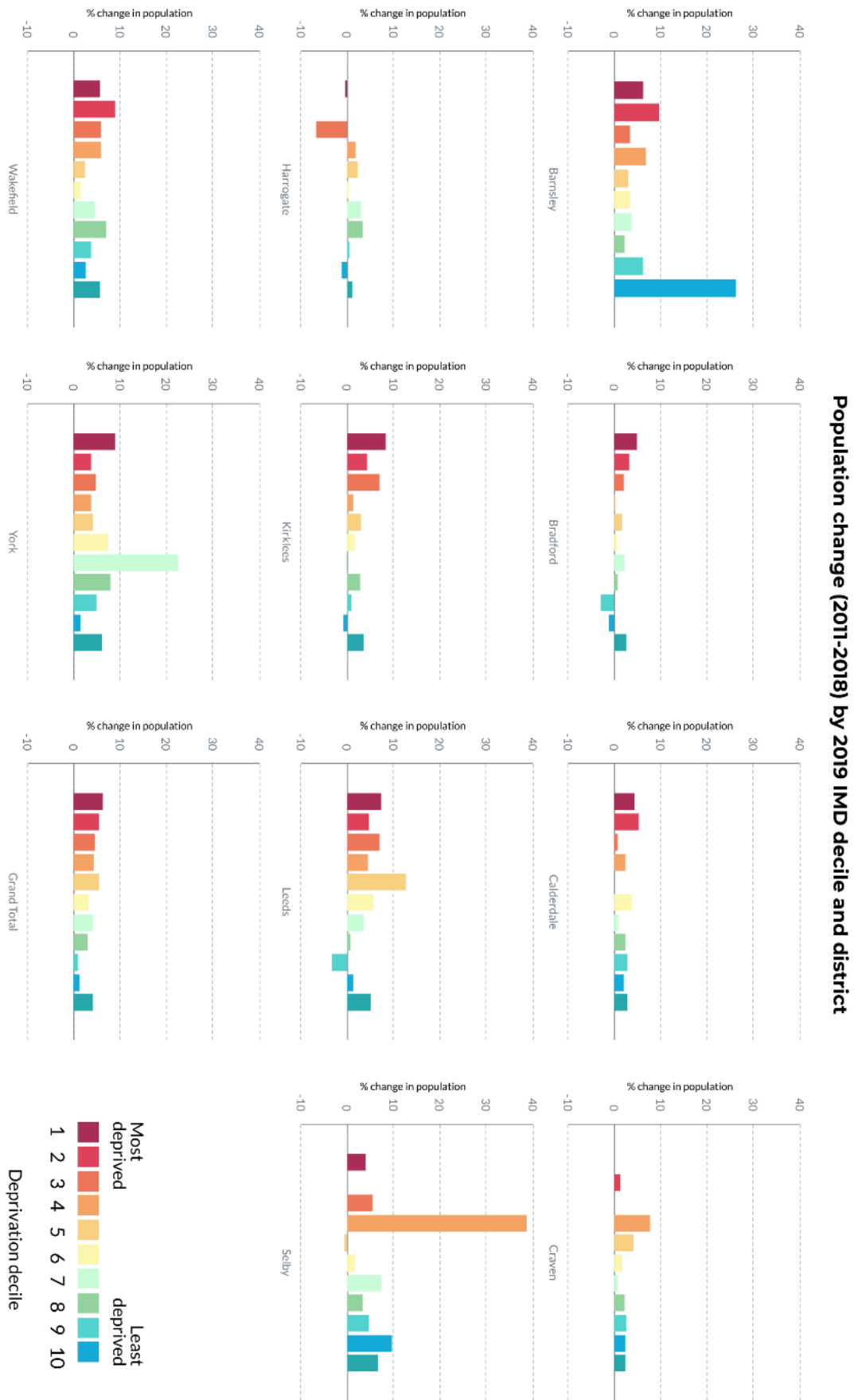
- 4.27 As was discussed earlier there is a relationship between recent patterns of population growth at the neighbourhood level and tenure. Neighbourhoods which have a higher proportion of renters appears to have been those where population growth has been focused. This means that, across LCR, there is also a relationship at the neighbourhood level between population growth and levels of deprivation.
- 4.28 On the whole, it would appear that growth has disproportionately occurred in more deprived neighbourhoods (Figure 4.10). This pattern is especially prominent in Barnsley, Bradford, Craven, Kirklees and Leeds (Figure 4.11). There is a slightly more mixed picture in Calderdale and Wakefield – where population growth has been apparent in both deprived and affluent neighbourhoods. Selby, York and Harrogate exhibit stronger growth in more affluent neighbourhoods.

Figure 4.10: Population change 2011-2018 at neighbourhood level by IMD 2019 decile



Source: ONS mid-year population estimates, 2011 and 2018; MHCLG (2019) English Indices of Deprivation.

Figure 4.11: Population change 2011-2018 at neighbourhood level by IMD 2019 decile, (district summaries)



Source: ONS mid-year population estimates, 2011 and 2018; MHCLG (2019) English Indices of Deprivation.

Future Trends

Summary of key points

- The extent to which the trends and dynamics of the period since the global financial crisis will continue is open to question. Even before Covid-19 there were questions about the ongoing sustainability of the growth of private renting, for example – especially as a result of an uncertain EU exit agreement.
- There are long term shifts in the economic geography of the city region, which have been nearly a century in the making. The last 70 years have witnessed a relentless process of decentralisation and suburbanisation – both of population *and* jobs – initially encouraged through public sector intervention but more recently as a result of private sector investment.
- As well as the broad shift of the city region’s tectonic plates over the long term, important and rapid changes appear to be occurring within local authority areas, particularly as these tend to be ‘over bounded’ and therefore contain a wide diversity of social, economic and housing market circumstances within them.
- Intense processes of spatial sorting through these long *and* short term processes have resulted in widening inequalities. To a great extent these explain the emergence of housing affordability issues throughout a city region which is not characterised by very high housing costs – in other words, income and cost of living (including transport costs) contribute to housing unaffordability.
- Transport infrastructure has played a key role in shaping outcomes. It will continue to do so, although the specific outcomes will depend on the nature and location of new developments and investments in transport, as well as strategic decisions about the location of housing and – especially – employment land.
- Selective migration – i.e. the ability of certain sections of the population to move – will also fundamentally shift the age profile of the city region in the future. Partly as a result of affordability problems, the north of the city region will have a disproportionately older population – the ratio of retirees in the north to young people will increase to 1.5 by 2034. The proportion of young people will also fall in the west of the city region, whilst in Leeds and the east (Selby, Wakefield) key family-forming age groups (20-34) will increase.
- Emergent policy issues will likely include: the need to shift to a higher productivity economy to support a growing number of older people with fewer workers; the carbon implications of the city region’s long-run spatial decentralisation; housing adaptations in the light of an ageing population and the need for carbon reduction; and challenges to social cohesion and inclusion that the Covid-19 pandemic will present.

- 5.1 The evidence presented in this Technical Report highlights a dynamic city region which is experiencing change that is occurring at different spatial scales and at different speeds. The most dynamic housing market forces have been driven at national and international level but have had the biggest impacts on people and places at a very local level. Clear examples of this can be seen in the growth of the private rented sector (PRS) which has arguably removed entry level home ownership from the reach of a generation of younger households over a two-decade period.
- 5.2 The genesis of this change was in wealth inequalities within and between generations and a fiscal framework which rewarded capital accumulation within the PRS through generous treatment of capital gains and the ability to offset mortgage interest costs against tax liability. These fiscal incentives were supported by the largest sustained increase in household numbers since the 1950s as international migration rapidly expanded after 2004. The result of these processes in the north of England has been that a significant amount of older terraced stock has shifted tenure, as this stock was amenable to multiple lettings, was cheap to buy, and produced a rental yield of between 5-7%, a range at the higher end of industry expectations. The impact of these national and international shifts were felt most sharply in communities which were already more likely to be deprived than the national average and have often experienced large increases in population at a time when expenditure on local public services has been reduced.
- 5.3 Of equal importance has been the expansion of Higher Education, which has doubled its student numbers since 1992. In Leeds alone there were 65,000 students enrolled for the period 2014-2018. Again, this inflow of people was supported by another driver of change which was the renaissance of city centres as areas of business growth and of retail, leisure and cultural consumption. This change in economic function produced a supply of graduates working in professional services that, together with the student market, provided a growing demand for city centre living often on a shared basis which produced an affordable rent but with trade-offs in respect of space standards.
- 5.4 These housing market changes have shaped core cities with very different residential functions and a much higher rate of population churn than smaller urban areas. For example in 2018 the inflow into Leeds was 5.3% of its population, and its outflow was 5.8%. In aggregate therefore, 11.2% of its population changed in this year. By way of contrast Wakefield, a city without a University or a sizable international reception function had figures of 3.9% and 3% respectively, an aggregate churn rate of 6.9%, i.e. a rate just less than two-thirds of that experienced by Leeds – and that is despite having the second fastest growing population in the city region (after Selby).

Prospects for the future

- 5.5 The extent to which these trends and dynamics can be simply projected forward is open to question. Even before the arrival of the Covid-19 pandemic with its apparent impact on higher density cities and poorer communities, there were questions about the sustainability of the scale of private renting as tax breaks are now being withdrawn, international migration may well be reduced following the UK exit from Europe, and student demand was entering a period of reduced demand because of demographic change. It is likely that a different set of opportunities and challenges will emerge at speed over the next few years.
- 5.6 Having reviewed the way in which the City Region has changed over time it can be observed that changing patterns of tenure, housing demand and neighbourhood differentiation and segregation all happen at a much faster pace *within* local authority districts, especially where they are under-bounded for administrative purposes. The converse would appear to be true in respect of shifts in economic geography and changes in the distribution of population and households generated at the sub regional

level which moves at much slower pace. Over the last 70 years there has been a relentless process of decentralisation and suburbanisation, of both population and jobs, which was initially stimulated by the direct provision of accommodation by the public and private sector. During the period 1980- 2010 this development framework was shifted to a model where the market was the main provider of new housing supply. The tendency to suburbanise under this model was encouraged by investment in transport infrastructure but was also moderated to a limited extent by an active urban policy which provided brownfield regeneration resources, thus mitigating some of the social costs associated with decline and segregation of urban areas. In the period since 2010 the model has shifted again, urban policy in its traditional form has been abandoned, and urban extensions, road building, and land value capture are all being actively promoted by a suite of planning, housing and transport policies. It would appear that, once again, the competitive forces *between* the constituent parts of the city region are reasserting themselves. The combination of market driven public sector investment programmes designed by central government which are based on land value capture and narrowly framed VFM measurements are reinforcing strengths and weaknesses within and between localities, and over time these differences in performance become increasingly self-perpetuating. The tendency for increasing spatial inequality and higher social costs to result from change driven by market forces alone, was actively managed and partially mitigated by 60 years of active UK Urban Policy up until its abandonment in 2010/11. Continued processes of employment decentralisation and the land-use policies and investment incentives which underpin these are likely to be having the largest impact on this 'pulling apart', as population fractures along socio-economic lines and north Leeds, Harrogate and York pull further ahead in terms of exclusivity and unaffordability.

- 5.7 Across England the impact of the policy shifts since 2010 aimed at encouraging housing growth were blunted by the six-year period following the financial crisis where private sector housebuilding fell below 100,000 a year. In only one other year since 1950 had that happened (1981). The dominant policy position however still is to facilitate suburbanisation and use green field development to enhance development values and land-value capture (increasing the volume of affordable housing provided through planning obligations). Direct capital investment in housing appears to be giving way to indirect investment through infrastructure spending. This has had clear impacts in delineating the location and form of recent housing growth in the city region.
- 5.8 The slow moving nature of regional change is illustrated by the following figures. In 2007 the areas of the LCR which have experienced the highest growth in population and housebuilding were Barnsley, Leeds, Selby and Wakefield which contained 48.7% of the city regions total number of households. By 2034 this area is predicted to grow to 49.6% of the total. By contrast the largest relative loser of population growth will be the western area of the LCR, which is projected to shift downwards from 37.4% to 36.6% of the city regional population. This east ward shift in growth can now be observed to be an entrenched process over several decades, and this has generated future population and household projection which have become partially path dependent.
- 5.9 Transport infrastructure at a range of scales has been key here. Road based investments have played a dual role in opening up access to large development sites, (for both housing and land-intensive employment such as in logistics and comparatively low value retail and back-office business sectors), as well as providing the necessary national and international freight connections to enhance access to markets (again, especially for logistics). Rail investments, present and future, operate at a different scale and are focused on services the demands of a knowledge intensive centralised economy, and enabling relatively rapid but selective commuting along key radial routes. The rail corridors between Leeds and Dewsbury, Bradford, Halifax and Huddersfield, together with connections through the Pennine valleys to Greater Manchester, are likely to have been instrumental in moderating what could otherwise

have been a precipitous decline in the housing market fortunes of Calderdale, Kirklees and Bradford.

Selective migration – the shifting age profile of the city region

5.10 It is well known that even with the existing volumes of international migration being sustained and projected forward that the UK is entering a period when the population is ageing rapidly. What appears to be little discussed, however, is the spatial, employment and housing market impacts of these processes. By a process of aggregating the constituent local authorities into the North, Leeds and East and West blocks as discussed in Section 2 it is possible to look at big shifts in demographic profile across large geographies which have similar recent development characteristics. This shows that by comparing changes in the 20-34 age groups, which are the drivers of new housing demand, and those over 65, the following spatial patterns emerge over the period 2018-2034 as projected by the ONS:

- *The North of LCR-* Has a projected fall in the absolute numbers of those aged 20-34 of - 4.5%, and a falling LCR share from 13% to 12.5%. The number of people over 65 is projected to increase by 31.8% and this represents a ratio of 1.52 residents of retirement age to each young person, up from 1.10 in 2018;
- *The West of LCR:* Has projected absolute fall of 3% in the younger cohort and a falling LCR share from 35.5% to 34.4%. The number of people over 65 is projected to increase by 31.3%. This produces a ratio of 1.18 older residents to younger residents, up from 0.875 in 2018.
- *Leeds and East of LCR-* Has a projected **increase** in those aged 20-34 of 3.2% , and increases its LCR share from 51.5% to 53.1%.The number of those aged over 65 is projected to increase by 29.5% and the ratio of young to older groups will be 0.98 which is an increase from 0.78 in 2018.

5.11 The regional shifts are again relatively small over time, however the impacts are cumulative following the decades of shifts which preceded these ONS projections. The North was already much older than the rest of West Yorkshire by 2018, and West was older than the East. The impact on housing demand is likely to be more fundamentally altered by these demographic shifts within localities than between them because of the impact on the existing stock as well the pattern of new build. Looking forward, ONS are projecting substantial falls in households with 2-3 or more dependent children across the LCR geography, with every local authority with exception of Barnsley projected to experience reductions. This outcome along with the substantial growth in older households is likely to change the new build market, and create a competition for mobile families and young workers.

5.12 The competition for younger residents is unlikely to apply solely to housebuilders, but will also extend to local authorities and employers who will seek to remain competitive by attracting the young and skilled. According to data from Nomis, Leeds and the East of the city region increased its employment base from 50.4% of the LCR total to 51.2% in 2018. The figures for the north and west declined from 16.4% and 33.2% to 16.3% and 32.5% respectively. This of course says little about employment quality, although the locational choices of those with degree level qualifications (NVQ4) does provide some indication of where the quality employment and residential offers are in spatial terms, and these show bigger relative movements between the different clusters of places over the period 2008 and 2018 , as summarised below:

- *North of LCR-* Already had a relatively large share of LCR residents qualified to NVQ4 standard with 19.2% in 2008, but this had fallen slightly by 2018 to 18.7%, although in the context of 29.7% numerical increase;

- *West of LCR*- Registered a fall in LCR share from 35.6% to 33.9%, in the context of a 26.1 % increase in volume of those meeting this standard who live locally;
- *Leeds and East of LCR* - Registered an **increase** in LCR share from 45.2% to 47.4% in the context of a 39.3% expansion locally in residents meeting that attainment level.

5.13 There is therefore a strong momentum to widening intra- district, sub-regional inequality over time, and the current policy on position in respect of urban renewal, employment and planning policy is likely to reinforce trends. The demographic change projected also suggests that there will be increased competition for young, mobile and skilled households between places, and a shift in the demand for housing, unless as a society the UK is wealthy enough in future to rapidly expand the floor space that each household consumes through the continuation of the current form of new housebuilding which focuses on family accommodation.

5.14 The current pandemic and accompanying recession is likely to accelerate the process of change during the next period, a period when the pace of change was likely to have increased any way as a result of policy and demographic shifts. The assumption embedded in the projections produced by ONS which have been used here is that there is no material change in immigration policy which impacts on inward migration. If this proves to be wrong in the light of the current review following Brexit then any radical change in policy will have a considerable impact on housing demand and labour markets. In 2018 alone 23,429 long term migrants arrived in the Leeds City Region, a gross flow of 0.8% of the population, this was however much higher in some locations such as York (+1.3%) and Leeds (+ 1.2%). In Leeds as an example, 27.5% of all births in 2018 were born to mothers who themselves were born abroad, while in Braford this figure was 32.4%.

5.15 There are a considerable number of policy issues which arise considering the demographic changes and the progressive suburbanisation of dwellings and employment discussed in this a paper. These will be explored in a separate short policy discussion paper, however they include the following: The need to shift to a higher productivity economy to support a growing number of older people with fewer workers; How to address the zero carbon agenda in the context of suburbanisation; How to adapt the housing stock to accommodate the zero carbon agenda **and** the older population; The need to build resilience in the community and the built form following the impact of the pandemic; the public policy dimensions to the provision of a framework to manage cohesion and social inclusion in a rapidly changing polycentric City region which is currently undergoing a series of economic, health, fiscal, and demographic shocks, some of which predate Covid-19 but will be amplified by it.