

Understanding changes in Greater Manchester's 'deprived' neighbourhoods 2004 to 2015 using a typology of residential mobility

Working paper 01/2018

Ceri Hughes & Ruth Lupton

Inclusive Growth Analysis Unit

Contents

Acknowledgements	2
Introduction.....	3
PART 1: INTRODUCING A TYPOLOGY OF NEIGHBOURHOOD RESIDENTIAL MOVES.....	5
1.1 Describing the typology and its use in policy	5
The Robson typology.....	5
The value and use of the typology.....	7
What the typology does not tell us.....	9
PART 2: DESCRIBING TYPOLOGY RESULTS FOR 2004 AND 2015	11
2.1 How neighbourhoods are distributed within the typology	11
The distribution of neighbourhoods by type in Greater Manchester in 2004	11
The distribution of neighbourhoods by type in Greater Manchester in 2015	15
2.2 Describing neighbourhood change using the typology	20
PART 3: RELATING THE TYPOLOGY BACK TO NEIGHBOURHOOD DATA	25
3.1 How typology change relates to demographic change.....	25
A closer look at change in selected neighbourhoods in the 1% most deprived.....	25
Case study 1: A Higher Blackley neighbourhood	27
Case study 2: An Ancoats and Clayton neighbourhood	30
Case study 3: An Ardwick neighbourhood	33
Case study 4: A Miles Platting and Newton Heath neighbourhood	35
Case study 5: A Kingsway neighbourhood.....	38
Applying insights from the case studies to the wider group of deprived neighbourhoods	40
3.2 Identifying neighbourhoods which meet the stringent criteria	43
Section 4: Conclusion	45
Appendix A: The extent of churn.....	47
Appendix B: Students and residential flows in deprived neighbourhoods	48
Appendix C: Additional maps.....	49

Acknowledgements

The analysis in this paper reproduces and extends analysis undertaken by Robson et al. (2009) and Rae et al. (2016). We are grateful to Alasdair Rae and Ruth Hamilton from the University of Sheffield for providing feedback on an early draft and for sharing underlying data for the purposes of benchmarking our analysis.

We are also grateful to Alan Harding and colleagues at the Greater Manchester Combined Authority and to Mike Hawking at the Joseph Rowntree Foundation for their comments and suggestions for extending the analysis.

Responsibility for the accuracy of this report, including any errors or misunderstandings, lies with the authors.

The paper draws on Census flow data which is Crown copyright and is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland. The following data collections have been used:

- Office for National Statistics, 2011 Census: Special Migration Statistics (United Kingdom) OA/SA – Safeguarded data.
- Office for National Statistics, 2001 Census: Special Migration Statistics (United Kingdom) Level 3. UK Data Service Census Support.

Downloaded from: <https://wcid.ukdataservice.ac.uk>

The data is licensed under the terms of the Open Government Licence

<http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3>

Introduction

This report analyses patterns of neighbourhood change in so called 'deprived' neighbourhoods¹ in Greater Manchester (GM) between 2004 and 2015, according to a typology of neighbourhoods based on residential mobility. We focus on neighbourhoods in Greater Manchester that were among the most deprived 10% and 1% of neighbourhoods in England.

There are many ways in which changes in the geography of deprivation can be understood, including changes in the relative position of neighbourhoods on the Indices of Multiple Deprivation, changes in specific indicators, such as employment rates or life expectancy, and changes in residents' experiences of their quality of life or opportunities. Some of these changes have been reported in recent work by the Inclusive Growth Analysis Unit and others.²

This report focuses on a particular way of understanding neighbourhood change – that of residential moves into and out of different neighbourhoods. The paper draws on a typology of residential mobility that was first developed by Robson et al. in 2009³ and which drew on the Indices of Multiple Deprivation (IMD) 2004 and the 2001 Census. The typology was updated by Rae et al. in 2016 based on data from the 2015 IMD and the 2011 Census.⁴ This paper lays the foundations for further research on neighbourhood deprivation and inclusive growth, to be undertaken by the Inclusive Growth Analysis Unit in 2018.

We report on neighbourhood change according to this typology principally because it has high resonance within Greater Manchester. The original typology was used extensively in neighbourhood analysis supporting the Manchester Independent Economic Review and the recent update is of considerable interest within Greater Manchester policy circles. In 2016, we produced a short briefing paper highlighting the updated typology along with the results of a new labour market typology also produced by Rae et al.⁵

This report aims to support decision making in Greater Manchester by:

- Presenting analysis of change between 2004 and 2015⁶ as indicated by the initial and updated work;

¹ The term 'deprived neighbourhoods' is a common shorthand for neighbourhoods that have high proportions of low income households, low employment rates and a range of other characteristics associated with poverty. Residents of such neighbourhoods tend not to like or associate with the term which is why we start by using it in inverted commas here.

² Lupton, R., Rafferty, A. & Hughes, C. (2016) Inclusive Growth: opportunities and challenges for Greater Manchester, IGAU; Rafferty, A. & Moosavi, S. (2016) Inclusive Growth Monitor: city region comparisons and a focus on Greater Manchester; Hincks, S. (2015) Neighbourhood change and deprivation in the Greater Manchester city-region, *Environment and Planning A*, 47 (2), 430-449.

³ Robson, B, Lympelopoulou, K. & Rae, A. (2009) A typology of the functional roles of deprived neighbourhoods. London, Department for Communities and Local Government

⁴ Rae, A., Hamilton, R., Crisp, R. & Powell, R. (2016) Overcoming deprivation and disconnection in UK cities, JRF

⁵ Hughes, C. & Lupton, R. (2016) Residential and labour market connections of deprived neighbourhoods in Greater Manchester and Leeds City Region, IGAU

⁶ We talk about change between the years 2004 and 2015, in line with the versions of the Indices of Deprivation that we use but the data behind the residential mobility data relate to 2001 and 2011, and some of the data underpinning the IMD also relate to these years or to intervening years. The changes

- Reporting analysis of the underlying data to help explain what the changes do and do not tell us;
- Revisiting the policy arguments made on the basis of the original data in the light of the changes that have taken place.

The structure of the report is as follows:

PART 1 INTRODUCING THE TYPOLOGY

Section 1.1 Describes the typology and its use in policy

PART 2 DESCRIBING TYPOLOGY RESULTS FOR 2004 AND 2015

Section 2.1 Shows the overall distribution of different types of neighbourhoods across Greater Manchester in 2004 and 2015; comparing results with London and Leeds City Region

Section 2.2 Traces typology changes taking place at neighbourhood-level among the most deprived neighbourhoods in Greater Manchester

PART 3 RELATING THE TYPOLOGY TO NEIGHBOURHOOD DATA

Section 3.1 Compares how changes in the functional role of a neighbourhood relate to changes in other data in a set of case study neighbourhoods in Greater Manchester

Section 3.2 Applies a more stringent set of criteria to identify those neighbourhoods that are associated with a more distinctive pattern of residential moves

Section 4 Reviews key findings and draws conclusions

described can thus loosely be understood as those that occurred between the early part of the 2000s and the early part of the 2010s.

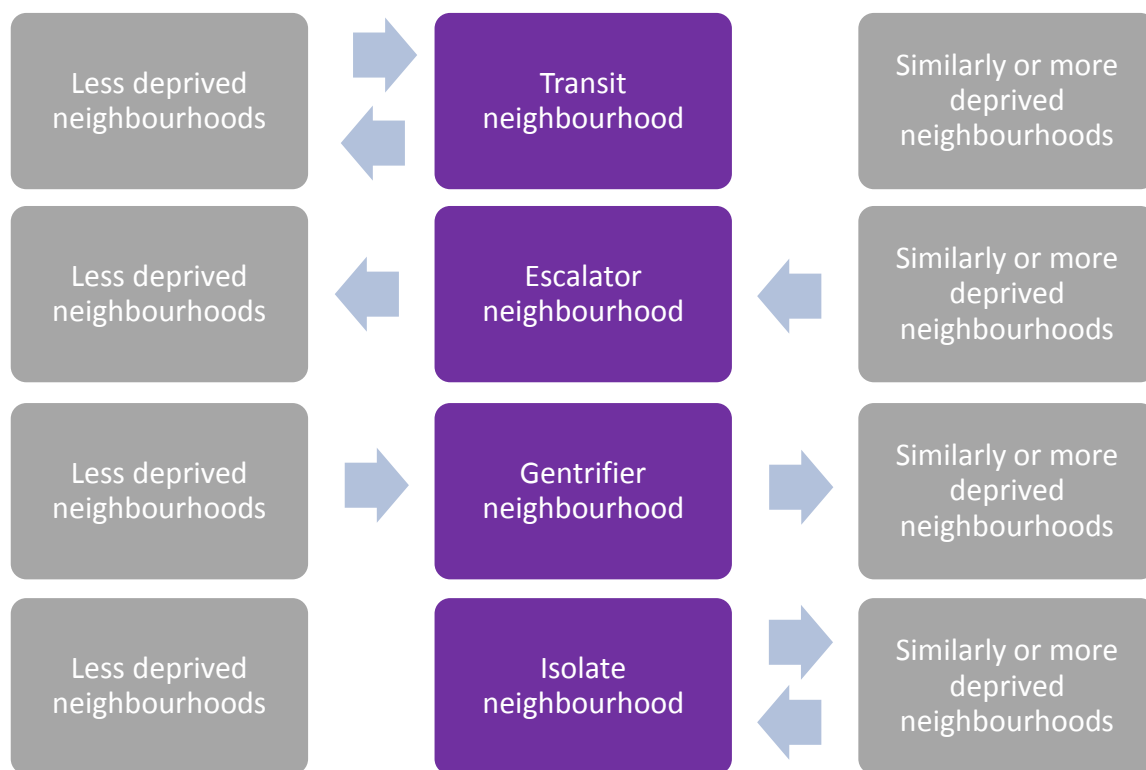
PART 1: INTRODUCING A TYPOLOGY OF NEIGHBOURHOOD RESIDENTIAL MOVES

1.1 Describing the typology and its use in policy

The Robson typology

The typology that was developed by Robson et al. characterises deprived neighbourhoods⁷ according to their 'functional roles' as indicated by patterns of inward and outward residential mobility.⁸ Four neighbourhood types are identified based on the main types of moves into and out of an area. In 'transit' neighbourhoods, for example, most flows in and out were to comparatively less deprived neighbourhoods.

Figure 1.1: Summary of the main types of residential flows into and out of deprived neighbourhoods by neighbourhood type



⁷ The original work covered neighbourhoods in the top fifth of the Indices of Multiple Deprivation nationally, we take a narrower focus. Greater Manchester has a large number of such neighbourhoods (581 in 2015). Thinking in terms of policy intervention, we find it more appropriate to concentrate on a smaller number of neighbourhoods, those in the top 1% or 10% nationally.

⁸ Information on the origins and destinations of households is collected in the Census, which contains data on current residence and where people were living in the year before the Census took place. The Census was taken on April 29 2001 and March 27 2011.

Figure 1.2: Two approaches to classifying neighbourhoods within the Robson typology⁹

Neighbourhood type	Relaxed approach	Stringent approach
Transit	(The number of people moving in from less deprived areas is greater than the number moving in from similarly deprived areas, and from more deprived areas) AND (The number of people moving out to less deprived areas is greater than the number moving out to similarly deprived areas, or to more deprived areas)	(Over 50% of people moving in are from less deprived areas) AND (over 50% of people moving out go to less deprived areas) A further test is applied to ensure that there is a significant difference between the number of moves in from less deprived areas compared to from more AND/OR similarly deprived areas (a difference of at least 10% of moves in). Likewise for moves out.
Escalator	(The number of people moving in from similarly deprived areas AND/OR from more deprived areas is greater than the number moving in from less deprived areas) AND (The number of people moving out to less deprived areas is greater than the number moving out to more deprived AND/OR to similarly deprived areas)	(Together the number of people moving in from more deprived areas and from similarly deprived areas is over 60% of moves in) AND (over 50% of people moving out go to less deprived areas) A further test is applied to ensure that there is a significant difference between the number of moves in from more deprived AND/OR similarly deprived areas compared to less deprived areas (a difference of at least 10% of moves in). Likewise a test is applied to ensure that there is a significant difference between the number of moves out to less deprived areas compared to more AND/OR similarly deprived areas (a difference of at least 10% of moves out)
Gentrifier	(The number of people moving in from less deprived areas is greater than the number moving in from similarly deprived areas, and from more deprived areas) AND (The number of people moving out to more AND/OR similarly deprived areas is greater than the number moving out to less deprived areas)	(Over 50% of people moving in are from less deprived areas) AND (Together the number of people moving out to more deprived areas and to similarly deprived areas is over 60% of moves out) A further test is applied to ensure that there is a significant difference between the number of moves in from less deprived areas compared to from more AND/OR similarly deprived areas (a difference of at least 10% of moves in). Likewise a test is applied to ensure that there is a significant difference between the number of moves out to more AND/OR similarly deprived areas compared to less deprived areas (a difference of at least 10% of moves out)
Isolate	(The number of people moving in from similarly deprived areas AND/OR from more deprived areas is greater than the number moving in from less deprived areas) AND (The number of people moving out to more AND/OR similarly deprived areas is greater than the number moving out to less deprived areas)	(Together the number of people moving in from more deprived areas and from similarly deprived areas represents over 60% of moves in) AND (Together the number of people moving out to more deprived areas and to similarly deprived areas represents over 60% of moves out) A further test is applied to ensure that there is a significant difference between the number of moves in from more AND/OR similarly deprived areas compared to from less deprived areas (a difference of at least 10% of moves in). Likewise a test is applied to ensure that there is a significant difference between the number of moves out to more AND/OR similarly deprived areas compared to less deprived areas (a difference of at least 10% of moves out). Likewise for moves out.

⁹ Adapted from Robson et al. (2009), Annex A

The researchers that devised the residential mobility typology describe two approaches to categorising neighbourhoods into these four types. Under the 'stringent' approach additional criteria are applied (see Figure 1.2). For example, under the relaxed approach an area will be classified as a 'transit' area if the number of people moving into the area is greater than the number moving in from similarly or more deprived areas (considered separately) and if the number moving out to less deprived areas is greater than the number moving out to similarly or more deprived areas. The more 'stringent' criteria specify that a 'transit' area must have at least half of the people moving in and out of the area moving from/to less deprived areas. Furthermore the difference in the balance of flows will need to equal to at least 10% of flows.

Under the more 'stringent' approach to classifying areas, a greater number of areas are left unclassified because residential flows into or out of the neighbourhood do not follow a clear pattern. Using the 'relaxed' version of the typology, 3% of neighbourhoods among the 20% most deprived in England were unclassified in 2004 (2% in 2015). The proportion of unclassified neighbourhoods increases substantially if the stringent approach is applied – to 52% in 2004 (47% in 2015).

In the analysis that follows we report results for the 'relaxed' version of the typology as this is consistent with the approach taken by Rae et al. (2016). This version of the data has been made available to areas across England through Rae et al.'s project.¹⁰ However, we have also recreated the 'stringent' version of the typology for the purposes of this analysis and we reports results for Greater Manchester based on this version in Section 3.2.

The value and use of the typology

Since its inception, the originators and users of the typology have argued that its key contribution is the ability to differentiate between neighbourhoods of similar levels of deprivation in terms of the different roles they play in the urban system and thus the different policy interventions that might be needed.¹¹

While many areas may be poor, some have characteristics such as proximity to city centres and attractive housing stock that make them more likely to become more socially mixed over time. Other neighbourhoods are likely to serve roles as homes for students or as places where newcomers to a city or first time independent households find a foothold on the housing ladder. Still others have long term roles in housing the urban poor and have stable, locally rooted communities. Lupton (2003)¹² shows how these different kinds of neighbourhoods have followed different trajectories and demand different kinds of support.

The production of the typology in 2009 helped to answer the question "what kinds of poor neighbourhoods have we got in this city?", while its 'refresh' in 2015 provides an opportunity to see what has changed. It is also possible to look at how the typology results vary between different cities.

¹⁰ Rae, A., Hamilton, R., Crisp, R. & Powell, R. (2016) Overcoming deprivation and disconnection in UK cities, JRF. See <https://www.jrf.org.uk/report/overcoming-deprivation-and-disconnection-uk-cities>

¹¹ Robson, B, Lympelopoulou, K. & Rae, A (2009) A typology of the functional roles of deprived neighbourhoods. London, Department for Communities and Local Government

¹² Lupton, R. (2003) Poverty Street: The Dynamics of Neighbourhood Decline and Renewal

The policy conclusions drawn in the original work and its application in the Manchester Independent Economic Review¹³ were as follows:

- That certain kinds of neighbourhoods (particularly gentrifiers) would not need 'intensive place-based interventions' to reconfigure their roles in the housing market because these would shift over time anyway. Policy interventions might look to support housing improvement or social mix while also protecting homes and services for existing residents.
- That other kinds of neighbourhood (escalators and transits) might continue to be relatively poor but were serving valuable functions in the housing market. Policy interventions in these areas might focus on maintaining services and supporting individual needs and transitions rather than on changing the housing stock.
- That isolate neighbourhoods were neither likely to become less poor over time through flows of people, nor to offer opportunities/footholds/springboards for individuals. These were therefore the kinds of deprived neighbourhoods that should be prioritised for 'intensive place-based interventions' (i.e. redevelopments), particularly those which contained large concentrations of social housing.

It is worth noting that this original work played into a policy climate in which there was particular interest in transforming neighbourhoods through housing development to create 'mixed communities'.¹⁴ Two main arguments have been used in support of this approach. One is that it hinders the development and growth of cities to have large areas of inner urban land taken up by low income neighbourhoods, often with low density development. Re-densifying inner urban neighbourhoods and making them attractive to higher income households is seen as good for cities.¹⁵ The other is that socially mixed neighbourhoods are better for everyone to live in because they are better resourced, and offer beneficial social networks as well as de-segregating schools and increasing social solidarity (although the latter is rarely used as an argument to build low income housing in rich neighbourhoods).¹⁶

Understanding neighbourhood roles and neighbourhood change can also support other kinds of policy interventions, such as those focusing on improving the incomes and employment prospects of residents of disadvantaged neighbourhoods and those aimed at improving services and amenities. These kinds of policies have tended to be supported by arguments about the rights and needs of existing communities and the need to reduce poverty and

¹³ Sustainable Communities (2009) Report for the Manchester Independent Economic Review

¹⁴ Lupton, R. and Fuller, C. (2009) Mixed Communities: A New Approach to Spatially Concentrated Poverty in England. *International Journal of Urban and Regional Research* 33(4) 1014-28

¹⁵ DETR (2000) *Our Towns and Cities: Delivering an Urban Renaissance*. London: DETR. ODPM (2003) *Sustainable Communities: Building for the Future*. London: ODPM. Katz, B (2004) *Neighbourhoods of Choice and Connection: The Evolution of American neighbourhood policy and what it means for the UK*. York: Joseph Rowntree Foundation.

¹⁶ ODPM (2005) *Sustainable Communities: People, Places and Prosperity*. London: ODPM. Berube, A. (2005) *Mixed Communities in England: A US Perspective on evidence and policy prospects*. York: JRF. Silverman, E., Lupton, R. and Fenton, A (2005) *A Good Place for Children: Attracting and retaining families in inner urban mixed income communities*. Coventry and York: Chartered Institute of Housing and Joseph Rowntree Foundation.

inequality rather than arguments about the revitalisation of cities.¹⁷ Social mix in neighbourhoods is seen as less important if there are narrower gaps between people and indeed this argument has been used as a criticism of place-based policies.¹⁸

These and other arguments around the rationales for different kinds of policy approach are beyond the scope of this report but nevertheless can help explain interest in the typology and how it might be read. We return to policy implications in the conclusion.

What the typology does not tell us

When interpreting the findings from the typology analysis, it is worth bearing in mind some of the factors that it does not take into account.

First, the typology does not in itself measure the volume of movement or 'churn'. Very high churn or very low churn may be problematic in different ways, but this is not measured in the typology itself where it is the overall balance between movements into or on to areas of similar, lower or greater deprivation which is of interest.

To give an indication of the extent of 'churn', across deprived neighbourhoods in Greater Manchester in 2001,¹⁹ the median number of people moving in to each LSOA in the year before the Census was 150, or 9.6% of the resident population, while 160 or 10.2% moved out.²⁰ In 2011 median flows were similar (150 moved in and 160 moved out, again equivalent to around 10% of the resident population). In each year there was a considerable range, for instance in-movers in 2001 ranged from 3% to 40% of the resident population. Appendix A compares this data across the typology groups. Among the 10% most deprived neighbourhoods in Greater Manchester there was a not clear pattern to moves in and out. Gentrifier and transit types tended to have slightly higher in-movement than other types in 2004, but this was not the case in 2015 (see Appendix A).

Students are particularly associated with high churn neighbourhoods, and they have particular patterns of moves which help explain the classification of these neighbourhoods in the typology. Students may move from relatively affluent neighbourhoods where their parents' homes are located into relatively deprived neighbourhoods. They may also move out to more affluent neighbourhoods. Students tend to make up a small proportion (2%) of people in the most deprived LSOAs in GM but in some areas they make up more than half of usual residents (see Appendix B).

Second, because the typology is based on the characteristics of neighbourhoods of origin and destination in England, only moves within England can be included. This means that moves taking place between English neighbourhoods and areas in the devolved nations (Wales,

¹⁷ Lupton, R. (2013) What is Neighbourhood Renewal For? People, Place and Policy, 7(2) pp. 66-72

¹⁸ Cheshire, P. (2007) Segregated Neighbourhoods and Mixed Communities: A Critical Analysis. York; Joseph Rowntree Foundation.

¹⁹ Those neighbourhoods among the 10% most deprived nationally. Figures are rounded to nearest 10

²⁰ These figures do not take into account moves within the local area; half of the 10% most deprived neighbourhoods also saw 22 or more people moving within the area in 2004.

Northern Ireland and Scotland) are not taken into account.²¹ In addition, the functional role that some neighbourhoods play as the first foothold for international migrants is not taken into consideration. These other migration patterns are clearly important in relation to neighbourhood change and should be considered alongside the typology.

Third, the typology does not tell us anything about the characteristics of neighbourhoods or whether they have got better or worse over time, including the characteristics of people who did not move. For this, other data such as the Index of Multiple Deprivation, administrative or Census data would need to be used. We demonstrate some of this analysis in Section 4. For further discussion of some of the conceptual and data limitations see Robson et al. (2009).

²¹ Separate indices of multiple deprivation are estimated for each country, preventing comparison of deprivation rank between these areas

PART 2: DESCRIBING TYPOLOGY RESULTS FOR 2004 AND 2015

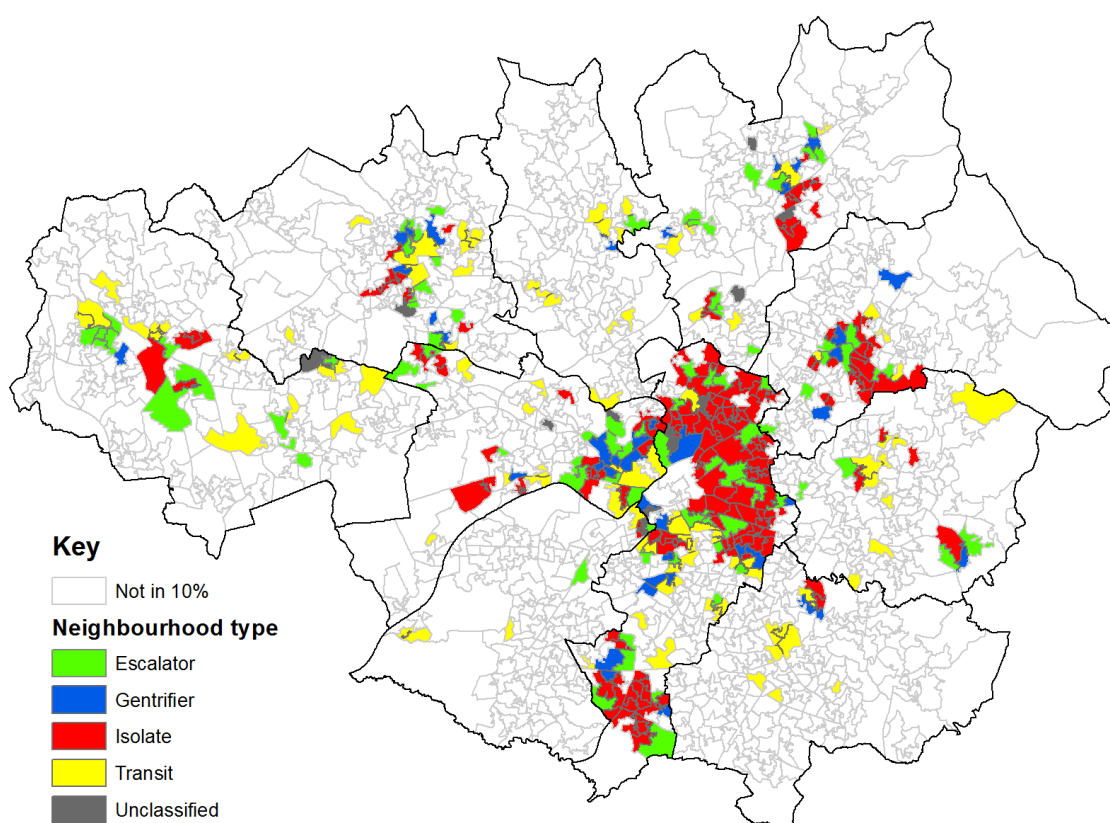
2.1 How neighbourhoods are distributed within the typology

The distribution of neighbourhoods by type in Greater Manchester in 2004

As indicated earlier, this report focusses on neighbourhoods in the top 10% and 1% of the Indices of Multiple Deprivation nationally, in order to understand changes underway in areas with more substantial challenges and which might be first in line for additional policy interventions.²² The typology results reported here are for the 'relaxed' version of the typology.

In 2004, Greater Manchester had 396 LSOAs in the top 10% nationally (24% of neighbourhoods). Of these 41% were classified as isolate, 25% transit, 21% escalator and 10% gentrifier, with the remainder unclassified. 66 LSOAs were in the top 1% nationally, of which a larger proportion were classified isolate (64%). 21% were classified as escalator neighbourhoods, while gentrifiers and transits were rare among these most deprived neighbourhoods (accounting for 6% each).

Map 2.1: GM LSOAs among 10% most deprived nationally by residential typology type 2004



Source: neighbourhood types estimated based on the relaxed approach devised by Robson et al. 2009; drawing on IMD 2004 and Census 2001 data

²² This differs from Robson et al. (2009) and Rae et al. (2016) who both report results for the 20% most deprived neighbourhoods

Map 2.1 shows the uneven distribution of these neighbourhoods around the conurbation. Although there were some very deprived neighbourhoods in most of Greater Manchester's local authority areas, including significant numbers in Oldham, Rochdale, Bolton, Salford and Wigan, the majority were in Manchester itself – in North and East Manchester and in the Wythenshawe area of South Manchester. Isolate neighbourhoods were particularly concentrated in Manchester, as Table 2.1 shows.

Table 2.1: Local authority level distribution of neighbourhoods in most deprived 10% nationally by type, Greater Manchester 2004

	Escalator	Gentrifier	Isolate	Transit	Unclassified	Total
Bolton	11	6	10	10	1	38 (10%)
Bury	1	1	0	9	0	11 (3%)
Manchester	24	12	92	24	3	155 (39%)
Oldham	7	4	19	4	0	34 (9%)
Rochdale	10	5	11	6	3	35 (9%)
Salford	13	8	19	11	2	53 (13%)
Stockport	0	1	2	8	0	11 (3%)
Tameside	4	1	4	9	0	18 (5%)
Trafford	2	0	2	4	1	9 (2%)
Wigan	11	1	4	15	1	32 (8%)
Total	83 (21%)	39 (10%)	163 (41%)	100 (25%)	11 (3%)	396 (100%)

Among the more deprived authorities, isolates were the most common neighbourhood type. This was particularly the case in Manchester (by a long way) but also in Oldham, Salford and Rochdale. While Manchester (Local Authority) contained 39% of the Greater Manchester (GM) neighbourhoods that were in the 10% most deprived nationally, 92 (56%) of the 163 isolate neighbourhoods in GM were in Manchester (LA).

Table 2.2: Local authority level distribution of neighbourhoods in most deprived 1% nationally by type, Greater Manchester 2004

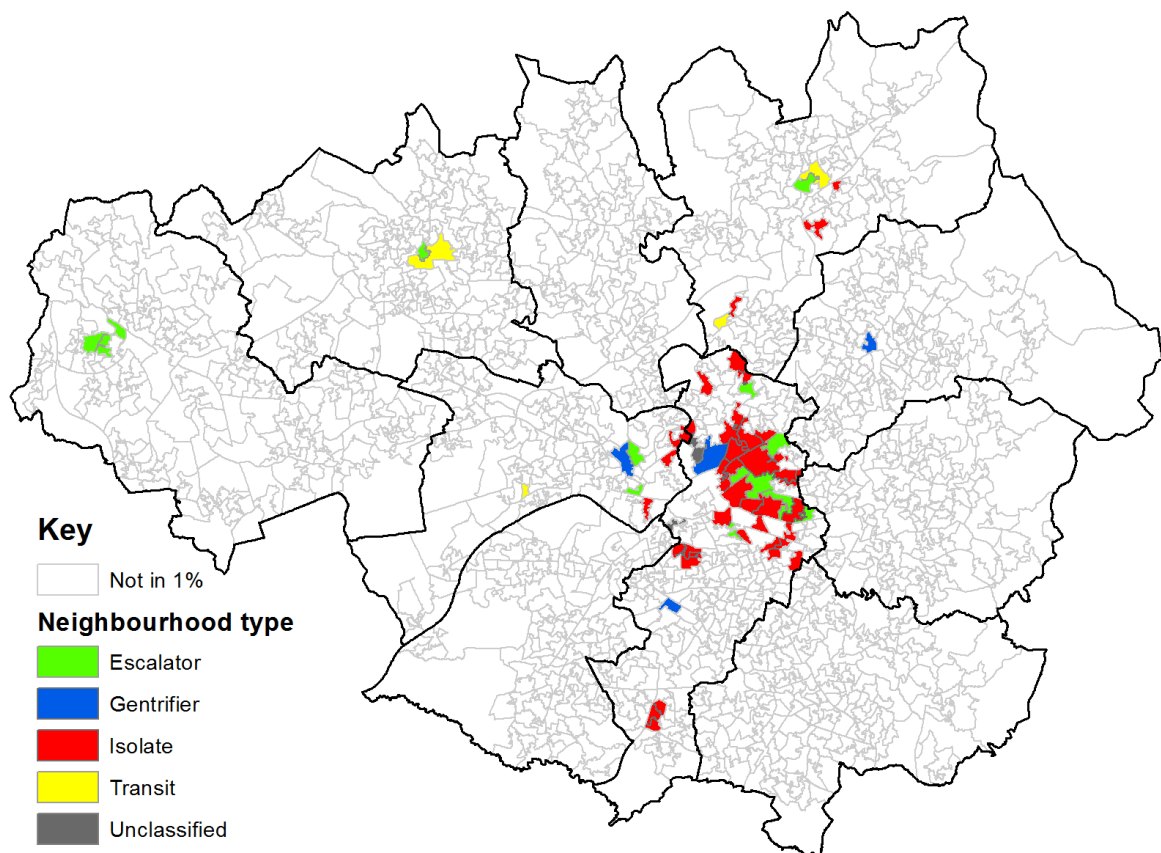
	Escalator	Gentrifier	Isolate	Transit	Unclassified	Total
Bolton	1	0	0	1	0	2 (3%)
Bury	0	0	0	0	0	0 (0%)
Manchester	7	2	35	0	2	46 (70%)
Oldham	0	1	0	0	0	1 (2%)
Rochdale	1	0	3	2	0	6 (9%)
Salford	2	1	4	1	0	8 (12%)
Stockport	0	0	0	0	0	0 (0%)
Tameside	0	0	0	0	0	0 (0%)
Trafford	0	0	0	0	0	0 (0%)
Wigan	3	0	0	0	0	3 (5%)
Total	14 (21%)	4 (6%)	42 (64%)	4 (6%)	2 (3%)	66 (100%)

A connected point is that isolate neighbourhoods tended to be in clusters, whereas neighbourhoods of other types tended to be on the edge of clusters or surrounded by less

deprived neighbourhoods. As Robson et al. (2009) acknowledge, since most residential moves are made over a short distance, a neighbourhood surrounded by other deprived neighbourhoods is much more likely to be classified 'isolate' than a neighbourhood with a similar level of deprivation and pattern of moves which is surrounded by a more diverse group of neighbourhoods.

In Greater Manchester, the neighbourhoods among the 1% most deprived nationally were particularly concentrated in inner East Manchester, with other pockets in areas on the edge of Rochdale town centre, and inner Salford (see Map 2.2). Isolate neighbourhoods made up 70% of these extremely deprived neighbourhoods, and four-fifths (83%) of the isolates in Greater Manchester were in the city of Manchester.

Map 2.2: GM LSOAs among 1% most deprived nationally by residential typology type 2004



Source: neighbourhood types estimated based on the relaxed approach devised by Robson et al. 2009; drawing on IMD 2004 and Census 2001 data

By way of comparison, we also show the picture for 2004 for London and for Leeds City Region (Tables 2.3 and 2.4). Maps for these cities are in Appendix C. Overall, Leeds had fewer neighbourhoods than Manchester in the top 10% (304, or 17% of all neighbourhoods), but a similar distribution across the typology – with 46% classed as isolate, 22% transit, 19% escalator and 9% gentrifier. Only 31 neighbourhoods were in the top 1% nationally, of which 22 were classified isolate (71%).

Deprived neighbourhoods were also unevenly distributed across the Leeds City Region (LCR). Particular concentrations were to be found in central Leeds (32% of all the deprived neighbourhoods), in Bradford (31%) and parts of Kirklees and Barnsley (11% each), whereas there were no neighbourhoods among the 10% most deprived nationally in Craven, Harrogate, York, or Selby. As in Greater Manchester, isolate neighbourhoods were generally in clusters and were concentrated in the urban centres of Leeds (39% of isolates compared with 33% of all deprived neighbourhoods) and Bradford (40% of isolates compared with 31% of all deprived neighbourhoods). Isolates were also the most common neighbourhood type in Barnsley.

31 neighbourhoods in Leeds City Region were in the top 1% most deprived nationally of which, as in GM, the majority were isolates (22 or 71%). 29 of these extremely deprived neighbourhoods were in Bradford or Leeds.

Table 2.3: Local authority level distribution of neighbourhoods in most deprived 10% nationally by type, Leeds City Region 2004

	Escalator	Gentrifier	Isolate	Transit	Unclassified	Total
Barnsley	8	2	13	10	1	34 (11%)
Bradford	16	6	56	11	4	93 (31%)
Calderdale	6	2	2	4	1	15 (5%)
Craven	0	0	0	0	0	0 (0%)
Harrogate	0	0	0	0	0	0 (0%)
Kirklees	9	3	6	15	0	33 (11%)
Leeds	15	10	54	17	4	100 (33%)
Selby	0	0	0	0	0	0 (0%)
Wakefield	3	5	9	9	3	29 (10%)
York	0	0	0	0	0	0 (0%)
Total	57 (19%)	28 (9%)	140 (46%)	66 (22%)	13 (4%)	304 (100%)

For London, the picture was very different. A smaller proportion of neighbourhoods were among the 10% most deprived nationally and relatively few were isolate neighbourhoods (17%). The majority (53%) were transit neighbourhoods, where the majority of moves in/ out are to/from less deprived neighbourhoods.

Table 2.4: Comparing the number of neighbourhoods in the most deprived 10% nationally by type, three city regions 2004

	Escalator	Gentrifier	Isolate	Transit	Unclassified	Total
Greater Manchester	83	39	163	100	11	396
Proportion of LSOAs	21%	10%	41%	25%	3%	
Leeds City Region	57	28	140	66	13	304
Proportion of LSOAs	19%	9%	46%	22%	4%	
Greater London	90	33	79	245	15	462
Proportion of LSOAs	20%	7%	17%	53%	3%	

As Table 2.4 shows, the number of isolate neighbourhoods in London was half that in Greater Manchester. The maps in Appendix C show that many of the neighbourhoods that featured among the 10% most deprived nationally were to be found in the Inner East of the city region.

This particularly applied to gentrifier, escalator and isolate neighbourhoods with transit areas scattered more widely across the region. There were particular concentrations of isolate areas in Hackney (27) and Tower Hamlets (29).²³

The different pattern in London may be explained by the more variegated pattern of housing development and high density of housing in large parts of London. Deprived neighbourhoods in northern cities are often areas of low density social housing that replaced Victorian 'slum' dwellings or accommodated urban expansion, or inner urban neighbourhoods that the better-off have never occupied or have left. The socio-economic geography is very distinctly marked. By contrast, in inner London especially, it is more common for low income neighbourhoods to be adjacent to high income neighbourhoods and for individual neighbourhoods to have pockets of high income terraces alongside low income social housing estates. This is a historic pattern partly attributable to higher density development²⁴ but by 2004 it had already been extended through the gentrification of parts of inner London. Local moves were therefore more likely to be between neighbourhoods of different levels of deprivation than they were in Leeds city region or Greater Manchester. Hence the dominance of the 'transit' type of neighbourhood in London. London had only 3 neighbourhoods in the top 1% of the IMD nationally in 2004.

The distribution of neighbourhoods by type in Greater Manchester in 2015

Table 2.5: Local authority level distribution of neighbourhoods in most deprived 10% nationally by type, Greater Manchester 2015 (and change 04-15)

	Escalator	Gentrifier	Isolate	Transit	Unclassified	Total
Bolton	5(-6)	5(-1)	11(1)	15(5)	0(-1)	36(-2)
Bury	0(-1)	1(0)	1(1)	10(1)	0(0)	12(1)
Manchester	11(-13)	11(-1)	71(-21)	22(-2)	0(-3)	115(-40)
Oldham	10(3)	3(-1)	13(-6)	5(1)	1(1)	32(-2)
Rochdale	11(1)	3(-2)	15(4)	9(3)	0(-3)	38(3)
Salford	6(-7)	7(-1)	3(-16)	26(15)	1(-1)	43(-10)
Stockport	2(2)	1(0)	1(-1)	13(5)	0(0)	17(6)
Tameside	3(-1)	2(1)	1(-3)	17(8)	1(1)	24(6)
Trafford	0(-2)	0(0)	0(-2)	4(0)	0(-1)	4(-5)
Wigan	2(-9)	2(1)	3(-1)	19(4)	1(0)	27(-5)
Total ²⁵	50 (14%)	35 (10%)	119 (34%)	140 (40%)	4 (1%)	348
<i>Total in 2004</i>	83	39	163	100	11	396
<i>Difference 04-15</i>	-33	-4	-44	40	-7	-48

Source: neighbourhood types estimated based on the relaxed approach devised by Robson et al. 2009; change calculated by comparing aggregate figures for neighbourhoods among the 10% most deprived nationally in 2004 with the total for 2015.

²³ LA breakdown not given as numbers are small for many boroughs. Available on request from authors

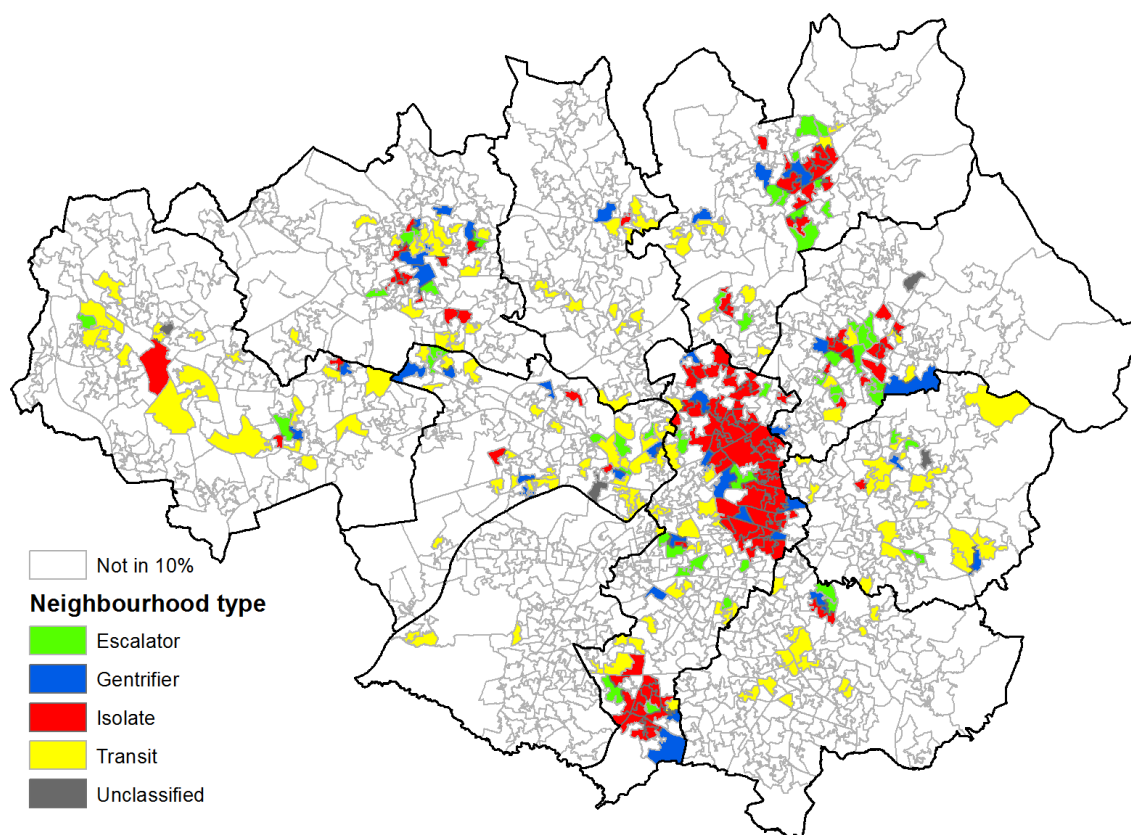
²⁴ In 2001, the LA with the highest population density in GM was Manchester at 34 persons per hectare. Almost all London Boroughs exceeded this. For illustrative comparison, Hackney's population density was 106 persons per hectare, Tower Hamlets 99.

²⁵ Row percentages show proportion of all GM neighbourhoods in each of the neighbourhood types in 2015

Maps 2.3 and 2.4 show the same patterns mapped for 2015. One important point to note is that there were fewer GM neighbourhoods in the top 10% and 1% nationally in 2015 than 2004 (348 in the top 10% in 2015, compared to 396 in 2004, and 41 in the top 1% compared to 66) and this relative improvement affected some boroughs more than others. We are therefore looking at a smaller set of neighbourhoods in 2015.

Of the 348 neighbourhoods in the top 10% in 2015, 140 were transits (40%) followed by 119 isolates (at 34%), 50 escalators (14%) and 35 gentrifiers (10%), and the remainder were unclassified. Comparing the number of neighbourhoods of each type in 2004 to 2015, there were far fewer escalator neighbourhoods in 2015 compared to 2004 (down 33 to 50).

Map 2.3: GM LSOAs among 10% most deprived nationally by residential typology type 2015



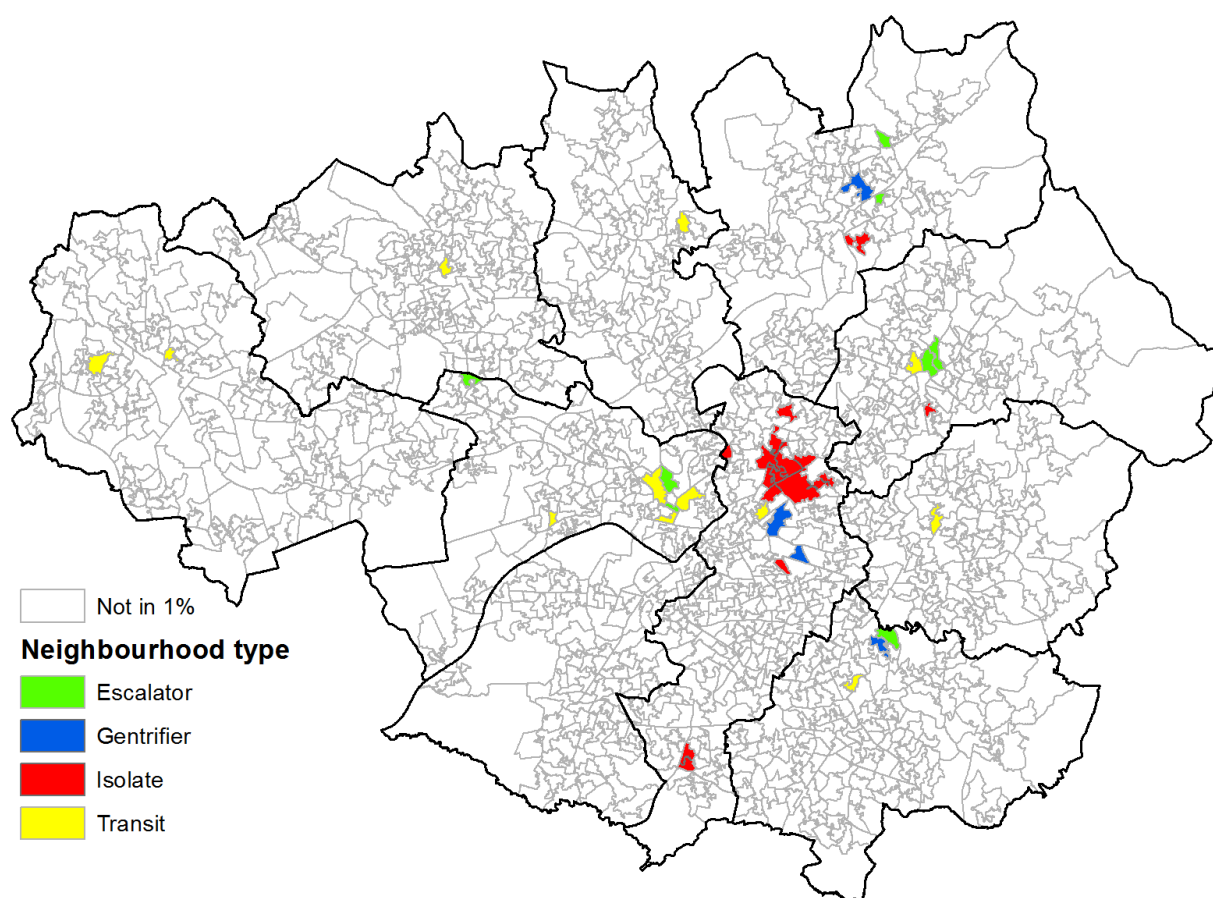
The number of isolate neighbourhoods also fell (down 44 to 119), largely driven by falls in Manchester and Salford. Meanwhile, the number of transit areas increased, particularly in Salford and Tameside. By comparison with 2004, transits rather than isolates made up the largest grouping in 2015.

Among the 1% most deprived neighbourhoods, a similar pattern is seen. There was a large fall in the number of isolates (down by 25), with a more modest increase in the number of transit areas (up 8 to 12 in 2015). The fall in isolate areas was largely confined to Manchester local authority, which had 20 fewer isolate areas in 2015. However, isolates still formed the largest group among the most deprived 1% (17), followed by transit areas (at 12 in 2015).

Table 2.6: Local authority level distribution of neighbourhoods in most deprived 1% nationally by type, Greater Manchester 2015 (and change 04-15)

	Escalator	Gentrifier	Isolate	Transit	Unclassified	Total
Bolton	0(-1)	0(0)	0(0)	1(0)	0(0)	1(-1)
Bury	0(0)	0(0)	0(0)	1(1)	0(0)	1(1)
Manchester	0(-7)	2(0)	15(-20)	1(1)	0(-2)	18(-28)
Oldham	2(2)	0(-1)	1(1)	1(1)	0(0)	4(3)
Rochdale	2(1)	1(1)	1(-2)	0(-2)	0(0)	4(-2)
Salford	3(1)	0(-1)	0(-4)	4(3)	0(0)	7(-1)
Stockport	1(1)	1(1)	0(0)	1(1)	0(0)	3(3)
Tameside	0(0)	0(0)	0(0)	1(1)	0(0)	1(1)
Trafford	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Wigan	0(-3)	0(0)	0(0)	2(2)	0(0)	2(-1)
Total²⁶	8 (20%)	4 (10%)	17 (41%)	12 (29%)	0 (0%)	41
<i>Total in 2004</i>	14	4	42	4	2	66
<i>Difference 04-15</i>	-6	0	-25	8	-2	-25

Map 2.4: GM LSOAs among 1% most deprived nationally by residential typology type 2015



²⁶ Row percentages show proportion of all GM neighbourhoods in each of the neighbourhood types in 2015

In Leeds City Region, between 2004 and 2015, there was no overall fall in the number of neighbourhoods that featured among the 10% and 1% most deprived nationally. In fact the number of neighbourhoods increased slightly at the 10% threshold, 312 compared to 304 in 2004. In addition, 31 neighbourhoods were in the 1% most deprived nationally, the same as in 2004. That is not to say that there was no improvement in relative deprivation ranking at neighbourhood level but while some moved up, others took their place. Around 39% of the neighbourhoods that were in the 1% most deprived in 2004 were still there in 2015, a similar proportion to GM (40%).

In Leeds City Region, isolate areas still dominated in 2015 (135 areas, accounting for 43%) followed by transit (33%), gentrifier (14%) and escalator areas (8%). Compared to 2004 there were 13 fewer escalator areas and 37 more transit areas. The number of gentrifiers was relatively stable (down by 3 to 25). In contrast, the number of isolates fell by only 5 due to increases in Bradford and Leeds which offset falls in Barnsley, Kirklees and Wakefield. Isolates remained the largest grouping in 2015 with 135 (43%) of the 312 neighbourhoods among the 10% most deprived falling into that category.

Table 2.7: Local authority level distribution of neighbourhoods in most deprived 10% nationally by type, Leeds City Region 2015 (and change 04-15)

	Escalator	Gentrifier	Isolate	Transit	Unclassified	Total
Barnsley	5(-3)	5(3)	2(-11)	19(9)	1(0)	32(-2)
Bradford	10(-6)	6(0)	68(12)	17(6)	0(-4)	101(8)
Calderdale	5(-1)	1(-1)	4(2)	7(3)	2(1)	19(4)
Craven	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Harrogate	0(0)	0(0)	0(0)	1(1)	0(0)	1(1)
Kirklees	2(-7)	3(0)	2(-4)	16(1)	0(0)	23(-10)
Leeds	18(3)	10(0)	59(5)	16(-1)	2(-2)	105(5)
Selby	0(0)	0(0)	0(0)	1(1)	0(0)	1(1)
Wakefield	4(1)	0(-5)	0(-9)	26(17)	0(-3)	30(1)
York	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Total	44 (14%)	25 (8%)	135 (43%)	103 (33%)	5 (2%)	312
<i>Total in 2004</i>	<i>57</i>	<i>28</i>	<i>140</i>	<i>66</i>	<i>13</i>	<i>304</i>
<i>Difference 04-15</i>	<i>-13</i>	<i>-3</i>	<i>-5</i>	<i>37</i>	<i>-8</i>	<i>8</i>

Changes in the number of escalator and isolate neighbourhoods were even more pronounced in London. As in GM there was an overall fall in the number of neighbourhoods among the 10% most deprived nationally, down to 274 neighbourhoods (188 fewer than in 2004). While there were falls across the typology categories, the reductions were particularly concentrated among escalator and isolate areas. There were just 10 areas that were classed as isolates out of 274 neighbourhoods among the 10% most deprived nationally in 2015, compared to 79 in 2004. There were 62 fewer escalator areas in 2015 compared to 2004, down to 28 neighbourhoods. As in 2004, the overwhelming majority of areas were classed as 'transits' in 2015 (222, 81% of all

the neighbourhoods in London that were among the 10% most deprived). By 2015 no neighbourhoods in London were in the 1% most deprived nationally.

Table 2.8: Comparing the number of neighbourhoods in the most deprived 10% nationally by type, three city regions 2015

	Escalator	Gentrifier	Isolate	Transit	Unclassified	Total
Greater Manchester	50	35	119	140	4	348
<i>Proportion of LSOAs</i>	14%	10%	34%	40%	1%	
Leeds City Region	44	25	135	103	5	312
<i>Proportion of LSOAs</i>	14%	8%	43%	33%	2%	
Greater London	28	10	10	222	4	274
<i>Proportion of LSOAs</i>	10%	4%	4%	81%	1%	

2.2 Describing neighbourhood change using the typology

In this section, we move beyond describing overall patterns to explore how typology classifications changed for specific neighbourhoods. For example, we assess how many neighbourhoods changed from isolates to escalators or gentrifiers, and consider the implications of these transitions.

The neighbourhood types described in the typology invite many interpretations, particularly when looking at change over time. In Table 3.1, we set out a series of hypotheses about what different kinds of changes might mean in terms of the housing market position and IMD ranking of the neighbourhood, in relation to a matrix of neighbourhood types. We then examine the actual number of classification changes in Greater Manchester, with London and Leeds again used for comparison. These hypotheses are offered as a way of making explicit some of the assumptions underpinning the residential mobility typology. They require further testing and qualification, as we show in Part 3 of the paper.

We take the neighbourhoods in Greater Manchester that were among the 10% most deprived nationally in 2004 and assess their residential mobility 'type' in 2015, assuming they remain among the 10% most deprived. Table 3.2 shows the data for Greater Manchester, looking at neighbourhoods among the 10% most deprived according to the IMD in 2004. Note that the table also shows a count of neighbourhoods that moved out of the top 10% alongside changes in typology.

In 2015, GM had 348 neighbourhoods among the 10% most deprived neighbourhoods, compared with 396 in 2004, and 41 neighbourhoods among the 1% most deprived, compared to 66 in 2004. Of the 60 neighbourhoods that were among the 1% most deprived neighbourhoods in 2004 and which weren't subject to boundary changes, 60% were not in the 1% most deprived in 2015, indicating a significant amount of movement in and out of this category, though 98% were still among the 10% most deprived.

Table 3.1: Some hypotheses about the meaning of changes in type between 2004 and 2015

		Residential move type in 2015				
		Escalator	Gentrifier	Isolate	Transit	Not in 20%
Residential move type in 2004	Escalator	<p>NO CLEAR CHANGE</p> <p>People still able to move in from more or similarly deprived areas and perhaps trade upwards. Neighbourhood perhaps offering a long-term route for lower income residents to 'progress' through the housing market</p>	<p>An apparent switch in the kinds of areas people move in from (more or similarly deprived to less) and the kinds of areas moved on to (less to more deprived)</p>	<p>Going down in the scheme of things? Suggests increased flows into more deprived areas</p>	<p>An escalator no more. Area now attracts more people from less deprived areas. Reduced interaction with higher deprivation areas</p>	<p>A neighbourhood that was offering people a chance to move up in the world has now moved out of 20% most deprived. May still be serving as an 'escalator'</p>
	Gentrifier	<p>An apparent switch in the kinds of areas people move in from (less to more or similarly deprived) and the kinds of areas moved on to (more to less deprived)</p>	<p>NO CLEAR CHANGE</p> <p>Gradual 'gentrification'. Lower income residents still moving on to more deprived areas and people moving in from less deprived</p>	<p>Fewer resident moves in from less deprived areas. A short-lived development? Area apparently not as attractive as it was</p>	<p>People now more likely to move on to less deprived areas. It may be that those moving out now have more discretion over where they move on to</p>	<p>An area classified as a gentrifier in 2004 that no longer features among the 20% most deprived in 2015</p>
	Isolate	<p>More interaction with less deprived areas through people moving on - could be a sign of area becoming more attractive, with higher house prices facilitating moves to less deprived neighbourhoods</p>	<p>New developments? Suggests area has become more attractive to people from less deprived areas</p>	<p>NO CLEAR CHANGE</p> <p>Persistent 'isolation', limited interaction with less deprived areas continues</p>	<p>A complete switch in the kinds of areas people move in from and on to (more to less deprived)</p>	<p>An apparent switch in fortunes. Residential moves apparently not a key factor, or there may have been a shift in the profile of residential moves since 2004</p>
	Transit	<p>Area becoming more accessible to those from more deprived areas, or less desirable to those in less deprived areas?</p>	<p>More flows to more deprived areas. If this was an area with increasing student or young professional density, changes in the character of the neighbourhood may mean that long-term residents now moving on to other areas?</p>	<p>Total switch in profile of moves - interaction with less deprived areas much reduced</p>	<p>NO CLEAR CHANGE</p> <p>Still in transit. A deprived area that continues to attract people from less deprived areas</p>	<p>No longer in the 20% - flows into and out of less deprived areas may explain some of the improvement in the IMD rank</p>

Table 3.2: Residential mobility type of GM neighbourhoods among 10% most deprived in 2004 and typology classification or IMD ranking in 2015

		2015							
		Escalator	Gentrifier	Isolate	Transit	Un-classified	10-20%	Not in 20%	Total
2004	Escalator	10 (13%)	7 (9%)	20 (26%)	25 (32%)	0 (0%)	13 (17%)	2 (3%)	77
	Gentrifier	2 (6%)	5 (14%)	8 (23%)	12 (34%)	0 (0%)	6 (17%)	2 (6%)	35
	Isolate	19 (12%)	9 (6%)	75 (47%)	18 (11%)	2 (1%)	33 (21%)	2 (1%)	158
	Transit	8 (9%)	9 (10%)	2 (2%)	57 (62%)	1 (1%)	14 (15%)	1 (1%)	92
	Un-classified	2 (18%)	0 (0%)	2 (18%)	4 (36%)	0 (0%)	3 (27%)	0 (0%)	11
	Total	41 (11%)	30 (8%)	107 (29%)	116 (31%)	3 (1%)	69 (18%)	7 (2%)	373

Source: IMD 04, IMD 2015, typology re-drawn based on Robson et al.; excludes those LSOAs subject to boundary change. Proportions are shown in brackets for row totals.

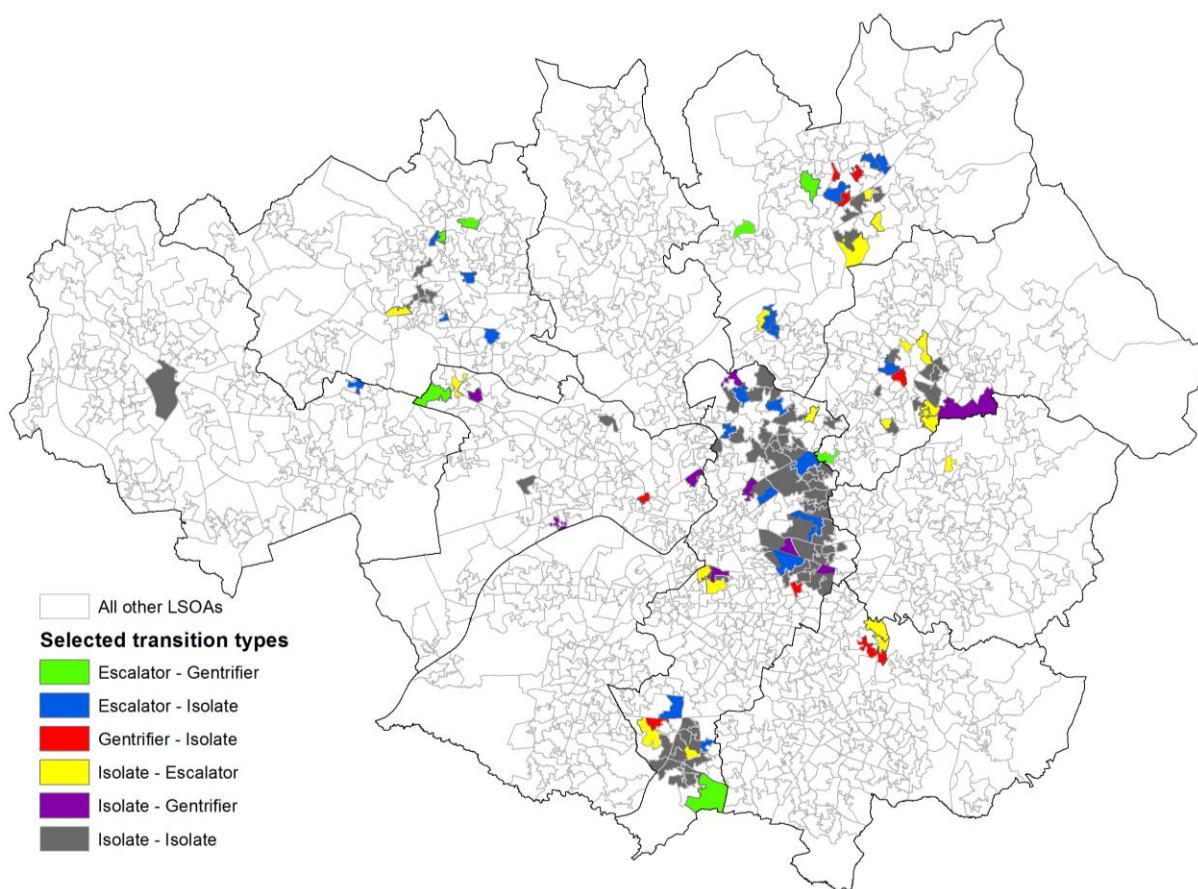
Just under half (47%) of the neighbourhoods among the 10% most deprived nationally that were Isolate in 2004 were also in this category in 2015. Meanwhile, 35 isolate neighbourhoods had an improved ranking in the IMD 2015, equivalent to just over 1 in 5 of the isolate neighbourhoods in 2004.

A small proportion of isolate neighbourhoods became transit, escalator and gentrifier neighbourhoods. It may be that these neighbourhoods were better connected to less deprived neighbourhoods through residential flows in 2015, and were perhaps becoming more attractive to incomers from less deprived areas (in the case of gentrifiers and transits).

Map 3.1 highlights some selected transitions between typology categories. It shows that within the large cluster of deprived neighbourhoods in East and North Manchester, isolate neighbourhoods tended to remain isolate. Meanwhile, the 19 neighbourhoods that moved from being classed as Isolate to escalators were found in outlying areas and on the edges of clusters of deprivation.

At the same time around a quarter of the neighbourhoods that were classed as gentrifiers or as escalators became isolates. 28 neighbourhoods changed in this direction while another 28 isolate neighbourhoods were classed as gentrifiers or escalators in 2015. These neighbourhoods tended to be located alongside clusters of isolate neighbourhoods that remained isolate (Map 3.1). Thus although the overall number of isolates decreases, there is evidence of 'filling in' of clusters of isolate neighbourhoods with newly isolate neighbourhoods, particularly in parts of Manchester and Rochdale.

Map 3.1: Selected transition types for neighbourhoods in GM among the 10% most deprived



Note: Map shows selected transition types covering 138 of 373 neighbourhoods that were among the 10% most deprived nationally in 2004 and which were not subject to boundary change.

Table 3.3: Residential mobility type of Leeds City Region neighbourhoods among 10% most deprived in 2004 and typology classification or IMD ranking in 2015

		2015							Total
		Escalator	Gentrifier	Isolate	Transit	Unclassified	10-20%	Not in 20%	
2004	Escalator	9 (17%)	4 (7%)	15 (28%)	18 (33%)	1 (2%)	7 (13%)	0 (0%)	54
	Gentrifier	3 (12%)	2 (8%)	9 (35%)	8 (31%)	1 (4%)	2 (8%)	1 (4%)	26
	Isolate	13 (9%)	10 (7%)	85 (62%)	14 (10%)	1 (1%)	14 (10%)	0 (0%)	137
	Transit	7 (11%)	5 (8%)	4 (6%)	35 (54%)	1 (2%)	13 (20%)	0 (0%)	65
	Un-classified	1 (8%)	0 (0%)	7 (54%)	4 (31%)	0 (0%)	1 (8%)	0 (0%)	13
	Total	33 (11%)	21 (7%)	120 (41%)	79 (27%)	4 (1%)	37 (13%)	1 (0%)	295

Source: IMD 04, IMD 2015, typology re-drawn based on Robson et al.; excludes those LSOAs subject to boundary change. Proportions are shown in brackets for row totals.

In Leeds City region, the pattern is remarkably similar (see Table 3.3) though the isolate category appears more 'sticky' with 62% of neighbourhoods in this category in both 2004 and 2015.²⁷

However, in London, a different pattern emerges. Here, only 3 % of isolate neighbourhoods in the 10% most deprived nationally on the IMD 2004 remained isolate in 2015, with 31% becoming 'transit' areas. In terms of transitions between the different functional roles that a neighbourhood might play, the dominant pattern was for all types of neighbourhoods that remained among the 10% most deprived neighbourhoods (including isolates) to become transit neighbourhoods, with the majority of moves in and out coming from less deprived neighbourhoods. Across all types, over half of the neighbourhoods were no longer in the bottom 10% of the distribution in 2015.

Table 3.4: Residential mobility type of Greater London neighbourhoods among 10% most deprived in 2004 and typology classification or IMD ranking in 2015

		2015							Total
		Escalator	Gentrifier	Isolate	Transit	Unclassified	10-20%	Not in 20%	
2004	Escalator	4 (5%)	0 (0%)	1 (1%)	21 (24%)	2 (2%)	51 (59%)	7 (8%)	86
	Gentrifier	1 (3%)	1 (3%)	0 (0%)	9 (29%)	0 (0%)	15 (48%)	5 (16%)	31
	Isolate	5 (7%)	2 (3%)	2 (3%)	23 (31%)	0 (0%)	37 (49%)	6 (8%)	75
	Transit	6 (3%)	3 (1%)	1 (0%)	91 (42%)	1 (0%)	102 (47%)	15 (7%)	219
	Un-classified	3 (21%)	0 (0%)	0 (0%)	3 (21%)	0 (0%)	7 (50%)	1 (7%)	14
	Total	19 (4%)	6 (1%)	4 (1%)	147 (35%)	3 (1%)	212 (50%)	34 (8%)	425

Source: IMD 04, IMD 2015, typology re-drawn based on Robson et al.; excludes those LSOAs subject to boundary change. Proportions are shown in brackets for row totals.

These changes suggest some emerging patterns. The increasing lack of affordability of housing in inner London and the suburbanisation of poverty has meant that formerly deprived neighbourhoods have tended to become more of an option for people moving from and to less poor neighbourhoods. While these trends are much less visible in GM and Leeds, some isolate neighbourhoods have become 'gentrifiers', 'escalators' or 'transits', but equally others have moved in the other direction, tending to add to clusters of isolate neighbourhoods

To examine how these complexities play out in different neighbourhoods and what they might imply for policy, the next section examines some case studies of change in particular types of neighbourhood.

²⁷ The previous section highlighted differing trends between Leeds City Region and Greater Manchester in terms of changes in the overall number of isolates among the 10% most deprived neighbourhoods. Here we are looking at specific changes among LSOAs in the most deprived 10% in 2004 compared to their position and classification in 2015 (covering the 20% most deprived)

PART 3: RELATING THE TYPOLOGY BACK TO NEIGHBOURHOOD DATA

3.1 How typology change relates to demographic change

We have now reviewed how the typology can be used to describe the functional role of deprived neighbourhoods in Greater Manchester, and how the picture varies compared to Leeds City Region and London. In this and the next section we assess the extent to which typology change is associated with other significant change at neighbourhood level.

This section examines changes at neighbourhood-level in greater detail. Focussing on five neighbourhoods that were among the most deprived neighbourhoods in 2004, we assess what was driving changes in the typology class between 2004 and 2015 and whether this was accompanied by changes in other indicators (derived from the Census).

Through these cases we explore whether a change in classification matches our hypotheses about change, but perhaps more importantly, whether it tells us what we would need to know about the neighbourhood in order to make informed policy decisions. The issues raised by the case studies are then considered in relation to the 10% most deprived neighbourhoods in Greater Manchester to give a sense of what can be learned overall from this individual neighbourhood change approach.

A closer look at change in selected neighbourhoods in the 1% most deprived

Selection criteria

In order to understand some of the changes taking place at neighbourhood level over this time period, and how these relate to the typology, we selected five case study areas in Greater Manchester based on:

- a) Whether they were among the 1% most deprived neighbourhoods nationally in 2004;
- b) How their residential mobility type changed between 2004 and 2015. We selected three transition types of particular interest:
 - i. isolate neighbourhoods that were escalators in 2015
 - ii. isolate neighbourhoods that were gentrifiers in 2015
 - iii. escalator neighbourhoods that were isolates in 2015
- c) Whether their 2004 residential mobility classification was non-marginal. We discount those neighbourhoods which would have been classified differently if 10 people had moved in from or out to a different type of area.

Among the 60 neighbourhoods in GM that were in the most deprived 1% of areas in England,²⁸ 26 (43%) were Isolate in both 2004 and 2015, according to the 'relaxed' version of the typology. There were 14 neighbourhoods that were in the categories of interest (isolate-escalator, isolate-gentrifier or escalator-isolate). We then calculated whether any of these neighbourhoods would have been classified differently if 10 people had moved in from or out to a different type of area. This is the equivalent of between 6 and 7% of average moves in or out

²⁸ This excludes those subject to LSOA boundary changes over the period to enable comparison

at neighbourhood level in 2001. This left us with five case study neighbourhoods. Four of the five selected neighbourhoods were in the east of inner Manchester and one was in Rochdale. The '10 person' flow test was used to identify whether a neighbourhood had a distinctive pattern of residential moves. An alternative approach would be to use the 'stringent' version of the typology, discussed briefly in the next section (3.2). All of the five selected areas met the stringent criteria for classification in 2004, but none met the criteria in 2015 i.e. their 2015 typology classification might be considered to be marginal.

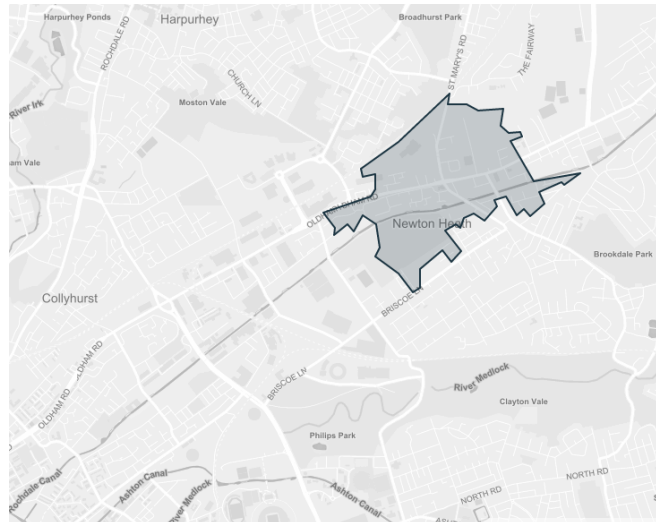
Table 4.1: Neighbourhood case study overview

	Ward area	2004 Rank of IMD score	2015 Rank of IMD score (change)	Typology change 2004 – 2015 (relaxed criteria)
Manchester 011A	Higher Blackley	120	511 (+391)	Escalator - Isolate
Manchester 013C	Ancoats & Clayton	49	399 (+350)	Escalator - Isolate
Manchester 020A	Ardwick	6	77 (+71)	Isolate - Gentrifier
Manchester 014B / 054A²⁹	Miles Platting & Newton Heath	44	350 (+306)	Isolate - Gentrifier
Rochdale 012E	Kingsway	170	54 (-116)	Isolate - Escalator

²⁹ While the LSOA name changed between 2001 and 2011, no change in LSOA boundary is recorded by the ONS

Case study 1: A Higher Blackley neighbourhood

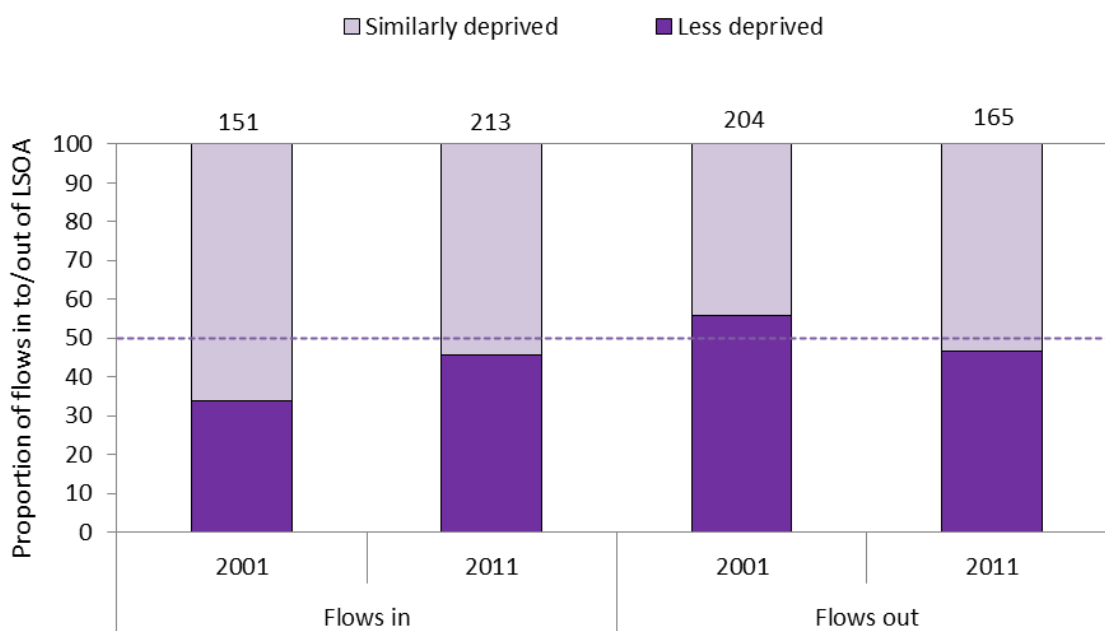
A neighbourhood in Higher Blackley ward, between Newton Heath and Moston in inner East Manchester (LSOA name Manchester 011A). The area saw improvement in its IMD ranking between 2004 and 2015 but its residential mobility type also changed from an 'Escalator' to 'Isolate'.³⁰



Changes in residential mobility, 2001 to 2011

In 2001 the number of people moving out to other English neighbourhoods was greater than the number moving in to the area. But by 2011, and somewhat counter intuitively given its new 'isolate' classification in 2015, significantly more people were moving into the area (60 more moved in in 2011 than in 2001) and fewer people were moving out. Between 2001 and 2011 the resident population increased by almost a third (see Table 4.3 below).

Figure 4.2 Balance of flows into and out of the neighbourhood 2001-2011



Source: IGAU analysis of Census Flow data. Column totals are included at the top of each bar.

The profile of flows also changed over the period. While the majority of flows out were to less deprived areas in 2001, by 2011 moves to similarly deprived areas made up the majority. This led to the area being classed as an 'Isolate' rather than an 'Escalator' and is explained by the

³⁰ Though the neighbourhood does not meet the Robson et al. stringent criteria in 2015

fact that the number of people moving out to less deprived areas fell, while the number moving out to similarly deprived areas was about the same.

There were also changes in the kinds of flows taking place into the neighbourhood (rising flows in from less deprived areas and a fall in flows in from similarly deprived) but these were not substantial enough to change the overall balance of moves. In 2011 as in 2001 the majority of moves in were from similarly deprived areas (54%, compared to 66% in 2001).

Finally, the number of neighbourhoods that people moved to and from was also more diverse in 2011, particularly in terms of the places that people moved in from (more than tripling).

Table 4.2 Residential flows

		2001	2011	Change
Person flows	Moves in	151	213	62
	Moves out	204	165	-39
	Within area	22	32	10
Neighbourhoods moved to/from	LSOAs moved from	31	97	66
	LSOAs moved to	52	80	28

Other changes at neighbourhood-level

Other changes in the characteristics of people and households living in the neighbourhood in the decade to 2011 appear to dwarf the changes we mark in residential flows, though some may also be a function of these flows. First, there was a large increase in the number of people and households living in the area, with the number of usual residents increasing by 33% compared to an average of 10% across the 10% most deprived nationally.³¹ One factor here is that there is a recognised issue with Census 2001 population counts for Manchester, which means part of the population increase may be attributable to an adjustment in the undercount.³² However, other estimates also confirm the overall trend.³³ According to Census data, the number of households increased to a similar degree (by 30%) indicating new or substantial redevelopment of the local housing stock or an increase in multi-household properties.

The housing tenure profile changed in the course of the decade, with a large increase in the number of households living in the private rented sector. In contrast the number in social rented accommodation remained stable while the number living in a home that they at least partly owned increased slightly.

³¹ Estimate for LSOAs among the 10% most deprived nationally in 2004. The estimate is provided as a guide but the average necessarily excludes those areas that experienced boundary change. This is significant because boundary changes often take place because population totals exceed or fall below set population thresholds i.e. the average excludes some areas that saw significant increases or falls in their population

³² The 2001 Census failed to account for between 11,900 and 16,400 addresses in Manchester, an estimated 22,000-30,000 people are thought to be missing across the local authority area. ONS (2004) 2001 Census: Manchester and Westminster Matching Studies: Full Report

³³ Revised Mid-Year Population estimates for the LSOA also indicate a large population increase (up by about 27% between 2002 and 2011)

At the same time, the population became more ethnically diverse. The number of people from Black, Mixed and Asian ethnic backgrounds increased (by 9.5, 3.1 and 2.6 percentage points respectively). While the White British population also increased it did so at a slower rate, hence an overall decline in the proportion of people who were White British (down to 74%). While a relatively small number of people moved to the neighbourhood directly from abroad in 2001 or 2011 (equivalent to less than 1% of usual residents), data on the country of birth of residents indicates a large increase in the number of people living in the area who were born outside the UK (up by 10%).

Table 4.3: Change in selected indicators

		Number			Proportion (%)		
		2001	2011	Change	2001	2011	Change
Population	Population	1506	1995	489	-	-	32.5*
	Households	658	854	196	-	-	29.8*
	Full-time students	43	82	39	2.9	4.1	1.3
	Moves into the area from abroad	5	10	5	0.3	0.5	0.2
Economic activity (aged 16-74) & qualifications (16+)	Employed (excl. FT students)	496	698	202	50.9	53.1	2.2
	Unemployed (excl. FT students)	64	120	56	11.4	14.7	3.2
	Economically inactive (all)	464	595	131	42.6	37.7	-4.8
	Economically inactive - sick or disabled	161	193	32	14.5	13.2	-1.3
	No qualifications	374	569	195	45.3	37.7	-7.5
Tenure (households)	Owner occupiers	195	248	53	29.6	29.0	-0.6
	Social rent	397	409	12	60.3	47.9	-12.4
	Private rent	42	178	136	6.4	20.8	14.5
Ethnicity	White British	1343	1468	125	89.2	73.6	-15.6
	White other	50	64	14	3.3	3.2	-0.1
	Mixed	38	112	74	2.5	5.6	3.1
	Asian	39	104	65	2.6	5.2	2.6
	Black	30	230	200	2.0	11.5	9.5
	Other	6	17	11	0.4	0.9	0.5
Other characteristics	People born abroad	77	310	233	5.1	15.5	10.4
	Aged 50+	395	534	139	26.2	26.8	0.5
	Providing 20 hrs unpaid care	87	111	24	5.8	5.6	-0.2

Source: Census 2001, 2011, IMD 2004, 2015 and Census flow data. * Indicates a percentage change is reported, rather than overall percentage point change as a share of the resident population or households

Finally, the change in residential typology does not appear to be associated with a worsening in the economic situation of residents. There were 200 more people in employment in 2011 compared to 2001, though the number of economically inactive people also increased. While the number of working age residents with no qualifications increased, it fell as a proportion of the population, suggesting that incomers were more likely to have higher qualifications than the resident population. In addition, the IMD ranking of the area improved.

Despite these positive changes, residents continued to face very significant economic problems. Only 53% of working-age residents were in employment and 13% of working age people were inactive due to sickness or disability.

Case study 2: An Ancoats and Clayton neighbourhood

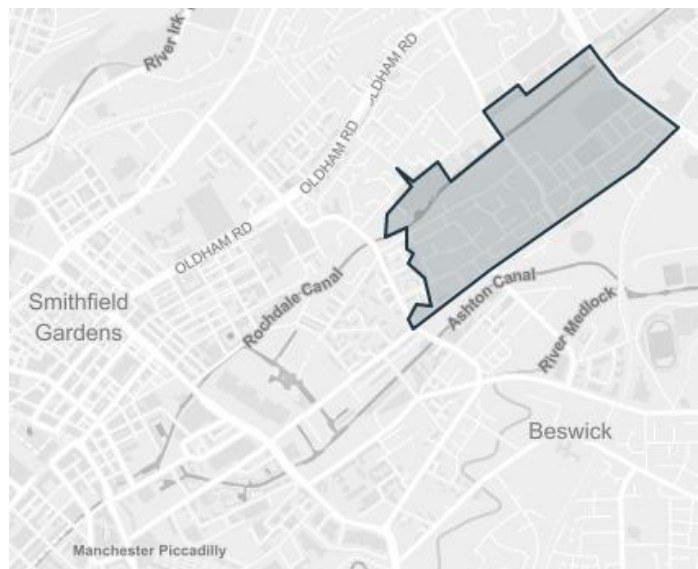
A neighbourhood in Ancoats and Clayton ward in inner East Manchester (LSOA name Manchester 013C). The IMD ranking of the area improved between 2004 and 2015 but the area classification also changed from 'escalator' to 'isolate'.³⁴

Changes in residential mobility 2001 to 2011

More people were moving in to and out of the neighbourhood in 2011 than in 2001, with a particularly large increase in the number of people moving in (around 80 more people in 2011).

The number of people moving out to similarly deprived areas increased while the number of people moving out to less deprived areas decreased. As a result the majority of moves out were to similarly deprived areas in 2011, explaining the change in classification to an 'Isolate' area. The reclassification is therefore linked to increased flows out to similarly deprived areas and fewer moves on to less deprived areas.

There were also changes in the kinds of flows taking place into the neighbourhood. The majority of moves in were still from similarly deprived areas in 2011 (65% of moves in compared to 75% in 2001) but the difference between flows in from similarly and less deprived areas narrowed slightly. So despite its 'isolate' classification, the neighbourhood was actually seeing more people move in from less deprived areas than in 2001. There could be many factors at play here. The increase in flows in from less deprived areas could indicate an area that is actually becoming more attractive, or could be linked to wider changes in IMD ranking (for example, if the IMD rank of closely linked neighbourhoods has improved substantially).



³⁴ Though the neighbourhood does not meet the Robson et al. stringent criteria in 2015

Figure 4.3 Balance of flows into and out of the neighbourhood 2001-2011



Source: IGAU analysis of Census Flow data. Column totals are included at the top of each bar.

Table 4.4 Residential flows

		2001	2011	Change
Person flows	Moves in	96	172	76
	Moves out	158	169	11
	Within area	12	32	20
Neighbourhoods moved to/from	LSOAs moved from	23	71	48
	LSOAs moved to	39	65	26

Short-distance moves within the same neighbourhood also increased, reaching over 30 moves in 2011. Finally, as with the previous case study area, this 'isolate' neighbourhood was connected in to a wider range of neighbourhoods in 2011 through residential moves than a decade earlier. The number of neighbourhoods that people moved in from more than tripled to around 70.

Other changes at neighbourhood-level

In contrast to the other case study areas in inner east Manchester, the number of people living in the neighbourhood did not increase between 2001 and 2011 and the number of households actually fell (by 11%). Despite relative stability in the total resident population, there were some marked changes in the ethnic mix of the neighbourhood. The number of people of Black ethnicity increased (by 160) from a small base, while the number of people who identified as White British fell (by 230). There were also smaller increases in the Asian and Mixed ethnicity population. The number of people living in the neighbourhood who were born abroad also increased, accounting for 17% of the resident population. In terms of housing, there was a large

fall in the number of people living in social rent (down by over a 100) while private renting only increased slightly and the number of owner-occupiers was stable.

Links into the labour market improved with the employment rate increasing by 9.5 percentage points. Economic inactivity also fell, partly accounted for by a fall in the number of people with a health condition. Yet challenges remained – more residents had no qualifications in 2011 than 2001 and it was still the case that less than half of working age residents were employed (49%).

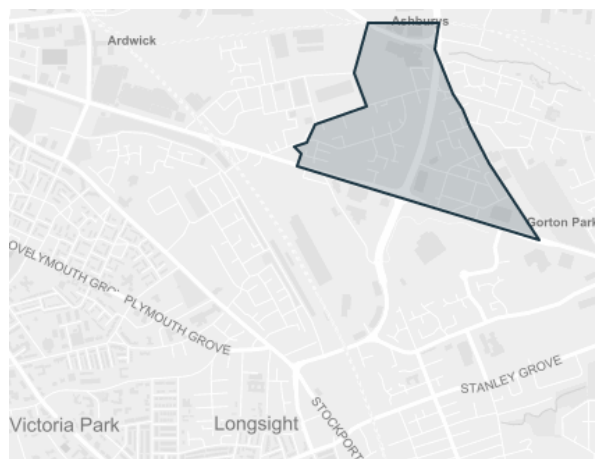
Table 4.6: Change in selected indicators

		Number			Proportion (%)		
		2001	2011	Change	2001	2011	Change
Population	Population	1504	1480	-24	-	-	-1.6%
	Households	740	661	-79	-	-	-10.7%
	Full-time students	26	71	45	1.7%	4.8%	3.1%
	Moves into the area from abroad	13	*	*	0.9%	*	*
Economic activity (aged 16-74) & qualifications (16+)	Employed (excl. FT students)	386	456	70	39.7%	49.2%	9.5%
	Unemployed (excl. FT students)	63	80	17	14.0%	14.9%	0.9%
	Economically inactive (all)	561	470	-91	53.9%	42.2%	-11.7%
	Economically inactive - sick or disabled	177	146	-31	16.1%	14.1%	-2.1%
	No qualifications	302	491	189	28.7%	45.6%	16.9%
Tenure (households)	Owner occupiers	161	163	2	21.8%	24.7%	2.9%
	Social rent	510	408	-102	68.9%	61.7%	-7.2%
	Private rent	38	77	39	5.1%	11.6%	6.5%
Ethnicity	White British	1282	1051	-231	85.2%	71.0%	-14.2%
	White other	76	57	-19	5.1%	3.9%	-1.2%
	Mixed	41	65	24	2.7%	4.4%	1.7%
	Asian	47	109	62	3.1%	7.4%	4.2%
	Black	30	192	162	2.0%	13.0%	11.0%
	Other	27	6	-21	1.8%	0.4%	-1.4%
Other characteristics	People born abroad	119	256	137	7.9%	17.3%	9.4%
	Aged 50+	440	366	-74	29.3%	24.7%	-4.5%

Note: * indicates a flow count below 5 has been suppressed to comply with the conditions of use

Case study 3: An Ardwick neighbourhood

A neighbourhood in Ardwick ward in East Manchester (LSOA name Manchester 020A). The neighbourhood was ranked the 6th most deprived in England in 2004 but its relative ranking had improved by 2015. Its residential mobility type also changed, moving from an 'Isolate' to 'Gentrifier'.³⁵

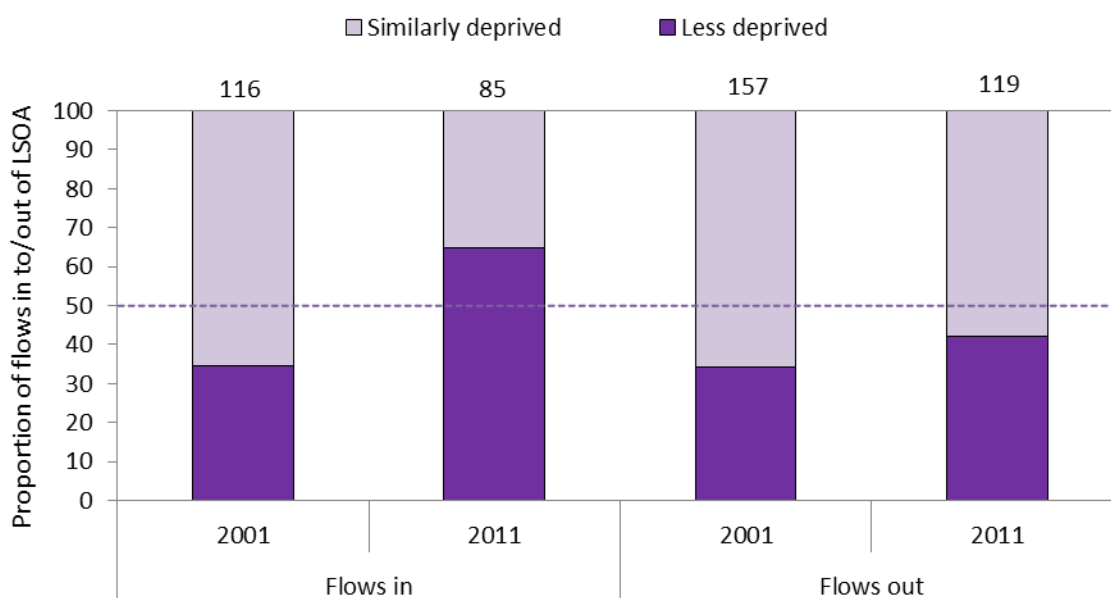


Changes in residential mobility 2001 to 2011

In both 2001 and 2011 there were more people leaving the area than there were moving in. However, the profile of moves in changed over this period, with the number of people moving in from similarly deprived neighbourhoods falling while the number moving in from less deprived areas increased slightly. As a result, moves in from similarly deprived areas made up just a third of all moves in in 2011 (from 66% in 2001), leading to the change in type. The reclassification is largely attributable to reduced interaction with similarly deprived areas, rather than increased interaction with less deprived areas.

One explanation could be the limited availability of housing options for people to move on to, or it could be linked to changes in the IMD ranking of neighbourhoods of origin/destination.

Figure 4.4 Balance of flows into and out of the neighbourhood 2001-2011



Source: IGAU analysis of Census Flow data. Column totals are included at the top of each bar.

The neighbourhood was connected in to a wider range of neighbourhoods in 2011 through residential moves than a decade earlier. The number of neighbourhoods that people moved in

³⁵ Though the neighbourhood does not meet the Robson et al. stringent criteria in 2015

from and on to more than doubled over the period.

Table 4.7 Residential flows

		2001	2011	Change
Person flows	Moves in	190	160	-30
	Moves out	147	162	15
	Within area	15	*	*
Neighbourhoods moved to/from	LSOAs moved from	44	98	54
	LSOAs moved to	36	75	39

Note: * indicates a flow count below 5 has been suppressed to comply with the conditions of use

Other changes at neighbourhood-level

Table 4.8: Change in selected indicators

		Number			Proportion (%)		
		2001	2011	Change	2001	2011	Change
Population	Population	1001	1362	361	-	-	36.1%
	Households	529	587	58	-	-	11.0%
	Full-time students	45	80	35	4.5%	5.9%	1.4%
	Moves into the area from abroad	*	15	*	*	1.1%	*
Economic activity (aged 16-74) & qualifications (16+)	Employed (excl. FT students)	270	351	81	38.6%	43.0%	4.3%
	Unemployed (excl. FT students)	49	96	47	15.4%	21.5%	6.1%
	Economically inactive (all)	428	441	13	54.4%	45.3%	-9.1%
	Economically inactive - sick or disabled	139	127	-12	17.0%	13.5%	-3.5%
	No qualifications	439	449	10	36.8%	45.5%	8.7%
Tenure (households)	Owner occupiers	101	95	-6	19.1%	16.2%	-2.9%
	Social rent	372	401	29	70.3%	68.3%	-2.0%
	Private rent	33	79	46	6.2%	13.5%	7.2%
Ethnicity	White British	833	861	28	83.2%	63.2%	-20.0%
	White other	70	66	-4	7.0%	4.8%	-2.1%
	Mixed	36	77	41	3.6%	5.7%	2.1%
	Asian	23	105	82	2.3%	7.7%	5.4%
	Black	34	225	191	3.4%	16.5%	13.1%
	Other	4	28	24	0.4%	2.1%	1.7%
Other characteristics	People born abroad	100	320	220	10.0%	23.5%	13.5%
	Aged 50+	402	358	-44	40.2%	26.3%	-13.9%
	Providing 20 hrs unpaid care	87	82	-5	4.7%	6.0%	1.3%

Nonetheless census data indicate significant changes in the composition of the neighbourhood over the course of the decade. The population increased by over a third (36%) between 2001 and 2011³⁶ but the number of households did not keep pace with this increase in the population, suggesting more large families. The ethnic mix of the neighbourhood also changed, with a large increase in people identifying as Black (up by nearly 200) and Asian (up by 80). Relatedly, the number of people who were born abroad also increased, reaching 24% of the resident population.

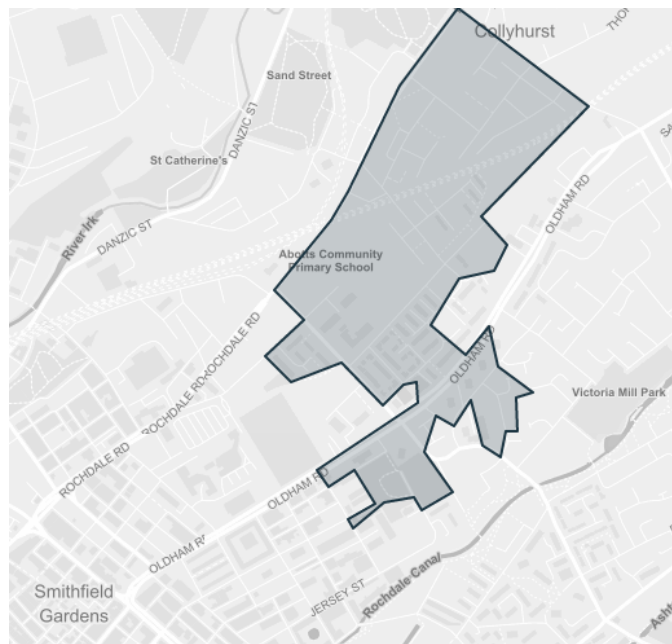
The majority of households were in the social rented sector in both 2001 and 2011, but there was also an increase in the number of private renting households over this period (reaching 14% of all households in 2011). Looking at links into the labour market, the overall employment rate increased (up 4.3 percentage points) but was still low at just 43% of working-age residents. The unemployment rate also increased (up by 6.1 percentage points) over this period, as did the proportion of people with no qualifications.

Case study 4: A Miles Platting and Newton Heath neighbourhood

A neighbourhood in the Miles Platting and Newton Heath ward in inner East Manchester (LSOA name Manchester 054A, or 014B in 2001). The neighbourhood was ranked the 44th most deprived in England in 2004 but its relative ranking had improved by 2015. Its residential mobility type changed from an 'isolate' to 'gentrifier' area.³⁷

Changes in residential mobility 2001 to 2011

There were more people moving in to the area than out of it in 2001 but by 2011 the flows were balanced, close to the average for deprived neighbourhoods in Greater Manchester at 160. The overall profile of moves also changed. Compared to 2001, moves in from similarly deprived areas were lower and moves in from less deprived areas increased, though not as much. This meant that the majority of moves in were from less deprived areas in 2011, leading to the classification change.



Meanwhile, the number of areas that people moved to (and from) increased over the period, part of a wider trend. While people moved in from 36 different neighbourhoods in 2001, this had increased to 75 different areas by 2011. There were few local moves (i.e. within the neighbourhood).

³⁶ Though see the note on issues with population counts from the Census 2001 in the first case study

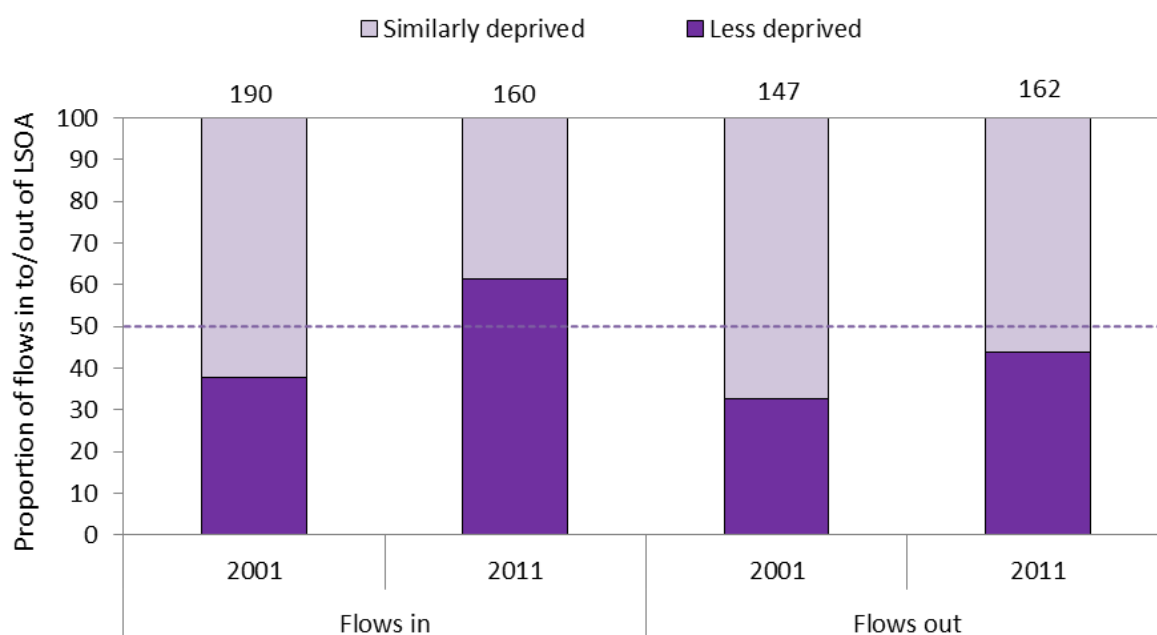
³⁷ The neighbourhood does not meet the Robson et al. stringent criteria in 2015

Table 4.9 Residential flows

		2001	2011	Change
Person flows	Moves in	190	162	-28
	Moves out	147	160	13
	Within area	15	*	*
Neighbourhoods moved to/from	LSOAs moved from	36	75	39
	LSOAs moved to	44	98	54

Note: * indicates a flow count below 5 has been suppressed to comply with the conditions of use

Figure 4.5 Balance of flows into and out of the neighbourhood 2001-2011



Source: IGAU analysis of Census Flow data. Column totals are included at the top of each bar.

Other changes at neighbourhood-level

Despite the change in residential mobility type, this was a neighbourhood facing some significant challenges in 2011. The employment rate for working-age residents was below 50%, despite strong improvement over the period, and unemployment remained high (at 18% of economically active people). The number of people with no qualifications also increased (up by 200) with the result that 40% of those aged 16 or over had no qualifications. Finally, many residents were economically inactive due to ill health (17% of working-age people).

In terms of housing options, a high proportion of households were in social rented accommodation (76% in 2011) but the number of households in this tenure was stable. Meanwhile, there was a relatively small increase in the number of people in private rent (increasing to just under 10% of households). The limited extent of these changes suggests an area that has not seen much development.

Finally, the area also became more ethnically diverse. The number of people from minority ethnic groups living in the neighbourhood grew substantially, as did the number of people who

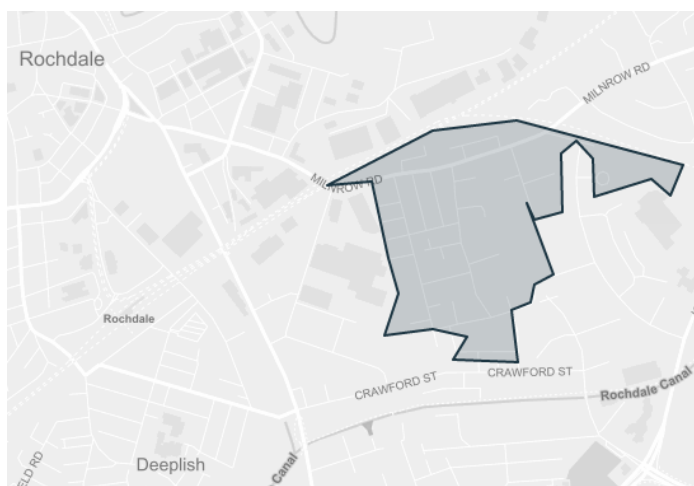
were born abroad. In 2011 12% of people were of Black ethnicity, up from just 4% in 2001. While the flows of people moving into the area from abroad were small (just 12 were recorded in 2011), one in five people living in the area was born abroad (23% of residents) in 2011. While the ethnic diversity of the neighbourhood increased, the number of residents identifying as White British also fell with the result that 65% of residents were in this ethnic group by 2011, down from 80%.

Table 4.10: Change in selected indicators

		Number			Proportion (%)		
		2001	2011	Change	2001	2011	Change
Population	Population	1357	1481	124	-	-	9.1%
	Households	731	767	36	-	-	4.9%
	Full-time students	29	70	41	2.1%	4.7%	2.6%
	Moves into the area from abroad	8	12	4	0.6%	0.8%	0.2%
Economic activity (aged 16-74) & qualifications (16+)	Employed (excl. FT students)	366	511	145	37.8%	48.4%	10.6%
	Unemployed (excl. FT students)	83	114	31	18.5%	18.2%	-0.2%
	Economically inactive (all)	560	496	-64	53.6%	40.8%	-12.8%
	Economically inactive - sick or disabled	216	190	-26	19.8%	16.5%	-3.3%
	No qualifications	274	477	203	28.7%	40.1%	11.4%
Tenure (households)	Owner occupiers	80	92	12	10.9%	12.0%	1.1%
	Social rent	586	586	0	79.9%	76.4%	-3.5%
	Private rent	25	75	50	3.4%	9.8%	6.4%
Ethnicity	White British	1091	961	-130	80.4%	64.9%	-15.5%
	White other	74	81	7	5.5%	5.5%	0.0%
	Mixed	37	79	42	2.7%	5.3%	2.6%
	Asian	61	140	79	4.5%	9.5%	5.0%
	Black	49	171	122	3.6%	11.5%	7.9%
	Other	42	49	7	3.1%	3.3%	0.2%
Other characteristics	People born abroad	151	339	188	11.2%	22.9%	11.7%
	Aged 50+	397	375	-22	29.3%	25.3%	-3.9%
	Providing 20 hrs unpaid care	87	67	-20	3.8%	4.5%	0.8%

Case study 5: A Kingsway neighbourhood

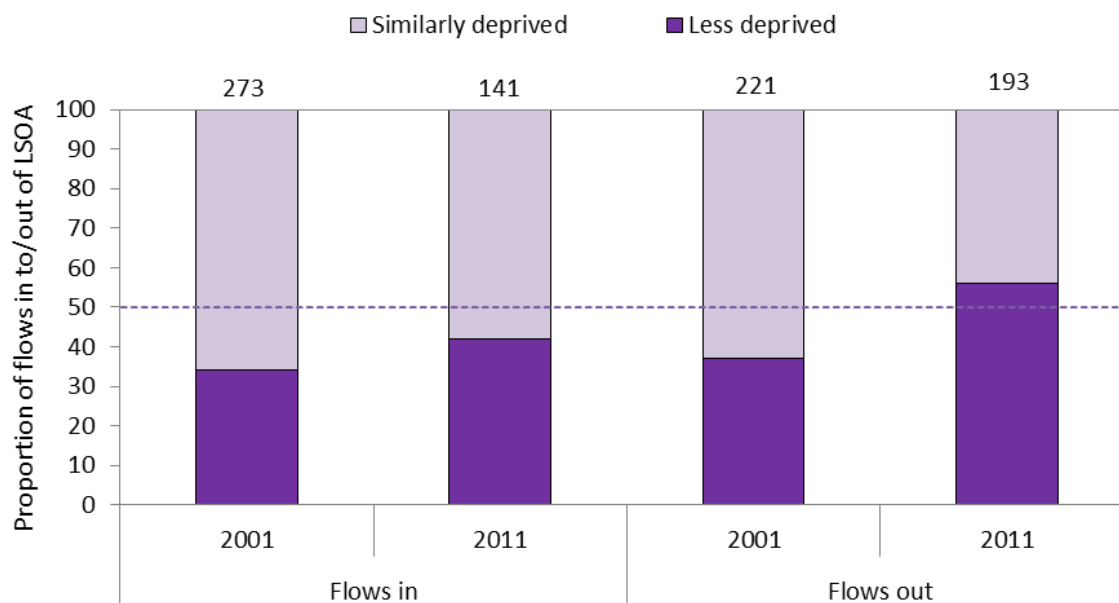
A neighbourhood in the Kingsway ward near the centre of Rochdale (LSOA name Rochdale 012E). The relative ranking of the neighbourhood on the IMD worsened between 2004 and 2015. In 2015 the neighbourhood was ranked 54th most deprived in England. Its residential mobility type changed from an 'Isolate' to 'Escalator'.³⁸



Changes in residential mobility 2001 to 2011

The large flows taking place into and out of the neighbourhood dropped off between 2001 and 2011, though flows out were still relatively high (at 190 people in 2011). The profile of flows out also changed, with an increasing proportion of people moving out to less deprived areas.

Figure 4.6 Balance of flows into and out of the neighbourhood 2001-2011



Source: IGAU analysis of Census Flow data. Column totals are included at the top of each bar.

The category change from 'isolate' to 'escalator' is explained more by a large drop in the number of people moving out to similarly deprived areas (over 50 fewer) than by an increase in people moving out to less deprived areas. There may be many factors at work here, including rising rents in areas that would previously have been accessible to those on low incomes, or

³⁸ Though the neighbourhood does not meet the Robson et al. stringent criteria in 2015

reduced availability of social housing or changes in the circumstances of potential movers, meaning they are less able to make 'upwards' moves.

Flows into the area also changed. In 2011 there were almost 100 fewer people moving in from similarly deprived areas. However, as there were such large flows in to the area to start with, and as flows in from less deprived areas also fell, the majority of people moving were still coming from similarly deprived areas in 2011.

One distinct feature of residential flows in this area is the high number of within neighbourhood moves that were taking place in both 2001 and 2011. In 2011 51 people moved within the neighbourhood, this compares to fewer than 5 within area moves in two of the other case study areas (the Miles Platting and Newton Heath, and Ardwick neighbourhoods), though the two other areas also had relatively high number of moves (32 within area moves in the Higher Blackley and Ancoats and Clayton case study areas). The high number of internal moves may indicate families moving locally, perhaps to find larger homes or splitting off to form new households nearby. The overall number of households fell between 2001 and 2011 (see below) while the resident population was relatively stable, indicating a trend toward larger households.

Table 4.11: Residential flows

		2001	2011	Change
Person flows	Moves in	273	141	-132
	Moves out	221	193	-28
	Within area	42	51	9
Neighbourhoods moved to/from	LSOAs moved from	46	56	10
	LSOAs moved to	34	56	22

Other changes at neighbourhood-level

In 2001 White British people made up the majority of local residents (at 57%) though with a large Asian population (36% of residents). By 2011 the Asian population made up the largest ethnic group (45%), in large part due to a fall in the number of White British people (nearly 300 fewer) but also through an increase in people identifying as Asian (150 more). There was also an increase in the number of people identifying as Black (increasing by 90). While there were relatively few moves into the neighbourhood directly from abroad, the foreign-born increased by almost 130 over this period and 29% of residents were foreign-born in 2011.

The housing options available to residents changed little over the period. There was a fall in the number of households in social rent, matching a fall in the number of owner-occupiers. This was accompanied by a small increase in private renting households, but overall the number of households living in the area declined by 9%.

The economic position of residents worsened between 2001 and 2011 as the unemployment rate increased and the number of residents with no qualifications also increased. In 2011 45% of working-age residents had no qualifications, compared to 19% of residents in 2001. Meanwhile, the employment rate only improved by one percentage point and the number of residents who

were inactive and long-term sick or disabled increased, reaching 17% of the working-age population in 2011. This picture suggests an area that is increasingly disconnected from the labour market and where residents face significant barriers to employment.

Table 4.12: Change in selected indicators

		Number			Proportion (%)		
		2001	2011	Change	2001	2011	Change
Population	Population	1686	1674	-12	-	-	-0.7%
	Households	693	632	-61	-	-	-8.8%
	Full-time students	48	68	20	2.8%	4.1%	1.2%
	Moves into the area from abroad	9	17	8	0.5%	1.0%	0.5%
Economic activity (aged 16-74) & qualifications (16+)	Employed (excl. FT students)	332	359	27	35.1%	36.1%	1.0%
	Unemployed (excl. FT students)	88	137	49	21.0%	27.6%	6.7%
	Economically inactive (all)	602	591	-11	55.6%	50.1%	-5.5%
	Economically inactive - sick or disabled	151	192	41	13.3%	17.0%	3.7%
	No qualifications	210	473	263	18.5%	41.0%	22.5%
Tenure (households)	Owner occupiers	175	144	-31	25.3%	22.8%	-2.5%
	Social rent	412	379	-33	59.5%	60.0%	0.5%
	Private rent	76	93	17	11.0%	14.7%	3.7%
Ethnicity	White British	964	673	-291	57.2%	40.2%	-17.0%
	White other	65	77	12	3.9%	4.6%	0.7%
	Mixed	44	49	5	2.6%	2.9%	0.3%
	Asian	605	760	155	35.9%	45.4%	9.5%
	Black	10	102	92	0.6%	6.1%	5.5%
	Other	3	13	10	0.2%	0.8%	0.6%
Other characteristics	People born abroad	360	489	129	21.2%	29.2%	8.0%
	Aged 50+	387	350	-37	23.0%	20.9%	-2.0%
	Providing 20 hrs unpaid care	87	85	-2	3.7%	5.1%	1.4%

Applying insights from the case studies to the wider group of deprived neighbourhoods

The preceding case studies have shown that many deprived neighbourhoods in Greater Manchester have undergone profound changes in the course of the last decade. Even though they each focus on a GM neighbourhood that was among the most deprived 1% of neighbourhoods nationally, these were not a homogenous set of areas. Here we briefly

summarise some of our findings and consider the extent to which they apply to GM neighbourhoods among the 10% most deprived nationally.

From the preceding analysis we know that some deprived neighbourhoods have experienced large changes in population size over the last decade. Two of the case study neighbourhoods apparently saw their populations increase by over 30% while in others the population was stable, or declined. The potential for large changes in population size also applies to neighbourhoods among the 10% most deprived nationally. Whilst some saw their population fall by over 1000, others experienced population increases in the order of 2000 more people. It seems likely that population shifts on this scale will be associated with large development or regeneration projects. These kinds of population shifts are particularly confined to the most deprived neighbourhoods: for example, the majority of the LSOAs in GM that had to be split or merged due to population changes between 2001 and 2011 were in the 10% most deprived nationally. Less deprived areas saw far fewer boundary changes.

People moving in to these areas from outside the UK also form part of this picture of population change. Whilst average flows in from abroad are relatively small in our case study areas, the changes we identify in the country of birth of people living in the area suggests that such flows play an important part in neighbourhood change alongside other domestic moves.

The most deprived GM neighbourhoods tended to see an improvement in their IMD ranking between 2004 and 2015. Half of the neighbourhoods in the 10% most deprived improved their ranking by about 400 places or more. Changes in rank were on a smaller scale among the 1% most deprived where half improved by around 300. There were some exceptions to this pattern, as we see across the five case study areas where three of the areas improved their relative ranking by 300 or more, but the IMD ranking for the Kingsway neighbourhood in Rochdale worsened.

Finally, while the typology provides a starting point for understanding the kinds of flows that take place in a particular neighbourhood, we found that in many neighbourhoods there is a relatively even balance between flows from/to less and similarly/more deprived areas. Some of these areas are already identified in the typology as 'unclassified' areas. However it is also important to identify those neighbourhoods where the typology classification is made based on a marginal difference between moves in and/or out of different types. This can be done by applying a 'stringent' version of the typology, or by comparing differences in flows between areas (as we did with the case studies).

In 2001 and focussing on neighbourhoods among the 10% most deprived, 128 neighbourhoods (32%) would have been in a different typology group if up to 10 people who moved in from a similarly deprived area had instead moved in from a less deprived area, and vice versa.³⁹ The same applies to 2011, when 113 neighbourhoods (32%) would have been classed differently. This means that small changes in the overall number of neighbourhoods in each type may not be particularly significant.

³⁹ Neighbourhoods may be categorised within the typology using different approaches, one stringent and one more 'relaxed'. These calculations are based on the typology as formatted under the 'relaxed' definition.

Furthermore, when a neighbourhood's typology classification at two time points is of interest the potential for the classification to be 'marginal' at one of the time points increases. Overall 50% of neighbourhoods had closely matched flows from (or to) less and similarly/more deprived areas in 2001 or 2011, or in both years.⁴⁰ The fact that an area that changed classification between 2004 and 2015 might therefore have only experienced a small change in the overall pattern of flows underscores the need to look in more detail at the processes underway in these neighbourhoods. On this basis, the stringent approach to classifying neighbourhoods within the typology may be preferred. Section 3.2 briefly considers how the picture changes when we apply this more stringent classification approach.

⁴⁰ Of those neighbourhoods which did not experience boundary changes 2001 – 2011.

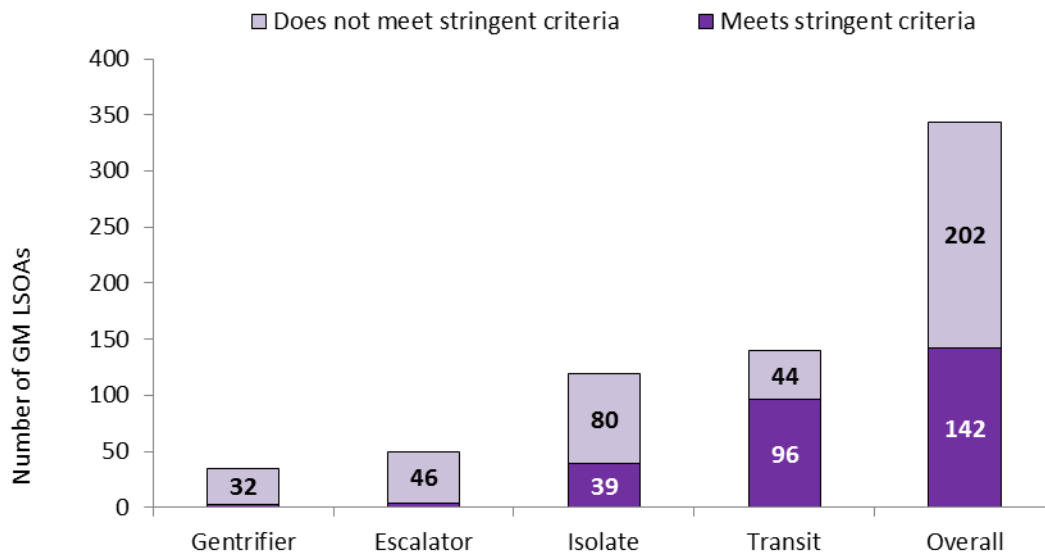
3.2 Identifying neighbourhoods which meet the stringent criteria

Compared to the relaxed version of the typology, the 'stringent' version leaves a large number of neighbourhoods unclassified (48% of all LSOAs in England in 2015). This version can be used to identify neighbourhoods which are associated with more of a distinctive pattern of residential moves.

Applying the 'stringent' criteria for classifying deprived neighbourhoods based on residential flows we find that in 2015:

- 59% of neighbourhoods in Greater Manchester that were among the 10% most deprived are not classified. This is higher than the proportion of deprived areas that are unclassified in the stringent version across England as a whole (48%) and compares to 1% of GM areas using the 'relaxed' approach.
- Just 4 areas met the conditions set for classification as an 'escalator' area, where moves in were mostly taking place from more or similarly deprived areas and moves out were mainly to less deprived areas.
- Just 3 areas met the conditions set for classification as a 'gentrifier' area, where moves in were mostly taking place from less deprived neighbourhoods and moves out were mainly taking place to more or similarly deprived neighbourhoods;

Figure 4.1 Neighbourhood residential mobility types in 2015 compared for 'relaxed' and 'stringent' versions



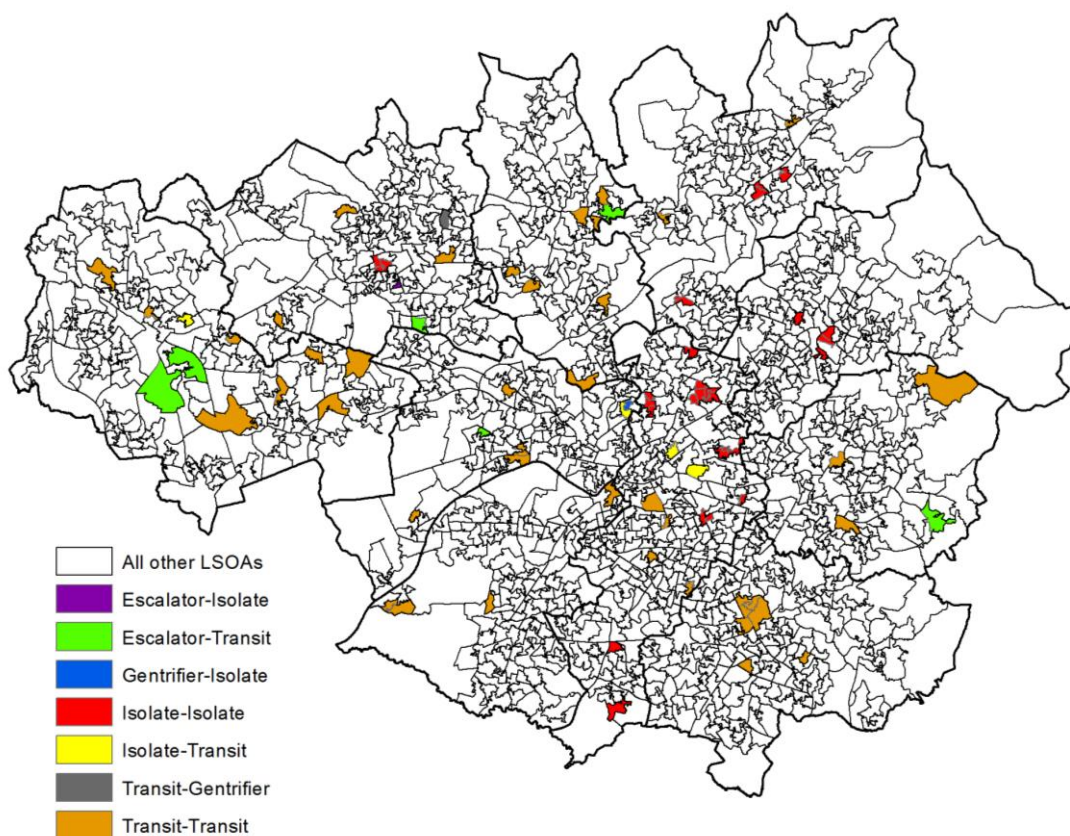
Note: excludes 4 LSOAs that were unclassified in both versions of the typology; neighbourhoods ranked among the 10% most deprived nationally

Map 4.1 shows those areas that met the stringent criteria in 2004 and 2015. It also identifies the typology group for each year. There were 80 neighbourhoods which met the stringent criteria in both 2004 and 2015 and therefore might be said to show a clear pattern of residential moves at both time points. Half of these (40) were 'transit' type neighbourhoods at both points in time. A further 27 neighbourhoods were 'isolate' at both points in time and these were to be found

across Bolton, Oldham, Rochdale and Manchester, though with the usual relative concentration in the North of Manchester.

This suggests there are many neighbourhoods that do not display a clear profile of moves in both years, or at least a pattern of moves distinctive enough to place them in one of the four categories specified within the typology. It should be noted that the 'stringent' version specified here is one alternative version of the residential mobility typology; it is not necessarily better than the 'relaxed' version as its value will depend on the kinds of questions that are being posed. The point is that the typology can help to describe the circumstances of a particular neighbourhood in terms of residential mobility, but there is a case for using it in conjunction with other data to understand the challenges facing different neighbourhoods. Those looking to identify areas which are strongly associated with a particular functional role may therefore apply this 'stringent' version, as specified by Robson et al. (2009), or other approaches (such as that used to identify case study areas in the previous section) to ensure that the classification is robust.

Map 4.1 Greater Manchester residential mobility types, 2004 -2015, LSOAs meeting stringent criteria only



Note: Data for LSOAs that were not subject to boundary change between 2001 and 2011 and which met stringent criteria.

The final section draws together the findings from the previous chapters and reflects on their implications.

Section 4: Conclusion

This report extends considerably existing analysis of the 'Robson typology' of the functional roles of deprived neighbourhoods in Greater Manchester, including a comparison with Leeds City Region and Greater London, a focus on change over time between the early 2000s and early 2010s, and a forensic look at neighbourhoods which have moved between categories within the typology.

The analysis contributes to our understanding of what underpins change in typology classifications and how those changes relate to other observable changes that might be considered important in policy terms. We have also focused on the most deprived neighbourhoods, those among the 10% and 1% most deprived according to the Indices of Multiple Deprivation, which are still numerous in Greater Manchester, in order to provide a sharper focus for policy discussion.

The analysis suggests a number of issues of interpretation, as follows:

- Changes in classification are driven by wider housing market conditions as well as changes taking place in particular neighbourhoods – for example, lower availability of social housing, first time buyer properties or rising rents relative to wages. These could cause a reduction in the number of escalator neighbourhoods, for example.
- Flows in and out of neighbourhoods are complex and resist generalisation. The classification of neighbourhoods is also affected by overall population density and the patterns of development that arise in more and less dense cities. As many residential moves are local, changes in levels of area deprivation generally will impact on the classification of neighbourhoods because the characteristics of neighbourhoods will change, while not fundamentally affecting their housing market function;
- The balance between moves from/to less and similarly/more deprived areas is relatively even in many neighbourhoods, which means that changes in classification may occur due to relatively small changes in the number of people moving;
- International migration is a considerable factor in changes occurring among deprived neighbourhoods but direct international flows are not included in the typology.

These considerations suggest to us that, while the overall patterns relative to other cities are informative, any analysis of neighbourhood change for policy purposes needs to go a lot further to understand the particular dynamics of change in neighbourhoods of concern.

The analysis we have undertaken here suggests that deprived neighbourhoods in Greater Manchester are undergoing other multiple changes, not least in terms of international migration and changes in ethnic mix, at the same time as they face other pressures and opportunities in terms of income, housing and employment. Low qualifications, poor health and caring commitments are all issues that emerge from a close look at these neighbourhoods, and these are often more striking than changes in residential mobility patterns causing changes in classification. Such a lens is more likely to point to strategies for addressing social and economic exclusion in deprived neighbourhoods rather than to those related to neighbourhood remodelling which might be suggested by a focus on the residential mobility typology alone.

The conclusions that can be drawn for policy depend largely on understandings of what it is that policy-makers are trying to achieve.

The findings relating to London suggest that fewer isolate neighbourhoods are likely to occur when there is significant densification of inner urban neighbourhoods, introducing higher income households. This may also have other benefits but there are potential costs too. London's reduction in area deprivation and isolate neighbourhoods has occurred in parallel with a suburbanisation of poverty, rising living costs, rising inequality and continuing high poverty.

At the same time, reductions in area deprivation per se seem to be associated with falling numbers of isolate neighbourhoods, and it might be argued in any case that clusters of poorer neighbourhoods where people mainly move locally are not in themselves problematic provided that the gap in conditions, services and life chances between these neighbourhoods and others is smaller. This would suggest strategies based less on intensive neighbourhood remodelling and more on addressing social and economic exclusion in deprived neighbourhoods.

Either strategy, or a mix, can bring growth and inclusion, but the mechanisms are complex and require a close understanding of the characteristics, functions and inter-relationships of different places. Understanding the opportunities and challenges of the most disadvantaged areas becomes crucial, a process we have begun here and intend to continue.

Appendix A: The extent of churn

Table A1: Between area migration 2000-2001 in the GM neighbourhoods among the 10 most deprived nationally

	Number of LSOAs in category	Median moves in (% of resident population)	Range of in moves (% of resident population)	Median moves out (% of resident population)	Range of out moves (% of resident population)
LSOAs in 10% most deprived	396	150 (9.6)	3-40	160 (10.2)	4-36
Escalator	83	140 (9.1)	4-22	150 (9.9)	5-26
Gentrifier	39	160 (10.3)	5-26	160 (10.6)	5-29
Isolate	163	140 (9.1)	3-21	150 (9.9)	4-18
Transit	100	160 (10.4)	5-40	160 (10.8)	5-36
Unclassified	11	130 (8.6)	6-13	130 (8.6)	6-14
LSOAs in 1% most deprived	66	140 (9.5)	5-16	160 (10.9)	5-16

Table A2: Between area migration 2010-2011 in the most deprived neighbourhoods in GM

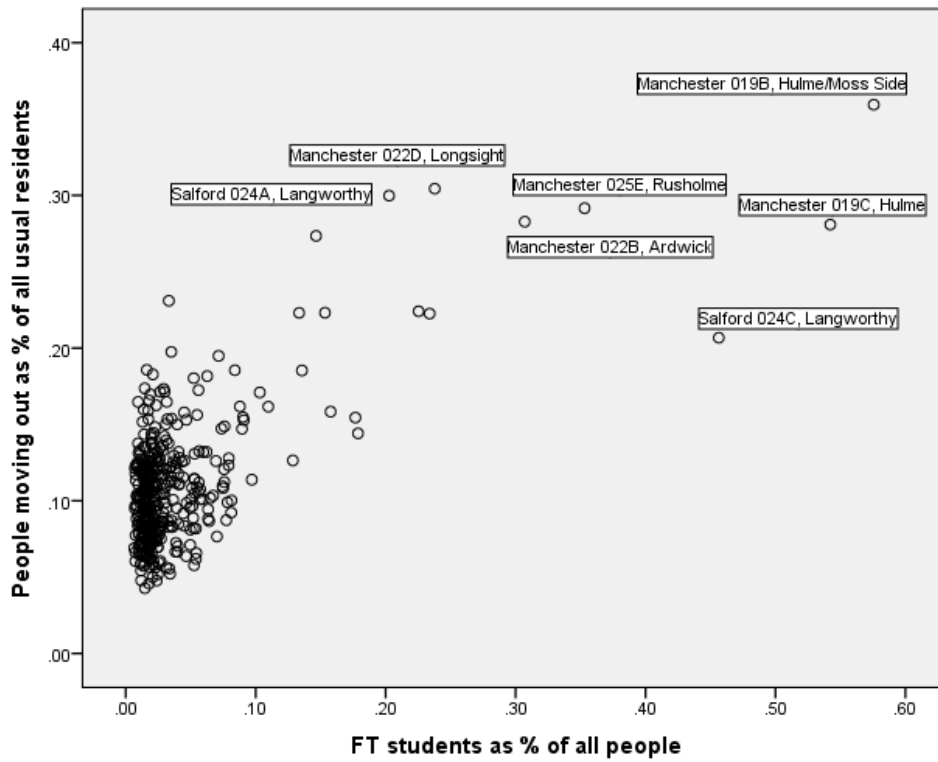
	Number of LSOAs in category	Median moves in (% of resident population)	Range of in moves (% of resident population)	Median moves out (% of resident population)	Range of out moves (% of resident population)
LSOAs in 10% most deprived	348	150 (9.6)	3-34	160 (9.9)	4-44
Escalator	50	150 (9.6)	7-21	160 (9.8)	6-19
Gentrifier	35	160 (10.0)	5-25	170 (10.7)	6-23
Isolate	119	150 (9.1)	3-18	170 (10.1)	4-17
Transit	140	160 (10.0)	4-34	150 (9.7)	5-44
Unclassified	4	150 (10.1)	9-15	160 (10.5)	8-13
LSOAs in 1% most deprived	41	160 (10.0)	6-19	170 (10.6)	7-19

Source: WICID Census Flows data 2001, 2011 and IMD 2004, 2015. Excludes those with no usual address in the year before the Census as well as moves in or out to Wales, Northern Ireland, Scotland or abroad. Numbers rounded to nearest 10 or one decimal place.

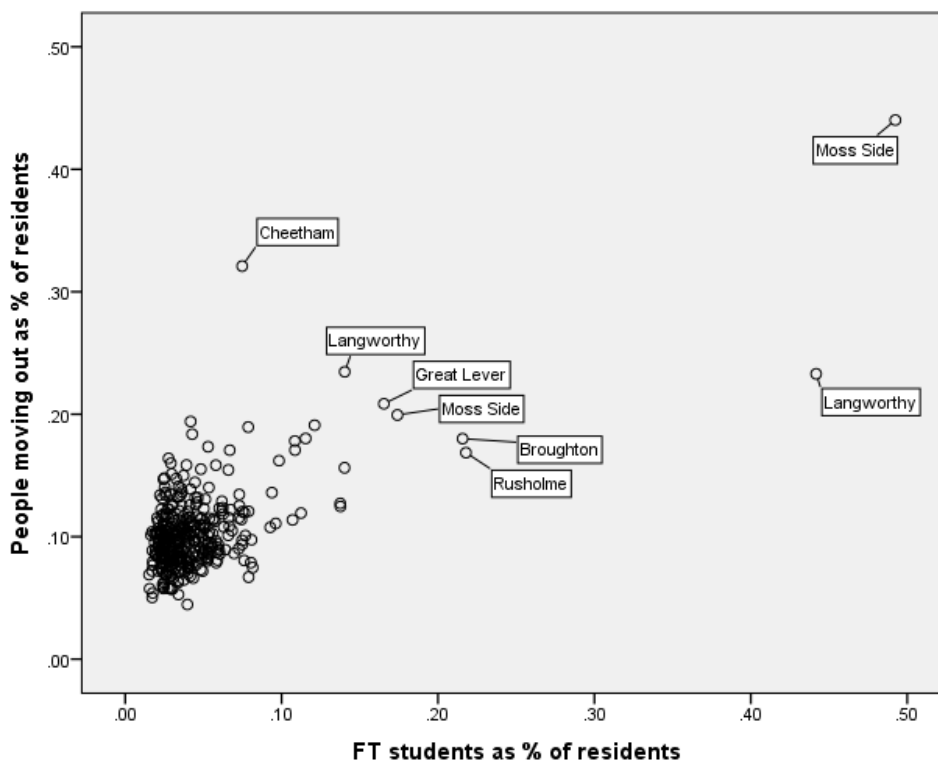
Appendix B: Students and residential flows in deprived neighbourhoods

Graph: The relationship between out migration and student population in the GM LSOAs among the 10% most deprived nationally

2001

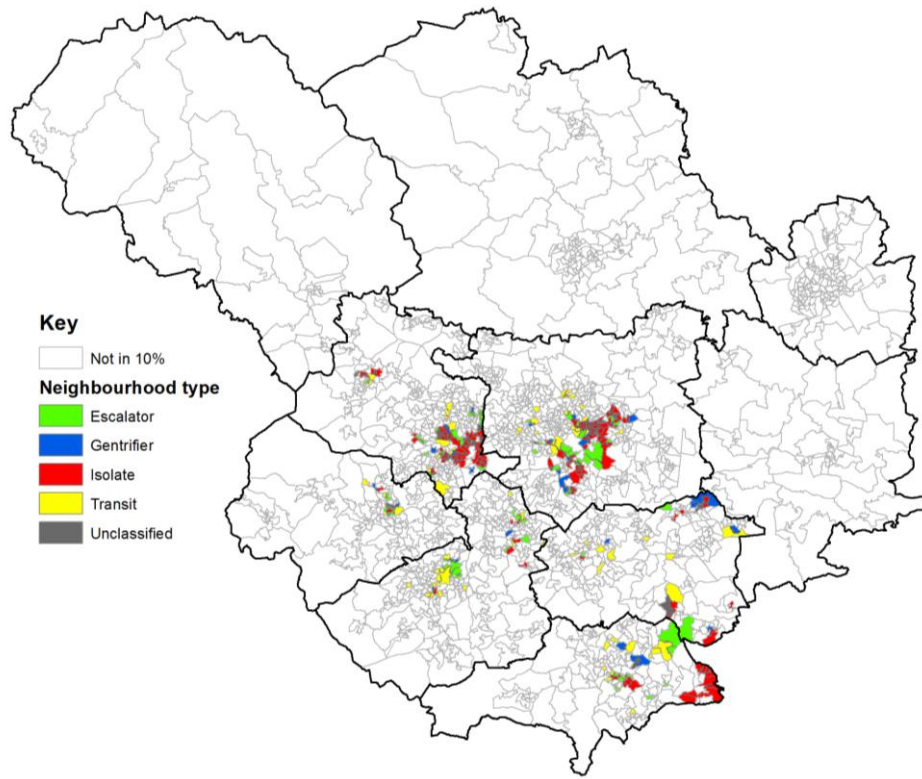


2011

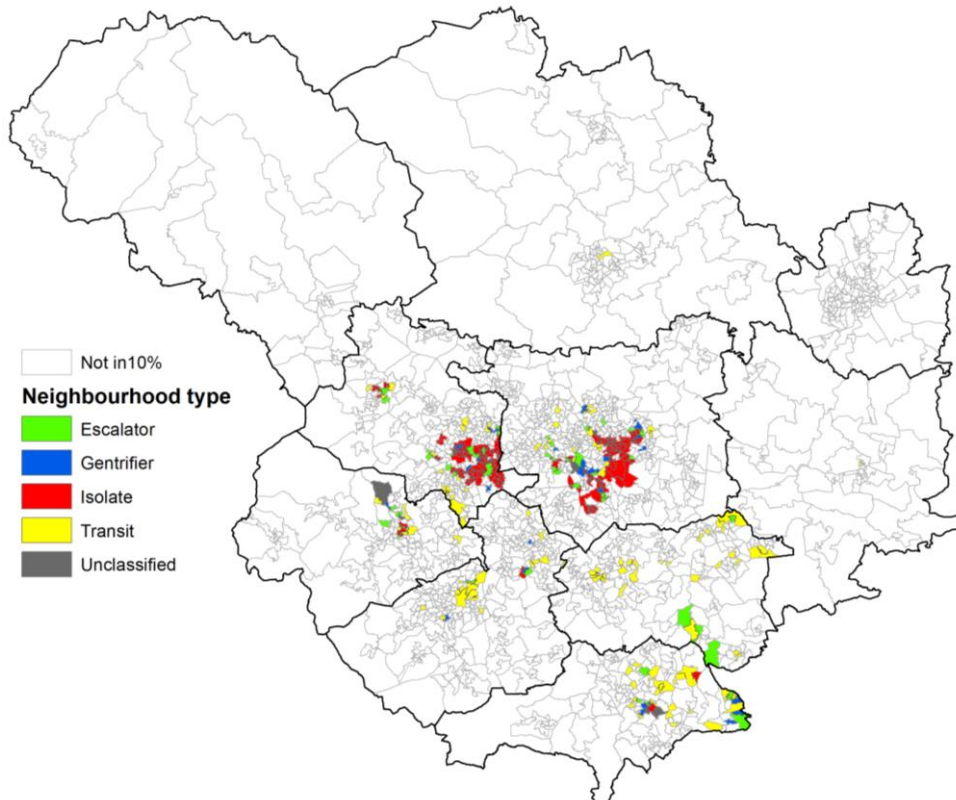


Appendix C: Additional maps

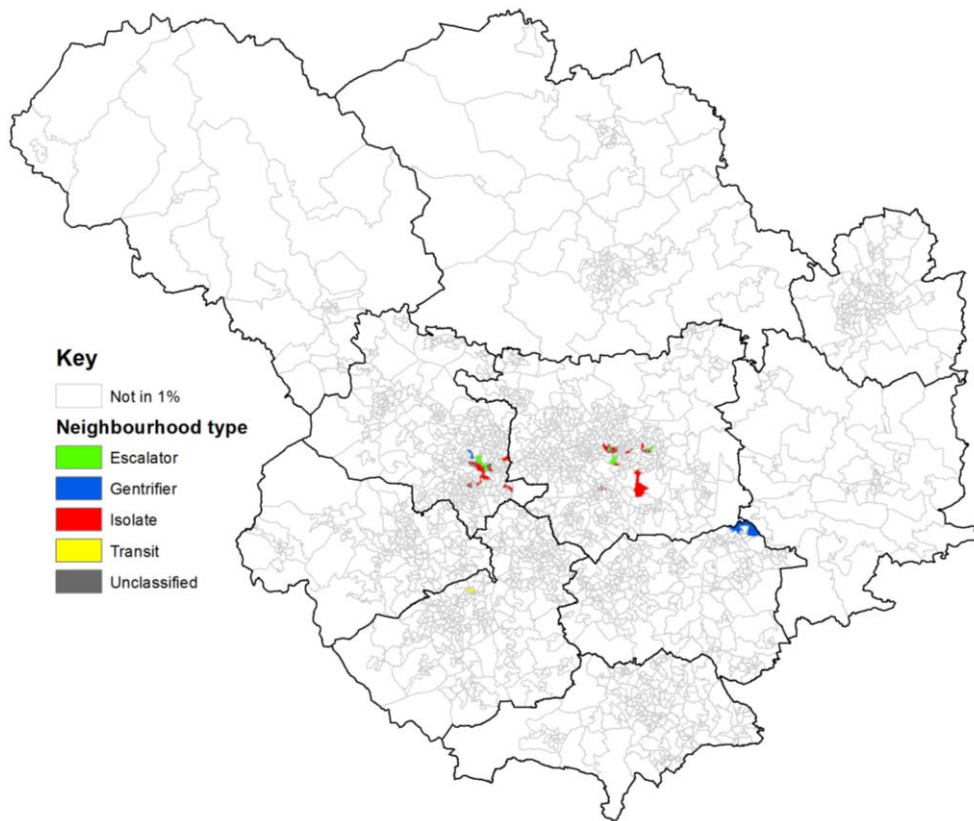
LCR LSOAs among 10% most deprived nationally by residential typology type 2004



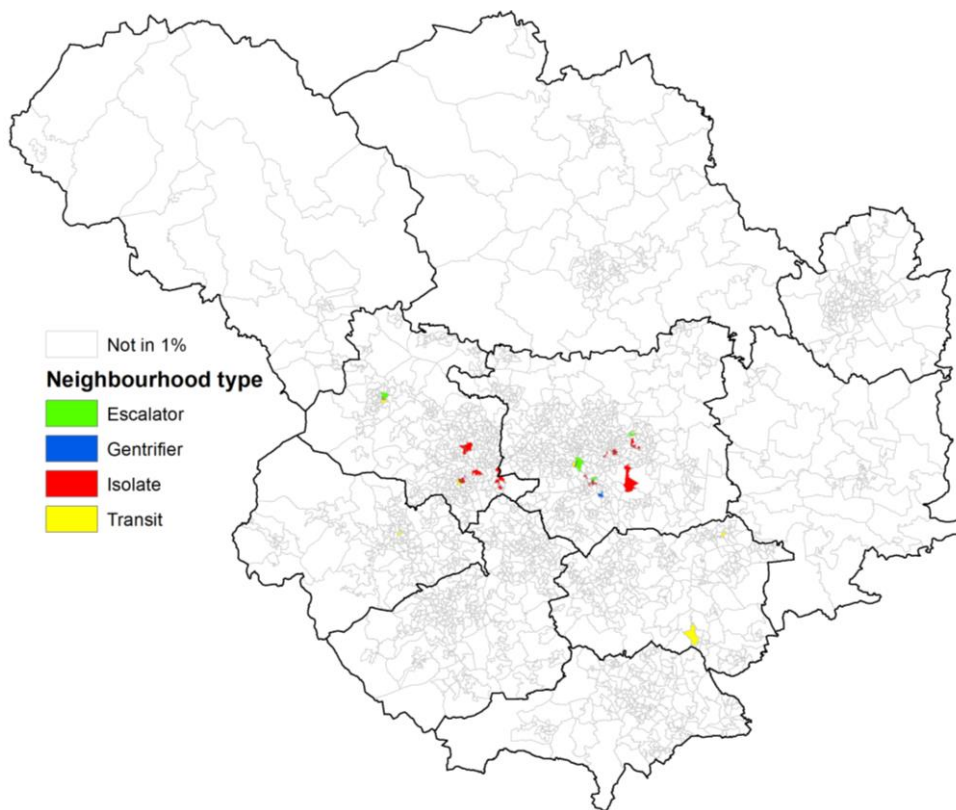
LCR LSOAs among 10% most deprived nationally by residential typology type 2015



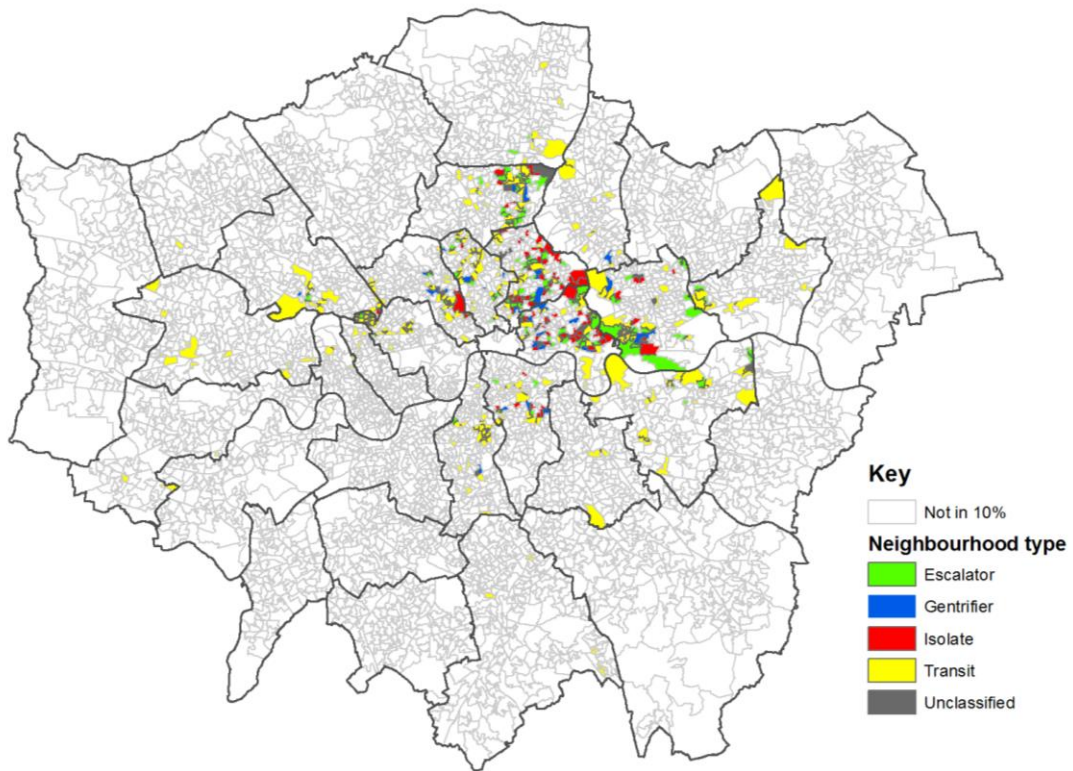
Leeds CR LSOAs among 1% most deprived nationally by residential typology type 2004



Leeds CR LSOAs among 1% most deprived nationally by residential typology type 2015



London LSOAs among 10% most deprived nationally by residential typology type 2004



London LSOAs among 10% most deprived nationally by residential typology type 2015

