Overcoming deprivation and disconnection in UK cities

by Alasdair Rae, Ruth Hamilton, Rich Crisp and Ryan Powell

This report explores neighbourhood deprivation and disconnection at the neighbourhood level, focussing on the poorest neighbourhoods across the UK. It examines how and why these areas often remain disconnected from economic growth within their wider city regions.
Overcoming deprivation and disconnection in UK cities

Alasdair Rae, Ruth Hamilton, Rich Crisp and Ryan Powell

This report explores neighbourhood deprivation and disconnection at the neighbourhood level. We focus on the poorest neighbourhoods across the UK by looking at areas among the 20 per cent most deprived on each nation’s most recent deprivation indices. Specifically, we attempt to gain a better understanding of how and why these areas often remain disconnected from the economic growth which occurs within their wider city regions. Our approach is based on an in-depth analysis of commuting data, data on residential moves at the small area level, and the development of two complementary area typologies.

The report shows that:

- several hundred neighbourhoods across the UK are particularly poorly connected to both their wider housing and labour market areas; we refer to this as 'double disconnection';
- in some areas, local conditions have worsened over time in relation to housing and jobs and this may have a negative impact on social mobility;
- despite some deprived areas being situated very close to large numbers of jobs, poorer residents are often not well represented in their local labour markets;
- local context matters a lot – across the UK, not all deprived areas are the same and we have identified a wide variety of housing and labour market challenges. We think policy approaches need to recognise this diversity.
Contents

Executive summary 1
1 Introduction 5
2 Reflections on disconnection 8
3 Household moves and neighbourhood change 14
4 Travel to work and deprived neighbourhoods 37
5 Understanding disconnection 54
6 Policy and practice 62
7 Conclusions 68

References 75
Appendix 1: Technical details 80
Appendix 2: Maps 83
About the authors 84

List of figures
1 Deprivation in Leeds over time 2
2 UK cities and the 20 per cent most and least deprived areas 7
3 Residential typology of deprived neighbourhoods 16
4 Composition of most deprived 20 per cent of areas, by type 17
5 Comparison of the distribution of the most deprived 20 per cent LSOAs across the LEPs of (a) Greater Birmingham and Solihull and (b) Greater Manchester 18
6 Comparison of the distribution of the most deprived 20 per cent LSOAs across Greater London 19
7 Typology for all local enterprise partnerships 20
8 Typology for core cities in England 21
9 Location and type of LSOAs in the most deprived 20 per cent nationally across Bristol and the West of England LEP 22
10 Proportion of SOAs falling in the most deprived 20 per cent within each local authority by 2015 residential mobility typology (based on 2014 local government district boundaries) 23
11 Location and type of SOAs in the most deprived 20 per cent nationally across Belfast (based on 2014 local district boundaries)

12 Proportion of data zones falling in the most deprived 20 per cent within each local authority by 2015 residential mobility typology

13 Location and type of data zones in the most deprived 20 per cent nationally across Glasgow City Region

14 Location and type of data zones in the most deprived 20 per cent nationally across Glasgow

15 Proportion of LSOAs falling in the most deprived 20 per cent within each local authority by 2015 residential mobility typology

16 Location and type of LSOAs in the most deprived 20 per cent nationally across Cardiff City Region

17 Location and type of LSOAs in the most deprived 20 per cent nationally across Cardiff City

18 Overall composition of the residential typology composition for the 20 per cent most deprived areas in England

19 Typology changes between 2004 and 2015 for England

20 2015 residential mobility typology for Birmingham compared with 2004 typology (using approximated values to account for boundary changes)

21 2015 residential mobility typology for Leeds compared with 2004 typology (using approximated values to account for boundary changes)

22 2015 residential mobility typology for Bristol compared with 2004 typology (using approximated values to account for boundary changes)

23 2015 residential mobility typology for Newcastle upon Tyne compared with 2004 typology (using approximated values to account for boundary changes)

24 Travel-to-work typology

25 Composition of most deprived 20 per cent LSOAs in terms of the travel-to-work typology based on EIMD 2015, NIMDM 2010, SIMD 2012 and UJIMD 2014 and workflow data from...
the 2011 census

26 Proportion of LSOAs in the most deprived 20 per cent within each core city’s local authority by 2015 travel-to-work typology

27 Bristol, showing the travel-to-work typology for the most deprived 20 per cent LSOAs nationally

28 Birmingham, showing the travel-to-work typology for the most deprived 20 per cent LSOAs nationally

29 Liverpool, showing the travel-to-work typology for the most deprived 20 per cent LSOAs nationally

30 London, showing the travel-to-work typology for the most deprived 20 per cent LSOAs nationally

31 Proportion of SOAs in Northern Ireland falling in the most deprived 20 per cent within each local government district by 2015 travel-to-work typology

32 Belfast, showing the travel-to-work typology for the most deprived 20 per cent SOAs nationally

33 Proportion of data zones in Scotland falling in the most deprived 20 per cent within each local authority by 2015 travel-to-work typology

34 Glasgow, showing the travel-to-work typology for the most deprived 20 per cent data zones nationally

35 Proportion of LSOAs in Wales falling in the most deprived 20 per cent within each local authority by 2015 travel-to-work typology

36 Cardiff City Region, showing the travel-to-work typology for the most deprived 20 per cent LSOAs nationally

37 Combined typology maps for Greater Manchester

List of tables

1 Number of UK areas in each typology category

2 Percentage of most deprived 20 per cent of areas, by type

3 Percentage of most deprived 20 per cent LSOAs in each residential mobility type in 2004 and 2015

4 Percentage of LSOAs in the eight core cities in each residential mobility type in 2004 and 2015
<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Definition of travel-to-work typology</td>
<td>39</td>
</tr>
<tr>
<td>6</td>
<td>Percentage of most deprived 20 per cent LSOAs in each travel-to-work type</td>
<td>41</td>
</tr>
<tr>
<td>7</td>
<td>The percentage of the most deprived 20 per cent areas in each residential and travel-to-work typology combination for each country</td>
<td>55</td>
</tr>
<tr>
<td>8</td>
<td>Deprivation by combined typology</td>
<td>56</td>
</tr>
<tr>
<td>9</td>
<td>Mean score for the employment domain of the IMD for the 20 per cent most deprived LSOAs in England</td>
<td>58</td>
</tr>
<tr>
<td>10</td>
<td>Adult skills sub-domain (IMD 2015) by area type</td>
<td>58</td>
</tr>
<tr>
<td>11</td>
<td>England – unadjusted means-tested benefits rate 2013</td>
<td>59</td>
</tr>
<tr>
<td>12</td>
<td>Scotland – unadjusted means-tested benefits rate 2013</td>
<td>59</td>
</tr>
<tr>
<td>13</td>
<td>Wales – unadjusted means-tested benefits rate 2013</td>
<td>59</td>
</tr>
<tr>
<td>14</td>
<td>Change in UMBR rate (in percentage points) between 2003 and 2013</td>
<td>60</td>
</tr>
<tr>
<td>15</td>
<td>Potential policy responses in different area types</td>
<td>69</td>
</tr>
</tbody>
</table>
Executive summary

This report provides an in-depth analysis of patterns of neighbourhood deprivation and disconnection across the United Kingdom. The focus is on those areas which, for various reasons, do not seem to benefit fully from periods of economic growth in their wider city regions. In doing so, we identify a number of key issues which we believe may have a negative impact on the life chances and opportunities for people living in some of the nation’s most deprived areas. In summary these issues are:

• Double disconnection: some areas seem particularly poorly connected to their wider labour market areas and their wider housing market areas. There are 387 inner urban areas across the United Kingdom in this situation.

• Residualisation: in some areas, over time, there has been a tendency for local conditions to stagnate, or worsen, in relation to housing and jobs. This may have a prolonged negative impact on social mobility.

• The job proximity paradox: despite the geographical proximity of large numbers of jobs next to many deprived neighbourhoods, residents are often not well represented in their local labour market areas.

• National problems, local contexts: our approach shows that among the most deprived 20 per cent of areas within each part of the UK, there is a wide variety of housing and labour market challenges. These require policy approaches which are sensitive to local contexts.

• Connected policies for disconnected areas: we believe there is a need for policy interventions to help bridge the gaps between urban economic growth and perpetual disconnection in the UK’s poorest neighbourhoods. There is an opportunity here to help foster inclusive growth which helps lift neighbourhoods out of poverty.

Why look at disconnection?

One of the most striking features of cities is that they are often very spatially divided between rich and poor. This is not new, but this is the point. The very persistence of these patterns through time suggests that successive waves of economic growth have not done enough to help lift some neighbourhoods out of poverty. Or, to put it another way, growth has not been sufficiently inclusive. Previous periods of policy intervention attempted to address these issues but today there is something of a policy vacuum in this area, despite recent moves in England to transform a number of deprived estates.

The reason for looking at disconnection in the first place is that it can help us understand why, and how, some neighbourhoods remain perpetually disconnected from the wider economic success of the cities they sit in. A very simple illustration of this can be seen in Figure 1, which shows patterns of deprivation across Leeds over an eleven-year period, for four different time points. The fact that the patterns are almost identical at all four time points helps illustrate the point that more could be done to bridge the perennial gap between growth and poverty.

Why look at cities?

Cities across the world are heralded for their ability to drive economic growth, particularly as more and more people migrate to metropolitan areas. In the highly urbanised United Kingdom this is particularly true and cities like London, Manchester, Birmingham, Newcastle, Glasgow, Cardiff and Belfast have a strategically important role to play in their contribution to the national economy.

On the other hand, cities are also home to a disproportionate share of the UK’s most deprived neighbourhoods. For example, 61 per cent of Liverpool’s small areas (lower layer super output areas – LSOAs) are within the most deprived quintile on the English Indices of Deprivation 2015. In Glasgow, the comparable figure for data zones in the most deprived quintile of the Scottish Index of Multiple Deprivation 2012 is 49 per cent. With few exceptions, the United Kingdom’s major cities have large concentrations of deprived neighbourhoods, the location of which have changed little over time. In this
report we focus on the most deprived areas of major cities from the perspective of housing and labour market disconnection in order to better understand why this might be.

**Figure 1: Deprivation in Leeds over time**

Understanding disconnection

Disconnection can take on a number of different meanings. It may be social, economic, physical, institutional or digital (to name but a few). The analysis presented in this report focuses on economic, physical and institutional disconnection, as we explain in Section 2. Underpinning our approach is the belief that access to housing and jobs are crucial for ensuring residents of deprived neighbourhoods benefit more fully from economic growth in their cities. What we seek to provide is a more nuanced understanding of the ways in which poorer neighbourhoods are physically connected or disconnected from their wider housing and labour market areas.

In part, our approach builds upon previous research by Robson *et al.* (2009) for the Department of Communities and Local Government, but it also extends the work to cover the whole United Kingdom. In
addition, we develop a new approach to understanding neighbourhood disconnection in relation to the labour market. Clearly, not all deprived neighbourhoods are the same, so this research attempts to shed light on precisely how they are different through the use of two complementary neighbourhood typologies, both of which focus on the 20 per cent most deprived areas within each part of the United Kingdom.

- Residential mobility typology: following Robson et al. (2009) we explore residential mobility using four basic area types. This includes gentrifiers (in-movers are mainly from less deprived areas, out-movers go to other similarly deprived areas), escalators (in-movers from more deprived areas, out-movers to less deprived areas), transits (in-movers from less deprived areas, out-movers to less deprived areas), and isolates (in-movers and out-movers from similarly deprived areas. This typology helps highlight the relative perceived status of neighbourhoods, as well as their connections with other places.

- Travel-to-work typology: we also present a typology based on travel-to-work flows into, and out of, deprived neighbourhoods. There are five area types here. First, we have primary employment zones, deprived areas which also happen to have high numbers of jobs in them. Connected core areas are where residents work close to home and travel to a wide variety of jobs. Disconnected core areas are ones where workers also stay close to home but there is a lower level of diversity in terms of destinations. The fourth and fifth area types are the connected suburb and disconnected suburb, typically deprived areas on the edge of towns and cities. In the former, residents tend to work more than three miles from home and travel to a wide variety of destinations. In the latter, workers also tend to travel further afield, but to a more limited variety of destinations (see Webster, 1999).

These typologies are explained and discussed at length in Sections 3 and 4, and in Section 5 we take a combined approach to understanding how the different kinds of disconnection we identify may interact. This is summarised in Table 1, where we show the total number of areas in each category in relation to both typologies. This highlights the fact that there are 524 areas across the United Kingdom which are more isolated in terms of their housing market flows and relatively disconnected in terms of their labour market flows. The implications of these figures will vary by city and neighbourhood, but we hope this analysis can be used to provide a more effective approach to making connections between poorer areas and wider city-regional prosperity.

### Table 1: Number of UK areas in each typology category

<table>
<thead>
<tr>
<th></th>
<th>Residential typology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Escalator</td>
</tr>
<tr>
<td>Connected core</td>
<td>50</td>
</tr>
<tr>
<td>Disconnected core</td>
<td>130</td>
</tr>
<tr>
<td>Connected suburb</td>
<td>122</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td>80</td>
</tr>
<tr>
<td>Primary employment zone</td>
<td>185</td>
</tr>
</tbody>
</table>

### Key messages

This report aims to provide new evidence and suggest a range of different policy responses to help bridge the gap between city-regional economic growth on the one hand, and poverty alleviation on the other. By looking at housing and labour market connection and disconnection, our focus has been on a particularly important subject. But, of course, this is only part of the challenge of wider economic growth. Other forms of disconnection — including social, digital and institutional — may also have an important role to play. However, we identify five key messages.

- First, it is clear from our policy review (Section 2) and stakeholder consultations (Section 6) that current policy approaches are not sufficiently bridging the gap between growth and poverty alleviation strategies. This misalignment may best be overcome through an approach which places a greater premium on inclusive growth, an approach which the OECD has recently championed.
• Second, we can view neighbourhood moves as a measure of area status and perceived attractiveness within their wider housing markets. The majority of people don’t move from year to year, but relatively small numbers of people moving can significantly change the character of areas over the longer term. We see this in Section 3 where some areas of our cities are becoming increasingly gentrified, while others seem almost perpetually disconnected from their wider neighbourhoods.

• Third, labour market disconnection would appear to be a significant problem in some areas, as we report in Section 4. The root of the problem may be poor skills, physical distance, or a mix of the two but it is clear that even in more economically buoyant cities, deprived areas do not seem particularly well connected to their local labour markets.

• Fourth, we believe that the concept of ‘double disconnection’ is a useful way of understanding which areas might be most at risk from missing out on the benefits of economic growth across their city regions. This is borne out in Section 5, where we show that ‘doubly disconnected’ areas suffer from higher levels of deprivation and have a higher proportion of benefit claimants.

• Fifth, we believe that a multi-faceted approach to poverty alleviation is needed if we are to overcome the historic challenges of deprivation in deprived neighbourhoods. This would recognise that some kind of ‘social deal’ relating to inclusive growth needs to be incorporated into city–regional economic growth strategies across the UK, as we discuss in Section 7.

Note: this report includes maps of major UK cities, but as part of the project we also produced maps of every area in the UK with at least one neighbourhood falling within the 20 per cent most deprived on the respective deprivation indices for each nation. These can be found online for both typologies featured in the report.

Direct link: https://goo.gl/9qeSQ0
1 Introduction

The idea of cities as drivers of economic growth has risen to prominence in recent years and is now a mainstay of policy doctrine across the developed world (e.g. Brookings, 2011; City Growth Commission, 2014). While we can applaud the economic success of some cities, and pay homage to their role as economic powerhouses within a national context, this report focuses on the areas within cities which do not seem to benefit from wider economic uplift. Across the United Kingdom, there are areas of persistent urban deprivation which have consistently failed to see the full benefits of the economic growth their cities have achieved.

We therefore take a close look at the ways in which certain neighbourhoods appear to remain disconnected and deprived, in contrast to the cities they sit in. The research is part of the Joseph Rowntree Foundation’s Cities, Growth and Poverty Programme and our overarching aim is to develop a set of policy proposals which might help overcome some of the persistent problems faced by deprived neighbourhoods. In doing so, however, we are acutely aware of the fact that many of the problems of deprived neighbourhoods – such as unemployment and deprivation – do not have their causes in deprived neighbourhoods.

The recent pledge by the Prime Minister to ‘transform sink estates’ (Cameron, 2016) brings area-based urban policy back on to the agenda in England after several years of inactivity in this area. Elsewhere in the United Kingdom, the retreat from an area-based approach to urban policy was less pronounced. Given the modest success of such schemes, this may not be viewed in negative terms, but while many cities have grown and prospered in recent years, persistent pockets of deprivation remain a key feature of our cities. Not only is there less of a focus on tackling the problems faced by deprived neighbourhoods across the UK, there is a reluctance to engage with the root causes of the problem. In this study, we reflect on why this might be and conclude that it is, at least in part, related to the new sub-regional policy infrastructure created after 2010 and the creation of local enterprise partnerships without, crucially, any organisations specifically tasked with connecting growth to poverty alleviation or jobs growth in the poorest neighbourhoods. At present, then, there is a missing link between the goals of city-regional economic growth on the one hand and persistent neighbourhood deprivation on the other. We believe that much good was done in previous periods of urban policy, despite the relatively modest outcomes reported in Section 2, and that more can be done today to help improve the fortunes of people in deprived neighbourhoods. This report helps identify, with more nuance, which areas we might want to focus on.

Structure of the report

In order to explore the topic in more depth, we take a variety of approaches. In Section 2, we take a step back from the contemporary policy context to consider what has come before, both nationally and internationally. The clear message here is that linking growth to poverty alleviation at the local level is inherently difficult, politically challenging and also something of an ideological battle over the root causes of urban deprivation. Nonetheless, we think much can be learned by reflecting upon previous policy approaches here and elsewhere, particularly as the current UK government embarks on a new wave of spatially targeted neighbourhood regeneration.

Taking this jobs and housing mantra further, Sections 3 and 4 then explore in more detail patterns of residential and employment mobility at neighbourhood level. One of the key mechanisms through which neighbourhoods can change, and how they fit within their wider city-regional contexts, is residential mobility. In Chapter 3 we explore household moves by residents across the UK’s most deprived neighbourhoods by focusing on the 20 per cent most deprived areas identified in each country’s most recent official deprivation measure (IMD 2015 in England; NIMDM 2010 in Northern Ireland; SIMD 2012 in Scotland; and Wimd 2014 in Wales). This builds on previous research for the Department for Communities and Local Government (DCLG, 2009a) which developed a typology of deprived neighbourhoods based on their interactions with other areas. Here we update this typology using 2011 Census migration data to help identify what many of our consultees noted: ‘not all deprived neighbourhoods are the same’.
In Section 4 we explore travel-to-work patterns in deprived neighbourhoods. We examine commuting patterns for the 20 per cent most deprived neighbourhoods across the United Kingdom in order to understand more about the skills and spatial mismatches associated with city-regional labour markets. These are particularly important topics in the UK’s most deprived neighbourhoods, since they often have lower levels of skills and a greater dependency on public transport. This can seriously limit the job horizons of potential employees and lead to a situation where jobs growth in a city region has little impact upon the areas that most need it. Therefore, we develop a typology which helps differentiate between different kinds of deprived areas based on, for example, whether they are close to employment centres with multiple nearby job opportunities or whether they are spatially isolated and disconnected from their wider urban labour market.

Section 5 then combines the quantitative and qualitative analyses from the previous chapters to focus on the different characteristics and problems faced by poorer neighbourhoods across the country, using the two typologies as a frame of reference. In this section we attempt to provide a more nuanced understanding of the true nature of neighbourhood deprivation and disconnection in the UK’s poorest neighbourhoods. The purpose here is to provide a new approach to analysing deprived neighbourhoods and to identify the different housing and labour market challenges that exist in different places. The clear message here again is that not all deprived neighbourhoods are the same. The corollary is that not all interventions should be the same, but the history of urban interventions (Section 2) has shown that this has rarely been incorporated successfully in policy design. Following from this, it should be clear that this creates a need for spatially sensitive, nuanced policy responses rather than the kind of nationwide, ‘regeneration by bulldozer’ approaches sometimes proposed (Crookes, 2011).

The typologies developed in Sections 3 and 4 were used as the basis for consultation with more than 140 policy professionals across the UK’s city regions, as we report in Section 6. The message here is sobering and often boils down to the fact that local agencies simply do not have the resources needed to bring about change. Beyond this headline other messages are: the importance of housing as the key driver of change; increasingly polarised labour markets; the need for more nuanced approaches to local issues; and the need for truly long-term strategies. This then raises the question of whether a city-regional policy vacuum exists around the area of poverty alleviation. We examine this later in the report.

In Section 7 we develop a variety of potential policy responses. Too often urban policy in the UK has been spatially blind and not taken local context into account. We hope to offer suggestions which help demonstrate why a more nuanced approach is desirable. Fundamentally, we believe that if deprived neighbourhoods are ever going to truly benefit from periods of economic growth in their wider housing and labour markets, more thought needs to be given to their individual characteristics. We also believe that while devolved economic development agencies are generally a good thing, if we are serious about tackling inequality there needs to be a greater focus on connecting growth to the fortunes of deprived neighbourhoods. To do so requires a shift in thinking towards inclusive growth.

**Drivers of growth and sites of concentrated deprivation**

Before we move on, it is helpful to paint a picture of the different kinds of spatial deprivation patterns currently in existence across UK cities. This helps highlight some of the historically disconnected places we look at later in the report. In some cities deprivation is highly concentrated and extensive and in others it is more dispersed (Rae, 2012a; 2012b). But in general the major cities of the UK feature prominently in their respective national deprivation indices, as shown in Figure 2.

Cities may well be engines of national economic growth (Centre for Cities, 2016) but they are also home to large concentrations of people living in poverty and this has changed very little over the past few decades. This is most obvious in places like Glasgow, Liverpool and Manchester where areas among the 20 per cent most deprived nationally cover most of the city. Other cities, such as Cardiff, Leeds and Sheffield, are more balanced but spatially divided. These patterns are explored further in Sections 3 and 4 when we develop alternative ways to understand these patterns.
Figure 2: UK cities and the 20 per cent most and least deprived areas

* All cities are mapped at the same scale
2 Reflections on disconnection

Key messages

- There is a long history of area-based urban policy intervention in ‘disconnected’ neighbourhoods.
- We can think of disconnection in a variety of ways, including: economic, social, physical, institutional, and digital.
- Deprivation and disconnection typically go hand-in-hand.
- In-work poverty is clearly important, but often overlooked.

Understanding ‘disconnection’

The policy-focused nature of this report means that we are particularly interested in understanding previous approaches to intervention in neighbourhoods across the UK which are in some way disconnected from opportunities in their wider labour or housing markets. It is explicitly not about disconnection from society or about people in poorer areas somehow living outside the bounds of society. In fact, we know from previous research that in poorer neighbourhoods the sense of community can be far greater than in many more prosperous areas (e.g. Social Action and Research Foundation, 2015).

In this section we focus on the underlying notion of disconnection and find that it has been a consistent feature of urban policies in disadvantaged areas since the late 1960s. Successive policy regimes targeting areas experiencing decline have sought to connect residents to wider economic opportunity, but with very limited success. The analysis below reviews different approaches to economic regeneration since the late 1960s. It then presents a framework for understanding how disconnection has been understood and addressed within urban policies. The section concludes with some reflections on in-work poverty, often the ‘missing link’ in discussions of disconnected neighbourhoods and deprivation.

A brief history of urban policy and disconnected neighbourhoods

It is well known that poverty and other forms of disadvantage can be both concentrated and persistent in particular areas (e.g. Booth, 1888; Dorling et al., 2007; Ferrari, et al., 2007; Pacione, 2004; Palmer, et al., 2006; Rowntree, 1901; SEU, 2004; Tunstall, 2012). To address this, a series of urban policy interventions in the post-war period have sought to reverse the fortunes of areas experiencing social or economic decline. The first distinct urban policy regime for deprived areas emerged in the late 1960s in response to the ‘rediscovery of poverty’ (Alcock, 2006; also Cochrane, 2007) that challenged assumptions of shared prosperity in post-war affluence. Policy-makers regarded poverty as ‘pathological’ (Alcock, 2006; Atkinson and Moon, 1994) in the sense of stemming from the flawed behavioural and cultural dispositions of individuals clustered in pockets of deprivation. Their response was to launch a series of initiatives including the urban programme and community development projects (CDPs). These funded small-scale projects to improve conditions and services in target areas while encouraging a culture of self-help among communities.

Assumptions around the localised and cultural transmission of poverty were challenged, however, by a growing emphasis on the structural economic factors contributing to poverty (DoE, 1977). Conservative administrations in the 1980s responded through private sector led forms of economic and physical regeneration delivered via area-based initiatives (ABIs) including enterprise zones, urban development corporations, and urban development grants (later to become city grants). These programmes sought to stimulate economic development through addressing perceived failures in land and property markets and creating a more entrepreneurial culture in areas deemed dependent on state welfare (Scottish Office, 1988; Imrie and Thomas, 1999; Marinetto, 2003; Matthews, 2010). The assumption, however, that benefits of economic growth would trickle down to residents meant there was little explicit focus within programmes on addressing worklessness and poverty.
This private sector led approach was discredited by the failure of such schemes to tackle entrenched forms of poverty and deprivation (Bradford et al., 1994; Atkinson and Moon, 1994; Lupton, 2003; Marinetto, 2003). Recognition of these shortcomings saw a new emphasis in the 1990s on more holistic forms of regeneration such as City Challenge and the Single Regeneration Budget (SRB) Challenge Fund. These were distinguished by a notion that creating jobs was not enough as lagging economic outcomes were not just a consequence of dysfunctional local housing and labour markets. Supply-side issues in terms of individual employability were now also identified as bottlenecks to growth with an attendant emphasis on training and employment support. In addition, programmes also put in place horizontal, multi-agency partnerships as a response to the perceived failure of public agencies working in silos to tackle barriers to work that cut across multiple policy domains.

This holistic approach was fully consolidated under the neighbourhood renewal agenda of successive Labour governments between 1997 and 2010. Centring on the notion of social exclusion, policy-makers saw deprivation as having multiple, overlapping dimensions that required action across a range of policy domains at the sub-district level. Programmes and strategies such as the New Deal for Communities (NDC) and the National Strategy for Neighbourhood Renewal (NSNR) in England, and Communities First in Wales, sought to improve employability directly through supply-side training and employment schemes. At the same time, these area-based initiatives (ABIs) addressed interlinked disadvantage around health, crime, education and housing that could also distance residents from the labour markets. Multi-agency working was also promoted through both specific ABIs and broader strategic mechanisms such as social inclusion partnerships (SIPs) in Scotland to address different dimensions of economic exclusion (McWilliams et al., 2004).

The supply-side emphasis on employability increasingly narrowed in on individual behaviour and outlook and how this scaled up into localised ‘cultures of worklessness’ (HM Treasury, 2003) that cut off residents from the benefits of consistent economic growth (see Lupton et al., 2013). Accordingly, a package of sub district-level programmes were introduced in England to address issues around employability including employment zones and the Working Neighbourhoods Fund as well as dedicated employment support initiatives and labour market activation programmes within the larger ABIs. These were accompanied by ongoing efforts within regeneration and housing programmes to create ‘mixed communities’ (Lupton et al., 2013).

The rationale was that deconcentrating poverty reduced the ‘area effects’ that compounded individual disadvantage (Manley et al., 2012) within local social and historical contexts. This is despite most research suggesting that the evidence for the existence of area effects is mixed (Tunstall and Lupton, 2010; Manley et al., 2012). At the same time, government also saw physical location as a contributing place-based factor that cut areas off from centres of economic opportunity where transport was limited or unaffordable (Social Exclusion Unit, 2003; Lucas et al., 2008).

More traditional forms of property led economic regeneration also continued through the work of regional development agencies (RDAs). At a local level, the Local Enterprise Growth Initiative (LEGI) was introduced to support the creation and growth of small- and medium-sized enterprises (SMEs) in deprived areas. Indeed, the final term of the Labour Government saw a shift away from an emphasis on social exclusion towards a narrower focus on economic development through the sub-national review (HM Treasury, BERR, DCLG, 2007) and the DCLG White Paper Why Place Matters (DCLG, 2008). These emphasised the need to align efforts to tackle worklessness at neighbourhood levels with wider sub-regional economic development supported by a new, pan-district strategic framework (multi-area agreements (MAAs)). This highlighted a new concern with how to integrate vertical structures of governance to improve economic outcomes.

The Coalition Government’s localist approach to regeneration has, in many ways, consolidated this emphasis on wider economic development as the engine of regeneration. A series of initiatives have been delivered through the local growth agenda (BIS, 2010; DCLG, 2011, 2012) including local enterprise partnerships, the Regional Growth Fund and local growth deals. These devolve powers, funding and responsibilities to sub-regional bodies to stimulate private sector led growth as a means of redressing a perceived culture of dependency on the public sector (HM Government, 2012). At lower spatial scales, the Coalition Government also signalled a determination to end large-scale, well-funded ABIs.
In their place, they promoted community led forms of regeneration (e.g. neighbourhood plans and the ‘right to’ suite of programmes) alongside efforts to encourage public service reform to reconfigure budgets and services to support disadvantaged neighbourhoods. Fundamental to both the local growth and community led regeneration reforms is a guiding belief that markets and services are most efficient when delivered by local actors unencumbered by state intervention. Alongside these initiatives, the UK continues to receive and allocate European structural and investment funds (ESIF) monies (€10.7 billion in 2014–2020), principally in the form of the European Social Fund (ESF) and European Regional Development Fund (ERDF) funding. This is intended to support key priorities around generating growth and jobs and, while not delivered primarily through targeted ABIs, ESIF funding can support area based projects related to physical infrastructure, enterprise, employment and skills that aim to improve social and economic outcomes in low-income neighbourhoods.

At the same time, there is an explicit notion that markets cannot and should not be expected to deliver equitable spatial outcomes: ‘In some cases this means areas with long-term growth challenges undergoing transition to better reflect local demand. National and local government policies should work with and promote the market, not seek to create artificial and unsustainable growth’ (BIS, 2010, p. 8). Regeneration should promote sustainable growth rather than prop up areas in terminal decline. This has important implications for the geography of economic opportunities. It increasingly implies that it is not the role of government to create jobs or encourage investment in the most disadvantaged areas, a marked shift from the regional policy of the past. Rather, the task is to support areas best positioned for growth and encourage individuals to commute or move to these centres of opportunity. A 2014 consultation on a possible right-to-move scheme underscores the former Coalition Government’s interest in supporting residential mobility within the social rented sector to enable tenants to find work (DCLG, 2014).

The localist approach in England which assumes that it is up to localities to take responsibility for addressing spatial disparities has not been adopted, though, by the devolved administrations within the UK. While local government has been given greater control over regeneration priorities and budgets in both Scotland and Northern Ireland, there is no direct equivalent to the localist agenda. Scotland, Wales and Northern Ireland all continue to have strategic frameworks for regeneration that are currently lacking in England. Strategies on regeneration and poverty have also become more explicitly aligned in Wales and, to a lesser extent, Northern Ireland. Wales in particular is notable for its recent decision to redesignate Communities First as a community focused poverty tackling programme (Welsh Government, 2013). Wales and Northern Ireland also both continue to address regeneration through ABIs although Scotland has moved far closer to a mainstreaming approach, notably through community planning partnerships.

**Conceptualising neighbourhood disconnection**

Drawing on this review of regeneration it’s possible to draw out a number of different forms of disconnection as conceptualised, and responded to, within urban policy frameworks. Not surprisingly, an underlying notion of economic disconnection cuts across most urban regeneration interventions over the last 40 years. However, there are other forms of disconnection – social, physical and institutional – that are not primarily economic problems but have adverse economic outcomes. These forms can be summarised as:

- **Economic disconnection:** A lack of demand-side growth caused by economic shocks (e.g. deindustrialisation) and market failures combined with a shortage of suitably skilled labour.
- **Social disconnection:** Individual or collective cultures within disadvantaged areas that act as barriers to work. This can include limited knowledge of employment opportunities outside immediate areas and an aversion to ‘unfamiliar places’ (Green and White, 2007; Fletcher et al., 2008). There is some overlap here with supply-side factors contributing to economic disconnection.
- **Physical disconnection:** Disadvantages caused by location, such as a lack of suitable transport connections to centres of economic opportunity.
- **Institutional disconnection:** A lack of horizontally or vertically integrated structures or partnerships that leads to sub-optimal economic outcomes.

The evidence presented in this report focuses more on economic, physical and institutional disconnection.
rather than social, but the four are interdependent. These four forms of disconnection are prominent throughout the evidence base on regeneration. However, digital disconnection is also a more recent and important phenomenon in accounting for the disparities between places and people. Efforts to foster digital inclusion may be a means through which some of the above effects can be ameliorated, though it should not be seen as a panacea to entrenched problems of neighbourhood disconnection. While not the focus of this research it is important to note that digital disconnection cuts across each of the four forms noted above.

Different forms of disconnection and policy remedies have been emphasised at different times. For example, the current localist approach to regeneration favours economic disconnection as the primary driver of uneven spatial outcomes and positions demand-side economic development (e.g. LEPs) as the most appropriate response. Mandatory supply-side interventions around employment and training are now the preserve of national benefit regimes and the Work Programme.

By contrast, previous Labour administrations focused more broadly on removing demand-side barriers to job creation (e.g. through RDAs) and supply-side barriers (e.g. through employment zones). The size of the areas covered by interventions also varies over time. The neighbourhood focus that featured centrally in the urban policy of Labour administrations during its last period in office was jettisoned by the Coalition Government because of perceptions that it was expensive, ineffective and inattentive to the needs of residents (HM Government, 2012). This shows there is no consensus on the causes of, and appropriate responses to, spatial disadvantage. The nature and causes of neighbourhood disconnection remain contested ground.

Nonetheless, it remains clear that many parts of our cities remain disconnected from their wider labour and housing markets and that the policy apparatus established by governments since 2010 seems ill-equipped to address it. The recent focus on ‘sink estates’ is, we think, indicative of a lack of understanding about the root causes of the problem and the history of urban policy intervention. Certainly, there are widespread concerns that urban policy after 2010 has largely abandoned longstanding concerns about concentrations of deprivation which were addressed at source through ABIs (Crisp et al., 2014; Wilks-Heeg, 2016). Past urban regeneration programmes may have failed to understand the spatial relationships between localised concentrations of poverty and wider labour markets but it seems doubtful that the current focus on growth at the expense of ABIs will improve economic and social outcomes in low-income neighbourhoods.

The notion of disconnection is intimately related to that of deprivation. Over time, neighbourhoods that have become increasingly disconnected from opportunities in local labour markets have experienced growing levels of deprivation. This may be compounded by the attributes of place i.e. physical disconnection as well as forms of social disconnection as, for example, residents have fewer opportunities to find out about, or access, employment through networks of family, friends and neighbours. The resulting deprivation may, in itself, reinforce disconnection through loss of employment-related skills and experience and the negative consequences on health and emotional or financial wellbeing of experiencing poverty, worklessness or insecure work.

Reconnecting neighbourhoods to growth, therefore, requires mechanisms to ensure that jobs generated are accessible to residents, for example through developing appropriate skills, employment and recruitment pathways. But it also requires tackling forms of deprivation associated with poverty, worklessness and job insecurity to ensure individuals and households have the necessary skills, health and financial security to compete for, and secure, employment opportunities. Tackling both disconnection and deprivation requires a holistic approach cutting across many policy areas.

**Outcomes of economic regeneration**

Decades of urban regeneration to tackle the problems faced by disconnected neighbourhoods have failed to make significant inroads into poverty as measured by related proxies such as jobs, employment and worklessness. A recent review of the evidence base on the impact of economic regeneration (Crisp et al., 2014) found that:

- business development and business support programmes had created jobs but these were often taken up by individuals living outside target areas or who were already in work;
regeneration programmes improved individual prospects of finding work for programme participants but largely failed to improve aggregate levels of worklessness. The review concluded that the poverty impacts of major regeneration programmes were muted. Reasons suggested for limited outcomes included:

- population change as less disadvantaged residents move out to be replaced by more disadvantaged individuals, thereby dampening aggregate outcomes;
- the influence of wider local labour market conditions with regeneration least successful in less buoyant labour markets;
- insufficient spend to achieve transformative change in economic outcomes.

One further observation is that regeneration evaluations largely, though not exclusively, focus on observed changes within programme boundaries. This may underestimate wider economic impacts. Jobs created in regeneration areas may go to inward commuters or those already employed but this could have wider multiplier effects in terms of generating knock-on jobs for individuals experiencing poverty. Crucially, these outcomes may occur outside the boundaries of the evaluation.

The apparent failure of urban regeneration to significantly improve economic outcomes may also point to wider shortcomings in policymakers’ understandings of the causes of area disadvantage. Rae (2011) highlights the mismatch between regeneration activities delivered at the local level to address problems that have wider spatial origins, such as the uneven distribution of the proceeds of national economic growth. This mismatch is exemplified by an increasing emphasis on local forms of social/cultural disconnections despite mixed evidence for the existence of area effects (Buck, 2001; Tunstall and Lupton, 2003; Manley et al., 2012).

While some policies have tried to address more localised dynamics such as sub-regional markets in labour (e.g. RDAs and LEPs) and housing (e.g. HMR), there has never been a comprehensive and vertically integrated account of urban decline that invites co-ordinated responses across spatial scales. The result is a succession of urban policy regimes that focus on the consequences to smaller and, less often, medium sized areas, of uneven development while largely neglecting the national causes of, and levers for tackling, spatial inequalities. This is not to imply that government has no understanding of these dynamics. For example, DCLG (2008) outlined:

‘the best level to tackle a problem is not always the spatial level at which it manifests...tackling neighbourhood deprivation requires recognising the connections between neighbourhood and a wider economy and understanding the factors that constrain people in disadvantage’.

However, it is not clear that the full extent, nature and spatial relationships of those connections have been given sufficient attention in urban policy.

**In-work poverty: the missing link?**

Previous regeneration programmes have tended to focus on worklessness as the main outcome of economic disconnection, and sought to address this through initiatives to create jobs and employment. Less attention was paid to the nature of work itself. This is a serious omission given growing evidence of the rise of in-work poverty which now accounts for a significant proportion (around two-fifths) of working-age adults in poverty (MacInnes et al., 2014). Ray et al. (2014) identify a number of characteristics of work associated with in-work poverty including:

- insufficient spend to achieve transformative change in economic outcomes.
- temporary or precarious work;
- part-time work;
- low hourly pay;
- employment in elementary, sales, caring, process and administrative occupations;
- employment in hospitality and catering, personal services, retail and residential care sectors.
The recent growth of in-work poverty meant past regeneration initiatives were perhaps slow to recognise this trend and, as a result, did not systematically seek to increase access to better paid work through interventions such as skills use strategies. That said, there is evidence from within the NDC programme that individual projects tried to support residents to secure better paid, higher skilled work (DCLG, 2009b). In other words, job quality has been addressed but only on an ad hoc basis.

It remains the case, though, that there has yet to be a comprehensive regeneration strategy or programme that seeks to improve the conditions attached to existing low paid, low skilled jobs or support low paid workers to access better jobs. Recent pilots using devolved funding, such as Glasgow City Council’s City Deal-funded project to improve the terms and conditions of employment in the care sector, suggest that may be changing (see Limitations of past and current approaches in Section 6). It provides tentative signs of an increasing local recognition that past programmes to support access to employment may not be enough. The terms and conditions of work in relation to pay, job satisfaction, duration, security, and opportunities for training and progression, all clearly matter too.
3 Household moves and neighbourhood change

Key messages

• Deprived neighbourhoods exhibit very different patterns of household connection and disconnection across the UK.
• In some areas residential mobility patterns appear to indicate more limited social mobility, particularly in inner urban areas.
• Several inner urban areas appear to be gentrifying, particularly in Birmingham and Nottingham.
• In cities such as Belfast, Glasgow, Liverpool and Manchester a large proportion of deprived neighbourhoods remain isolated from their wider housing market areas.

Introduction

In Section 1, we highlighted the issue of spatially concentrated deprivation across UK cities to put into context the analysis in this report. There are also, of course, significant areas of concentrated affluence within cities, as documented by scholars such as Doug Massey (1996) and Peter Matthews (2015). We take a similar position to Scott Orford here, from his study of long-term change in London, in recognising the links between the two phenomena:

‘...the geographies of rich and poor areas in a city are rarely independent and an understanding of both is useful in order to understand the processes that create and maintain them.’
Orford, 2004, pp. 714

However, given the policy focus on more deprived areas, and their relative disconnection from their wider housing and labour markets, we focus here on those areas among the 20 per cent most deprived in each national setting.

In addition to the spatial question of concentration – or isolation – there is another obvious issue: the persistence of these patterns through time. This significant persistence has been reported in previous work for JRF, (e.g. Blanden and Gibbons, 2006) and it remains a critically important issue. The lessons of the past suggest that successive waves of the kinds of policies discussed in Section 2 have had little impact on the spatial concentration of deprivation within our cities.

Given the high degree of spatial concentration, and its persistence over time, the obvious question one might ask is ‘how might this change’ since we know that, in general, neighbourhoods do not tend to change much over time (e.g. Tunstall, 2016). One way it could conceivably occur is through the movement of different kinds of people to and from different areas, as described in similar research in the past (e.g. Bailey and Livingston, 2008). In the rest of this section we therefore explore the residential mobility patterns associated with the most deprived areas in UK cities in an attempt to understand how, and where, the greatest changes are taking place.

Our approach builds upon previous work by Robson et al. (2009), who developed a typology of areas based on the nature of their residential mobility interactions within their wider neighbourhoods and cities. A fairly low percentage of residents actually move in any given year (around 11 per cent) but the relative attractiveness of areas and their status within city regions can in part be discerned from their connections – or disconnections – with others. In the rest of the section we therefore explain the residential mobility typology we have used (following Robson et al., 2009), update the analysis so it is based on the most recent deprivation indices and deprivation data, and report it in a series of charts and maps. Additionally, since the timing of the Indices of Deprivation 2015 release in England was opportune, we also provide some time series analysis to show how areas within cities have changed since 2004.
A typology of household moves

Understanding the role residential mobility plays in determining neighbourhood structure is an important step in addressing the challenges faced by deprived neighbourhoods. Previous studies used 2001 Census data to create a typology of deprived neighbourhoods in England based on differing patterns of residential mobility (Bailey and Livingston, 2008; Robson et al., 2009). These studies revealed considerable differentiation in the function of different types of neighbourhoods which in turn has implications for the suitability of different policy interventions. For example, an area of east London that is rapidly gentrifying will have different needs to an area elsewhere that suffers from long-term population decline and a stagnant housing market.

The previous typology classified the most deprived neighbourhoods (defined as the 20 per cent most deprived in the Index of Multiple Deprivation) into one of four types: escalator, gentrifier, isolate and transit. The classification is based on the volumes of residential moves into or out of an individual Lower Super Output Area (LSOA) and the relative IMD rank of the LSOA of origin and the LSOA of destination. The neighbourhood types were defined to capture a broad description of the function they play in the socio-demographic structure of the nation and are applied only to the most deprived 20 per cent. A full technical explanation of the method is provided elsewhere (Robson et al., 2008) so here we provide short pen portraits of each area type.

- An escalator area is one where in-movers mainly come from areas that are more deprived while most out-movers go to areas that are relatively less deprived. Although defined as deprived, they can play an important role in the upward progression through the housing market since movers often see them as a kind of ‘stopping off point’ on their way to affording a more expensive property.

- A gentrifier area is one where in-movers come from relatively less deprived areas and out-movers go to similarly or more deprived areas. This may reflect a process of localised economic opportunism as existing residents in ‘low value’ neighbourhoods are displaced by people moving in from less deprived areas to take advantage of cheaper housing costs.

- An isolate area is defined as an area where in-movers and out-movers come from and move to similarly or more deprived areas. It is an ‘isolate’ area in the sense that it is relatively disconnected from the wider housing market and residential mobility patterns, not in relation to social cohesion. Therefore, its socio-economic composition is less likely to be altered by people moving in or out. These areas have the highest average deprivation score out of all four types.

- The final type is a transit area where both in-movers and out-movers are moving from and to less deprived areas. This may reflect areas with high student populations or young households getting onto the housing ladder for the first time. These are both groups with limited resources whose period of residence in the neighbourhood may be relatively brief.

Owing to the nature of the underlying data, in-movers from other countries cannot be included in the analysis. Our analyses suggest that for the vast majority of small areas this is not a significant problem, but we believe that in some areas – particularly in London – this issue ought to be kept in mind when interpreting the results at the small area level.
In order to paint a picture of how social mobility patterns in the most deprived neighbourhoods look, we returned to the 2004 typology and updated it for England using data from the 2011 Census and the 2015 Index of Multiple Deprivation. The typology is then extended to include Northern Ireland, Scotland and Wales using the most recent Index of Multiple Deprivation released by each country: IMD 2015, NIMDM 2010, SIMD 2012 and WIMD 2014, respectively. The indicators and weighting used in each index vary so we cannot make comparisons of relative deprivation across countries.

**Results of typology**

Overall, it is notable that the composition of the typologies calculated for the most deprived 20 per cent of areas for England and Northern Ireland are remarkably similar (Figure 4 and Table 2). Just over 50 per cent of areas are classified as transits while isolate areas are the second most common type. Scotland has
a similar percentage of transits but a higher percentage of escalator and gentrifier types. Most striking is the very high percentage of the most deprived 20 per cent of LSOAs in Wales that are identified as transits (77 per cent). The similarities seen suggest that the typology is capturing some common patterns that transcend national boundaries; at the same time, the differences imply that there are other factors influencing residential mobility patterns and that these may be revealed only at a smaller scale.

**Figure 4: Composition of most deprived 20 per cent of areas, by type**

![Composition of most deprived 20 per cent of areas, by type](image)

**Table 2: Percentage of most deprived 20 per cent of areas, by type**

<table>
<thead>
<tr>
<th></th>
<th>Escalator (%)</th>
<th>Gentrifier (%)</th>
<th>Isolate (%)</th>
<th>Transit (%)</th>
<th>Unclassified (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>7.0</td>
<td>12.2</td>
<td>26.3</td>
<td>52.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>6.2</td>
<td>11.2</td>
<td>29.2</td>
<td>52.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Scotland</td>
<td>11.8</td>
<td>15.4</td>
<td>19.0</td>
<td>53.7</td>
<td>0.1</td>
</tr>
<tr>
<td>Wales</td>
<td>6.3</td>
<td>8.9</td>
<td>6.3</td>
<td>76.6</td>
<td>1.8</td>
</tr>
</tbody>
</table>

**Current patterns in residential mobility across the UK**

**England**

As we saw in Section 1, deprived areas are not uniformly distributed across the country. Typically we see entrenched areas of deprivation particularly within larger cities but also within smaller regional centres. Across the country the biggest concentrations occur in London and the major industrial cities further north. At a regional level, the distribution of deprivation also varies. Within local enterprise partnerships (LEPs) the proportion of LSOAs within a given LEP falling into the most deprived nationally varies widely (see Figure 7). In some LEPs more than 12 per cent of the LSOAs within them are in the most deprived 20 per cent, while others, like Hertfordshire and Enterprise M3, have very low numbers of deprived areas.

The distribution of deprivation across a LEP can also vary widely. Greater Manchester and Greater Birmingham and Solihull have a similar proportion of LSOAs in the most deprived 20 per cent, but in Greater Manchester these areas are distributed across a number of local authorities while in Greater Birmingham they are concentrated in Birmingham itself as shown in Figure 5. As Rae (2009) has shown, this local spatial context can have a bearing on the extent to which individual neighbourhoods have interactions with nearby, similarly deprived areas. We also provide an overview map of the typology for Greater London (Figure 6).
Figure 5: Comparison of the distribution of the most deprived 20 per cent LSOAs across the LEPs of (a) Greater Birmingham and Solihull and (b) Greater Manchester
It is also clear that the composition of deprived areas within the LEPs is variable; LEPs with low proportions of deprived areas within them tend to have largely transit areas. This is because, on average, residential moves are of a very short distance. This means that for an area classed as deprived by the IMD, the number of households moving to it from a more or similarly deprived area is directly related to the number of more or similarly deprived areas in its vicinity, i.e. local spatial context is an important factor (see Rae, 2009). This explains the predominance of transit types in LEPs with a higher rural area share in which deprived areas are more dispersed, such as Cumbria and the North East, and those which have very low overall numbers of deprived LSOAs.
At the scale shown in Figure 7, we get an overview of the general pattern across England but this can obscure more nuanced patterns at a local scale. Because of the large proportion, and concentrations, of deprived areas in major cities, we now focus our attention particularly on the core cities of Birmingham, Bristol, Leeds, Liverpool, Manchester, Newcastle upon Tyne, Nottingham and Sheffield. This enables us to support our analysis with feedback gained from economic development, planning and social service professionals within the local authorities of the core cities. Representatives from local enterprise partnerships were also involved in the consultation exercise but to a lesser extent, as reported in Section 6.

The cities of Birmingham, Liverpool, Manchester and Nottingham all have more than 50 per cent of their LSOAs in the most deprived 20 per cent nationally (see Figure 8). For Birmingham, Liverpool and Manchester, the largest proportion are isolates by some margin, suggesting a high level of housing market disconnection in these areas. Newcastle upon Tyne and Bristol both have high levels of transit areas. While more than 25 per cent of the LSOAs within Bristol are in the most deprived 20 per cent, unlike in most other cities these are relatively dispersed across the city (see Figure 9). The high level of dispersion and the very low occurrence of deprived areas in the wider sub-region means that moves to and from more or similarly deprived areas are less likely, resulting in a high degree of transit areas.
Figure 8: Typology for core cities in England
Northern Ireland

The measure of deprivation used in Northern Ireland, the Northern Ireland Multiple Deprivation Measure (NIMDM), was last published in 2010, predating the 2011 census. Since its publication, some boundary changes have been made to the Super Output Area (SOA) geography used in the 2011 Census. This only affected 6 of the 890 SOAs in Northern Ireland and these are indicated on the maps by hatched areas. Additionally, SOAs do not nest within local government districts (LGDs) and have been allocated to a district based on the lookup table provided by Northern Ireland Statistics and Research Agency (NISRA).

The districts of Derry and Strabane and Belfast have the highest proportion of deprived areas within them, as indicated by Figure 10, largely associated with the cities of Derry and Belfast respectively. Looking at Belfast in particular (Figure 11) we see the same pattern of highly clustered deprived areas that is evident in many of the large English cities.

Again, in Belfast these areas are dominated by isolate types suggesting limited scope for neighbourhood change through residential mobility in these areas. The SOAs identified as transits in Belfast fall largely along the docks and riverside. These types of areas are often the focus of regeneration schemes aimed at reviving derelict industrial districts, with the Titanic Quarter in Belfast being one example. The new-build apartment blocks that often result from such schemes are popular buy-to-let investments targeted at a young market with high mobility and often have a high proportion of privately rented accommodation (ECOTEC, 2008). This is likely to result in a high turnover of tenants, with the average tenancy across the...
private rented sector being 15 to 17 months (ARLA, 2007 cited in ECOTEC, 2008, p.32), and from a geographically mobile sector of the market meeting the criteria for a transit classification.

Figure 10: Proportion of SOAs falling in the most deprived 20 per cent within each local authority by 2015 residential mobility typology (based on 2014 local government district boundaries)

Figure 11: Location and type of SOAs in the most deprived 20 per cent nationally across Belfast (based on 2014 local district boundaries)
Scotland

Scotland has a similar composition of types to England and Northern Ireland (Figure 4). Like in the other nations of the UK, most of the deprived areas are concentrated in the major industrial and post-industrial areas. In Scotland we see it particularly focused in the central belt with Glasgow, Inverclyde and West Dunbartonshire among the local authorities with the highest proportion of data zones in the most deprived 20 per cent, as demonstrated in Figures 12 and 13.

Figure 12: Proportion of data zones falling in the most deprived 20 per cent within each local authority by 2015 residential mobility typology
As discussed above in relation to patterns of deprivation in England, the majority of deprived areas within wider city regions are in the inner urban locations. The same is true of Glasgow City Region. It contains 34 per cent of Scotland’s population (1.8 million) and 35 per cent of its jobs, yet the majority of the most deprived neighbourhoods are within the City of Glasgow, in addition to a concentration of deprived areas in Inverclyde in particular. Figure 14 provides a closer look at the residential mobility typology for Glasgow, in order to demonstrate both the spatial concentration of deprived areas and the variety of types visible there.
Figure 14: Location and type of data zones in the most deprived 20 per cent nationally across Glasgow

Wales

As noted previously, the residential mobility typology in Wales is strikingly different to that in the other three nations. More than 75 per cent of LSOAs in the most deprived 20 per cent were classified as transits, in contrast to just over 50 per cent in the other UK nations. Additionally, the two most populous local authorities in Wales, Cardiff and Swansea, have lower proportions of LSOAs in the most deprived 20 per cent than other less densely populated local authorities. Instead, the local authorities with the highest proportion of deprived LSOAs are those associated with the former mining and industrial communities in Blaenau Gwent, Rhondda and Merthyr Tydfil (Figure 15). With one exception, all of the local authorities that contain areas in the most deprived 20 per cent are dominated by transit types, with the exception being the Isle of Anglesey which has a majority of isolate types. It should be noted that only 7 of the 44 LSOAs in the Isle of Anglesey fall in the most deprived 20 per cent and of these 4 are classed as isolates.
Figure 15: Proportion of LSOAs falling in the most deprived 20 per cent within each local authority by 2015 residential mobility typology

The high occurrence of transit types is a result of deprived areas in Wales being more widely distributed across local authorities and less concentrated in major cities. As a result, the density of deprived areas is relatively low, even though numbers may be high, as is evident in Figure 16 showing the distribution of the most deprived 20 per cent of LSOAs within Cardiff City Region. An additional map showing only Cardiff is shown in Figure 17.
Figure 16: Location and type of LSOAs in the most deprived 20 per cent nationally across Cardiff City Region
Changes in patterns of residential mobility in England since 2004

The residential mobility typology presented here is based on a method developed by Robson et al. (2008) in their analysis for the Department for Communities and Local Government. During the course of this research, new indices of deprivation for England were released, and this allowed us to explore the question of change over time in the residential mobility typology for England. This was not possible for other parts of the UK since new indices have not yet been released (the Scottish Indices of Deprivation 2016 are due to be released in the summer of 2016).

Because of a number of changes to the statistical units on which the census data is based, direct comparisons between the 2004 and 2015 typology must be treated with caution. Largely based on population changes, the number of LSOAs increased in the 2011 Census to 32,844 (from 32,482). However, it is useful to make comparisons on how an area has changed in terms of its residential typology. For the purposes of this study we produced maps showing both the 2004 typology and 2015 typology at both the local authority and LEP level for the core cities (see Appendix 2).

These maps are useful when considered in the context of particular areas. For example, highlighting an area where a particular housing development has been built, where the population composition has changed significantly, or where there have been other changes which affect the nature of the local area.
For the identification of larger-scale patterns, a more technical approach was needed. In order to achieve this, we used the characteristics of the 2011 LSOAs to derive an approximate 2004 typology class for that area. This process may mask some of the detailed changes but in conjunction with information gathered from the stakeholder workshops (Section 6) it provides a broad picture of the changes in residential typology that are being seen.

We can see in Figure 18 that there has been an increase in the proportion of transit areas between 2004 and 2015 (Table 3), and a noticeable decline in the proportion of escalator areas. The latter may reflect the boom in residential properties in deprived areas marketed at students and young professionals while the former may reflect the increasing unaffordability of housing across England, even in the most deprived areas. The increase in the proportion of gentrifier areas may be taken as a sign that this is the case, but we would urge caution in this interpretation without further local investigation. Nonetheless, this is a plausible explanation.

**Figure 18: Overall composition of the residential typology composition for the 20 per cent most deprived areas in England**

![Figure 18: Overall composition of the residential typology composition for the 20 per cent most deprived areas in England](image)

**Table 3: Percentage of most deprived 20 per cent LSOAs in each residential mobility type in 2004 and 2015**

<table>
<thead>
<tr>
<th></th>
<th>Escalator (%)</th>
<th>Gentrifier (%)</th>
<th>Isolate (%)</th>
<th>Transit (%)</th>
<th>Unclassified (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>18.7</td>
<td>8.0</td>
<td>31.2</td>
<td>38.8</td>
<td>3.3</td>
</tr>
<tr>
<td>2015</td>
<td>7.0</td>
<td>12.2</td>
<td>26.3</td>
<td>52.8</td>
<td>1.7</td>
</tr>
</tbody>
</table>

The ‘river plot’ in Figure 19 shows the connection between the 2015 typology and the 2004 typology. The increase in transit areas seen in 2015 is largely from areas that were not in the most deprived 20 per cent in 2004 (labelled N_A in Figure 19). While the decrease in escalator areas in 2015 is due to areas moving from the escalator type to isolate or transit. Very few areas that were identified as gentrifiers or escalators remained that type in 2015, suggesting significant change in the socio-economic composition of hundreds of England’s most deprived areas.

(NB Because of the boundary changes made to LSOAs the flows in Figures 19 and 20 – 23 should be treated as illustrative of overall patterns; it is not appropriate to quantify them explicitly and some caution should be used in their interpretation.)
The rise in transit areas is intriguing, since in some areas it can indicate high density urban regeneration developments. One example is in Kelham Island in Sheffield, which is a combination of student complexes and apartments aimed at young professionals. It can also indicate areas where the relative density of deprived areas is low or dispersed. This is because on average residential moves in and out of deprived areas are of a very short distance; thus for an area that is classed as deprived on the IMD the number of households moving to it from a more or similarly deprived area is related to the number of more or similarly deprived areas in its vicinity. This is likely to underlie the relatively high number of transit areas in Bristol (Figure 9) whose deprived areas are dispersed across the local authority rather than the spatial concentrations seen, for example, in Liverpool and Sheffield.

Apart from Bristol, all the English core cities saw an overall decrease in the proportion of LSOAs in the most deprived nationally in the 2015 IMD (compared with their position in 2004). This was most marked in Liverpool, Manchester and Newcastle which over that period saw percentage point decreases of 11.4 per cent, 13.3 per cent and 10.2 per cent, respectively, in the proportion of their LSOAs in the most deprived 20 per cent nationally.

Table 4 details the composition of the typology of the most deprived 20 per cent LSOAs in each of the core cities based on both the 2004 and 2015 IMD and the percentage point change (in bold). Because of LSOA changes between the 2001 and 2011 census we express these as a percentage of LSOAs in the local authority. Of particular note is the decrease in areas identified as escalators across all eight cities with 10.4 and 6.6 percentage point decreases in Birmingham and Manchester, respectively. In contrast, gentrifier areas increased in Birmingham and Nottingham by 6.0 and 6.3 percentage points, respectively. This reduction in escalator areas (associated with social mobility) and increase in gentrifier areas (associated with displacement) is perhaps a sign that the most deprived areas in the core cities have attracted wealthier residents in recent years. This may have negative implications in relation to reduced social mobility for the residents of deprived areas, who may be forced to move to poorer neighbourhoods as a result of wealthier incomers.
Table 4: Percentage of LSOAs in the eight core cities in each residential mobility type in 2004 and 2015

Change in percentage points is indicated in bold and unclassified areas are excluded.

<table>
<thead>
<tr>
<th></th>
<th>Escalator (%)</th>
<th>Gentrifier (%)</th>
<th>Isolate (%)</th>
<th>Transit (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birmingham</td>
<td>13.3</td>
<td>2.8</td>
<td>-10.4</td>
<td>3.7</td>
</tr>
<tr>
<td>Bristol</td>
<td>4.4</td>
<td>1.1</td>
<td>-3.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Leeds</td>
<td>5.3</td>
<td>2.1</td>
<td>-3.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Liverpool</td>
<td>7.2</td>
<td>2.0</td>
<td>-5.2</td>
<td>4.8</td>
</tr>
<tr>
<td>Manchester</td>
<td>11.2</td>
<td>4.6</td>
<td>-6.6</td>
<td>7.7</td>
</tr>
<tr>
<td>Newcastle upon Tyne</td>
<td>8.1</td>
<td>5.1</td>
<td>-2.9</td>
<td>6.4</td>
</tr>
<tr>
<td>Nottingham</td>
<td>10.8</td>
<td>7.1</td>
<td>-3.7</td>
<td>9.1</td>
</tr>
<tr>
<td>Sheffield</td>
<td>5.9</td>
<td>4.6</td>
<td>-1.3</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Focusing on individual cities, Birmingham and Leeds show similar patterns of change since 2004 with a decrease in the proportion of escalator areas, the majority of them becoming isolates as shown in Figures 20 and 21. For both cities this is the biggest change type (by proportion). They also both see a relatively high proportion of areas moving from the isolate to the gentrifier category. In Leeds, the areas that were gentrifiers in 2004 are no longer all in a different category, suggesting this process has been completed in some areas. The fact that the proportion of gentrifiers is greater in 2015 suggests it has started in others.

Figure 20: 2015 residential mobility typology for Birmingham compared with 2004 typology (using approximated values to account for boundary changes)
Bristol and Newcastle see particularly notable increases in the number of areas that are identified as transits. Bristol was dominated by transit areas in the 2004 typology and has seen their number increase further in 2015 (see Figure 22). This increase has come mainly from areas that had previously not been in the most deprived 20 per cent (N_A on Figure 22) and those that had previously been classed as escalators.

Newcastle has also seen a big increase in the proportion of areas classed as transits, although in Newcastle the change has been from all types in similar proportions. This rise has been countered by a dramatic decrease in the number of isolate areas identified in Newcastle (see Figure 23).
How should we interpret these changes?

The results above show that in many areas the composition of deprived areas was significantly affected by residential mobility. For example, Table 3 shows that between 2004 and 2015 in England the percentage of isolate areas dropped from 31.2 per cent to 26.3 per cent and in Liverpool and Newcastle by 11.3 per cent and 15.6 per cent respectively (Table 4). This may appear to be a positive change, but we interpret it rather differently. Given that a decline in isolate areas is accompanied — nationally and locally — with a big increase in transits (38.8 per cent to 52.5 per cent for England), this suggests that some of the most deprived areas in 2004 have since become home to a significant number of residents from less deprived areas, with new-build flats on brownfield land hosting shorter-term, wealthier residents alongside existing, more deprived residents (in line with the transit type).

If the typology were to be constructed on an annual basis, these areas may have been identified at one time as gentrifiers, but by 2015 they are classified as transits. Another notable trend from Table 3 and Table 4 is the big decline in escalator areas. This may indicate that by 2015 there was less progression up and through the housing market from the country’s most deprived areas, possibly as a direct result of a decade of house price inflation. Again, however, such a conclusion requires further investigation at the local level, even if it seems entirely plausible. In Section 5 we therefore provide further analysis on the characteristics of these areas. The point here is that the typology provides a snapshot view of patterns of connection at a single point in time rather than an explanatory framework for how and why neighbourhoods change as a result of residential mobility.

Conclusions

The purpose of the in-depth analysis in this section was to shed more light on the functional roles deprived neighbourhoods play in relation to shaping the characteristics of local areas. As others have shown (e.g. Bailey and Livingston, 2008) the variety of residential moves, and the characteristics of those moving in and out, can have a significant impact on both origin and destination areas so understanding the nature and volume of movements is important. One obvious case where this happens is in gentrifying areas and another is in areas that may suffer from long-term low demand or abandonment, as seen in the north of England in the 1990s (Cameron, 2006).

More recent research by Hincks (2015) has identified the divergent pathways of change that deprived neighbourhoods may take as they change over time. In fact, Hincks identified 260 different transition pathways followed by neighbourhoods in the Greater Manchester City Region between 2001 and 2010.
Although we restrict our analysis to four types here, the important point is that deprived neighbourhoods are very much not all the same and as such any policies which seek to improve the fortunes of their residents must be sensitive to that. We examine this proposition in more detail in Section 5.

Using deprivation indices provides a useful initial framing of the characteristics of a neighbourhood but, we think, only a partial understanding of the important housing and labour market connections and disconnections that really matter. It does not tell us anything about the everyday experiences of individuals in the nation’s most deprived areas, or about the life chances of people living there. We highlight four key points about the typology and what we believe it says about the nature of deprived areas across the UK.

- First, from a practical point of view, it would appear that expanding the typology to cover the whole UK based on the four different deprivation indices has significant value in helping distinguish between different kinds of deprived area. The composition of the typology is almost identical for England and Northern Ireland, and very similar for Scotland. The results for Wales, as discussed above, are markedly different in that the proportion of transits is much higher. This is an indication that the typology is sensitive to contexts where the spatial distribution of deprivation is more dispersed (as in Wales) and the range of possible moves into or out of the most deprived neighbourhoods is more limited. In particular, we believe it highlights the importance of job proximity and accessibility in the more deprived parts of the South Wales Valleys. In terms of understanding neighbourhood connection and disconnection, therefore, this approach is very helpful.

- Second, the neighbourhood residential mobility typology approach also highlights the fact that localities matter. At the national level, Wales is different in this respect but more locally it is clear that some cities have a very different composition to the national pattern, with clusters of deprived areas that have little functional connection to less deprived areas when it comes to residential mobility. This is particularly true in cities like Liverpool, Manchester, Birmingham, Belfast and Glasgow, where the largest single category of deprived areas are isolates, indicating that a significant proportion of deprived areas in these cities predominantly connect with the most deprived locations, with limited moves into or out of less deprived neighbourhoods. This is in itself not necessarily a problem, but it does indicate a level of residential disconnection potentially indicative of some neighbourhoods being functionally disconnected in terms of residential moves to less deprived areas.

- Third, we note that overall the proportion of areas in the transit category has increased significantly, from 38.8 per cent in 2004 to 52.8 per cent in 2015. The proportion of gentrifiers during the same period increased from 8.0 per cent to 12.2 per cent. One potential explanation for the growth in transits is the development of housing marketed at students and young professionals who typically dip in and out of these neighbourhoods for relatively short periods. It seems plausible to suggest that the growth of gentrifier areas is indicative of the encroachment of the housing market into more affordable areas which residents of less deprived areas would not previously have considered moving to. This can, of course, lead to displacement of local, long-term residents and have a destabilising effect on local communities.

- Fourth, we note here the utility of taking a longitudinal approach to understanding the neighbourhood typology. Although this was only possible for England, it allowed us to identify a rise in the relative proportion of transits between 2004 and 2015. This could very well be related to an increase in new-build flats in more deprived areas occupied for relatively short periods by students and young professionals. Such developments can be seen close to major English universities in cities such as Leeds, Manchester and Sheffield. We also see in some cities, such as Newcastle, a proportion of the most deprived category (isolates) becoming gentrifiers. This is consistent with the ’return to the city’ phenomenon (Rae, 2013) of the New Labour years, when the major English cities turned around decades of population loss through a series of high profile regeneration initiatives.

The relative attractiveness – or otherwise – of individual areas can tell us about their relative place within cities, regardless of the volume of flows. Furthermore, it can also help pinpoint those areas where social mobility seems more likely (e.g. escalator areas), or less likely (e.g. isolate areas). If the majority of moves into a deprived neighbourhood are from a less deprived area and to a more or similarly deprived area, this would be consistent with processes of gentrification, as discussed above. On the other hand, deprived areas which show very little interaction with less deprived areas may suffer from the kind of ‘residualisation’ of poverty, where the poor remain poor and become relatively poorer over time (see Lupton, 2003). For this reason, we view isolate areas as being particularly important from a policy
perspective. But housing is only one part of the story. Often, the fortunes of individuals are closely related to employment opportunities in their local labour and regional labour market. The extent to which residents in more deprived areas can access, and participate in, the labour market is therefore a critical factor in understanding why some areas do not seem to benefit from periods of sustained urban economic growth, as described by Lee et al. (2014) in their evidence review. Section 4 explores this subject in more depth, through the development of an entirely new travel-to-work typology which seeks to shed light on the extent to which deprived neighbourhoods are connected with their wider labour market areas in relation to the geography of employment.
4 Travel to work and deprived neighbourhoods

Key messages

- Deprived neighbourhoods vary widely in relation to their labour market links, with some areas functionally disconnected.
- The geography of employment of a given city region may represent a significant challenge to the residents of deprived neighbourhoods: this may represent evidence of a spatial mismatch between the location of jobs and people.
- Many well connected neighbourhoods remain highly deprived, despite their proximity to employment opportunities: this may suggest a skills mismatch between jobs and local residents.
- In many of the country’s most deprived areas, people do not travel very far for work.

The geography of employment and deprived areas

In the previous section we presented a detailed account of the variety of patterns associated with residential mobility at the neighbourhood level across the UK, updating and extending previous work by Robson et al. (2009). This provides a useful basis for understanding the functional characteristics of individual areas, and the roles they play within their wider city regions. But of course residential mobility is only part of the story since it is inextricably linked to the geography of travel to work, as Hincks (2010) has demonstrated. We therefore also need greater knowledge of the types of travel patterns associated with the most deprived neighbourhoods if we are to understand more about the challenges they face. Put simply, to get more people from deprived areas into jobs, we either need to move people to jobs, or we need to create jobs near to where people live (or a combination of both). In this respect, two phenomena from the academic and policy literature are relevant.

The first is spatial mismatch, which relates to a mismatch between the geography of labour supply and demand within a metropolitan labour market (Holzer, 1991; Houston, 2005). More jobs and better jobs are of course a necessity if residents of deprived neighbourhoods are to benefit from economic growth at the city level, but they need to be accessible. In some cities, such as Glasgow, many poorer areas are on the periphery of the city, some distance from major employment zones. In others, such as Liverpool, there are significant concentrations of deprived areas near major employment zones. Therefore, the geography of employment and the geography of deprivation within an urban area are important, particularly when the evidence has shown that unless new jobs are within about five kilometres of unemployment blackspots, their residents are unlikely to get a significant share of them (Webster, 1999).

The second critical factor in linking residents of more deprived neighbourhoods to wider economic uplift relates to skills. As Houston (2005) and others have shown, the notion of employability in contemporary labour markets has its basis in the concept of the existence (or lack) of a skills mismatch, whereby the skills of the unemployed do not match the needs of employers. Therefore, even if there are plenty of jobs within or near the most deprived neighbourhoods, lack of necessary skills can serve as a barrier to employment and, in turn, prevent individuals and neighbourhoods benefitting from – and contributing to – wider economic growth.

In this study we sought to understand the extent to which these two phenomena might play out across the most deprived neighbourhoods of the United Kingdom. Taking spatial and skills mismatch as our conceptual foundation, we have developed a new neighbourhood typology for the labour market which sheds light on these issues.
Understanding travel to work and deprived neighbourhoods

The 2011 census provides detailed origin-destination data on workplace travel flows. This allowed us to look more closely at the workplace destinations of residents in deprived areas. This can help us assess labour market disconnection and, potentially, where work related policy interventions should be targeted. With a large, complex origin-destination travel-to-work dataset such as that provided by the 2011 census it can be difficult to understand the complex connections of flows into and out of deprived neighbourhoods and, in turn, discern which areas are well connected and which are not, so in this sense a conceptually simple typology is useful. We developed a travel-to-work typology for the 20 per cent most deprived areas as defined by the most recent deprivation indices in use across the UK (IMD2015 in England, NIMDDM10 in Northern Ireland, SIMD2012 in Scotland and WIMD2014 in Wales). The typology is calculated individually for each nation and is based on three separate parameters:

1. The ratio of jobs to residents (are there more jobs than people?).
2. The distance between residence and workplace (how far do people travel to work?).
3. The number of different destinations travelled to (is there a wide variety of employment destinations?).

The typology uses the first of these parameters to classify an area (LSOAs in England and Wales, SOAs in Northern Ireland and data zones in Scotland) by a basic employment vs. residence characteristic. Where the number of jobs in an area is greater than the number of workers (measured as the number of residents whose workflow originates in that area), the area is deemed to be an employment area and is termed a primary employment zone; this is the first type and indicates an area that is a significant source of employment. This indicator is very similar to the jobs density measure developed previously by the Office for National Statistics (Hastings, 2003) and gives an indication of where the major local employment centres are. A further sub-type (low local workers) is defined using the proximity ratio defined below, which indicates employment areas where a relatively high number of local residents travel more than 5 km to work. This may indicate more limited opportunities for local residents or better access to opportunities further afield. Either way, we use it here to distinguish between areas of high employment where local residents are less likely to be employed.

Where the number of jobs is less than the number of working residents (outgoing workers) the area is deemed to be a residential area. This group is then further classified based on the remaining two measures. The second measure, the proximity ratio, looks at the ratio of workers travelling less than 5 km to work to those commuting more than 5 km to work, following Webster (1999). This is a relatively short distance, but in the most deprived locations job proximity can have a significant impact on unemployment rates (Immergluck, 1998). Straight-line distance was measured between the population weighted centre of the area of residence and the area of employment.

The third measure, links per worker, is simply the number of distinct destination areas divided by the number of workers originating from that area. This provides a measure of the geographical diversity of employment opportunities associated with individual neighbourhoods. A higher links per worker value is generally associated with a lower level of deprivation (see Section 5) and we use it here as a kind of proxy for deprived neighbourhood connectivity, given the traditionally limited commuting horizons of residents in deprived areas (Webster, 1999). If we want to connect people to jobs, then understanding where travel-to-work links are limited may help identify where, for example, improved transport would help.

Using these two measures, each area is then characterised by whether it is low or high relative to the average value across the most deprived 20 per cent of areas in each part of the UK. We then characterise each area based on these values as shown in Table 5 and Figure 24. An area that has a high proximity ratio (more people working close to home) and high links per worker is described as a connected core. These areas are typically close to urban centres and are likely to be close to numerous employment opportunities and transport options.

Where the proximity ratio is low and the links per worker is high, the area is called a disconnected core. These areas may be close to employment opportunities but less able to exploit them, perhaps suggesting
areas of where *skills mismatch* is an issue. These areas may be well connected internally, but given the very small size of the areas we are looking at, their external disconnection is considered to be a barrier to employment.

When the proximity ratio is *low* (more people travel more than 5 km to work) and the links per worker is *high* the area is described as a connected suburb. These areas are generally more peripheral to city centres so workers tend to travel further to employment opportunities but are still able to exploit a wider range of work options.

If the proximity ratio is *low* and the links per worker measure is *low* then we call it a disconnected suburb. Here the residents travel further to employment but also to a less varied range of workplaces. This will be an indicator of areas more likely to be suffering a *spatial mismatch*. These areas are suburbs in the sense that they are typically on the periphery of the urban area, rather than what one might typically think of as a leafy, more prosperous urban area.

### Table 5: Definition of travel-to-work typology

<table>
<thead>
<tr>
<th>Travel-to-work typology</th>
<th>Area group</th>
<th>Proximity ratio (those who work less than 5 km away)</th>
<th>Links per worker (measure of workplaces travelled to)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary employment zone</td>
<td>Employment area more jobs than workers</td>
<td>&lt;50% (less than 50% of workers work within 5 km)</td>
<td>-</td>
</tr>
<tr>
<td>Low local workers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connected core</td>
<td>Residential area more workers than jobs</td>
<td>High (more people work within 5 km)</td>
<td>High (wide variety of workplaces)</td>
</tr>
<tr>
<td>Disconnected core</td>
<td></td>
<td>High (more people work within 5 km)</td>
<td>Low (limited variety of workplaces)</td>
</tr>
<tr>
<td>Connected suburb</td>
<td></td>
<td>Low (more people travel more than 5 km to work)</td>
<td>High (wide variety of workplaces)</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td></td>
<td>Low (more people travel more than 5 km to work)</td>
<td>Low (limited variety of workplaces)</td>
</tr>
</tbody>
</table>

We use the links per worker measure here as a proxy for spatial labour market connectivity, since previous research has demonstrated the importance of transport links in deprived areas (e.g. Immergluck, 1998; Lucas *et al.*, 2008) and the more limited travel-to-work horizons of residents of deprived areas. Our analysis in Section 5 confirms this, and shows that this form of disconnection is associated with higher levels of deprivation.
In contrast to the residential typology, the travel-to-work typology has a strong geographical element with the implicit inclusion of distance. In conjunction with the residential typology, then, it should provide a powerful tool to further tease out some of the barriers to inclusion in the workforce. We frame it here in relation to potential skills mismatch (a labour supply and demand issue) and spatial mismatch (a ‘geography of jobs’ issue) owing to the longstanding nature of these issues in more deprived neighbourhoods (e.g. Houston, 2005). However, we must note here that to identify the true nature of these issues in individual areas, further local analyses are needed.

Applying the typology to each of the four nations shows a similar distribution in each nation (Figure 25). The biggest variation is in the ratio of connected to disconnected types; of the core areas in Northern Ireland, a higher proportion are classed as connected than disconnected than in the other nations. Wales has a notably higher proportion of its suburb type areas defined as connected than the other nations.
The key message here is that many of the UK’s most deprived areas are areas with lots of jobs. In Northern Ireland, for example, in nearly a third of the most deprived areas there are considerable numbers of jobs. In Scotland, the figure is just under a quarter. When we add in the inner urban ‘core’ areas (see Table 6), the proportion of well-connected areas that are among each nation’s most deprived quintile is more than 50 per cent. In England alone it is 60 per cent and in Northern Ireland it is 65 per cent. Therefore, in most cases geographical proximity to employment opportunities in deprived areas does not appear to be a significant problem. The question this then raises is whether local people are given appropriate opportunities locally and whether there is a mismatch of skills to jobs in some places.

**Table 6: Percentage of most deprived 20 per cent LSOAs in each travel-to-work type**

<table>
<thead>
<tr>
<th></th>
<th>Connected core (%)</th>
<th>Disconnected core (%)</th>
<th>Connected suburb (%)</th>
<th>Disconnected suburb (%)</th>
<th>Primary employment zone (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>8.8</td>
<td>22.2</td>
<td>20.6</td>
<td>9.0</td>
<td>28.3</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>16.3</td>
<td>17.4</td>
<td>16.3</td>
<td>12.9</td>
<td>31.5</td>
</tr>
<tr>
<td>Scotland</td>
<td>7.3</td>
<td>23.0</td>
<td>12.5</td>
<td>16.8</td>
<td>23.9</td>
</tr>
<tr>
<td>Wales</td>
<td>9.2</td>
<td>18.4</td>
<td>28.1</td>
<td>7.6</td>
<td>26.2</td>
</tr>
</tbody>
</table>

**England**

Applying the typology to the English core cities, we see considerable variation, as shown in Figure 26. At opposite ends of the spectrum are Bristol, which is mostly comprised of disconnected area types and Birmingham which is predominantly connected.
Bristol has a relatively low proportion (29 per cent) of LSOAs in the most deprived 20 per cent compared with the other core cities but still high compared with the national figure (the median proportion of LSOAs in the most deprived 20 per cent per local authority is 9.5 per cent). Almost all areas in Bristol are defined under the travel-to-work typology as disconnected suggesting a more limited variety of workplace options (see Figure 27). This could be due to accessibility limitations where transport links restrict access to sources of employment. Additionally, Bristol is relatively isolated from other major towns and cities which may reduce the variety of workplace opportunities available outside the local authority itself. The dispersed geography of deprivation in Bristol, combined with limited commuting horizons of many people within more deprived neighbourhood, is also a factor here.
In contrast, Birmingham is almost entirely connected under the travel-to-work typology as seen in Figure 28. This is perhaps not surprising given that Birmingham is a much larger, flatter and well-connected city than Bristol. It is also situated centrally and surrounded by other significant towns and cities. Not only does this widen the range of employment centres but it will also lead to a wider potential network of accessibility and transport links.
The other core cities show more variation in their composition. Liverpool has a similar population size to Bristol (473,000 and 442,000 to the nearest thousand, respectively (NOMIS, 2015) but includes areas that are both connected and disconnected. The areas in the southern part of Liverpool, around Speke, are mainly primary employment zones. Despite the proximity to these employment zones, the neighbouring areas are, with one exception, defined as suburbs (more people travel more than 5 km to work than the average for similarly deprived areas). This may suggest that employment opportunities for local people are more limited in these areas and may be indicative of a skills mismatch and spatial mismatch, though more localised analysis is needed to bear this out. The inner core of Liverpool around the city centre contains a patchwork of connected and disconnected core areas (Figure 29). It should be noted that some areas may be classified as disconnected core areas where they are in close proximity to an employment centre with numerous employers within a single LSOA. Thus, the reduced number of links per worker in such cases may not fully reflect the absolute connectedness of the area. This can also be seen in Figure 30, where we show a smaller scale map for Greater London.
Figure 29: Liverpool, showing the travel-to-work typology for the most deprived 20 per cent LSOAs nationally
Northern Ireland

The typology shows a higher proportion of deprived areas in Northern Ireland are classified as connected core than in the other nations of the UK (16 per cent in Northern Ireland compared with between about 8 per cent in the other nations). Looking at the composition across the local government districts (Figure 31) shows that these are concentrated in Belfast while Derry and Strabane is primarily composed of disconnected types. This is similar to the pattern seen, for example, in Bristol where employment centres beyond the immediate city area may be limited resulting in higher proportions of the disconnected types.
Belfast shows the pattern typical in most cities (Figure 32). The central area is dominated by primary employment zones, with core areas (both connected and disconnected) next to it. Connected and disconnected suburbs both appear in the more peripheral areas along with a few primary employment zones. These peripheral employment zones may indicate areas of decentralisation of employment centres, particularly when next to suburb type areas which may indicate areas where opportunities for residents without appropriate skills are limited.
Scotland

Applying the travel-to-work typology across Scotland reveals quite wide variation (Figure 33). In general, most areas show high proportions of disconnected data zones with the exception of Stirling where the composition of areas is made up of connected core and connected suburb. However, it should be noted that Stirling is a relatively small area with a high rural component and a low overall proportion of deprived areas, reflecting the small numbers of deprived areas within it. In cities outside the central belt, like Aberdeen and Dundee, we see high proportions of ‘disconnected core’ data zones reflecting the more limited variety of employment opportunities within smaller cities more generally. This is another reminder of the importance of geography. Even if we do have more jobs and better jobs, their spatial distribution clearly matters. The low incidence of ‘suburb’ types indicates that, unlike the areas surrounding Glasgow, for example, opportunities in the wider area are also limited (Figure 34).
Figure 33: Proportion of data zones in Scotland falling in the most deprived 20 per cent within each local authority by 2015 travel-to-work typology
Wales

As outlined in Section 3, Wales differs from the other nations of the UK in the location of its most deprived neighbourhoods. Unlike the other countries, the most deprived areas of Wales according to the WIMD 2014 are less strongly associated with the major cities of Cardiff and Swansea but instead with the valleys of South Wales (see Figures 35 and 36). These areas see high proportions of areas classified as suburb types indicating the residents tend to travel more than five kilometres to work. This may be an underestimate given that the straight-line measures of distance used in this analysis will not reflect all the geographical constraints of the area but, nonetheless, it provides a useful measure of job proximity.
Figure 35: Proportion of LSOAs in Wales falling in the most deprived 20 per cent within each local authority by 2015 travel-to-work typology
Conclusions

The travel-to-work typology is more influenced by geography than the residential mobility typology. This is to be expected, since the location of employment centres are relatively fixed, while residential mobility can be more fluid within and between neighbourhoods, bearing in mind the constraints discussed previously. As one would expect, our research clearly shows that larger cities have a greater potential in terms of variety of employment locations, as demonstrated, for example, by the higher degree of connected areas in Belfast compared with Derry, or Glasgow compared with Dundee.

The typology was calculated individually for each nation so a connected area in one part of the UK cannot be directly compared to a similar one in another part of the country. We can, however, make comparisons of the overall distribution and composition. For example, the local authority areas of Birmingham and Stirling both show very high proportions of connected areas among their most deprived areas. Birmingham is the second largest city in England with just over 1 million residents and a high proportion of areas among the most deprived 20 per cent nationally, while Stirling is one of the smaller council areas in Scotland with 92,000 residents (ONS, 2015) and a low proportion of areas in the most deprived nationally (but note that the small number of deprived areas in Stirling may affect the comparison). What both areas have in common is a central location with neighbouring large cities and towns as well as being on the interchange of both road and rail networks. This helps emphasise the importance of wider geographical context in the derivation of the typology.
In the next section, we bring together the results of the two typologies to provide a basis for a kind of typology matrix approach to understanding the different challenges that exist in deprived areas across the UK. We end this section by highlighting two particularly important points in relation to connecting growth and poverty reduction in urban areas.

- First, while we concur with the 'more jobs, better jobs' mantra and the need to move to a high wage, low welfare urban labour market (Centre for Cities, 2016), we also think too little attention has been paid to the micro-geographies of labour market connection and disconnection within city regions. Also, it is clear that job quality matters and that all jobs are not equal. So, even deprived areas with higher levels of employment may not fully reap the benefits of wider city-regional growth unless job quality is taken into consideration from a policy point of view. Our research has demonstrated that this is a complex topic and that in this respect there are some very important differences between deprived areas. This can be summed up quite simply in the phrase ‘geography matters’. We would add to this, given the analysis above, to say that it matters but it is by no means the only important factor. In some areas of the country and some parts of cities, it also represents a significant challenge, owing to the geography of deprivation.

- The second learning point from the analysis is that local spatial context is once again a key contributing factor in relation to whether some areas are well placed to benefit from employment opportunities locally or within the wider metropolitan area. As Webster (1999) and others have demonstrated, the travel-to-work horizons of residents in deprived neighbourhoods are much narrower than those in more affluent areas. If there is employment growth within city regions, then understanding the complex patchwork of labour market connectivity is critical to capturing that growth and its benefits in deprived neighbourhoods.
5 Understanding disconnection

Key messages
- Using residential and employment typologies in combination, we can gain a deeper understanding of disconnection at the local level, and identify areas which appear to be ‘doubly disconnected’.
- We identify what appears to be a ‘residualisation’ effect over time, where the most deprived areas see their poverty rates increase, particularly if they become gentrified.
- This counter-intuitive ‘gentrification with residualisation’ effect may occur in small areas which are becoming increasingly polarised between rich and poor.

A more nuanced understanding of deprived areas

In Section 2 we discussed the rather fragmented nature and modest results of urban policy intervention. In one sense, this can be viewed as indicative of the scale of the problem and its structural rather than local causes. On the other hand, we think the history of urban policy also demonstrates that there has been a lack of nuance in relation to both problem definition (Matthews, 2010) and geographical scale (Rae, 2011). Therefore, our approach in Sections 3 and 4 was aimed at shedding more light on the extent to which the most deprived neighbourhoods across the UK are functionally disconnected from their wider labour and housing markets. The evidence suggests that things are highly variable in this regard but also that – clearly – different challenges exist in different places. We believe local stakeholders are best placed to judge this. This was confirmed during the extensive policy consultation phase of the work, reported in Section 6. We now bring these elements together to provide a framework for discussing evidence-based policy proposals in Section 7. Below we use a combined housing and labour market matrix to explore the existence of 20 different possible areas types.

A matrix of connection and disconnection

Having derived and updated the fourfold residential mobility typology for each part of the UK, in addition to a new fivefold travel-to-work typology, we then explored the relationships between area types in a 4x5 matrix. This allows us to understand, for example, where a more isolated neighbourhood also suffers from a high degree of functional labour market disconnection (i.e. an isolate disconnected suburb in our typologies). We refer to this as ‘double disconnection’. It also allows us to identify areas that might be particularly attractive to shorter term, more affluent residents which are also well connected in labour market terms (i.e. transit connected suburb). There are a total of 20 different permutations in the housing-labour market matrix, each of which has different implications for what we might do about it. These matrices are now presented in a series of tables; one for each part of the UK, with the four residential mobility types in columns and the travel-to-work types in rows.

As we saw in Section 3, the single biggest category of areas falls into the transit type in terms of residential mobility, with a significantly higher proportion of these areas in Wales, compared with the rest of the UK. For the travel-to-work typology, the primary employment zone type is the largest single category across the UK. What we can see from Table 7A, for England, is that those areas identified as isolates from a residential mobility perspective fall into each of the five different travel-to-work types, to varying degrees. The largest single group here is isolate primary employment zone, suggesting that while many of these most deprived areas might be functionally disconnected from their wider housing market area, they are at least geographically close to employment opportunities. On the other hand, 1.4 per cent of isolates are also disconnected suburbs, where residents mostly move to and from similarly deprived areas and are much further from employment opportunities. This may only account for 91 LSOAs in England, but it provides a much more nuanced way of understanding the functional role of neighbourhoods in a time of very limited resources, as noted in Section 5. Therefore, it may prove to be a particularly useful policy targeting tool.

Northern Ireland, in Table 7B has similar percentage figures to England, but in the isolate category, 10.1 per cent of areas are classified as connected core. This may indicate that in the most deprived areas of
Northern Ireland it is skills (or the availability of suitable jobs) which serves as a barrier to employment. Areas which act as stepping stones up the housing market (escalators) account for a much lower proportion of deprived areas in Northern Ireland, with none at all in the connected suburb category and one each being a disconnected core or a disconnected suburb.

Table 7: The percentage of the most deprived 20 per cent areas in each residential and travel-to-work typology combination for each country

The most common combination for each residential type is highlighted in bold, although note that in some cases the differences may not be large.

### 7A: England

<table>
<thead>
<tr>
<th>Travel-to-work typology</th>
<th>Residential typology</th>
<th>Escalator</th>
<th>Gentrifier</th>
<th>Isolate</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected core</td>
<td></td>
<td>0.5</td>
<td>1.1</td>
<td>4.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Disconnected core</td>
<td></td>
<td>1.5</td>
<td>2.6</td>
<td>4.8</td>
<td>13.0</td>
</tr>
<tr>
<td>Connected suburb</td>
<td></td>
<td>1.4</td>
<td>3.3</td>
<td>5.5</td>
<td>9.9</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td></td>
<td>0.7</td>
<td>0.9</td>
<td>1.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Primary employment zone</td>
<td></td>
<td>2.1</td>
<td>2.7</td>
<td>7.0</td>
<td>16.1</td>
</tr>
</tbody>
</table>

### 7B: Northern Ireland

<table>
<thead>
<tr>
<th>Travel-to-work typology</th>
<th>Residential typology</th>
<th>Escalator</th>
<th>Gentrifier</th>
<th>Isolate</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected core</td>
<td></td>
<td>2.2</td>
<td>0.0</td>
<td>10.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Disconnected core</td>
<td></td>
<td>0.6</td>
<td>3.4</td>
<td>6.7</td>
<td>6.7</td>
</tr>
<tr>
<td>Connected suburb</td>
<td></td>
<td>0.0</td>
<td>2.2</td>
<td>3.9</td>
<td>10.1</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td></td>
<td>0.6</td>
<td>1.7</td>
<td>1.1</td>
<td>9.0</td>
</tr>
<tr>
<td>Primary employment zone</td>
<td></td>
<td>2.8</td>
<td>3.4</td>
<td>6.7</td>
<td>18.0</td>
</tr>
</tbody>
</table>

Given the necessity to accurately identify need in a time of fiscal austerity, the implication of this combined typology approach is that we might expect resources to be directed towards the most deprived areas on the residential mobility typology (isolates), which also show signs of being functionally disconnected from the labour market (those in the disconnected categories in travel-to-work terms). That is, the doubly disconnected areas. In Scotland (Table 7C), the isolate-disconnected core category is largest, with 4.3 per cent of the most deprived 20 per cent. This translates to 56 data zones across Scotland; a small but significant number. In these areas, there may be issues around skills mismatch, but the data suggests there are also significant signs of spatial mismatch. This requires further localised investigation but our analysis provides, at the very least, a framework for doing so. These numbers may not seem large, but in the context of fiscal austerity it could provide a useful tool for local and national agencies in identifying where resources might most usefully be focused.
### 7C: Scotland

<table>
<thead>
<tr>
<th>Travel-to-work typology</th>
<th>Escalator</th>
<th>Gentrifier</th>
<th>Isolate</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected core</td>
<td>0.5</td>
<td>1.4</td>
<td>1.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Disconnected core</td>
<td>2.4</td>
<td>2.2</td>
<td>4.3</td>
<td>14.1</td>
</tr>
<tr>
<td>Connected suburb</td>
<td>1.8</td>
<td>2.6</td>
<td>2.3</td>
<td>5.8</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td>2.2</td>
<td>3.2</td>
<td>3.2</td>
<td>8.1</td>
</tr>
<tr>
<td>Primary employment zone</td>
<td>2.6</td>
<td>3.6</td>
<td>4.2</td>
<td>13.5</td>
</tr>
</tbody>
</table>

In Wales (Table 7D) connected suburb is the largest single category across gentrifier and isolate areas, suggesting that geographical proximity has different implications in deprived areas than in Scotland, for example. Further consultation with local authorities on these patterns is important, but these areas may need further investment in skills and training if residents are to benefit from the full range of employment opportunities available locally.

### 7D: Wales

<table>
<thead>
<tr>
<th>Travel-to-work typology</th>
<th>Escalator</th>
<th>Gentrifier</th>
<th>Isolate</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected core</td>
<td>1.6</td>
<td>1.6</td>
<td>0.5</td>
<td>5.2</td>
</tr>
<tr>
<td>Disconnected core</td>
<td>0.8</td>
<td>2.1</td>
<td>0.5</td>
<td>14.7</td>
</tr>
<tr>
<td>Connected suburb</td>
<td>1.3</td>
<td>3.4</td>
<td>2.9</td>
<td>19.9</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Primary employment zone</td>
<td>1.8</td>
<td>0.5</td>
<td>1.0</td>
<td>22.8</td>
</tr>
</tbody>
</table>

### How do the areas differ?

Having combined the two typologies in this fashion, and having established that it could be a useful way of understanding disconnection in an urban context, we then examined the areas with respect to a number of different indicators. In Table 8 we calculated the average deprivation score across all 20 area types (where a higher score means more deprived) for England, Northern Ireland and Scotland. Individual deprivation scores for the Welsh Index of Multiple Deprivation 2014 are not published so we could not repeat the analysis for Wales.

In Table 8A we see four of the five highest deprivation scores in the isolate category. This matches the results reported by Robson et al. (2008) and also makes sense when we think of the housing residualisation effect reported by workshop participants in Section 6 and in previous research on high poverty areas (e.g. Lupton, 2003). The lowest deprivation scores are generally for connected suburbs, but it is interesting to note that in deprived areas classified as primary employment zones, there are many high deprivation scores. Once again, this suggests a need to address skills and training provision in more deprived areas where geography does not seem to serve as a barrier to employment.

### Table 8: Deprivation by combined typology

#### 8A: Mean IMD score for 20 per cent most deprived LSOAs in England

Areas highlighted in bold have a higher mean IMD score than the average of the most deprived 20 per cent areas. The mean IMD score for the most deprived 20 per cent of LSOAs in England is 47.3. Note that IMD score is on a scale from low (0.48) to high (92.6) where low is less deprived.
For Northern Ireland, the highest deprivation scores by far are found in isolate areas in connected core and primary employment zone areas. Unlike in England, the lowest deprivation scores here are found in the disconnected suburb category, suggesting a lower degree of connection is not necessarily linked to a higher deprivation score. In fact, in Northern Ireland, it is the connected suburb areas which have higher than average deprivation scores, particularly in areas classified as isolates, as in Table 8B.

8B: NIMDM 2010 by SOA

<table>
<thead>
<tr>
<th>Travel-to-work typology</th>
<th>Residential typology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Escalator</td>
</tr>
<tr>
<td>Connected core</td>
<td>50.9</td>
</tr>
<tr>
<td>Disconnected core</td>
<td>43.9</td>
</tr>
<tr>
<td>Connected suburb</td>
<td>44.5</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td>47.7</td>
</tr>
<tr>
<td>Primary employment zone</td>
<td>48.9</td>
</tr>
</tbody>
</table>

In Scotland, as in England and Northern Ireland, isolate areas tend to have higher than average deprivation scores, no matter which travel-to-work typology category they fit within. The exception to this is in the disconnected suburb which, as in Northern Ireland, has the lowest deprivation scores across the board. Interestingly, the highest average deprivation score by category in Scotland is in areas identified as escalator connected core. However, this represents a very small proportion of all data zones in Scotland (Table 8C) so should be treated as something of an anomaly here. These results can be seen in full in Table 8C.

8C: SIMD 2014 by Data Zone
The employment domain of the Indices of Deprivation 2015 provides a good separate measure of worklessness at a local level. It is one of two domains (along with the income domain) which measure a proportion and it reports the percentage of the working-age population who would like to work but are unable to do so because of ‘unemployment, sickness or disability, or caring responsibilities’ (DCLG, 2015, p.15). In Table 9, we see that the highest single value (26.3 per cent) is classified as isolate disconnected core and that of the 11 highest values, 8 are in isolate or disconnected types. Once again, the lowest values are to be found in areas classified as connected on the travel-to-work typology. This helps reaffirm the logic of the typology and provides a useful basis for suggesting different policy responses, as we explain below. It also builds upon the original typology-policy response approach proposed by Robson et al. (2008) in their earlier work.

Table 9: Mean score for the employment domain of the IMD for the 20 per cent most deprived LSOAs in England

Areas highlighted in bold have a higher proportion of the working-age population excluded from the labour market than the average calculated for the most deprived 20 per cent of areas

<table>
<thead>
<tr>
<th>Residential typology</th>
<th>Escalator</th>
<th>Gentrifier</th>
<th>Isolate</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected core</td>
<td>23.7</td>
<td>25.9</td>
<td>25.1</td>
<td>22.5</td>
</tr>
<tr>
<td>Disconnected core</td>
<td>25.0</td>
<td>24.5</td>
<td>26.3</td>
<td>23.8</td>
</tr>
<tr>
<td>Connected suburb</td>
<td>22.8</td>
<td>22.3</td>
<td>22.3</td>
<td>22.0</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td>24.3</td>
<td>24.3</td>
<td>24.9</td>
<td>24.0</td>
</tr>
<tr>
<td>Primary employment zone</td>
<td>25.6</td>
<td>25.4</td>
<td>26.3</td>
<td>23.8</td>
</tr>
</tbody>
</table>

We also delved a little deeper into the underlying indicators from the indices of deprivation to understand more about how the combined typologies relate to skills at the local level. For this, we used the adult skills sub-domain of the 2015 Indices of Deprivation in Table 10. This measures the lack of qualifications in the resident working-age adult population, where a higher score relates to poorer skills in an area. Once again, above average scores are shown in bold text and we can see that the highest values occur in isolate areas, in addition to both travel-to-work typologies classified as disconnected. However, the highest value overall is found in the isolate connected core category.

Table 10: Adult skills sub-domain (IMD 2015) by area type

<table>
<thead>
<tr>
<th>Residential typology</th>
<th>Escalator</th>
<th>Gentrifier</th>
<th>Isolate</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected core</td>
<td>0.433</td>
<td>0.491</td>
<td>0.514</td>
<td>0.397</td>
</tr>
<tr>
<td>Disconnected core</td>
<td>0.464</td>
<td>0.476</td>
<td>0.507</td>
<td>0.458</td>
</tr>
<tr>
<td>Connected suburb</td>
<td>0.418</td>
<td>0.431</td>
<td>0.441</td>
<td>0.407</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td>0.482</td>
<td>0.485</td>
<td>0.495</td>
<td>0.456</td>
</tr>
<tr>
<td>Primary employment zone</td>
<td>0.462</td>
<td>0.483</td>
<td>0.500</td>
<td>0.417</td>
</tr>
</tbody>
</table>

Finally, we attempted to identify how this combined typology relates to local poverty rates. Therefore, we have used the unadjusted means-tested benefits rate (UMBR) dataset, since it is a good proxy measure of income poverty, it includes an element of in-work related poverty and it gives a single rate for household poverty for the years 2001–2013 based on 2011 small area geographies such as LSOAs and data zones (Fenton, 2015). UMBR covers the whole of Great Britain, so we are able to report values for England, Northern Ireland and Wales below.
The values in Tables 11 to 13 show the proportion of households in the 20 per cent most deprived areas who claim means-tested benefits. In England, all connected core areas and all but one isolate area have higher values. The highest value is found in the isolate connected core area type (52.7 per cent). In Scotland and Wales, the highest value is also found in an isolate connected core area (58.5 per cent and 55.3 per cent respectively). In all parts of the UK, most primary employment zones and all connected core areas have higher than average poverty rates when compared with other areas in the 20 per cent most deprived. This would suggest that physical connection is not a mitigator of poverty in and of itself and, consequently, that more could be done to help alleviate poverty.

**Table 11: England – unadjusted means-tested benefits rate 2013**

<table>
<thead>
<tr>
<th>Residential typology</th>
<th>Escalator</th>
<th>Gentrifier</th>
<th>Isolate</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected core</td>
<td>47.4%</td>
<td>50.6%</td>
<td>52.7%</td>
<td>44.9%</td>
</tr>
<tr>
<td>Disconnected core</td>
<td>44.4%</td>
<td>43.9%</td>
<td>49.2%</td>
<td>42.4%</td>
</tr>
<tr>
<td>Connected suburb</td>
<td>43.1%</td>
<td>43.1%</td>
<td>44.5%</td>
<td>42.3%</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td>41.5%</td>
<td>43.1%</td>
<td>44.9%</td>
<td>41.0%</td>
</tr>
<tr>
<td>Primary employment zone</td>
<td>47.1%</td>
<td>46.6%</td>
<td>51.2%</td>
<td>42.5%</td>
</tr>
</tbody>
</table>

**Table 12: Scotland – unadjusted means-tested benefits rate 2013**

<table>
<thead>
<tr>
<th>Residential typology</th>
<th>Escalator</th>
<th>Gentrifier</th>
<th>Isolate</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected core</td>
<td>56.8%</td>
<td>50.1%</td>
<td>58.5%</td>
<td>52.8%</td>
</tr>
<tr>
<td>Disconnected core</td>
<td>48.1%</td>
<td>47.6%</td>
<td>53.0%</td>
<td>45.3%</td>
</tr>
<tr>
<td>Connected suburb</td>
<td>50.7%</td>
<td>48.7%</td>
<td>49.1%</td>
<td>46.5%</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td>47.6%</td>
<td>48.0%</td>
<td>48.7%</td>
<td>46.3%</td>
</tr>
<tr>
<td>Primary employment zone</td>
<td>52.6%</td>
<td>49.8%</td>
<td>57.6%</td>
<td>45.1%</td>
</tr>
</tbody>
</table>

**Table 13: Wales – unadjusted means-tested benefits rate 2013**

<table>
<thead>
<tr>
<th>Residential typology</th>
<th>Escalator</th>
<th>Gentrifier</th>
<th>Isolate</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected core</td>
<td>49.4%</td>
<td>48.5%</td>
<td>55.3%</td>
<td>52.6%</td>
</tr>
<tr>
<td>Disconnected core</td>
<td>47.2%</td>
<td>50.2%</td>
<td>41.6%</td>
<td>48.0%</td>
</tr>
<tr>
<td>Connected suburb</td>
<td>53.4%</td>
<td>54.2%</td>
<td>49.8%</td>
<td>50.3%</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td>44.5%</td>
<td>45.1%</td>
<td>46.2%</td>
<td>48.9%</td>
</tr>
<tr>
<td>Primary employment zone</td>
<td>49.4%</td>
<td>53.3%</td>
<td>45.7%</td>
<td>46.5%</td>
</tr>
</tbody>
</table>
The foregoing analysis can be rather difficult to digest when taken as a whole but the point can be stated simply. Areas which are less well connected to their wider housing markets typically have worse outcomes than those which are more connected. Furthermore, and somewhat counter-intuitively, it also appears that in deprived areas with lots of jobs (primary employment zones) there are higher levels of benefit claims and overall deprivation. In addition, it would also appear that areas which are well connected in labour market terms often have similarly poor outcomes.

The residualisation of poverty?

There are limited datasets available that allow us to consistently track changes in poverty-related measures over time. This is due to changes in boundaries, in terms of statistical units and administrative regions, and to government policy changes affecting the availability, definition and administration of poverty-related measures and data. Nonetheless, we have attempted here to go beyond these data difficulties in order to understand the extent to which poverty might become more concentrated, or residualised, in certain areas over time. Here, as above, we use the UMBR dataset.

This dataset allows us to look at how this underlying measure of poverty has changed over time and how this relates to the residential typology. (Because the travel-to-work typology was developed for the first time here, we do not have previous time points to compare it to).

In Table 14 we show the mean percentage point change in poverty between 2003 and 2013 based on the residential typology from 2004 and 2015. We use 2003 and 2013 data points because this most closely matches the time period of the indicators used in the 2004 and 2015 indices of deprivation.

The results show that areas that were identified as an escalator in 2004 and an isolate in 2015 had an average percentage point increase in their UMBR rate of 3.7, indicating an increase in the poverty rate for areas that changed from an escalator to an isolate (Table 14, first row, third column). Across all LSOAs there was an overall increase in the UMBR rate of 2.7 percentage points. In Table 14 we highlight in bold those areas whose percentage point change was higher with respect to the national change (2.7 percentage points).

**Table 14: Change in UMBR rate (in percentage points) between 2003 and 2013**

Areas in bold have a higher than average increase in their UMBR rate indicating an increase in the underlying poverty measure.

<table>
<thead>
<tr>
<th>Residential typology 2004</th>
<th>Residential typology 2015</th>
<th>Not in most deprived 20% in 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escalator</td>
<td>2.9 4.8 3.7 2.4 -2.1</td>
<td></td>
</tr>
<tr>
<td>Gentrifier</td>
<td>-0.3 5.9 3.8 2.1 -4.6</td>
<td></td>
</tr>
<tr>
<td>Isolate</td>
<td>3.1 4.6 3.3 2.6 -2.7</td>
<td></td>
</tr>
<tr>
<td>Transit</td>
<td>0.9 3.1 2.5 2.5 -5.0</td>
<td></td>
</tr>
<tr>
<td>Not in most deprived 20% in 2004</td>
<td>8.0 6.4 6.9 6.5 2.7</td>
<td></td>
</tr>
</tbody>
</table>

As you would expect, areas that moved into the most deprived 20 per cent by 2015 (as indicated by those areas in the bottom row of Table 14 that did not have a typology classification in 2004 but did have one in 2015), there is a clear increase in the poverty rate. Conversely, areas that moved out of the most deprived 20 per cent (as indicated by those areas in the final column of Table 14 that had a typology classification in 2004 but not in 2015) all showed a clear decrease in the mean UMBR rate.

It should be noted that while the UMBR data provides a useful consistent measure across England, Wales and Scotland it does not cover Northern Ireland and its use comes with some caveats. The UMBR rate is
determined by the number of claimants of Jobseeker’s Allowance, Income Support, Employment and Support Allowance and Pension Credit Guarantee Element as a proportion of households. The inclusion of Pension Credit benefits in the poverty rate calculation may affect our analysis given one might expect recipients to be geographically clustered. It also may not fully capture in-work poverty or the effects on poverty rates of high housing costs. With these points in mind it still provides a very useful measure that allows us to pinpoint potential residualisation of poverty, particularly in certain types of areas.

The evidence here points towards a residualisation of poverty in the most deprived areas, particularly in isolates and gentrifiers. The latter is perhaps surprising since it suggests that despite the arrival of incomers from less deprived areas, local poverty rates are still increasing. This may therefore be indicative of an emerging trend of a fracturing of local areas, in which existing long-term, poorer residents live next door to wealthy incomers. The effect of this may be that more poverty ends up being ‘hidden’ as a result of ‘improved’ local indicators of deprivation when in fact it is simply a statistical averaging effect of rich and poor living side by side.

Conclusions

All of the above does, of course, raise the vexed question of what we might do with this information, and how it helps already stretched local authorities and national government. We think it does this in three ways.

• First, it provides a robust, field-tested framework for demonstrating that deprived areas across the UK can be very different with respect to their housing and labour market characteristics – and their local poverty rates. We have seen that this can vary greatly at the national level (e.g. Wales) but also that it varies considerably at city-regional and local levels (e.g. Glasgow). The message here is that the national, local and regional contexts matter greatly and that broad-brush, top-down national interventions have too often got this wrong in the past. Or, at the very least, have not been sufficiently nuanced.

• Second, we think our approach provides a useful micro-level geography of housing and labour market interaction which local agencies can use as a targeting tool for policy intervention, particularly for areas showing signs of ‘double disconnection’. We do not suggest that this is the only appropriate tool, but we do think it adds value in an age of depleted budgets and limited local analytical capacities. Understanding which areas might need to address skills shortages, which might need to address access constraints and which areas appear to need less intervention is now more critical than ever, to ensure that limited resources have the maximum impact. As this section has demonstrated, the existence of jobs near deprived areas is no guarantee of poverty alleviation.

• Third, we think that national and local government might be able to design and develop policies using our matrix approach as a frame of reference. This is more fully explored in Section 7, where we identify a number of different possible policy responses based on the challenges we have identified in different areas. Clearly, this view is at odds with current government plans to regenerate ‘sink estates’ in England, but the messages from at least 40 years of urban policy practice and research (Section 2) are clear: broad-brush, top-down approaches to urban intervention are, at best, marginally successful but more often than not they serve to displace communities, unsettle local residents and have little long-term impact on the life chances of the original residents of the areas they seek to target.
6 Policy and practice

Key messages

- Neighbourhood disconnection was seen to be a longstanding problem which is difficult to solve.
- Housing allocation policies in the social rented sector were seen to be a key driver of neighbourhood disconnection and deprivation.
- Despite a challenging fiscal environment, we found evidence of innovative practice in many UK cities, including Edinburgh, Glasgow, Sheffield and Birmingham.

Introduction

This section presents findings from an extensive consultation exercise involving workshops and interviews with key stakeholders across the ten members of the Core Cities Group, plus Edinburgh and London. A series of policy workshops were conducted in each area and typically involved participants from housing, regeneration, economic development, planning, transport, education and community development departments. In addition, a total of 12 interviews were also conducted: ten face-to-face interviews in Leeds and two telephone interviews with London-based respondents. In total over 140 policy-makers and stakeholders from across Britain’s major cities contributed to the consultation exercise.

The purpose of the workshops and interviews was threefold:

- to gather local policy knowledge on neighbourhood change with a focus on urban areas that have either improved or declined in terms of their relative level of housing and/or labour market disconnection;
- to sensitise the updated neighbourhood typology to local developments and to explore the extent to which it aligns with stakeholders’ own understandings of neighbourhood dynamics;
- to gather perspectives from stakeholders on what future direction policies to address neighbourhood disconnection should take: what has worked in the past and what more could be done to tackle neighbourhood-level disadvantage in the future.

The rest of this section presents this evidence, divided into four sub-sections. First, perspectives on spatial patterns and neighbourhood change are presented. Second, the limits to past and existing approaches are outlined. Third, some existing examples of good practice in connecting residents of disconnected neighbourhoods to economic opportunities are explored. Finally, a framework for a new approach is detailed drawing on findings from the consultation alongside the wider, existing evidence base (see Section 2).

Perspectives on patterns and narratives of neighbourhood change

This sub-section focuses on the explanations provided by participants on the neighbourhood patterns and trends observed in their localities over time. The expansion and updating of the neighbourhood typology enabled analysis across different time points: from the 2004, 2007, 2010 and 2015 English Indices of Deprivation in England combined with data from the 2001 and 2011 UK censuses (see Section 3). These findings were then presented to key stakeholders and policy-makers across the twelve cities. Participants were asked to reflect on the neighbourhood typology and the changing classifications over time.

The primary focus was on deprived areas of city regions which had either experienced significant change or showed little change in terms of their relative deprivation. Based on the participant responses at the workshops it was therefore possible to examine neighbourhood change and garner local insights on the drivers and factors thought to have contributed to that. In particular, participants tended to focus and reflect on:

- the extent to which poverty has become residualised in specific deprived neighbourhoods over time;
- more recent and emergent neighbourhoods of disconnection.
• the narratives and developments explaining neighbourhood experiences of both positive and negative change.

Explaining persistent neighbourhood disconnection

Historical trajectories and considerations figured prominently in the explanations and understanding of the relative disconnection of urban neighbourhoods. There were two distinct narratives related to areas that had not benefited from the wider economic growth of cities.

First, ‘long-term endemic problems driven by de-industrialisation’ were deemed to have brought about a gradual disconnect between some of the most deprived communities and economic opportunity. This predominantly related to a range of peripheral, poorly connected, de-industrialised, white working-class neighbourhoods where worklessness was high and Incapacity Benefit/Employment Support Allowance claimants tended to be concentrated. Many of these neighbourhoods had struggled to recover from the onset of deindustrialisation and were characterised by relative internal social homogeneity and external stigma. Successive regeneration interventions in these neighbourhoods were seen to have been of limited success (see Limitations of past and current approaches below). Across all cities, the perceived issues for residents of these communities were broadly the same and very familiar:

• low skills and qualifications;
• a perception that residents were ‘not well placed’ to take up certain employment opportunities, such as customer service jobs for example;
• lack of investment and infrastructure;
• poor transport connections and prohibitive costs;
• childcare costs as a significant barrier to work;
• disproportionate incidences of alcohol and drug misuse;
• perceptions of anti-social behaviour and crime;
• reputational issues giving rise to neighbourhood stigma;
• low incomes and house price differentials ‘trapping’ residents wanting to move.

Labour market restructuring was pivotal to this narrative. Of particular concern for workshop participants was the fact that labour markets are now more polarised than they were in the past. There was a discernible ‘high- and bottom-end’ to the labour markets of the UK’s cities, but a much smaller middle compared with previous eras. The contraction of mid-level jobs had taken place alongside an expansion of entry-level jobs characterised by low wages, poor conditions, insecurity and in-work poverty: ‘lower-end jobs and low-paid jobs, that’s the Nottingham economy now’. In this regard the widespread policy focus on high value growth sectors was insufficient: these only account for around 30 per cent of jobs and tend to be taken by in-commuters and graduates. A recurring question was ‘what about the other 70 per cent?’ Many respondents therefore felt there was a clear need for a coherent strategy for lower-level volume jobs (see below).

The shifting spatial division of labour within some cities was also cited as a significant contributory factor feeding into neighbourhood disconnection. More localised employment opportunities had become scarcer, leaving many peripheral estates more isolated as employment was increasingly concentrated within city centres (as reflected in the travel-to-work typology in Section 4). For example, in Bristol a spatial shift of jobs to the city centre and to the docks in the north, tied to the fortunes of specific industries and sectors, served to limit localised opportunities in the south of the city. These trends were also evident in terms of the relationship between cities and their hinterlands. For example, at the Newcastle workshop there was a questioning of how far a focus on city region led growth would benefit more peripheral deindustrialised areas, such as Easington or Peterlee in Durham for instance, former coalfield areas (see Appendix 2). In this regard the shifting spatial distribution of jobs reflected both the loss of local employment outside of city centres and a trend towards the centralisation of employment opportunities within the central areas of cities.
There was also an inherent tension here among participants with two competing explanations as to why such areas had not experienced positive change. On the one hand, emphasis was placed on the structural factors associated with de-industrialisation that had led to disconnected neighbourhoods. This largely related to the lack of appropriate job opportunities for residents with low skills who had struggled to gain a foothold in restructured and increasingly competitive labour markets. On the other hand, a lack of aspiration, ambition and an insular outlook were perceived to be barriers to adaptation for some communities. The latter was invariably related to a reluctance to travel and a ‘culturally isolationist’ outlook. In this regard participants spoke of an emotional or cognitive disconnection related to cultural issues around place and identity.

For example, in Glasgow this cognitive disconnect was said to be perpetuated and reinforced by the withdrawal of certain bus services from more peripheral parts of the city, such as Drumchapel or Easterhouse. It was also noted that these communities tend to be fairly longstanding: people do not tend to leave these geographically disconnected neighbourhoods, or make localised moves (e.g. north Liverpool and Speke) if they do, which was seen as both a strength and a weakness.

Second, and more recently, another explanation for neighbourhood disconnection rested on the interaction of migration and housing processes, hence our combined analysis in Section 5. Many participants spoke of concentrations of migrant households within particularly diverse and transient neighbourhoods where the housing stock had become dominated by private rented sector (PRS) properties. Local context was also important here. For example, in Bristol a paucity of larger properties in many areas was seen to be a key factor in the emergence of ethnic concentrations in Bristol (e.g. Hillfields), which often brought positive aspects in terms of social networks and support. Given the relatively larger household sizes among some ethnic minority communities, the limited availability of larger dwellings meant they tended to be located in specific areas determined by the nature and size of the local housing stock.

In Nottingham, established migrant communities and more recent new international immigrant populations were concentrated in the more transient neighbourhoods to the east of the city characterised by cheaper, lower quality PRS accommodation (e.g. Sneinton). More recent international migration patterns had also led to new ethnic concentrations in some cities. For example in Glasgow, the fairly recent concentration of a West African population in Royston Road and an emergent Polish community in Carmunnock, and in Sheffield a Slovakian Roma population clustered around the Page Hall and Fir Vale areas of the city. It is important to remember here that, as the typology shows, different urban areas perform different housing market functions at different times.

Of course it is also true that the more affordable segments of the PRS have long served a transitional function for new migrants for example, and this is not necessarily a negative thing. The extent to which the function of these dynamic neighbourhoods should be seen as a cause for concern in terms of economic disconnection is therefore open to debate, given the very recent trends and patterns reported.

**Housing as the key driver of neighbourhood change**

Despite the different urban contexts, histories and developments across the 12 cities, there was a remarkable degree of consistency in terms of a perception of housing as the key driver of neighbourhood change. There were five key, inter-related themes to emerge that were seen as crucial to explaining the patterns and trends observed.

- The distribution of disconnected neighbourhoods across urban areas was viewed by many as an inevitable outcome of housing allocations policies in the social rented sector. The distribution of social housing stock meant that households in need, and often with similar characteristics, would tend to be housed in the same areas. This trend was more pronounced in areas exhibiting sharper housing polarisation and acute affordability issues, such as Edinburgh, where the bottom 20 per cent of neighbourhoods in the SIMD neatly mapped onto social housing across the city.

- Closely related to this was the significant shift in tenure experienced over the last 15–20 years: the rapid growth of the PRS alongside the contraction of the social housing sector. Given the increased scarcity of social housing and difficulties of access to it, more families were being housed in PRS accommodation. This was seen to increase the residualisation of areas where poor quality PRS stock
became a tenure of last resort and contributed to the concentration of the most vulnerable households and pressure on local services (e.g. schools).

- Related to PRS growth, recent international migration to the UK’s cities had brought about noticeable shifts in the demographic make-up of some neighbourhoods. In many cases, migration was associated with declining areas dominated by what was often seen as sub-standard PRS housing. This related to wider affordability issues putting many areas out of the reach of low-income households, and/or those in receipt of housing benefit.

- Population and demographic change at the neighbourhood level was also driven by new housing developments which brought in households from other parts of cities.

- City centre developments were central to narratives of change within central areas and many participants spoke of a ripple effect outwards from initial developments on waterfronts for example, to apartments being developed on the edge of city centres. Purpose-built student accommodation also played a key role here with newly built student residences increasingly located within city centres.

The continued decline of the social rented sector was a particular concern for participants. As one respondent noted, ‘the sale of social housing means the council has lost one of its primary levers’. There was a consensus that the rapid decline of the sector means that local authorities have much less leverage in terms of their ability to bring about housing and neighbourhood change. There were consistent concerns expressed about the quality of housing standards in the PRS but little that participants felt they could do about it. In many cases tenure change and demographic shifts were intrinsically linked. For example, Clifton in Nottingham has been viewed as a fairly self-contained and stable community reproduced through social housing allocations. However, Right to Buy was seen to have put an end to that longstanding pattern as older, established households were replaced by incomers to the area, both owner-occupiers and private renters.

To summarise, in understanding relative disconnection and current neighbourhood trajectories the key considerations for consulted participants were:

- longer term narratives of decline tied to de-industrialisation, labour market restructuring and the ‘decay of place’;

- dynamic migration patterns and their relation to housing allocations, segmentation and affordability;

- access to housing and tenure change – especially the growth of the PRS within urban areas.

In the main, participants were unsurprised by the patterns of relative deprivation observed over time through the neighbourhood typology analysis. Certainly there were neighbourhoods that had exhibited an upturn in fortunes tied to specific, and often large-scale, new housing developments and population change (e.g. Kelham Island in Sheffield; Craigimillar in Edinburgh; areas of Liverpool city centre); or intensive and concerted efforts at the neighbourhood level (e.g. Cowgate in Newcastle). Yet a common response to the consultation was that the exact same neighbourhoods would emerge as the most disconnected whether the typology exercise was carried out in the 1980s, or in the 2020s. Persistent economic and social disconnection from the opportunities afforded by economic growth is a longstanding reality for many urban neighbourhoods. If there is to be a genuinely transformative agenda for change in these marginalised communities, then there is clearly the need for a significant step change in policy approaches.

**Limitations of past and current approaches**

There was a clear consensus among respondents that a return to large-scale area-based initiatives (ABIs) is not the best means of ensuring that economic growth benefits all. Past regeneration programmes such as the New Deal for Communities (NDC) or the Single Regeneration Budget (SRB) were largely seen as expensive, unresponsive to local need, target-driven and geographically selective. There was some recognition that they had proved effective in tackling some of the physical symptoms of deprivation around poor quality housing and environmental neglect. However, these successes around place had not been replicated in addressing issues around people relating to health, education or employment. This was not a blanket criticism — the examples of good practice below indicate areas where area-based work has been, or continues to be, regarded as effective. But there was a feeling that tackling these forms of
deprivation as the prerequisite for connecting residents to jobs could be better achieved through local flexibilities around funding and service design as per the current round of devolution, rather than the nationally prescriptive approach which had been the hallmark of past rounds of ABIs.

In some areas, housing-led regeneration driven by new build development such as the Housing Market Renewal Pathfinder Programme was identified as having improved aggregate outcomes at the area level but respondents questioned whether the creation of ‘mixed’ communities had simply dispersed rather than reduced concentrations of poverty.

There was also a view in some areas that the current funding and flexibilities being devolved through the first and second generation of devolution deals may be valuable in delivering growth, yet fail to address the needs of low-income neighbourhoods. For example, stakeholders in a number of areas felt the emphasis in LEP strategies on growth sectors and creating high-skilled, high-paid jobs was unlikely to provide employment opportunities that were accessible to residents in disadvantaged areas. This is because such jobs are often not commensurate with skills and experience and also due to high levels of competition from inward commuters across the city region.

Manchester consultees also pointed out that growth sectors only represented a small part of the local economy which was dominated by health and social care, retail and hospitality. There was a sense, therefore, that a more comprehensive strategy on jobs and skills was needed, especially to address issues of poor quality work. Respondents in a number of areas highlighted the prevalence of low-paid, low-skilled work which would contribute to in-work poverty unless tackled through initiatives to improve wages or facilitate progression. To this end, Glasgow is currently using City Deal funding to pilot an initiative to address in-work poverty in the social care sector (see below).

**Existing good practice**

We end this section with a look at some examples of good practice in relation to local labour market initiatives we learned about during the consultations. These innovative examples of good practice illustrate where past or current funding and powers had been, or are being, used in attempts at better connecting households to employment opportunities.

**In-work progression pilot**

Glasgow has developed a pilot using City Deal funding to improve opportunities for in-work progression in the social care sector to address concerns about high levels of in-work poverty. Dedicated business advisors engage with businesses in the social care sector to help them identify opportunities to increase the skills of employees to improve the quality of service provided while achieving lower turnover, reduced recruitment costs and increased motivation and loyalty from staff. At the same time, employee advisors support employees in the same organisations to improve levels of skills and training to support workplace progression and secure higher incomes.

**The Edinburgh Guarantee**

This was set up to address the large percentage of school leavers not entering into education, employment, training or volunteering. The Edinburgh Guarantee is a citywide initiative that works with the public, private and voluntary sectors to increase the number of jobs, education and training opportunities available to young people in the city. So far more than 300 organisations have offered support and more than 1,252 of those opportunities have been matched to young people. Internal analysis undertaken by the council suggests that 757 additional young people have been placed into jobs or training who would not have otherwise secured those opportunities (Edinburgh City Council, 2015). While this city-wide initiative does not have a spatial focus, it illustrates how employer engagement activities can help to increase demand and can be targeted at residents in disconnected neighbourhoods.

**Job hubs**

Stakeholders in Bradford, Sheffield and Birmingham highlighted the value of local jobs hubs to connect residents in low-income neighbourhoods to employment in nearby large-scale developments, often in retail. In Birmingham, for example, a jobs hub was developed to support employment in retail around the
redevelopment of the Bull Ring. The initiative funded training to get individuals ‘job ready’. It had an area focus with jobs buses travelling out to engage residents in low income neighbourhood.

Local labour initiatives

Several areas had set up large-scale local labour initiatives to support residents into training and employment. For example, in Birmingham local apprentices are used as part of a big housebuilding initiative by Keepmoat and the Birmingham Municipal Housing Trust (BMHT).
7 Conclusions

Key messages

- Using a combination of residential and travel-to-work typologies can help us formulate different potential policy responses to neighbourhood disconnection, targeted on different area types.
- If the goal of inclusive growth is to be achieved, we need some kind of ‘social deal’ to be incorporated into city-regional economic growth strategies across the UK.
- Future approaches to tackling poverty in urban areas need to be very sensitive to local conditions and take a ‘life-course’ approach.

Learning from the past in urban policy

We have been quite clear, through the evidence review in Section 2, and the stakeholder consultation in Section 6, that a return to the past in urban policy is not desirable from a policy design point of view. In the context of contemporary devolution deals, this is not a viable proposition anyway, and in fact we think it creates an opportunity for this research to be used across the country in more subtle ways. With greater fiscal autonomy, even in the face of drastic budget cuts, devolved national and city-regional administrations ought to be able to draw upon the empirical work here to devise policies which are more locally appropriate than those in the past. In this sense, we think that it is possible to learn from the past in urban policy if we develop approaches which are sensitive to the needs, and geographical contexts, of individual areas.

A multi-faceted policy approach

We do not think that solving decades of intractable, entrenched urban deprivation is a simple task. Far from it. Rather, we view the challenge as being a generational one, since the ‘wars on poverty’ of the 1960s remain relevant today and the persistence of spatial patterns of deprivation through time is clear (Orford, 2004; Rae, 2011). But we believe any approach to poverty alleviation, and to connecting city-regional growth to deprived areas, needs a carefully evidenced and nuanced underpinning if it is to have any chance of success. It also needs political buy-in from the variety of organisations now tasked with growth and/or poverty alleviation in the UK’s cities, as discussed at the end of this section.

Table 15 sets out a range of potential policy responses in relation to the combination of 20 different area types identified previously. We have also added in the total number of areas across the UK which fall into each category (in brackets). This is not a fixed or exhaustive list of the kinds of policies which could be implemented, nor is it a one-size-fits-all solution to solving the disconnect between urban economic growth and deprivation. It does, however, provide a useful starting point for understanding the dynamics of disconnection at a local level and which approaches may be appropriate if we are to successfully tackle it (see also Lupton et al., 2011).
Table 15: Potential policy responses in different area types*

<table>
<thead>
<tr>
<th>Area Type</th>
<th>Escalator</th>
<th>Gentrifier</th>
<th>Isolate</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected core</td>
<td>Ensure training options for long-term residents match employment opportunities (50)</td>
<td>Identify households at risk of displacement, focus on skills development (98)</td>
<td>More jobs may be needed in these areas, or more targeted training initiatives (304)</td>
<td>Ensure housing remains diverse enough to offer lower-income residents long-term security (274)</td>
</tr>
<tr>
<td>Disconnected core</td>
<td>Improving transport accessibility and focusing on training needs of long-term residents (130)</td>
<td>Identify those at risk of displacement, focus on improving job accessibility in first instance (212)</td>
<td>Improve skills to increase ability to exploit proximity to employment opportunities (387)</td>
<td>Improving transport accessibility and focusing on training needs of long-term residents (1,108)</td>
</tr>
<tr>
<td>Connected suburb</td>
<td>Ensure housing mix remains diverse enough to offer lower-income residents long-term security (122)</td>
<td>Focus on skills development for long-term residents, particularly those at risk of displacement (270)</td>
<td>Develop 'pathways to employment' initiatives with local employers, focused on skills (409)</td>
<td>Provide targeted training schemes for long-term unemployed, long-term residents (817)</td>
</tr>
<tr>
<td>Disconnected suburb</td>
<td>Improve transport links with long-term residents in mind (80)</td>
<td>In England and Wales, a gentrifier is least likely to be here. (107)</td>
<td>Develop 'pathways to employment' initiatives with employers, focused on skills and transport (137)</td>
<td>Improve transport links with long-term residents in mind (521)</td>
</tr>
<tr>
<td>Primary employment zone</td>
<td>Focus on skills and training initiatives to capitalise on local employment opportunities – including in-work progression schemes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Potential priority areas are shown in bold text

Table 15 is easier to interpret if we put it into some kind of spatial context, since the underlying geography of employment and housing, as we have mentioned, is very important. Figure 37 shows four separate maps for Greater Manchester using the residential mobility typology and four of the five travel-to-work typology categories. A total of 184 LSOAs in Greater Manchester which fall in the 20 per cent most deprived nationally are primary employment zones (not shown below), with 85 being transits, 53 isolates, 23 gentrifiers and 22 escalators. The distribution of the other types can be seen in Figure 37 but if we wanted to home in on the areas from Table 15 which we have highlighted as potentially requiring the most urgent intervention, then we can identify 17 areas in the isolate disconnected core category and 3 in the isolate-disconnected suburb category. In this sense, then, the typology matrix approach may also serve as a kind of diagnostic tool in the initial assessment of why some neighbourhoods remain relatively disconnected from their wider labour and housing markets over time.
The kinds of policy approaches proposed above are only part of the wider support mechanism that might be needed in different areas so we propose them as a starting point. An important additional issue here is the extent to which we need to interpret the combined typology approach in light of local spatial context and spatial scale. For example, the geography of the social rented sector differs considerably across UK cities, as does the level of transport connectivity in the most deprived areas. In contrast to Greater Manchester, Glasgow is home to many more deprived outer urban estates, parts of which suffer from poor transport. In some cities, such as Bristol, patterns of deprivation are more dispersed. In others, such as Belfast, deprivation is more concentrated. In Wales, the geography of deprivation is quite unique, in that it is clustered in The Valleys of South Wales, away from the inner urban cores. Each of these configurations have different implications for how we might address the underlying question of why some neighbourhoods remain perpetually disconnected from wider growth. The consultations we carried out with stakeholders were therefore a very important part of helping us understand that our analyses need to be interpreted in light of the particular local and regional circumstances of individual urban areas.

The final part of the equation, and always a potential barrier to success, is making sure organisations can work effectively together. With a new wave of city–regional devolution in England, and more autonomous policy contexts elsewhere, the time is right to develop a new approach and fill the policy vacuum in relation to the link between urban economic growth and poverty alleviation. Knowing where to start when faced with a longstanding policy challenge like urban deprivation is always a problem, but particularly so in the context of the current period of austerity. Therefore, the two emboldened boxes in Table 15 are offered as a starting point in terms of which areas we might seek to target resources on first. The next section outlines the key principles which might help guide future policy, based on the empirical work conducted above and the stakeholder consultations with cities across the United Kingdom.
Towards a new approach

Past approaches to economic regeneration have not always benefitted large numbers of residents in low-income areas and a step change in policy is needed to reverse the fortunes of these areas. To this end, the workshops and interviews carried out in the 11 cities explored ways in which neighbourhoods could be better connected to economic opportunity as city regions grow. Participants were encouraged to think about how existing practice can be improved and where new, and potentially radically different, approaches could be adopted. The recommendations which follow draw on feedback from workshops as well as evidence from existing studies and proposals from other organisations involved in the city-regional agenda. The proposals made here can be best thought of as a framework that encompasses a set of key principles, strategies and programmes. It should be emphasised that the most effective approaches will vary by area. Evidently, there is no one-size-fits-all approach that could be applied to city regions that would enable them to better connect residents to the economic opportunities generated by growth.

It is important to note also that some of the proposals directly address the need to better connect residents in neighbourhoods to wider economic opportunities, for example through clearer pre-entry skills and employment pathways. But they also look at how to address forms of deprivation within neighbourhoods, for example through tackling health issues that could preclude residents from taking up economic opportunities, even if more targeted pathways were put in place. This reflects the earlier observation that disconnection and deprivation are intrinsically linked and that both need to be addressed to ensure residents are better placed to benefit from the proceeds of growth.

Key principles

As noted in Section 6, there is little appetite for a return to the kind of time-limited, area-based initiatives that dominated the urban policy landscape before 2010. At the same time, existing strategies and policies of new devolved institutions at the city-regional level have not filled the vacuum left behind by the demise of ABIs. The establishment of local enterprise partnerships (in England) does not fill this gap. In short, there is a lack of mechanisms to connect households in poverty at the neighbourhood level to the wider economic opportunities generated through growth. There is a clear need, therefore, for a different kind of approach which, we suggest, should be based on the following principles.

- **Long-term intervention:** transformative change requires long-term interventions beyond that of even the 10-year lifetime of programmes like NDC. Twenty years may be a more appropriate timeframe.

- **A whole household approach:** households should be the focus of interventions given that it is the level at which poverty is experienced and also where disadvantaged household members interact.

- **A ‘life course’ approach:** support should be available throughout the life course and from early years onwards.

- **People- and place-centred:** new initiatives need to be focused on people as much as place in recognition that past programmes may have transformed the physical infrastructure of neighbourhoods but failed to make significant inroads in terms of social and economic outcomes for individuals. In Manchester, for example, it was noted that it has been too easy to tackle issues around place rather than people.

- **Driven by public service reform:** the current agenda of public service reform provides opportunities to align provision across different service areas (e.g. employment, health and housing), pool resources, avoid duplication and address challenges in a holistic approach. This approach could support more integrated forms of working to address neighbourhood disconnection, although it will invariably be constrained if it continues to be underpinned by cuts in both national and local budgets.

- **A focus on prevention:** a need to ensure that interventions target causes (e.g. housing) rather than symptoms (e.g. homelessness).

- **Community-led:** a genuine commitment to involve local communities directly in the process of designing interventions rather than through top-down programmes.
Cutting across this set of principles was a sense that economic regeneration should be people-focused and embedded within mainstream service delivery. While ‘bending’ mainstream activities was a central aim of previous rounds of ABIs prior to 2010, there was a feeling that this had tended to be sidelined by the predominant focus on physical regeneration in targeted neighbourhoods. The current government would do well to take heed of these lessons as it seeks to address the perceived failures of 100 brutalist housing estates across the country. This is also largely confirmed by the existing evidence base which shows that people-focused activities such as interventions addressing health and education were only ever a small, and often largely ineffective, component of mainstream ABIs (Crisp et al., 2014). Stakeholders felt there was scope to ramp up the scale of such activities.

This set of principles is driven by a concern to ensure that interventions are focused on people and not just places and embedded in mainstream service delivery rather than the selective, project-based approach of past ABIs.

This is not to say there is no value in capital-intensive infrastructure projects delivered through current initiatives such as city deals and growth deals. There are opportunities here to maximise the use of planning and procurement levers to extract social value in the form of jobs and training opportunities. However, there is still a need for devolved funding and freedoms to be directed more clearly towards improving the lives of households in low-income neighbourhoods in a far more systematic way than had been attempted before. This is the starting point for ensuring neighbourhoods benefit from growth.

Strategy

There is arguably a need for overarching national strategies for delivering more inclusive forms of growth. England is unique within the UK, having no clear strategic vision of how to regenerate low-income neighbourhoods, for which it has attracted much criticism (House of Commons Communities and Local Government Committee, 2011). A clear statement of the need for growth to the benefit of all and the mechanisms through which this could happen is essential. Past research shows that trickle-down regeneration does not work (Crisp et al., 2014).

It is doubtful that the recent announcement of an estate regeneration programme that will ‘transform’ up to 100 estates across England will mark the beginning of a new period of urban regeneration that benefits low-income households. The £140 million of loan finance committed so far will only be enough to cover preliminary work and substantial extra investment will be required to regenerate 100 estates (Birch, 2016). And past experience from London shows that estate regeneration using significant private investment can reduce the overall stock of genuinely affordable housing to make new developments viable (London Assembly Housing Committee, 2015). This suggests regeneration based on recoverable loans to private sector developers may encourage higher value housing to be built that could displace existing low-income households. Past concerns voiced by stakeholders about the tendency of even well-funded, large-scale ABIs such as HMR to disperse residents echo these concerns (see above). It is not a sustainable model for regeneration.

There is a need to lay out how the current suite of devolved initiatives and funding can avoid the same mistakes. Evidently, this national statement needs to be embedded in the work of city regions, combined authorities and local authorities.

There are two obvious ways to do this. First, any future ‘refresh’ of strategic economic plans or new strategic planning processes provides an opportunity for LEPs and other city-regional institutions to articulate how strategic priorities and initiatives will connect residents in low-income neighbourhoods to the opportunities generated through economic growth. This could include articulating the extent to which sectors supported are most likely to deliver jobs that benefit households in poverty, focusing more on improving job quality in sectors where low-skilled work predominates; and ensuring the necessary infrastructure and support is in place to ensure residents in low-income neighbourhoods are aware of, and able to access, economic opportunity. One way to focus minds would be to include an assessment of the extent to which the refreshed plan is likely to benefit the bottom 10 per cent of households in terms of household income (possibly using the UMBR or deprivation data used above).

Some areas in England are already starting to show a clear commitment to pursuing an inclusive growth agenda. Greater Manchester, for example, will shortly launch a commission to explore ways of better
ensuring residents who are out of work, or on low incomes, benefit from growth. It is critical that city regions do not just focus exclusively on supporting high-skilled growth industries that may provide comparatively few opportunities for low-skilled residents within their city region.

A second, and potentially more far-reaching, approach is to ensure that any ‘third generation’ of devolution includes some form of ‘social deal’ which explicitly links economic growth objectives to social outcomes. This could see key city-regional institutions and constituent local authorities invited to bid for devolved funding to deliver predominantly revenue focused programmes to support inclusive growth. In the same way that strategic economic plans made the case for Local Growth Fund monies, a new statement of strategic and policy intent would form the basis for negotiating devolved or additional funds through the Social Deal, outlined in more detail below.

A new ‘Social Deal’ for cities?

The contents of a new Social Deal, like previous deals, would not necessarily be prescriptive but would devolve a new round of funding and ‘freedoms and flexibilities’ to enable key stakeholders to address neighbourhood disconnection. These could include:

• Greater flexibilities and incentives around tax and spending powers and responsibilities: Devolution of local property and land taxes, including powers to increase taxes, would provide local control over spending that could be targeted towards inclusive growth initiatives. Assuming responsibility for key areas of benefit expenditure e.g. Housing Benefit would also provide an incentive to tackle low incomes in and out of work if the proceeds of a reduced benefit bill could be retained locally. Evidently, there would need to be some kind of equalisation mechanism to ensure that some of the financial gains in the most buoyant areas would be redistributed to other areas (McGough and Bessis, 2015). Other potential sources of finance include tax increment financing or ‘earnback’ mechanisms where areas borrow to invest but retain some of the proceeds of growth.

• Devolved control and common commissioning frameworks over key policy areas: This would enhance the efficiency and effectiveness of services by responding to local need in ways that centrally designed and delivered programmes cannot. For example, devolving funding for welfare-to-work activities through the Work Programme could improve outcomes, as happened with the Youth Contract where devolved to local areas (Core Cities Group, 2015). Local control over the design and delivery of welfare-to-work activity would enable far better segmentation and targeting of priority groups, especially of different types of Incapacity Benefit/Employment Support Allowance claimant. The current system often fails such groups because prime providers are discouraged from supporting more ‘difficult’ groups because of the way payment-by-results operates.

• This devolution of funding would fit with the call by the Core Cities Group for skills and labour market agreements for city regions. This includes devolution of funding for, and commissioning of, skills and employment provision (Core Cities Group, 2015). This in turn could be aligned with services relating to education, schools and careers guidance, care and health, wrapping services around individuals and families.

Other place based settlements for revenue funds could be secured around housing or health and social care. The devolution of the health and social care budget in Greater Manchester illustrates the scale on which this is possible. The logic of this is to enable a shift away from a reactive model to prevention and intervention. It includes using resources allocated through health and social care funding streams to support employment-related interventions given the close interrelationship between employment and health. By definition, much of this work will have an area focus as Incapacity Benefit/Employment Support Allowance claimants will tend to be focused in more disadvantaged areas. However, explicit area targeting is clearly an option for this kind of place-based settlement.

Conclusions

We do not think that solving decades of intractable, entrenched urban deprivation is an easy task. The history of urban policy proves it is not. Dealing with disconnection is only part of the challenge, but it is an important one. We are now at a critical break-point in the way we manage and fund cities across the UK, so it is an opportune time to rethink approaches to connecting growth with poverty alleviation. The lack of such strategies within the remit of local enterprise partnerships is, we believe, a significant
omission. On the other hand, the new period of city-regional devolution offers hope that things can be different in future, but only if we take a more measured approach to understanding what the problems are and how they might be solved.

This is of course an inherently political question but our hope is that through showing how deprived neighbourhoods differ with respect to their individual housing and labour market characteristics, this research can help contribute to a consensus that more flexible, nuanced policy approaches are both necessary and appropriate. Ultimately, overcoming the historic links between deprivation and disconnection will require that multiple organisations work together to agree that:

• growth strategies at the city-regional level need to be tied to poverty alleviation at the local level;
• some areas are more in need than others, even if they all appear to be among the ‘20 per cent most deprived’.
References


BIS (Department for Business Innovation and Skills) (2010) Local growth: realising every place’s potential. London: TSO.


DCLG (2009b) Understanding and tackling worklessness volume 2: neighbourhood level problems, interventions and outcomes (evidence from the New Deal for Communities Programme) London: DCLG.


Office for National Statistics (2011a) Census: special migration statistics (United Kingdom) [MF01UK_oa_all]. UK Data Service Census Support. Available at: https://wicid.ukdataservice.ac.uk (accessed on 14 April 2016).

Office for National Statistics (2011b) Census: special workplace statistics (United Kingdom) [WF03UK_oa_v1]. UK Data Service Census Support. Available at: https://wicid.ukdataservice.ac.uk (accessed on 14 April 2016).


Appendix 1: Technical details

Residential typology

The residential typology was developed by Robson *et al.* (2008, 2009) as a means to describe the different function deprived neighbourhoods may play in terms of residential mobility. The study identified four types of neighbourhood that play different roles based on the patterns of residential moves in and out of them. In this report we update the typology using the most recent index of multiple deprivation data and census data on residential moves. We followed the methodology as laid out in Robson *et al.* (2009) using the relaxed typology criteria.

The typology uses index of multiple deprivation ranking to identify the most deprived 20 per cent of LSOAs. It then looks in detail at the pattern of residential moves into and out of each area based on data from the most recent census which records the previous location of respondents if it was different one year previously (ONS, 2011a). Essentially, the method calculates, for each area, the number of people:

- moving in from a similarly or more deprived area;
- moving in from a less deprived area;
- moving out to a similarly or more deprived area;
- moving out to a less deprived area;

where an area is defined as similarly deprived to another if its rank is within +/-10 per cent. Each area is then classified into a type based on the relative size of these flows according to the relaxed criteria specified in Robson *et al.* 2009, pp. 40-41. This gives rise to the four types as described in the main report.

There are a number of limitations and constraints that must be considered in the interpretation of the typology.

- Residential moves entirely within an individual LSOA (or equivalent spatial unit) are ignored because these can be argued to be neutral in terms of residential mobility.
- Residential moves across national borders (including those within the UK) are also ignored. This is because it is impossible to compare relative levels of deprivation in the absence of a consistent international measure.
- The typology only considers movers and is thus characterising areas based on the small proportion of the population who move house rather than the larger proportion of the population who don’t move.
- Census data provides a uniquely comprehensive dataset but one that comes at a large administrative and financial cost. As a result, we are relying on a single snapshot of residential mobility which may not always capture a representative picture of more sustained temporal patterns. Additionally, the 10-year interval between censuses and the processing delay inherent in the release of potentially sensitive census data, means that it may not reflect current mobility patterns but only those at the time of the census.

This methodology, its background and its limitations are discussed in detail elsewhere, for a more in depth analysis we refer interested readers to Robson *et al.* (2008,2009).

Using data from the 2001 census and IMD 2004 we recreated the original 2004 residential typology for England. This allowed us to verify the algorithms used to generate the 2015 residential typology we present here. Additionally, we were able to use it to look at typology changes across England (Chapter 3, *Changes in patterns of residential mobility in England since 2004*). Because of changes to LSOA boundaries for the 2011 census, we used the population weighted centroid for the 2011 LSOA to allocate each LSOA a 2004 residential ‘type’. As a result of the increase in LSOAs from 32,482 in 2001 to 32,844 in 2011, some 2004 areas will be represented more than once which may skew the output.
Travel-to-work typology

The travel-to-work typology was developed for this report using workflow data available from the 2011 census (ONS, 2011b). This records the location of usual workplace and excludes quasi-workplaces at the output area (OA) level. The initial step was to aggregate flows from OA to LSOA level using standard lookup tables (available from The Open Geography Portal and using National Statistics data © Crown copyright and database right 2016). We then limited the analysis to only the travel-to-work flows that originated or finished in the most deprived 20 per cent LSOAs as determined by the most recent index of multiple deprivation.

Working at the LSOA level means that established measures of labour market connection like self-containment (Cervero, 1996) are not appropriate. To study it at this scale we first grouped LSOAs by whether they were primarily employment areas i.e. had more jobs (measured as number of travel-to-work flows that terminated in that LSOA) than workers (measured as the number of flows that originated in that LSOA). These areas were termed primary employment zones and are largely found in city centres and industrial and commercial districts. We highlighted those areas with a proximity ratio of less than 50 per cent i.e. where less than 50 per cent of the working residents worked within 5 km (using the method described below).

To create the travel-to-work typology for LSOAs that are primarily residential i.e. have more workers than jobs, we calculated two parameters for each LSOA.

- **Proportion of residents working less than 5 km proximity ratio.** For England, Wales and Scotland we used the population weighted centroids (available from The Open Geography Portal and SASSPAC and using National Statistics data © Crown copyright and database right 2016) to calculate the Euclidean distance between each origin LSOA (residence LSOA) and each destination LSOA (workplace LSOA). Because, at the time of writing, population weighted centroids were unavailable for Northern Ireland SOAs, we used GIS software to calculate both the geographical centroids and vertices/feature weighted centroids which were then combined to obtain a centroid point. (The latter method tends to weight the centroid towards more densely populated areas where the boundary features are more complex, however, when used on their own they can calculate a centroid outside the feature polygon.) We calculated the proportion of all travel-to-work journeys for each LSOA that were less than 5 km, this being the distance threshold that has previously been demonstrated as limiting in deprived neighbourhoods (Webster, 1999).

- **Links per worker.** The second parameter we calculated was the total number of 'links' to workplace LSOAs for each residence LSOA (normalised by the number of workers commuting from that LSOA). We made the assumption that a greater number of links per worker indicated a greater potential to access the labour market. The most obvious driver being through better transport links in terms of both wider public transport options and access to major road networks. But could also include greater opportunity for car shares, for example.

For each of the LSOAs in the most deprived 20 per cent we compared the values of these parameters for each LSOA against the mean value for the most deprived 20 per cent and combined them as described in Table 5. This gave us a single type encompassing areas that are dominated by workplaces (primary employment zones) which then has a further sub-type identifying areas with high proportions of workers travelling more than 5 km to work (low local workers). Four further types then describe areas that are primarily residential (more workers than jobs).

- **Primary employment zone:** an LSOA that has more jobs than workers (i.e. more people come into the LSOA to work than there are workers living there).
  - **Low local workers:** primary employment zones with a proximity ratio of less than 50 per cent i.e. more than 50 per cent of the workers that live in that LSOA travel further than 5 km to work.

- **Connected core:** an LSOA with a high proximity ratio and high links per worker. These areas have a higher than average proportion of residents working within 5 km and travel to a wider diversity of workplace LSOAs than the average.
• *Disconnected core*: an LSO with a high proximity ratio and low links per worker. These areas have a higher than average proportion of residents working within 5 km and travel to a narrower range of workplace LSOs than the average.

• *Connected suburb*: an LSO with a low proximity ratio and high links per worker. These areas have a lower than average proportion of residents working within 5 km and travel to a wider diversity of workplace LSOs than the average.

• *Disconnected suburb*: an LSO with a low proximity ratio and low links per worker. These areas have a lower than average proportion of residents working within 5 km and travel to a narrower range of workplace LSOs than the average.

As stated above we rejected some of the more established measures of workplace connectivity. The primary reason being that these have been developed to describe wider labour market areas rather than at the neighbourhood level. This has necessitated making some broad assumptions which should be considered when interpreting the results.

• We used population weighted centroids to calculate travel-to-work distance. This makes assumptions about the location of both residence and workplace within the respective LSOs. In small, densely populated urban LSOs this will be a reasonable approximation of both residence and workplace location. In more sparsely populated rural and primarily industrial or commercial areas, it may be less reasonable to assume that the population weighted centroid reflects the distribution of workplaces and particularly in these cases may result in over- and under-estimates of travel-to-work distances. One method that might have improved the distance estimation would have been to use unaggregated data (OA level), but this was rejected due to the complication of dealing with significantly larger data sets and much smaller potential flows.

• An alternative approach to Euclidean distance would have been to use network distance. However, as we have no indication of the mode of travel used, this would have introduced further assumptions regarding both route and mode, therefore we chose Euclidean distance as the most appropriate option.

• Our general assumption that more links indicates better potential access to the labour market — a more connected area — may underestimate levels of connection where an area is in close proximity to a major employment area. Here many residents may work in a single neighbouring LSOA, which counts as one link, but this may represent multiple workplaces. In these cases links per worker may underestimate the potential employment opportunities for that LSOA. Again, this might be improved by analysis at the OA level.

• The primary employment zone classification is very broad and based purely on ratio of employment options to residents. This encompasses a very wide range of areas from large industrial areas to city centre retail districts and does not distinguish between them. The factors facing residents of these areas are not necessarily the same and will not be revealed in this analysis.

• Further, it gives no indication of job quality or type. We investigated the potential of metrics based on relative differences in IMD rank between the residents and incoming workers. These were rejected due to the difficulty in controlling for patterns of IMD deprivation in the surrounding areas.
Appendix 2: Maps

This research focuses primarily on the major urban areas of the United Kingdom. However, we realise that this research is relevant in many more towns and cities across the country so we are providing further maps here. These can be accessed online in the following folder:

Deprivation and Disconnection Maps

- Maps:
  - *residential typology*: this folder contains a set of residential mobility typology maps for each part of the UK with at least one area in the 20 per cent most deprived on each respective deprivation index, as follows:
    - England
    - Northern Ireland
    - Scotland
    - Wales
  
  - *travel-to-work typology*:
    - England
    - Northern Ireland
    - Scotland
    - Wales

Direct web link: [https://goo.gl/9ge5Q0](https://goo.gl/9ge5Q0)
About the authors

Alasdair Rae is a Senior Lecturer in Urban Studies and Planning at the University of Sheffield. His research focuses on deprivation, neighbourhoods, housing, labour markets and spatial data analysis. His most recent published work has focused on travel to work in England and Wales, residential mortgage lending and housing market search.

Ruth Hamilton is a Research Associate in the Department of Urban Studies and Planning at the University of Sheffield. She comes from a theoretical biology background and now specialises in spatial data analysis with a particular interest in labour markets.

Richard Crisp is a Senior Research Fellow at CRESR and specialises in research on poverty, spatial inequalities, housing and urban policy. Richard is currently working on a number of related projects for JRF looking at how economic development can deliver ‘inclusive growth’ that benefits low-income households in the context of the wider devolution of new powers to city regions in the UK.

Ryan Powell is a Reader in Urban Studies in CRESR. He has diverse research interests spanning urban sociology and geography with recent research focused on questions of housing and labour market access for disadvantaged groups and wider issues of governance and citizenship. He has published his research findings in various academic journals and edited collections.
Inspiring Social Change