

This is a repository copy of Understanding the worklessness dynamics and characteristics of deprived areas.

White Rose Research Online URL for this paper: http://eprints.whiterose.ac.uk/160382/

Version: Published Version

Monograph:

Barnes, H., Garratt, E. orcid.org/0000-0001-5974-4141, McLennan, D. et al. (1 more author) (2011) Understanding the worklessness dynamics and characteristics of deprived areas. Report. Department for Work and Pensions , Sheffield, UK.

Reuse See Attached

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk https://eprints.whiterose.ac.uk/ **Research report**

Understanding the worklessness dynamics and characteristics of deprived areas

by Helen Barnes, Elisabeth Garratt, David McLennan and Michael Noble



Department for Work and Pensions

Research Report No 779

Understanding the worklessness dynamics and characteristics of deprived areas

Helen Barnes, Elisabeth Garratt, David McLennan and Michael Noble

A report of research carried out by the Social Disadvantage Research Centre, Oxford Institute of Social Policy, University of Oxford on behalf of the Department for Work and Pensions

© Crown copyright 2011.

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence.

To view this licence, visit http://www.nationalarchives.gov.uk/doc/open-government-licence/ or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

This document/publication is also available on our website at: http://research.dwp.gov.uk/asd/asd5/rrs-index.asp

Any enquiries regarding this document/publication should be sent to us at: Department for Work and Pensions, Commercial Support and Knowledge Management Team, Upper Ground Floor, Steel City House, West Street, Sheffield S1 2GQ

First published 2011.

ISBN 978 1 908523 31 0

Views expressed in this report are not necessarily those of the Department for Work and Pensions or any other Government Department.

Contents

Acl	knowle	edgement	tsvii	
The	e Auth	ors	ix	
Ab	breviat	ions	x	
Sui	mmary	/	1	
1 Introduction				
	1.1	Backgro	und and project aims5	
		1.1.1	Policy context	
		1.1.2	Policy challenge	
		1.1.3	'Transition' areas5	
	1.2	Main res	earch question and accompanying sub-questions7	
	1.3	Structur	e of report7	
2 Data and definitions				
	2.1	Data	9	
		2.1.1	Work and Pensions Longitudinal Study9	
		2.1.2	Time period for analysis9	
		2.1.3	Limitations of the WPLS data for answering the research questions	
		2.1.4	Other data used	
	2.2	Definitio	ns	
		2.2.1	Worklessness	
		2.2.2	Neighbourhoods	
		2.2.3	Deprived areas	
3	Patte	rns of wo	rklessness between 2004 and 200714	
	3.1	Location	of deprived areas	
		3.1.1	England14	
		3.1.2	Scotland	

	3.3	Change	es in worklessness rates	19
		3.3.1	Method for calculating change	19
		3.3.2	Patterns of change	20
	3.4	Non-im	prover deprived areas	23
4	Ident	ifying tro	ansition areas	25
	4.1	Individu	ual-level dynamics	25
		4.1.1	Identifying individual-level dynamics	25
		4.1.2	Individual-level employment status dynamics	26
		4.1.3	Individual-level employment status and geographical dynamics	27
	4.2	Identify	/ing transition areas	29
		4.2.1	Method for identifying transition areas	29
		4.2.2	Transiting outmover rates	29
		4.2.3	Workless inmover rates	30
		4.2.3	Combining the transiting outmover rate and workless inmover rate	32
		4.2.4	Geographical distribution of transition areas	36
	4.3	Can tra	nsition areas explain the persistence of high worklessness rates?	39
5	Trans	iting out	movers	42
	5.1	Where	do the transiting outmovers go?	42
		5.1.1	Methods for examining geographical movements of transiting outmovers	42
		5.1.2	Deprivation status of destination area	43
		5.1.2	Distance moved	44
	5.2	Who ar	e the transiting outmovers?	45
		5.2.1	Choice of characteristics	45
		5.2.2	Demographic characteristics of transiting outmovers	46
		5.2.3	Characteristics relating to benefit claim of transiting outmovers	48
6	Concl	lusion		53

Appendix A	Defining deprived areas	. 55
Appendix B	Driver of change in worklessness rate	. 56
Appendix C	Location of deprived improver areas	. 60
Appendix D	Location of deprived decliner areas	. 61
Appendix E	Identifying individual-level dynamics	. 62
Appendix F	Worked examples	. 64
Appendix G	Transiting outmovers in Scotland and Wales	. 66
Appendix H	Analysis of transiting individuals	. 72
References		. 74

List of tables

Table 3.1	Number and percentage of deprived LSOAs in each English region
Table 3.2	Worklessness rates in deprived and non-deprived areas, 2004 and 2007 18
Table 3.3	Minimum and maximum worklessness rates in deprived areas, 2004 and 200718
Table 3.4	Percentage of deprived areas in the three broad groups, metropolitan county areas
Table 3.5	Number and percentage of deprived areas that are non-improvers
Table 4.1	Employment status in 2007 of individuals who were workless in 2004, non-improver deprived areas
Table 4.2	Transitions into employment of 2004 benefit claimants by client group, non-improver deprived areas27
Table 4.3	Geographical movements of transiting individuals, non-improver deprived areas
Table 4.4	Transiting outmover rates, non-improver deprived areas
Table 4.5	Workless inmover rates, non-improver deprived areas
Table 4.6	Geographical movements of transiting individuals, transition areas
Table 4.7	Number and percentage of non-improver deprived areas that are transition areas, regions in England
Table 4.8	Number of non-improver deprived areas that are transition areas, local authorities in England
Table 4.9	Seaside towns containing two or more transition areas
Table 4.10	Mean, minimum and maximum worklessness rates in 2007, transition areas

vi Contents

Table 4.11	Mean, minimum and maximum change in 2007 worklessness rates – estimated figures for assumption 1, transition areas	41
Table 4.12	Mean, minimum and maximum change in 2007 worklessness rates – estimated figures for assumption 2, transition areas	41
Table 5.1	Distance moved by all transiting outmovers, transition areas in England	44
Table 5.2	Age of transiting outmovers and transiting nonmovers, transition areas in England	46
Table 5.3	Sex of transiting outmovers and transiting nonmovers, transition areas in England	47
Table 5.4	Age and sex of transiting outmovers, transition areas in England	48
Table 5.5	Benefit type prior to employment of transiting outmovers and transiting nonmovers, transition areas in England	49
Table 5.6	Benefit type prior to employment of male and female transiting outmovers, transition areas in England	49
Table 5.7	Length of time on benefits of transiting outmovers and transiting nonmovers, transition areas in England	50
Table 5.8	Odds ratios from logistic regression modelling probability of moving following transition into employment	51
Table B.1	Classification of areas in terms of the change to workless and population counts	57
Table B.2	Number and percentage of improver, decliner, stayer and excluded areas	58
Table E.1	Complete list of labels of individual dynamics	62
Table G.1	Age of transiting outmovers and transiting nonmovers, transition areas in Scotland	67
Table G.2	Age of transiting outmovers and transiting nonmovers, transition areas in Wales	68
Table G.3	Sex of transiting outmovers and transiting nonmovers, transition areas in Scotland	68
Table G.4	Sex of transiting outmovers and transiting nonmovers, transition areas in Wales	68
Table G.5	Age and sex of transiting outmovers, transition areas in Scotland	69
Table G.6	Age and sex of transiting outmovers, transition areas in Wales	69
Table G.7	Benefit type prior to employment of transiting outmovers and transiting nonmovers, transition areas in Scotland	69
Table G.8	Benefit type prior to employment of transiting outmovers and transiting nonmovers, transition areas in Wales	70
Table G.9	Benefit type prior to employment of male and female transiting outmovers, transition areas in Scotland	70

Table G.10	Benefit type prior to employment of male and female transiting outmovers, transition areas in Wales	70
Table G.11	Length of time on benefits of transiting outmovers and transiting nonmovers, transition areas in Scotland	71
Table G.12	Length of time on benefits of transiting outmovers and transiting nonmovers, transition areas in Wales	71
Table H.1	Age of transiting individuals, transition areas in England	72
Table H.2	Sex of transiting individuals, transition areas in England	72
Table H.3	Benefit type prior to employment of transiting individuals, transition areas in England	72
Table H.4	Number of years on benefit of transiting individuals, transition areas in England	73

List of figures

Figure 2.1	Number of years (2004-2007) that deprived areas were in the most deprived decile, Great Britain
Figure 3.1	Percentage of LSOAs in a local authority that are deprived, England
Figure 3.2	Percentage of datazones in a local authority that are deprived, Scotland 16
Figure 3.3	Percentage of LSOAs in a local authority that are deprived, Wales
Figure 3.4	Composition of workless population in deprived areas, 2004 and 2007
Figure 3.5	Percentage of deprived and non-deprived areas in the three broad groups 21
Figure 4.1	Spread of transiting outmover rates, non-improver deprived areas
Figure 4.2	Spread of workless inmover rates, non-improver deprived areas
Figure 4.3	Transiting outmover rates by workless inmover rates, non-improver deprived areas in England
Figure 4.4	Transiting outmover rates by workless inmover rates, non-improver deprived areas in Scotland
Figure 4.5	Transiting outmover rates by workless inmover rates, non-improver deprived areas in Wales
Figure 5.1	Change in IMD rank for transiting outmovers, transition areas in England 43
Figure B.1	Difference between percentage change in workless count and percentage change in population count for other decliners
Figure B.2	Difference between percentage change in workless count and percentage change in population count for other improvers
Figure G.1	Change in IMD rank for transiting outmovers, transition areas in Scotland 66
Figure G.2	Change in IMD rank for transiting outmovers, transition areas in Wales

Acknowledgements

We are grateful to the Department for Work and Pensions (DWP) for funding the project and to the Office for National Statistics for methodological advice.

From DWP we would like to thank Joseph Clease, Danielle Mason and Caryl Williams for project managing and guiding the work. We would also like to thank Stuart Grant and Suzy Rutter for their work in preparing the data for us, as well as Rickson Gunzo for his input on some elements of the analysis.

The Authors

Helen Barnes is a Research Fellow at the Social Disadvantage Research Centre, Oxford Institute of Social Policy, University of Oxford.

Elisabeth Garratt is a Research Officer at the Social Disadvantage Research Centre, Oxford Institute of Social Policy, University of Oxford.

David McLennan is Deputy Director of the Social Disadvantage Research Centre and a Senior Research Fellow at the Oxford Institute of Social Policy, University of Oxford.

Michael Noble is Professor of Social Policy and Director of the Social Disadvantage Research Centre at the Oxford Institute of Social Policy, University of Oxford.

Abbreviations

CA	Carer's Allowance
DWP	Department for Work and Pensions
GROS	General Registry Office of Scotland
HMRC	Her Majesty's Revenue and Customs
IB	Incapacity Benefit
IMD	Index of Multiple Deprivation
IS-LP	Income Support for Lone Parents
JSA	Jobseeker's Allowance
LSOA	Lower layer Super Output Area
MAD	Median Absolute Deviation
NDC	New Deal for Communities
NI	National Indicator
ONS	Office for National Statistics
PAYE	Pay As You Earn
PSA	Public Service Agreement
SDA	Severe Disablement Allowance
SIMD	Scottish Index of Multiple Deprivation
WIMD	Welsh Index of Multiple Deprivation
WPLS	Work and Pensions Longitudinal Study

Summary

The analysis in this report breaks new ground in using individual-level data on employment transitions and geographical movements to try to shed light on some unanswered questions about the dynamics of worklessness in deprived areas.

The persistence of high rates of worklessness in certain neighbourhoods across Great Britain presents an enduring policy challenge. The trajectories of these neighbourhoods are underpinned and driven by the complex interplay of **individual-level** dynamics, which cover two distinct yet inter-related processes: (i) the transition into and out of worklessness and employment, and (ii) geographical migration.

It has been suggested that in certain deprived neighbourhoods individuals make the transition from worklessness into employment and move away to less deprived areas. As these people move away they are replaced by inflows of other workless people who may themselves find employment and move on in a similar way. Although people experience positive individual-level employment outcomes while living in a neighbourhood, the area may change little over time and may appear unresponsive to initiatives aimed at reducing worklessness.

In this report the individual-level dynamics operating in persistently deprived neighbourhoods in Great Britain are examined. This research is motivated by the need to better understand the dynamics and characteristics of deprived areas in order to support evidence-based policy responses.

Using data from the Work and Pensions Longitudinal Study, the following research question was explored:

Do certain deprived neighbourhoods exhibit relatively high levels of individual transition from worklessness into work but without a resultant reduction in area-level worklessness rates? Is this because many of the people who become employed subsequently move out of the area and are replaced by workless people moving into the area?

Lower layer Super Output Areas (LSOAs) in England and Wales and datazones in Scotland were the units of geography used for analysing neighbourhood-level patterns and trends. LSOAs/datazones were considered to be deprived if they fell within the worst ten per cent nationally, in terms of worklessness rates, in any year between 2004 and 2007. Worklessness rates were calculated as the number of workless people divided by the working-age population in that area (men aged 16 to 64 inclusive and women aged 16 to 59 inclusive).

For the purposes of this research, people were defined as 'workless' if they are involuntarily excluded from the labour market, measured by receipt of either Jobseeker's Allowance (JSA), Incapacity Benefit or Severe Disablement Allowance (IB/SDA), Income Support for lone parents (IS-LP), Carer's Allowance (CA) or other out-of-work benefits (other Income Support, including Disability Premium, or Pension Credit under State Pension age).

Patterns of worklessness between 2004 and 2007

In general, worklessness rates in deprived areas decreased between 2004 and 2007. The majority of the workless population in both 2004 and 2007 was IB/SDA claimants, and the composition of the workless population remained fairly stable over time.

Deprived areas were classified according to their change in worklessness rate between 2004 and 2007. Approximately half of deprived areas were found to have improved significantly over time, relative to the national average.

However, a group of 'non-improver deprived areas' was identified; these are deprived LSOAs/ datazones that either showed a significant decline or did not show a significant change in their worklessness rate. Non-improver areas are found in the majority of local authorities in which there are deprived areas.

Individual dynamics

Employment status changes and geographical movements of individuals in non-improver deprived areas were examined, comparing the situation in 2004 with that of 2007. It was found that approximately 70 per cent of workless people in 2004 were also workless in 2007. Nevertheless, approximately 15 per cent were in employment in 2007. (The true proportion of the 2004 workless population that secured employment between the two timepoints is likely to be higher than this as some individuals will have lost their jobs again by 2007.) A higher proportion of individuals who had claimed JSA or IS-LP in 2004 made the transition into employment, compared to claimants of IB/SDA, CA and other out-of-work benefits.

Unfortunately the geographical movements of 40 per cent of the individuals who made the transition into employment were unknown due to data issues. Thus it was not possible to ascertain if they had relocated or stayed in the same place following job entry. Of those who could be geographically tracked, approximately two-thirds remained in the LSOA/datazone, and one-third moved away. This general lack of geographical movement on finding work may, for those who had been living in social housing, partly relate to availability of social housing elsewhere or ability to access the private rented or owner occupier market.

The report contains analysis to consider the impact of the 40 per cent of unknown cases on the central research question. It was possible to conclude that there is little evidence to support the suggestion that the out-movement of individuals who find employment is a major underlying factor in the persistence of high worklessness rates in certain deprived areas.

Identifying transition areas

Despite the data issues, a set of 'transition areas' was identified based on two rates calculated for each non-improver deprived area: the 'transiting outmover rate' (the proportion of the 2004 workless population that made the transition into employment and moved away by 2007) and the 'workless inmover rate' (the proportion of the 2007 workless population that had moved into the area since 2004). Only a small proportion of workless individuals in 2004 made the transition into employment and moved away. The workless inmover rates are much higher than the transiting outmover rates, partly due to the unknown geographical movements, but also because there are other groups of individuals moving out, in particular workless people who moved home.

There is variation in the transiting outmover rates and workless inmover rates at LSOA/datazone level. Approximately one-quarter of the non-improver deprived areas in Great Britain were classified as transition areas as both rates were above the national average. There are transition areas in the majority of local authorities in which there are non-improver deprived areas.

Over one-fifth of transition areas are located in seaside towns. It is possible that the nature of the housing market is a major factor in many of these transition areas, for example inexpensive

temporary accommodation and houses in multiple occupation that may attract a transient population. Seasonal employment in the tourist industry may also be a factor.

Transiting outmovers

The nature of the geographical movements of the individuals who made the transition into employment and moved out of the LSOA/datazone ('transiting outmovers') in transition areas in Greater Manchester were examined. It was found that:

- the majority went to a less deprived LSOA/datazone, although often not substantially less deprived;
- some moved from very deprived LSOAs/datazones to some of the least deprived LSOAs/datazones in the country;
- the majority of moves were over a short distance.

The characteristics of the transiting outmovers were examined and compared with the characteristics of individuals who made the transition into employment but stayed in the area ('transiting nonmovers'). Unfortunately the available data on geographical location was much better for people who had claimed IS-LP (who are mostly women), which caused difficulty in interpreting the demographic and benefit characteristics of those who moved. Nevertheless, it was found that:

- outmovers appear to be younger than nonmovers, on average;
- the pattern of benefit receipt prior to employment is similar for outmovers and nonmovers, although there are more individuals who had been claiming CA among the nonmover group;
- outmovers in general spent less time on benefit prior to employment than nonmovers.

Conclusion

In addition to the above findings, some headline policy conclusions can be drawn:

- 1 There was a widespread, but not universal, phenomenon of 'catching up', whereby deprived areas (LSOAs/datazones) narrowed the gap with the national average during the favourable economic climate of 2004-2007.
- 2 There are deprived areas where worklessness actually became more entrenched during the years 2004-2007. This was despite a backdrop of strong and stable economic growth and very substantial investment in neighbourhood renewal.
- 3 Although some workless people who secure employment do move out of deprived areas into 'better' areas, and are replaced by workless people, this does not seem to be a key factor in the persistence of high worklessness rates in deprived areas. The impact of finding work and moving out on area trajectories is more than outweighed by long-term reliance on inactive benefits.
- 4 The proportion of individuals who made the transition into employment was much higher amongst those who had been claiming JSA and IS-LP in 2004 than among those who had been claiming IB/SDA. This is consistent with the view that active benefits are more effective in promoting job entry.
- 5 The results of the additional analysis funded by Greater Manchester local authorities (to be published as a separate report) accord well with this national report, suggesting that these findings have broad applicability in local areas.

It is hoped that this report will provoke debate both at a national and local level about the causes of worklessness and the nature of regeneration and employment support that is required.

In classifying LSOAs/datazones by their performance in reducing worklessness during the economic boom, this project has provided a resource to facilitate further local investigation of the factors that may have resulted in 'improvement', 'non-improvement' or 'transition' within neighbourhoods. A list of each LSOA/datazone and its classification can be found in the data annexes, published separately on the DWP website.

1 Introduction

1.1 Background and project aims

The persistence of high rates of worklessness in certain neighbourhoods across Great Britain presents an enduring policy challenge. The observed change (or lack of change) in worklessness rates at an area level is underpinned and driven by the complex interplay of **individual-level** dynamics. These individual-level dynamics cover two distinct yet interrelated processes: (i) the transition into and out of worklessness and employment, and (ii) geographical migration. The aim of this project is to explore the individual-level dynamics operating in neighbourhoods with persistently high worklessness rates and is motivated by the need to better understand the dynamics and characteristics of deprived neighbourhoods in order to support evidence-based policy responses.

1.1.1 Policy context

Reducing worklessness has long been a key policy objective for successive United Kingdom Governments. During the period of New Labour, particular emphasis was placed on reducing worklessness in the most deprived neighbourhoods with the aim of narrowing the gap between these deprived neighbourhoods and the rest of the country (Social Exclusion Unit, 2001). A number of area-based policies were implemented which were specifically targeted at the most deprived neighbourhoods. Some policies were specific to England (e.g. the Neighbourhood Renewal Fund, Working Neighbourhoods Fund and New Deal for Communities) or Scotland (e.g. Social Inclusion Partnerships and Community Planning Partnerships) or Wales (e.g. Communities First), while some polices covered more than one country (e.g. Employment Zones). The wide range of large-scale area-based polices reflected the importance attached to tackling worklessness in the most deprived areas of the country.

The Coalition Government is seeking to tackle worklessness via a more flexible local Jobcentre Plus offer, complemented by the Work Programme where providers have complete freedom to design support to get people back into work, rewarded through a 'payment by results' contract. The Coalition Government is seeking to stimulate economic growth in all parts of England, notably via Local Economic Partnerships and the Regional Growth Fund. Scotland and Wales have their own arrangements.

1.1.2 Policy challenge

Despite worklessness rates falling across most parts of Great Britain during the decade preceding the recession, resulting in a narrowing of the gap between the average workless rate in deprived areas and the Great Britain average, some neighbourhoods continued to exhibit persistently high levels of worklessness. In many cases, these high worklessness neighbourhoods were located close to areas that had seen strong employment growth. The policy challenge is to design and implement locally sensitive responses to tackle the high levels of worklessness in these deprived neighbourhoods. This requires a deeper understanding of the different dynamics operating within deprived neighbourhoods.

1.1.3 'Transition' areas

It has been hypothesised in the research literature that there exists a group of deprived neighbourhoods which play an important role as 'transitional' areas within the wider spatial area (e.g. Cole *et al.*, 2007; Glennerster *et al.*, 1999; Robson *et al.*, 2009). Certain neighbourhoods with

a relatively high through-flow of population may act as a 'springboard' for individuals to achieve improved social and economic outcomes. The key outcome is a transition from worklessness into employment which often facilitates geographical mobility, enabling people to move away to less deprived neighbourhoods. As these people move away they are replaced by inflows of other workless people who may, in turn, find employment and then move on in a similar way. The implication of this is that although people experience positive individual-level employment outcomes while living in a neighbourhood, these positive outcomes are not reflected in the arealevel worklessness rates. The overall worklessness rate of these neighbourhoods may therefore change little over time and they may appear unresponsive to initiatives aimed at reducing worklessness. However, this masks the important employment transitions experienced by individuals living in the areas and the important role that the neighbourhood (and public interventions) may play in facilitating this.

Such patterns were evident in some of the 39 New Deal for Community (NDC) partnership areas. Cole *et al.* (2007) considered residential mobility in the NDC areas by comparing the responses to household surveys in 2002 and 2004 from inmovers and outmovers as well as residents who remained in the area¹. Large differences were seen between the inmovers and outmovers, particularly with respect to the characteristics of employment, income and housing tenure. Crucially, outmovers were more likely than inmovers to be employed (71 per cent for outmovers compared to 47 per cent for inmovers) and to own their own home (48 per cent compared to 16 per cent) and were less likely to be on a low income of less than £100 per week (eight per cent compared to 20 per cent). Such a pattern implies that the people moving into and out of the NDC areas were distinctly different groups, although the higher socio-economic status of the outmovers could not necessarily be attributed to the NDC Programme. The attitudes of outmovers suggested the move had resulted in improvement and progression, with 79 per cent saying their current area was a better place to live. Only 28 per cent reported that they would consider moving back to their previous address.

Other research also shows the existence of these patterns. In an examination of population flow in the most deprived wards in Birmingham between 2000 and 2001, Fenton *et al.* (2010) reported a large net increase in the number of people employed in manual work as well as those who were long-term unemployed or had never worked. These wards conversely lost members of the managerial and professional occupations. The least deprived wards displayed the opposite pattern. The authors cite various possible explanations for the population movement, including personal or family reasons, work, and better or more affordable housing. They argue that 'the aggregate level of poverty in the area may improve much less if better off households leave and new poor households move in. This trend remains an important counter-balance to perceptions of poverty as 'static', affecting the same people in the same places over time' (Fenton *et al.*, 2010: 33).

Robson *et al.* (2009) considered the roles deprived neighbourhoods play in residential mobility using data from the 2001 Census and the Index of Multiple Deprivation 2004. Areas were classified according to whether the majority of population flow into and out of areas was to places that were more, less or similarly deprived, and four principal functional types were identified. One of these – 'escalator' – refers to neighbourhoods where inmovers come from equally or more deprived areas and outmovers go to less deprived areas, such that outmovers are replaced by more deprived individuals. Individuals living in these areas are described as having '*a continuous onward-and-upward progression through the housing and labour markets*' (Robson *et al.*, 2009: 16).

This project seeks to investigate the potential existence of neighbourhoods defined here as 'transition' areas, with a particular focus on the implications for worklessness policies.

¹ Note that only 13 per cent of movers were tracked over time, so there is potential for bias if there are systematic reasons why some individuals could be traced but others not.

1.2 Main research question and accompanying sub-questions

The key research question addressed in this report is:

Do persistently deprived neighbourhoods exist that have a relatively high and continuous throughflow of population, where workless people move into the area, obtain jobs and then move out of the area to be replaced by workless people moving into the area?

In other words, do certain deprived neighbourhoods exhibit relatively high levels of individual transition from worklessness into work but without a resultant reduction in area-level worklessness rates? Is this because many of the people who become employed subsequently move out of the area and are replaced by workless people moving into the area?

This can be broken down into a number of sub-questions:

- 1 What has happened to worklessness rates in deprived neighbourhoods over time: have they improved significantly, got significantly worse or stayed approximately the same?
- 2 To what extent do individuals in persistently deprived neighbourhoods make the transition from worklessness into work?
- 3 Do individuals who make the transition stay in the neighbourhood or move out once they have found a job?
- 4 To what extent do workless individuals move in to replace the individuals who move out?
- 5 Can a group of transition areas be identified?

As discussed above, one of the features of transition areas is that individuals move to less deprived areas. Therefore a key additional question to address is:

6 Where do individuals go when they leave an area having made the transition into employment?

While it is the entire process of population through-flow which defines a transition area, perhaps the most important component of that process is the transition from worklessness into employment. This particular phase of the overall process is particularly important given that transition areas are characterised by very high worklessness rates, and therefore any transitions into employment are positive in policy terms. The group of people who move out are interesting for policy, and therefore two final questions are addressed:

- 7 Who are these people?
- 8 In what ways do they differ from those who stayed in the area?

1.3 Structure of report

In Chapter 2 a brief description is given of the data used for the analysis presented in this report. The definitions used throughout the report, including 'worklessness', 'neighbourhood' and 'deprived area' are also explained.

In Chapter 3 the patterns of change in worklessness in deprived areas between 2004 and 2007 are examined in order to identify deprived areas that did not see an improvement in worklessness. A set of possible transition areas is subsequently identified from this group of 'non-improver' deprived areas.

In Chapter 4 analysis is presented to unpick the main research question. The employment status changes and geographical movements of individuals who were workless in 2004 in non-improver deprived areas are analysed. A set of possible transition areas is identified based on the individual-level dynamics seen in the non-improver deprived areas. The main research question is then answered.

In Chapter 5 the escalator function of transition areas is explored by examining the deprivation level of the neighbourhoods to which the individuals move having found employment. Brief analysis of the distance moved by these individuals is also presented. Key demographic characteristics of this group are examined as well as characteristics relating to the benefit claim prior to making the transition into employment. These individuals are also compared to those who made the transition into employment but did not leave the neighbourhood.

In Chapter 6 conclusions are drawn and policy recommendations made.

2 Data and definitions

In this chapter the data used for the analysis presented in this report are briefly described, and the definitions used throughout the report are then explained.

2.1 Data

2.1.1 Work and Pensions Longitudinal Study

The main data used in this project came from the Department for Work and Pensions' (DWP's) Work and Pensions Longitudinal Study (WPLS), which combines benefit and programme information from DWP with employment, earnings, savings, tax credit and pension records from Her Majesty's Revenue and Customs (HMRC). It contains records of individuals' employment and benefit spells in a number of relational datasets, and information from the different datasets can be linked together using one or more unique identifiers.

The specific elements of the WPLS utilised were the UK National Statistics datasets for the benefit data (i.e. the datasets used to produce published national statistics, which have been cleaned and quality assured by DWP), the P45/P46 datasets for the employment data (i.e. data from P45 and P46 returns made by employers when an individual joins or leaves an employment scheme) and the new tax credits datasets for the addresses of people in employment and to identify employment spells where the individual is not in the P45/P46 data. The research team was advised by DWP that the address information in the tax credit elements of the WPLS is considered more robust and therefore could be used to geocode people in employment who are also claiming tax credits.

The research team wrote code to combine the different sources of information into a single dataset containing individual-level data for ten years (1999 to 2008), including status (one of five benefits or employed), Lower layer Super Output Area (LSOA)/datazone code, age and sex at each timepoint (August each year). The ten extracts were linked together by a unique anonymised ID variable. This code was run by DWP's Information Directorate on behalf of the research team and the final anonymised file was safely transferred to the research team's secure unit in Oxford.

All analysis relating to worklessness and employment was undertaken on the WPLS data received (henceforth referred to as the research dataset) rather than published data (e.g. from Nomis or Tabtool) which has been rounded.

2.1.2 Time period for analysis

When selecting the time period to examine it is important to choose a duration that is long enough to capture significant geographical movement among residents, particularly movement out of an area following transition into employment, while at the same time ensuring that smaller interim changes are not obscured by the overall trend. For example, at an individual-level, people could cycle between benefit and employment and potentially make several geographical moves between two timepoints.

For this project tax credit data from 2004 to 2007 were made available. The obvious choice for the later timepoint is the most recent year of data available (i.e. 2007).

Given that individuals and areas do not change significantly over a short time period, meaning one year is arguably too short a period for analysis, there were only two viable options: 2005-2007 (two years) or 2004-2007 (three years). An examination of the data showed that in the longer time period a slightly higher proportion of individuals made the key transition from worklessness into employment and therefore the period 2004-2007 was selected.

2.1.3 Limitations of the WPLS data for answering the research questions

The analysis that could be undertaken was limited by the WPLS data that are currently available and that it was possible to access in Oxford. Although the phenomenon of interest is a continuous process whereby workless people move into the area, obtain jobs and then move out of the area to be replaced by workless people moving into the area, it was not possible to look at detailed individual-level dynamics because the necessary data could not be accessed for this project. It was possible, however, to examine cross-sectional cuts of data and the individual dynamics occurring between those timepoints. It was also not possible to establish from the data whether an individual moved after (rather than before) the transition into employment, but the assumption was made that this was the case.

The research dataset only contains data for people who have been a DWP claimant at some point since August 1999, and therefore individuals who have not received a DWP benefit since August 1999 will not be included. This is not considered to be a major issue for this project as ultimately the aim is to track people as they move from benefit into employment. However, it does mean that the data do not tell the full story as individuals who have only ever been employed or inactive (but not in receipt of any benefit) will not be included.

Only those individuals recorded as having a benefit or employment spell that spans the August timepoint each year are included in the research dataset (and therefore short spells between timepoints are not picked up). The counts of people on benefits at each timepoint in the research dataset were compared to Nomis counts and good agreement was found at national and LSOA/ datazone level. The main reason for inconsistency between the data on Nomis and the research dataset is likely to be the disclosure control applied to the Nomis data which may have a larger effect at LSOA/datazone level where numbers are small. It is difficult to compare the counts of people who are employed at each timepoint as the group of employed individuals in the research dataset is a very specific population (i.e. people who have been a DWP customer, and for those cases which it was possible to geocode, also claiming tax credits).

The benefits side of the WPLS is well geocoded (an imputation method is applied by DWP to improve the completeness of the data) and therefore the geographical movements of people claiming benefits are captured in the data. As working tax credits are awarded to people with relatively low incomes², there is only information about people who move geographically once they move into work in cases where the spell of employment is sufficiently low paid for the person to be eligible for working tax credit and actually claiming it. The address information from the child tax credit data, which stretches much higher up the income distribution (although only for individuals with children), was also used to geocode individuals in employment. Although the available data are not perfect, many of those individuals moving from benefit into employment find low paid work in the first

² Tax credit entitlements are quite complex, but as a guide, the working tax credit income threshold for a single person aged 25 or over and working 30 hours or more per week was £11,000 per annum in the 2007/08 tax year, while for a person in a couple aged 25 or over and working 30 hours or more a week, the threshold was £15,000 per annum. For child tax credit the annual income threshold (joint income if part of a couple) was £55,000. See http:// www.hmrc.gov.uk/taxcredits/index.htm for further information on tax credits. instance (or have children), and so many of the geographical moves accompanying transition into employment are captured by the tax credit data.

The P45/P46 data do not cover all employees as there is no requirement for employers to supply information if the individual is below Pay As You Earn tax thresholds³. This means that these individuals are not captured in the research dataset. In addition, some P45/P46 records were excluded, on the advice of HMRC, as they had imputed start and end dates (i.e. where HMRC does not have exact dates for employment start/end). These employed individuals may, however, be captured in the tax credit data if they meet the necessary criteria.

Despite these limitations, the WPLS data are the best available source of information for examining the questions of interest.

2.1.4 Other data used

While the WPLS was the main source of data for this project, two other data sources were used to undertake certain analyses: mid-year population estimates and the indices of deprivation.

Population estimates

Estimates of the working-age population were required for the calculation of worklessness rates. Mid-year population estimates at small-area level were sourced from the Office for National Statistics and General Registry Office of Scotland. These are published online and are free to download.

Index of Multiple Deprivation

Each country has an Index of Multiple Deprivation (IMD), which is the main measure of multiple deprivation at small-area level (LSOA in England and Wales, datazone in Scotland). The indices provide a relative ranking of small areas across the country according to their level of multiple deprivation. Each IMD consists of a number of domains of deprivation which are measured separately using the best possible indicators of that particular dimension of deprivation. Each IMD is constructed using the same methodological framework, but the component domains, indicators and timepoints differ.

The indices have been produced several times in each country, but the following were used because the data timepoint falls in the period selected for analysis:

- England IMD 2007 data timepoint of mid 2005.
- Scotland SIMD 2009 data timepoint of mid 2007.
- Wales WIMD 2008 data timepoint of mid 2006.

³ In the 2007/08 tax year the threshold is £100 per week/£435 per month/£5,225 per annum (see http://www.hmrc.gov.uk/helpsheets/2007/e12.pdf).

2.2 Definitions

2.2.1 Worklessness

There are many different measures of worklessness and no single agreed definition. For the purpose of this research, people are defined as 'workless' if they are involuntarily excluded from the labour market and in receipt of certain benefits. Five separate statistical client groups (as agreed with DWP) together form the composite category of overall worklessness:

- 1 Job seekers unemployed, actively seeking work and claiming Jobseeker's Allowance.
- 2 Incapacity benefits unable to work due to work-limiting illness and claiming Incapacity Benefit (IB) or Severe Disablement Allowance⁴.
- 3 Lone parents unable to work due to being a lone parent with a child aged under 16 and claiming Income Support.
- 4 Carers unable to work due to caring responsibilities and claiming Carer's Allowance⁵.
- 5 Others those claiming other out-of-work benefits (other Income Support, including Disability Premium, or Pension Credit under State Pension age).

The rate of worklessness in an area is calculated as the number of workless people divided by the working-age population in that area (men aged 16 to 64 inclusive and women aged 16 to 59 inclusive).

2.2.2 Neighbourhoods

LSOAs in England and Wales and datazones in Scotland are the units of geography used for analysing neighbourhood-level patterns and trends in this project.

LSOAs and datazones are statistical output geographies created from the results of the 2001 Census. LSOAs were designed to have a minimum population of 1,000 residents and a mean population of 1,500 at the Census date in 2001. Datazones were designed to have a population of between 500 and 1,000 at Census date. There are 32,482 LSOAs in England, 1,896 LSOAs in Wales and 6,505 datazones in Scotland.

The systematic difference in population size between LSOAs and datazones requires that the analysis for this project is undertaken and presented separately for England, Scotland and Wales.

LSOAs and datazones nest within local authority boundaries. Throughout this report a number of analyses are summarised at local authority level. In England there are 326 local authorities, consisting of London boroughs, non-metropolitan districts, unitary authorities and metropolitan districts. In Wales there are 22 unitary authorities and in Scotland there are 32 council areas.

⁴ From 27 October 2008, Employment and Support Allowance replaced IB and Income Support that is paid because of an illness or disability for new claimants. However, this reform to the benefit system does not affect the analyses presented in this report as the latest cut of worklessness data taken for this analysis relates to August 2007 (i.e. before the reforms were implemented).

⁵ Carer's Allowance is not an out-of-work benefit in the same way as the other benefits as a certain proportion of claimants will be in work.

2.2.3 Deprived areas

As the main aim of this project is to examine and explain patterns of worklessness in deprived neighbourhoods, it is vital that they are selected using a relevant criterion. For this project, LSOAs/ datazones were considered to be deprived if they fell within the most deprived national decile (separately for England, Scotland and Wales) in terms of worklessness rates in **any year** between 2004 and 2007. A detailed explanation of this choice is provided in Appendix A.

Figure 2.1 shows the proportion of deprived areas that were in the most deprived decile in terms of overall worklessness rates for one, two, three and four years. Although the definition and analysis of deprived areas was undertaken for the three countries separately, this particular chart summarises the results for Great Britain as a whole. The majority of areas (69.4 per cent) were in the most deprived decile for worklessness for all four years. Approximately 90 per cent of areas were in the most deprived worklessness decile for more than one year between 2004 and 2007. The patterns are very similar in each of the three constituent countries.

Figure 2.1 Number of years (2004-2007) that deprived areas were in the most deprived decile, Great Britain



Historically, DWP has used two definitions of deprived areas to measure outcomes in terms of Public Service Agreement (PSA) 8 and National Indicator (NI) 153. The PSA 8 deprived wards and 'worst performing neighbourhood' LSOAs (NI 153) were compared to the deprived areas selected for this project, and a close match was found. Over 90 per cent of the PSA 8 wards (91 per cent) and the 'worst performing neighbourhood' LSOAs (99 per cent) matched with the deprived areas used in this project⁶.

⁶ In order to allow a match with the PSA eight deprived wards, a ward variable was added to the project data. This analysis was conducted internally by DWP and the aggregate results passed to the research team for inclusion in this report.

3 Patterns of worklessness between 2004 and 2007

In this chapter the patterns of change in worklessness between 2004 and 2007 are examined. Ultimately the aim is to identify deprived areas that did not see an improvement in worklessness, as these areas will be the focus of subsequent chapters.

The chapter begins with a brief discussion of the location of deprived areas in general. Attention then turns to the classification of deprived areas according to their change in worklessness, before focusing only on those areas that did not experience an improvement in worklessness over time.

Although England, Scotland and Wales are shown together in many of the tables and charts in order to present the analysis concisely, it is not appropriate to make comparisons between the three countries. In particular it is inadvisable to compare areas in Scotland with those in England and Wales due to the differences in the population size of datazones and Lower layer Super Output Areas (LSOAs) (as outlined in Chapter 2).

3.1 Location of deprived areas

In this section the geographical location of the group of deprived areas in England, Scotland and Wales is described.

3.1.1 England

The deprived areas⁷ in England are spread across all nine regions, as shown in Table 3.1. A clear north-south divide can be seen in England, with the regions and local authorities with the highest proportion of deprived LSOAs concentrated mainly in the north of the country. For example, 28.0 per cent of LSOAs in the North East region and 23.0 per cent of LSOAs in the North West region are deprived. In contrast, five per cent or fewer of LSOAs in the South East, East of England and South West regions are deprived.

These regional differences have been exacerbated by the shifting economic base of the country whereby: (i) the mining and associated heavy industrial sectors of the economy have declined, leading to relatively high rates of worklessness in many northern cities; and (ii) the financial and high-technology sectors of the economy have developed strongly in the south, leading to a growth in the service sector and greater opportunities for employment, and consequently much lower rates of worklessness.

⁷ LSOAs that were in the most deprived national decile (separately for England, Scotland and Wales) in terms of worklessness rates in any year between 2004 and 2007.

Region	Number of LSOAs	Number of deprived LSOAs	Percentage of LSOAs that are deprived
East Midlands	2,732	262	9.6
East of England	3,550	133	3.7
London	4,765	543	11.4
North East	1,656	467	28.2
North West	4,459	1,004	22.5
South East	5,319	150	2.8
South West	3,226	149	4.6
West Midlands	3,482	584	16.8
Yorkshire and The Humber	3,293	537	16.3
Total	32,482	3,829	11.8

Table 3.1 Number and percentage of deprived LSOAs in each English region

Note: A deprived area is an LSOA that was in the most deprived national decile in terms of worklessness rates in any year between 2004 and 2007.

There is at least one deprived LSOA in 219 of England's 326 local authorities (67.2 per cent). The ten local authorities with the highest proportion of LSOAs that are deprived are shown in Figure 3.1. In Liverpool and Knowsley over half of the LSOAs (53.3 per cent and 51.5 per cent respectively) are deprived.



Figure 3.1 Percentage of LSOAs in a local authority that are deprived, England

3.1.2 Scotland

The ten local authorities in Scotland with the highest proportion of datazones that are deprived are shown in Figure 3.2⁸. Central Scotland contains a high concentration of deprived datazones. One quarter or more of datazones in Glasgow City (39.2 per cent), Inverclyde (36.4 per cent) and Dundee City (25.1 per cent) are deprived. The economy of all three areas was previously centred around the ship-building industry, which has now declined considerably. Overall there are ten local authorities where over ten per cent of datazones are deprived and all of these local authorities are located in central Scotland.

Local authorities with the lowest proportion of deprived areas are located to the far south and north of Scotland. Overall, in 16 local authorities fewer than five per cent of datazones are deprived. Four local authorities – Moray, Eilean Siar, Orkney Islands and Shetland Islands – do not contain any datazones that are deprived. These local authorities are all located in the north of Scotland.





⁸ This represents almost one third of Scotland's local authorities compared to approximately three per cent of England's local authorities in Figure 3.1.

3.1.3 Wales

The ten local authorities in Wales with the highest proportion of LSOAs that are deprived are shown in Figure 3.3⁹. The local authorities with the highest proportion are found in South Wales, the location of former coal mining areas and the iron and steel industries which have all declined in recent years. More than one quarter of LSOAs in two local authorities (Merthyr Tydfil and Blaenau Gwent) are classified as deprived (36.1 per cent and 29.8 per cent respectively). Overall there are ten local authorities where over 10 per cent of LSOAs are deprived and all of these local authorities are located in South Wales. Monmouthshire is the only local authority that does not have any deprived LSOAs.



Figure 3.3 Percentage of LSOAs in a local authority that are deprived, Wales

3.2 Worklessness in deprived areas

In this section the broad patterns of worklessness in deprived areas are analysed, both in terms of worklessness rates and the composition of the workless population.

Using worklessness counts at LSOA/datazone level from the Work and Pensions Longitudinal Study and LSOA/datazone population estimates for the years 2004 and 2007 from the Office for National Statistics (ONS) and the General Registry Office of Scotland, worklessness rates for 2004 and 2007 for all LSOAs/datazones in each country were constructed.

⁹ This represents almost half of the local authorities in Wales compared to approximately three per cent of England's local authorities in Figure 3.1.

Worklessness rates in deprived and non-deprived areas are presented in Table 3.2. In all three countries over 30 per cent of the working-age population in deprived areas was workless in 2004. As would be expected, a much lower proportion of working-age individuals in non-deprived areas was workless in 2004.

The worklessness rate had decreased by 2007 in both deprived and non-deprived areas in all three countries. In terms of deprived areas, Scotland saw a 4.2 percentage point decrease while for England the figure was 1.6 percentage points and for Wales the figure was 1.9 percentage points.

	Deprive	ed areas	Non-depri	ived areas
Country	2004	2007	2004	2007
England	31.6	30.0	10.5	10.0
Scotland	41.7	37.5	13.7	12.1
Wales	37.6	35.7	16.0	14.7

Table 3.2Worklessness rates in deprived and non-deprived areas, 2004
and 2007

Note: A deprived area is an LSOA or datazone that was in the most deprived national decile (separately for England, Scotland and Wales) in terms of worklessness rates in any year between 2004 and 2007.

However, these broad figures obscure varying patterns at LSOA/datazone level. Table 3.3 shows the range of worklessness rates in deprived areas in the three countries for 2004 and 2007. In Scotland, for example, worklessness rates in the group of deprived areas ranged from 23.8 per cent to 82.5 per cent in 2004, and 17.3 per cent to 75.6 per cent in 2007.

Table 3.3Minimum and maximum worklessness rates in deprived areas,
2004 and 2007

	2004		2007	
Country	Minimum	Maximum	Minimum	Maximum
England	19.9	65.9	12.8	76.3
Scotland	23.8	82.5	17.3	75.6
Wales	27.3	59.7	23.3	62.9

Note: A deprived area is an LSOA or datazone that was in the most deprived national decile (separately for England, Scotland and Wales) in terms of worklessness rates in any year between 2004 and 2007.

The composition of worklessness is broadly similar in all three countries for both years, as shown in Figure 3.4. Claimants of Incapacity Benefit (IB)/Severe Disablement Allowance (SDA) account for the majority of the workless population. Wales has a slightly higher proportion of IB/SDA claimants than the other countries, and a lower proportion of Jobseeker's Allowance claimants. England on the other hand has a slightly lower proportion of IB/SDA claimants than the other countries, and a higher proportion of lone parents claiming Income Support. Claimants of Carer's Allowance and other out-of-work benefits are a small group in all three countries and the proportions are fairly similar in 2004 and 2007.



Figure 3.4 Composition of workless population in deprived areas, 2004 and 2007

Summary:

- In general, worklessness rates in the group of deprived areas decreased over time.
- The majority of the workless population in deprived areas in both 2004 and 2007 was IB/SDA claimants, and the composition of the workless population remained fairly stable over time.

3.3 Changes in worklessness rates

In this section changes in worklessness rates over time at LSOA/datazone level are analysed in more detail. Deprived areas are first classified as having improved, stayed the same or declined according to their change in worklessness rate between 2004 and 2007. The distribution of deprived areas across the three groups is then examined at national level and for a subset of metropolitan areas across England.

3.3.1 Method for calculating change

Using the worklessness rates for 2004 and 2007 constructed previously, a simple change in worklessness rate was calculated. All LSOAs/datazones were then classified into three groups – 'improvers', 'stayers' and 'decliners' – on the basis of the change in worklessness rates.

The standardised difference method (ONS, 2009) was used to classify LSOAs/datazones. Although designed for calculating change and grouping areas within a local authority, the method can be applied at national level. The same method was applied to England, Scotland and Wales separately due to the differences in the population size of datazones and LSOAs and the impact this might have on worklessness rates.

The first step when applying the standardised difference method is to test the null hypothesis that the data are from a normal distribution. The recommended Jarque-Bera method combines two tests of normality (skewness and kurtosis) into an overall test statistic. This test revealed that the distribution of change in worklessness rates within each country is not normally distributed.

As the data are not normally distributed, the median absolute deviation (MAD) method was used to estimate the standard deviation. The MAD statistic is the median of the differences between each LSOA/datazone's change in worklessness rates and the median change in worklessness rates for the country.

The significance of change in worklessness rates was then calculated using the standardised difference for non-normal distributions¹⁰. A standardised difference of greater than or less than one standard deviation was considered significant. Any LSOA/datazone with a significant decrease in rate was classified as an improver, any LSOA/datazone with a significant increase in rate was classified as a decliner, and any LSOA/datazone with an insignificant change in rate was classified as a stayer.

It is important to remember that two particular timepoints were selected for this analysis – August 2004 and August 2007. Had other timepoints been used, it is likely that the categorisation of areas would have been slightly different.

Further investigation resulted in a small number of improvers and decliners being disregarded from the analysis as it was found that the change to the worklessness rate in these areas had been driven by a change to the working-age population count rather than a change to the workless count. For example, this may be where a significant amount of housing was built or demolished. This analysis is presented in Appendix B.

In total, across the whole of Great Britain, 107 decliner areas and 864 improver areas were excluded from subsequent analysis (2.4 per cent of the 40,883 LSOAs/datazones in Great Britain). The number of deprived areas included in the analysis from this point onwards is as follows:

- England 3,451 deprived LSOAs.
- Scotland 740 deprived datazones.
- Wales 210 deprived LSOAs.

3.3.2 Patterns of change

The distribution of deprived areas across the three broad groups is shown in Figure 3.5 for England, Scotland and Wales¹¹. The distribution of non-deprived areas is also shown alongside for reference, but is not discussed further as non-deprived areas are not the focus of this report.

¹⁰ Standardised difference = change in worklessness rate /(1.5*MAD). MAD is multiplied by 1.5 to equate it to the standard deviation.

¹¹ Table B.1 shows the distribution of all LSOAs and datazones across the three broad groups by country.

In deprived areas in all three countries there is a higher proportion of improvers than either stayers or decliners. In Scotland 64.9 per cent of deprived datazones are classified as improvers. In both England and Wales almost half of the deprived LSOAs are improver areas (45.6 and 46.7 per cent respectively). Stayers form the second largest group in each country. In Wales the proportion of stayer areas is almost the same as the proportion of improver areas. Decliners only account for a relatively small proportion of deprived areas in each country, which is perhaps to be expected given the general trends in worklessness rates over time. The proportion of decliners is higher in England than in Scotland or Wales.

It would have been helpful to present maps of the improver, decliner and stayer areas. Unfortunately, due to the small size of LSOAs and datazones, particularly in densely populated urban areas, it is not possible to show them on a national map or even by region. Attempts were made to summarise the information at local authority level (e.g. the percentage of a local authority's deprived areas in each of the groups), but this gave misleading results (e.g. where a local authority had only one deprived area, the local authority had a score of 100 per cent for a particular category). A data table at LSOA/datazone level containing information on each area's type has been made available on the DWP website to enable further analysis led by local areas.



Figure 3.5 Percentage of deprived and non-deprived areas in the three broad groups

Note: A deprived area is an LSOA or datazone that was in the most deprived national decile (separately for England, Scotland and Wales) in terms of worklessness rates in any year between 2004 and 2007.

In Table 3.4 the distribution of deprived areas across the three broad groups is presented for the six metropolitan county areas in England (which each contain a number of metropolitan districts) and the Greater London Authority (which contains 32 boroughs, with a status similar to metropolitan districts, and also the City of London). In all areas, with the exception of the West Midlands¹², the improver group is the largest of the three, followed by the stayer group. Merseyside and Tyne and Wear have the highest proportion of improvers among their deprived areas (66.0 and 65.8 per cent respectively).

The West Midlands shows a different pattern to the other metropolitan county areas. Over two fifths (42.2 per cent) of deprived areas in the West Midlands are classified as stayers, while the proportion of improvers is relatively low (31.6 per cent) and not much higher than the proportion of decliners (26.2 per cent). The West Midlands has the highest proportion of decliner areas, followed by Greater Manchester. Merseyside, South Yorkshire and Tyne and Wear have the lowest proportion of deprived areas that are classified as decliners (5.6, 7.8 and 8.7 per cent respectively).

Table 3.4Percentage of deprived areas in the three broad groups, metropolitan
county areas

Metropolitan county area	Number of deprived areas	Percentage of improvers	Percentage of stayers	Percentage of decliners
Greater London	483	57.1	31.7	11.2
Greater Manchester	331	46.8	34.1	19.0
Merseyside	324	66.0	28.4	5.6
South Yorkshire	179	50.8	41.3	7.8
Tyne and Wear	196	65.8	25.5	8.7
West Midlands	427	31.6	42.2	26.2
West Yorkshire	176	52.3	37.5	10.2

Notes: A deprived area is an LSOA or datazone that was in the most deprived national decile (separately for England, Scotland and Wales) in terms of worklessness rates in any year between 2004 and 2007. Areas where population changes were driving the change in worklessness rate have been excluded (as discussed above).

It is the group of stayers and decliners ('non-improver deprived areas') that will be the focus of the search for transition areas.

Summary:

- Amongst deprived areas, a higher proportion improved their worklessness rate over time than either got worse or did not change significantly.
- Metropolitan areas in England have varying distributions of deprived areas across the three groups.

3.4 Non-improver deprived areas

Until now the focus of the analysis has been on all deprived areas, and where appropriate, deprived areas have been compared to non-deprived areas. However, the main research question addressed in this report concerns only those areas that do not see a significant improvement in their worklessness rate. Improver areas are therefore of limited interest¹³ and the analysis in this section and subsequent chapters focuses only on the 2,249 non-improver deprived areas in Great Britain (i.e. areas where worklessness rates did not show a significant change or showed a significant decline)¹⁴.

When discussing the geographical distribution of non-improver deprived areas it is important to bear in mind the number of deprived areas as the base.

There are 1,877 non-improver deprived areas in England, and these are found in all regions of the country (see Table 3.5). The North West contains the largest number of non-improver deprived areas (445), but this represents a smaller proportion of the region's total deprived LSOAs than in many other regions.

There are deprived LSOAs in 219 local authorities, of which 204 contain at least one non-improver area. Most of the local authorities that do not have any non-improver deprived areas contain just a small number of deprived LSOAs. There are, however, some exceptions, and Camden is a good example: it contains 19 deprived LSOAs but none are classified as non-improvers.

Some local authorities in England contain a high proportion of deprived LSOAs that are non-improver areas. However, many of these contain only a small number of deprived LSOAs. There are some local authorities that have a larger number of deprived LSOAs, of which a relatively high proportion are non-improvers. For example, Blackpool has 29 deprived LSOAs and 27 of these (93.8 per cent) are classified as non-improvers, while Wolverhampton has 52 deprived LSOAs and 46 (88.5 per cent) are classified as non-improvers.

Overall there are 28 local authorities that contain 20 or more non-improver deprived areas. The majority of these local authorities are found in the North West, Yorkshire and The Humber and West Midlands regions; none are located in the South East or South West.

There are 260 non-improver deprived areas in Scotland. There are deprived datazones in 28 of Scotland's 32 local authorities, of which 26 contain at least one non-improver area. Ten local authorities contain ten or more non-improver deprived areas. The local authorities with the largest numbers of non-improver areas are Fife, Dundee City and Glasgow City, which contain 23, 26 and 57 non-improver deprived areas respectively. In both Fife and Dundee, non-improver areas account for over half of the deprived datazones. Although Glasgow City contains the largest number of non-improver deprived areas, the proportion of deprived datazones that are non-improvers is small in comparison to many of the other local authorities.

There are 112 non-improver deprived areas in Wales. There are deprived LSOAs in 21 of 22 local authorities in Wales, of which 18 contain at least one non-improver deprived area. Neath Port Talbot, Newport and Rhondda Cynon Taff each contain ten or more non-improver deprived areas. Rhondda Cynon Taff has 20 non-improver deprived areas, the largest of all the local authorities in Wales. The proportion of deprived LSOAs that are non-improver areas in these three local authorities is 47.6, 73.3 and 57.1 per cent respectively.

¹³ A brief description of the location of the deprived improver areas is, however, given in Appendix C.

¹⁴ A brief summary of the location of deprived areas that declined (separated out from deprived areas that stayed the same) can be found in Appendix D.

Region	Number of deprived areas	Number of non-improver deprived areas	Percentage of deprived areas that are non-improvers
South East	142	109	76.8
East of England	117	82	70.1
West Midlands	543	379	69.8
South West	127	86	67.7
East Midlands	235	135	57.4
Yorkshire and The Humber	469	264	56.3
North West	903	445	49.3
London	483	207	42.9
North East	432	170	39.4
England total	3,451	1,877	54.4
Scotland	740	260	35.1
Wales	210	112	53.3

Table 3.5 Number and percentage of deprived areas that are non-improvers

Notes: A deprived area is an LSOA that was in the most deprived national decile in terms of worklessness rates in any year between 2004 and 2007. A non-improver area is an LSOA that stayed the same or declined in terms of its worklessness rate between 2004 and 2007.

Summary:

- Non-improver areas are found in the majority of local authorities in which there are deprived areas.
- In some local authorities the proportion of deprived areas that are non-improvers is very high. In some cases this is partly a function of there being only a few deprived areas in the local authority.
- Conversely, some local authorities have a large number of non-improver deprived areas, but these account for a relatively small proportion of the local authority's deprived areas.
4 Identifying transition areas

In this chapter the central research question is explored, which is to identify whether there are deprived areas that do not see an improvement in their worklessness rate over time despite relatively high rates of transition of individuals from worklessness into employment, because many of the people who become employed subsequently move out of the area, and are replaced by workless people moving into the area.

While these individual-level dynamics may occur in all areas, the analysis in this chapter focuses **only on the 2,249 non-improver deprived areas** in Great Britain.

In Chapter 3 the analysis was based on Lower layer Super Output Area (LSOA)/datazone level data. In this chapter individual-level data from the Work and Pensions Longitudinal Study (WPLS) is used to identify the employment status changes and geographical movements made by individuals between 2004 and 2007. These individual-level dynamics are then aggregated to LSOA/datazone level. All counts of individuals based on the WPLS data are rounded to the nearest ten.

The employment status changes and geographical movements of relevant individuals are examined first and then possible transition areas are identified based on the individual-level dynamics. The chapter concludes with a summary of the evidence relevant to answering the main research question.

4.1 Individual-level dynamics

In this section the different possible combinations of employment status changes and geographical movements made by individuals are first outlined. The subsequent analysis focuses on individuals who were workless in 2004. The employment status changes and geographical movements of these individuals are examined in order to identify those who made the transition from worklessness into employment and subsequently moved out of the area.

4.1.1 Identifying individual-level dynamics

An individual's employment status in 2004 and/or 2007 can be either workless, employed or unknown. Each individual can either have the same LSOA/datazone code at both timepoints, or they may have different LSOA/datazone codes at the two timepoints because they have moved, or the LSOA/datazone code may be unknown at either of the timepoints. By combining the information on employment status and geographical location, each individual in the research dataset can be classified into one of 28 possible groups; a list of these is provided in Appendix E.

There are 12 groups where there is complete information for an individual (i.e. status and location are known at both timepoints). There are a further 12 groups where there is missing information for an individual (i.e. various combinations of employment status and geographical location are unknown at the two timepoints) and four groups which relate to individuals aging in or out of the dataset. The reasons for these incomplete cases are set out below.

• The incomplete cases in terms of employment status may be individuals who were not captured in the P45/P46 records used to create the research dataset (see Chapter 2), individuals who were genuinely neither in employment nor receiving one of the relevant benefits at one of the timepoints (e.g. in education or left the country), individuals who became a partner of a workless person claiming benefit (i.e. a joint claim), or individuals who switched from being the benefit claimant to the partner claimant in a joint claim.

- The incomplete cases in terms of geographical location are where the individual is not in receipt of the relevant benefits or tax credits at one of the timepoints. For example, if a person makes the transition from worklessness into employment but is not claiming tax credits, their location in 2007 will not be known. These individuals were either in employment which took them above the income threshold for working tax credit and they did not have any children, or in employment which took them above the income threshold for child tax credit, or in employment but working fewer hours than the tax credit threshold.
- Of course, for both employment status and geographical location, incomplete cases may also be the result of problems with the linking together of benefit, employment and tax credit data due to errors in the identifiers used for the matching process.
- In addition, some individuals were too young (i.e. not yet of working age) to be included in the dataset in 2004, or too old (i.e. no longer of working age) to remain in the dataset in 2007, and therefore also have missing information. These individuals, who are either workless or employed at the time they are in the dataset, are referred to as 'aged in' and 'aged out' respectively and account for the remaining four groups.

Each individual was placed into one of these 28 groups and then the groups were aggregated to LSOA/datazone level, giving a count of individuals in each category for every LSOA/datazone. The data were also aggregated to country level to give a count of individuals in each category for the three countries.

4.1.2 Individual-level employment status dynamics

Table 4.1 shows the employment status in 2007 of the people who were workless in 2004 for England, Scotland and Wales. In each country the majority (approximately 70 per cent) of workless people in 2004 were also workless in 2007. Approximately 15 per cent of the 2004 workless population in England and Scotland (13 per cent in Wales) made the transition into employment. Even in the most deprived areas, where worklessness rates were not improving, some individuals experienced positive employment outcomes.

Of the remaining individuals who were workless in 2004, approximately equal proportions (less than ten per cent) in each country had an unknown employment status in 2007 or were no longer of working age. It can be reasonably assumed that some of these individuals found employment, but it is not possible to be certain how many did so.

Table 4.1Employment status in 2007 of individuals who were workless in 2004,
non-improver deprived areas

	England	Scotland	Wales
2007 employment status	(%)	(%)	(%)
Remained workless	69.9	70.1	71.9
Became employed	15.3	15.4	12.8
Employment status unknown	7.8	7.4	6.5
Aged out	7.1	7.1	8.8
Total	100.0	100.0	100.0
Ν	511,550	45,550	34,400

Notes: A deprived area is an LSOA or datazone that was in the most deprived national decile (separately for England, Scotland and Wales) in terms of worklessness rates in any year between 2004 and 2007. A non-improver area is an LSOA or datazone that stayed the same or declined in terms of its worklessness rate between 2004 and 2007. There are 1,877 non-improver deprived areas in England, 260 in Scotland and 112 in Wales.

The patterns of transition into employment are shown for each client group in Table 4.2. Approximately one third of the individuals who had claimed Jobseeker's Allowance (JSA) in 2004 secured employment. The figure for lone parents claiming Income Support (IS-LP) is just over 20 per cent. A much lower proportion of Incapacity Benefit (IB)/Severe Disablement Benefit (SDA) claimants made the transition into employment (approximately seven per cent), while approximately 12 per cent of both Carer's Allowance (CA) and other out-of-work benefit claimants made this transition.

	England	Scotland	Wales
Client group	(%)	(%)	(%)
JSA	34.7	34.1	34.6
IB/SDA	6.9	7.3	6.5
IS-LP	22.8	24.4	23.1
CA	11.6	12.8	11.5
Other out of work benefit	11.9	10.4	13.1
Ν	78,170	7,010	4,410

Table 4.2Transitions into employment of 2004 benefit claimants by client
group, non-improver deprived areas

Notes: A deprived area is an LSOA or datazone that was in the most deprived national decile (separately for England, Scotland and Wales) in terms of worklessness rates in any year between 2004 and 2007. A non-improver area is an LSOA or datazone that stayed the same or declined in terms of its worklessness rate between 2004 and 2007. There are 1,877 non-improver deprived areas in England, 260 in Scotland and 112 in Wales.

4.1.3 Individual-level employment status and geographical dynamics

The focus of this section is on the group of individuals in non-improver deprived areas who made the transition from worklessness into employment, referred to as 'transiting individuals'. The geographical movements of the transiting individuals are shown in Table 4.3 for England, Scotland and Wales. There are three categories: (i) remained in the area, where an individual had the same LSOA/datazone code at both timepoints; (ii) moved away from the area, where an individual had a different LSOA/datazone code at the two timepoints; and (iii) location unknown, where the individual's LSOA/datazone code at the second timepoint was unknown.

When interpreting the table it is important to remember that the research dataset only captures the geographical movements of a subset of the employed population (i.e. those on tax credit). Approximately 40 per cent of the 2004 workless population in each country who had made the transition into employment by 2007 had an unknown location in 2007. These individuals may have moved from the area on finding employment or they may have stayed in the area.

Of those transitions into employment that can be tracked geographically, in all three countries a higher proportion of transiting individuals remained in the area than moved away. The ratio of stayers to movers is slightly higher in Wales than in England and Scotland, but all three countries are quite similar.

	England	Scotland	Wales
Movement	(%)	(%)	(%)
Remained in the area	37.4	36.5	42.9
Moved away from the area	22.0	20.6	18.4
Location unknown	40.6	42.9	38.7
Ν	78,170	7,010	4,410

Table 4.3Geographical movements of transiting individuals, non-improver
deprived areas

Notes: A deprived area is an LSOA or datazone that was in the most deprived national decile (separately for England, Scotland and Wales) in terms of worklessness rates in any year between 2004 and 2007. A non-improver area is an LSOA or datazone that stayed the same or declined in terms of its worklessness rate between 2004 and 2007. There are 1,877 non-improver deprived areas in England, 260 in Scotland and 112 in Wales.

Households headed by an unemployed or inactive person are much more likely to live in local authority or housing association accommodation. The median length of residence for this tenure is eight years¹⁵ whereas the period under consideration in this study was only three years. Accordingly, it is possible that more people will choose to relocate out of the deprived areas in subsequent years, as alternative social rented dwellings become available elsewhere or as they become able to access the private rented or owner occupier market.

Although the data are not perfect, they do give a possible indication of the broader trends. If the (not unrealistic) assumption is made that the unknown cases exhibited the same moving patterns to the observed cases, it is possible to estimate the proportion of transiting individuals who remained in the area and the proportion who moved away. The observed ratio of stayers to movers was applied to the unknown cases, with the result that over 60 per cent of transiting individuals remained in the area (almost 70 per cent in the case of Wales) and approximately 35 per cent moved away (just over 30 per cent for Wales). The potential impact of different assumptions about the proportion of the 'unknowns' that left or stayed is explored in Section 4.3.

Summary:

- The majority of workless people in 2004 were also workless in 2007.
- However, some individuals in deprived areas experienced positive employment outcomes.
- A higher proportion of individuals who had claimed JSA or IS-LP in 2004 made the transition into employment, compared to claimants of IB/SDA, CA and other out-of-work benefits.
- The geographical movements of a large proportion of the individuals who found work are unknown.
- A higher proportion of individuals who found work (who could be geographically tracked) remained in the area than moved away.

4.2 Identifying transition areas

In order to identify transition areas, it is necessary to focus on the two key dynamics: workless individuals becoming employed and moving out of the area, and workless individuals moving into the area. In this section the methods for identifying transition areas are outlined first, and then each of the elements required for the identification of transition areas is analysed in turn.

4.2.1 Method for identifying transition areas

To examine the extent to which individuals make the transition from worklessness into work and then leave the area, the **transiting outmover rate** was calculated as the proportion of the workless population in 2004 that makes the transition into employment and moves out of the area by 2007.

To examine whether the 'transiting outmovers' are replaced by 'workless inmovers', the **workless inmover rate** was calculated as the proportion of the workless population in 2007 that has moved into the area since 2004. These may be individuals who were workless in 2004, or individuals who were employed in 2004 and workless in 2007 (the assumption is made that the geographical move took place after the employment status change, in the same way as for individuals who made the transition from worklessness into employment).

Transition areas should have a high transiting outmover rate and a relatively high proportion of workless inmovers (at least to the same extent that transiting individuals move out).

Transition areas are defined as those with a transiting outmover rate and workless inmover rate that is above the mean for non-improver deprived areas in the country (England, Scotland and Wales separately). There are numerous thresholds that could have been selected, all of which are arbitrary. In the absence of any evidence for selecting a particular threshold, the mean was chosen.

4.2.2 Transiting outmover rates

Table 4.4 shows the transiting outmover rates for non-improver deprived areas in the constituent countries of Great Britain. In each country only a small proportion of workless individuals in 2004 made the transition into employment and moved away.

Of course, these are just the average values for each country; individual LSOAs/datazones vary in the proportion of individuals making the transition into employment and moving out of the area. The spread of transiting outmover rates is shown in Figure 4.1 for non-improver deprived areas in England, Scotland and Wales. The central shaded box illustrates the interquartile range of each LSOA/datazone distribution of transiting outmover rates, while the horizontal line within this shaded box shows the median rate of that distribution. The vertical lines (the 'whiskers') illustrate the range of transiting outmover rates in each country. Data points that lie more than 1.5 times the interquartile range away from the nearer quartile value are plotted separately as small dots on the chart at either end of the whiskers.

All non-improver deprived areas in each country have some individuals classified as transiting outmovers, although in some LSOAs/datazones transiting outmovers account for less than one per cent of the 2004 workless population. The distributions are broadly similar in the three countries. The maximum transiting outmover rate is 9.8 per cent in England, 8.0 per cent in Scotland and 5.5 per cent in Wales. The minimum transiting outmover rates are less than one per cent in all three countries, while the median values and interquartile ranges are of a similar magnitude.

Country	Number of transiting outmovers	Transiting outmover rate (%)
England	17,180	3.4
Scotland	1,450	3.2
Wales	810	2.4

Table 4.4 Transiting outmover rates, non-improver deprived areas

Notes: A deprived area is an LSOA or datazone that was in the most deprived national decile (separately for England, Scotland and Wales) in terms of worklessness rates in any year between 2004 and 2007. A non-improver area is an LSOA or datazone that stayed the same or declined in terms of its worklessness rate between 2004 and 2007. There are 1,877 non-improver deprived areas in England, 260 in Scotland and 112 in Wales.



Figure 4.1 Spread of transiting outmover rates, non-improver deprived areas

4.2.3 Workless inmover rates

In Table 4.5 the workless inmover rates are shown for the constituent countries of Great Britain. In Scotland more than one quarter of the workless population in 2007 is workless inmovers. The proportion is slightly lower in England and Wales.

The number of workless inmovers is far higher than the number of transiting outmovers (over eight times), an explanation for which is provided in the next section.

	Number of workless inmovers	Workless inmover rate (%)
England	122,270	22.9
Scotland	11,590	25.6
Wales	6,310	18.1

Table 4.5 Workless inmover rates, non-improver deprived areas

Notes: A deprived area is an LSOA or datazone that was in the most deprived national decile (separately for England, Scotland and Wales) in terms of worklessness rates in any year between 2004 and 2007. A nonimprover area is an LSOA or datazone that stayed the same or declined in terms of its worklessness rate between 2004 and 2007. There are 1,877 non-improver deprived areas in England, 260 in Scotland and 112 in Wales.

As with the transiting outmover rate, individual LSOAs/datazones vary in the proportion of the 2007 workless population that is made up of workless individuals who have moved into the area. The spread of workless inmover rates is shown in Figure 4.2 for England, Scotland and Wales. The distributions are broadly similar in the three countries, with rates ranging from less than ten per cent to between 40 and 50 per cent, similar median values and interguartile ranges.



Figure 4.2 Spread of workless inmover rates, non-improver deprived areas

same or declined in terms of its worklessness rate between 2004 and 2007. There are 1,877 non-improver deprived areas in England, 260 in Scotland and 112 in Wales.

4.2.3 Combining the transiting outmover rate and workless inmover rate

In Figures 4.3, 4.4 and 4.5 the horizontal axis shows the transiting outmover rate and the vertical axis shows the workless inmover rate. Every non-improver deprived area is plotted according to these two rates. In all countries there is not a particularly strong association between the proportion of workless inmovers to an LSOA/datazone and the proportion of workless individuals who become employed and leave the area. Some LSOAs/datazones which have a relatively large proportion of workless inmovers have only a small proportion of individuals making the transition from worklessness into employment and then moving out of the LSOA/datazone. Conversely there are also some LSOAs/datazones with a relatively large proportion of transiting individuals but only a small proportion of workless inmovers.

In the figures below, the workless inmover and transiting outmover rates are imbalanced, with a much higher proportion of workless inmovers in the 2007 workless population than transiting outmovers in the 2004 workless population. This is partly due to the fact that only a subset of the true group of transiting outmovers can be identified in the data (i.e. those claiming tax credits). If reliable data were available on the geographical location of all employed individuals, it is likely that the transiting outmover and workless inmover rates would be less divergent. For example, had it been possible to locate all the transiting individuals in 2007 (as carried out in Section 4.1 using the observed ratio of stayers to movers), it is estimated that the transiting outmover rates could be 5.7 per cent in England, 5.6 per cent in Scotland and 3.9 per cent in Wales. The maximum transiting outmover rate could be 16.2 per cent in England, 14.5 per cent in Scotland, and 9.4 per cent in Wales.

An exact match would not be expected as there are other dynamics occurring that have not been examined so far in this report. While the workless inmovers are a subset of people moving into an area, the transiting outmovers are an even smaller subset of people leaving an area. The transiting outmovers account for only a relatively small proportion of the 2004 workless population that moved out: the majority (85.5 per cent) are individuals who were workless in both 2004 and 2007¹⁶.

The minimum criterion for an area to be regarded as a transition area is for the transiting outmovers to at least be replaced by workless inmovers. In non-improver deprived areas this is the case.



Figure 4.3 Transiting outmover rates by workless inmover rates, non-improver deprived areas in England

Note: A deprived area is an LSOA that was in the most deprived national decile in terms of worklessness rates in any year between 2004 and 2007. A non-improver area is an LSOA that stayed the same or declined in terms of its worklessness rate between 2004 and 2007. There are 1,877 non-improver deprived areas in England. Spearman correlation coefficient + 0.3219. The line on the vertical axis is the mean of the transiting outmover rate.



Figure 4.4 Transiting outmover rates by workless inmover rates, non-improver deprived areas in Scotland

are 260 non-improver deprived areas in Scotland. Spearman correlation coefficient + 0.2665. The line on the vertical axis is the mean of the workless inmover rate and the line on the horizontal axis is the mean of the transiting outmover rate.



Figure 4.5 Transiting outmover rates by workless inmover rates, non-improver deprived areas in Wales

Note: A deprived area is an LSOA that was in the most deprived national decile in terms of worklessness rates in any year between 2004 and 2007. A non-improver area is an LSOA that stayed the same or declined in terms of its worklessness rate between 2004 and 2007. There are 112 non-improver deprived areas in Wales. Spearman correlation coefficient + 0.5168. The line on the vertical axis is the mean of the workless inmover rate and the line on the horizontal axis is the mean of the transiting outmover rate.

The lines on Figures 4.7, 4.8 and 4.9 show the national mean of the workless inmover rate (horizontal axis) and the national mean of the transiting outmover rate (vertical axis). LSOAs/ datazones which are above the mean on both the transiting outmover rate and workless inmover rate were considered transition areas. These are the LSOAs/datazones in the top right quadrant on each figure.

Using the chosen definition, there are 468 transition areas in England, 71 in Scotland and 38 in Wales (25.7 per cent of the non-improver deprived areas in Great Britain).

In general these areas have the highest ratio of individuals who moved out of the area having found employment (transiting outmovers) to individuals who stayed in the area having made that transition (transiting nonmovers), as shown in Table 4.6. When compared to Table 4.3, which shows similar information for all non-improver deprived areas, the proportion of transiting outmovers is much closer to the proportion of transiting nonmovers, while the proportion of transiting individuals for whom their location in 2007 is unknown is approximately equal to the proportion for all non-improver deprived areas (40 per cent).

	England	Scotland	Wales
Movement	(%)	(%)	(%)
Nonmover	30.3	31.9	38.2
Outmover	29.2	28.0	24.2
Location unknown	40.4	40.1	37.7
Ν	21,320	2,130	1,470

Table 4.6 Geographical movements of transiting individuals, transition areas

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean. There are 468 transition areas in England, 71 in Scotland and 38 in Wales.

4.2.4 Geographical distribution of transition areas

England

There are transition areas in every region in England (see Table 4.8). There are non-improver deprived areas in 204 local authorities, of which 136 contain at least one transition area. Most of the local authorities that do not contain any transition areas have only a small number of non-improver deprived areas. Exceptions to this are Barnsley (17), Greenwich (18), Hackney (22), Knowsley (21) and Wakefield (18).

In some local authorities in England a high proportion of non-improver deprived areas are transition areas. However, many contain only a small number of non-improver deprived areas. The local authority with the largest number of transition areas is Blackpool, where 23 LSOAs are transition areas (see Table 4.7). This represents 85.2 per cent of the total non-improver deprived areas in Blackpool. North East Lincolnshire has the second largest number of transition areas (17), which account for 77.3 per cent of the total non-improver deprived areas in the local authority.

Overall there are five local authorities that contain 10 or more transition areas. Three of these local authorities are located in Yorkshire and The Humber (North East Lincolnshire, Bradford, Kingston upon Hull), one in the North West (Blackpool), and one in the South East (Thanet).

Table 4.7Number and percentage of non-improver deprived areas that are
transition areas, regions in England

Region	Number of non-improver deprived areas	Number of transition areas	Percentage of non- improver deprived areas that are transition areas
East Midlands	135	28	20.7
East of England	82	32	39.0
London	207	32	15.5
North East	170	42	24.7
North West	445	117	26.3
South East	109	60	55.0
South West	86	36	41.9
West Midlands	379	40	10.6
Yorkshire and The Humber	264	81	30.7
Total	1,877	468	24.9

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean.

Local authority	Number of non-improver deprived areas	Number of transition areas
Blackpool	27	23
North East Lincolnshire	22	17
Kingston upon Hull, City of	47	13
Bradford	25	13
Thanet	15	12
Rochdale	25	9
Wirral	26	8
Stockton-on-Tees	14	8
Blackburn with Darwen	21	8
Bolton	25	7
Birmingham	127	7
Hastings	12	7

Table 4.8Number of non-improver deprived areas that are transition areas,
local authorities in England

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean.

This brief analysis of the location of transition areas in England suggests that a relatively high proportion may be situated in coastal areas. Table 4.9 shows the breakdown of transition areas by seaside town for England¹⁷. The table shows the seaside towns with two or more transition areas. There are 102 transition areas in seaside towns, which is over one fifth (21.8 per cent) of the total transition areas in England. This is a high incidence when one considers that seaside towns only contain 6.5 per cent of all the deprived LSOAs in England. The seaside towns with the highest number of transition areas are Greater Blackpool, Thanet and Hastings/Bexhill.

One explanation for this finding could be the availability of cheaper housing in seaside towns, for example houses in multiple occupation, some of which are in poor repair. This has resulted from the closure and re-use of hotels as privately rented flats. Such accommodation may act as a point of entry to the housing market in seaside towns, from which people move on to accommodation in the social housing sector in the same town (Beatty and Fothergill, 2003; Fothergill, 2008). Their movement from the LSOA/datazone may be unconnected to finding employment, but may instead be a function of the housing market.

However, much employment in seaside towns tends to be seasonal, depending mainly on tourism. The fact that individuals who were workless in August 2004 had found employment by August 2007 may reflect the availability of work in the summer months.

¹⁷ The definition of seaside towns follows a review of evidence (Fothergill, 2008) commissioned by the Department for Communities and Local Government. Four principles were used to define seaside towns, and on this basis, 43 larger seaside towns around the coast of Britain were identified, of which 37 are in England and the remainder are in Wales. The analysis presented was conducted internally by the Department for Work and Pensions and the aggregate results passed to the research team for inclusion in this report.

Conside tours	Number of non-improver	Number of
Seasiae town	aeprivea areas	transition areas
Greater Blackpool	39	26
Thanet	18	12
Hastings/Bexhill	18	10
Weston-super-Mare	10	6
Greater Bournemouth	13	5
Bridlington	8	4
Clacton	7	4
Folkestone and Hythe	6	4
Great Yarmouth	14	4
Scarborough	9	4
Southend-on-Sea	17	4
Torbay	10	4
Greater Brighton	19	2
Greater Worthing	3	2
Skegness	6	2

Table 4.9 Seaside towns containing two or more transition areas

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean. Seaside towns with less than two transition areas have been excluded.

Scotland

Of the 26 local authorities in Scotland that contain non-improver deprived areas, 21 contain at least one transition area.

There are 12 local authorities that contain just one or two transition areas and in most of these local authorities there are very few non-improver deprived areas (North and South Lanarkshire are exceptions).

Six local authorities contain five or more transition areas. The proportion of non-improver deprived areas that are transition areas in these local authorities ranges from 15.8 per cent in Glasgow City to 50.0 per cent in Edinburgh.

The local authorities with the largest numbers of transition areas are Fife and Glasgow City, which each contain nine transition areas. A much smaller proportion of Glasgow's non-improver deprived areas are transition areas compared to Fife.

Data on seaside towns in Scotland are not available as this was not covered in the original work by Fothergill and Beatty.

Wales

There are non-improver deprived areas in 18 local authorities in Wales, of which 14 contain at least one transition area.

The number of transition areas in each local authority is small. The local authorities with the largest number of transition areas are Cardiff and Newport. The five transition areas in these local authorities account for 71.4 per cent and 45.5 per cent of the non-improver deprived areas in the local authority respectively. Rhondda Cynon Taff has the largest number of non-improver deprived areas (20), but only one fifth of these are transition areas.

Again, a relatively high proportion of transition areas are in seaside towns: 23.7 per cent of transition areas in Wales are located in the seaside towns of Barry, Colwyn Bay, Conwy, Llandudno, Prestatyn and Rhyl.

Summary:

- Only a relatively small proportion of workless individuals in 2004 made the transition into employment and moved away.
- The workless inmover rates are much higher than the transiting outmover rates, partly due to the unknown geographical movements of some individuals who found work, but also because there are other groups of individuals moving out, in particular workless people.
- There is variation in the transiting outmover rates and workless inmover rates at LSOA/datazone level.
- Approximately one-quarter of the non-improver deprived areas in Great Britain are classified as transition areas.
- Transition areas are found in the majority of local authorities in which there are non-improver deprived areas.
- Over one-fifth of transition areas are located in seaside towns in England and Wales.

4.3 Can transition areas explain the persistence of high worklessness rates?

As outlined in the introduction, the main research question addressed in this report is as follows:

Do certain deprived neighbourhoods exhibit relatively high levels of individual transition from worklessness into work but without a resultant reduction in area-level worklessness rates? Is this because many of the people who become employed subsequently move out of the area and are replaced by workless people moving into the area?

In this chapter analysis has been presented which specifically relates to this research question, a summary of which follows.

First, across all non-improver deprived areas approximately 15 per cent of people who were workless in 2004 had made the transition into employment by 2007. Some areas have higher rates of individual transition into employment than others (e.g. the highest LSOA/datazone rate in England and Scotland is one quarter of the 2004 workless population, and the highest LSOA rate in Wales is one-fifth of the 2004 workless population).

Second, approximately one-third of the individuals who made the transition from worklessness into employment (and whose geographical location in 2007 is known) moved away from the LSOA/ datazone. This is approximately three per cent of the 2004 workless population (or approximately five per cent if the unknown location individuals are taken into account by applying the observed ratio of stayers to movers to the unknown cases). This varies by area, but the highest proportion of transiting outmovers in any LSOA/datazone is approximately 10 per cent of the 2004 workless population (or approximately 16 per cent if the unknown location individuals are taken into account). This is a relatively small proportion of the 2004 workless population.

Third, the proportion of the 2007 workless population that can be accounted for by workless people moving into the area is higher than the proportion of the 2004 workless population who made the transition into employment and moved out of the area. Thus, previously workless individuals who leave the area appear to be replaced by workless people moving into the area. This phenomenon occurs to some extent in all non-improver deprived areas, and a group of areas has been identified where this is happening to a greater extent, referred to as transition areas.

Of course, there is a group of individuals for whom there is no information on geographical location in 2007 (approximately 40 per cent of the individuals who made the transition into employment between 2004 and 2007 in non-improver deprived areas). This makes it difficult to properly assess whether the persistence of high worklessness rates is due to individuals moving out of the LSOA/ datazone after finding employment. However, by making certain assumptions it is possible to simulate the impact on worklessness rates of the geographical movement of the unknown cases under different scenarios.

In the analysis that follows, the assumption is made, as throughout the chapter, that the status quo is a situation where the geographical movement of the unknowns follows the observed ratio of stayers to movers in each LSOA/datazone. The LSOA/datazone mean, minimum and maximum worklessness rates in 2007 under this assumption are shown in Table 4.11 (these are the actual worklessness rates observed in the research dataset in transition areas).

Country	Mean worklessness rate 2007	Minimum worklessness rate 2007	Maximum worklessness rate 2007
England	32.0	22.7	63.0
Scotland	39.1	29.8	58.0
Wales	35.8	29.9	62.9

Table 4.10Mean, minimum and maximum worklessness rates in 2007,
transition areas

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean. There are 468 transition areas in England, 71 in Scotland and 38 in Wales.

Simulations under two different assumptions were tested: first, that all individuals with an unknown location in 2007 stayed in the LSOA/datazone; and second, that all individuals with an unknown location in 2007 moved from the LSOA/datazone.

If the assumption is made that all unknowns stayed in the area, the changes in the LSOA/datazone worklessness rates are slight (see Table 4.11). On average, the change to the LSOA/datazone worklessness rate is a decrease of approximately one percentage point. The smallest change in worklessness rates among transition areas is less than half a percentage point, while the largest change is a decrease of between two and four percentage points, depending on the country. The largest change in England is a decrease of 3.6 percentage points (see worked example in Appendix F).

Table 4.11	Mean, minimum and maximum change in 2007 worklessness rates –
	estimated figures for assumption 1, transition areas

Country	Mean change in worklessness rate	Minimum change in worklessness rate	Maximum change in worklessness rate
England	1.0	0.2	3.6
Scotland	1.3	0.4	3.0
Wales	0.8	0.2	2.5

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean. There are 468 transition areas in England, 71 in Scotland and 38 in Wales.

Under the assumption that all unknowns moved from the area, the changes in the LSOA/datazone worklessness rates are again quite small (see Table 4.12). The largest change in worklessness rates among transition areas in England, for example, is an increase of 3.0 percentage points (see worked example in Appendix F).

Table 4.12Mean, minimum and maximum change in 2007 worklessness rates –
estimated figures for assumption 2, transition areas

Country	Mean change in Minimum chang worklessness rate worklessness rate		Maximum change in worklessness rate	
England	0.9	0.1	3.0	
Scotland	1.3	0.3	2.4	
Wales	1.0	0.4	1.6	

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean. There are 468 transition areas in England, 71 in Scotland and 38 in Wales.

In the time period under examination, and of the group for whom there is geographical information at both timepoints, only a third of the individuals who made the transition into employment subsequently left the area.

With regard to those individuals for whom geographical location in 2007 is unknown, the analysis in this section has shown that even under the most extreme assumptions, where either every unknown transiting individual stays in the area, or conversely every unknown transiting individual leaves the area, there would be very little change to the worklessness rate in the majority of areas.

Therefore, in general, the movement of individuals from an LSOA/datazone after making the transition from worklessness into employment, and their replacement by workless individuals moving into the area, cannot explain why high worklessness rates persist in some deprived areas. In those transition areas with the greatest change to the worklessness rate under different assumptions, the worklessness rates remain high and the difference between the estimated worklessness rate and the observed rate is not particularly large. Therefore policymakers should look at other explanations for persistently high rates of worklessness.

Summary:

• There is little evidence to suggest that the outmovement of individuals having made the transition into employment is a major underlying factor in the persistence of high worklessness rates in certain deprived areas. Therefore policymakers should look at other explanations for persistently high rates of worklessness.

5 Transiting outmovers

Having identified a group of 577 possible transition areas in Great Britain, in this chapter the transiting outmovers in those areas are examined and compared to other relevant groups. To reduce the volume of analysis presented, results are discussed for England only (468 transition areas), although equivalent tables and charts for Scotland and Wales can be found in Appendix G.

In the first section the extent to which transition areas fulfil an escalator function is explored. While individuals in the transition areas have made the important transition from worklessness into employment, it is necessary to examine the deprivation level of the Lower layer Super Output Areas (LSOAs)/datazones to which the transiting outmovers go as this is also an important outcome. Brief analysis of the distance moved by transiting outmovers is also undertaken.

In the second section key demographic characteristics of the transiting outmovers are examined as well as characteristics relating to the benefit claim prior to making the transition into employment. The transiting outmovers are compared to individuals who made the transition into employment but did not leave the LSOA/datazone in order to establish whether there are particular characteristics associated with transiting outmovers that can help to explain why they left the LSOA/datazone having found employment while others did not.

5.1 Where do the transiting outmovers go?

In this section the geographical movements of transiting outmovers are examined in terms of the level of deprivation of the destination areas and the distance moved.

5.1.1 Methods for examining geographical movements of transiting outmovers

The Index of Multiple Deprivation (IMD) was used as a broad measure of neighbourhood deprivation in the origin and destination areas. The relevant country IMD rank was merged onto the individual cases by LSOA/datazone code. This was done twice – first the IMD ranks were merged onto the 2004 LSOA/datazone code (the origin area) and then onto the 2007 LSOA/datazone code (the destination area). The change in rank was then calculated for each transiting outmover.

Because each country's IMD is created separately and comprises slightly different domains and indicators constructed from varying data sources, it is not possible to compare levels of deprivation between countries. For this reason only individuals who moved within the same country in 2004 and 2007 were included in the analysis. This captured the vast majority (97.1 per cent) of individuals in transition areas who moved having become employed. Of the three countries, Wales has the highest proportion of movers who went to a different country (16.7 per cent, compared to 1.6 per cent in England and 9.3 per cent in Scotland).

The distance moved by transiting outmovers was also examined (for England only). This was done by merging the grid reference of the LSOA centroid onto the individual cases by LSOA code. This was done twice – first the grid references were merged onto the 2004 LSOA code and then onto the 2007 LSOA code. The distance between the 2004 LSOA centroid and the 2007 LSOA centroid was then calculated in metres for each transiting outmover as a measure of distance moved. Although this method is only able to identify the distance between the central point of different LSOAs, the small size of these areas means that the distances calculated are a fairly accurate reflection of the distances moved by an individual.

5.1.2 Deprivation status of destination area

In Figure 5.1 the change in overall IMD rank is shown for the group of transiting outmovers in transition areas in England. A positive value for the change in rank indicates a move to a less deprived area, while a negative value represents a move to a more deprived area.

The majority of transiting outmovers went to a less deprived area. In many cases the move was to an area that was not substantially less deprived than the area that the individual left. This is consistent with previous research on population turnover in deprived areas (Bailey and Livingston, 2007). However, some transiting outmovers went to areas that were considerably less deprived. These are the cases towards the far right on the chart. In some instances the individual has moved from one of the most deprived areas to one of the least deprived areas in the country.





It would have been interesting to identify a subset of transition areas from which the majority of transiting outmovers move to areas that are considerably less deprived than their origin area. Such 'escalator' areas would be those where transiting outmovers on average experience significant improvement in their circumstances in terms of the deprivation level of the area in which they live. However, the number of transiting outmovers per LSOA/datazone is quite small, making it difficult to produce a robust summary of moves at small-area level (e.g. the average change in rank).

5.1.2 Distance moved

The average distance moved by transiting outmovers in transition areas in England is approximately 30 kilometres. However, this figure is partly skewed by some individuals moving long distances. The majority of moves are much shorter than 30 kilometres, as shown in Table 5.1. One in five transiting outmovers (19.3 per cent) moved less than one kilometre from their previous home, while almost half (44.9 per cent) moved between one and five kilometres. Overall, three-quarters (74.9 per cent) of transiting outmovers moved less than ten kilometres and approximately 80 per cent moved less than 20 kilometres. Only 10.0 per cent of transiting outmovers moved over 100 kilometres, and a small proportion (1.8 per cent) moved into Scotland or Wales. These figures indicate that the majority of individuals who moved home after making the transition from worklessness into employment did not relocate very far from their previous home. The short distance nature of most moves has been reported elsewhere (Böheim and Taylor, 2002; Champion *et al.*, 1998; Kearns and Parkes, 2003; Meen *et al.*, 2005; O'Reilly and Stevenson, 2003; Shuttleworth and Green, 2011; Shuttleworth *et al.*, 2010).

Distance	Percentage of moves
Less than 1km	19.3
1km to 5km	44.9
5km to 10km	10.8
10km to 20km	5.5
20km to 30km	2.3
30km to 40km	1.4
40km to 50km	0.8
50km to 100km	3.1
100km to 200km	4.8
200km to 300km	2.8
More than 300km	2.4
Into Scotland or Wales	1.8
Total	100.0
Ν	6,240

Table 5.1	Distance moved by all transiting outmovers, transition areas
	in England

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean. There are 468 transition areas in England. A transiting outmover is an individual who made the transition from worklessness into employment between 2004 and 2007 and moved out of the LSOA.

There are a number of reasons why the moving distances of transiting outmovers are generally of a short distance. The above analysis showed that many of the moves made by transiting outmovers are to areas that are similarly or only slightly less deprived, and therefore, because deprived areas tend to cluster together, in the majority of cases the move will only be a short distance.

However, there are also reasons other than the geography of deprived areas that may explain the short distance moves. First, the employed individuals that can be geographically located are receiving tax credits. Individuals on working tax credit will be in low paid employment and may not have entered specialised jobs that require a significant relocation, instead finding employment close to their home. Individuals on child tax credit may be in higher paid employment, but may be less likely to move far if they have children in nursery or school who would be disrupted by a move. Second, as the transition into employment can be a challenging one, especially for individuals with children or other caring responsibilities, the destination options for transiting individuals may be limited to those close to home so that existing support systems can be utilised (Batty *et al.*, 2011).

Even if their place of work is not nearby, individuals who have become employed may be able to travel to their workplace without needing to move home. This strategy may be especially likely for those who have been workless for a long period of time and wish to become settled in their employment, or individuals who must wait until they have the resources to move before moving closer to their workplace.

Summary:

- The majority of transiting outmovers from transition areas went to a less deprived area, although often not substantially less deprived.
- Some transiting outmovers from transition areas moved from very deprived areas to some of the least deprived areas in the country.
- Over 80 per cent of the moves made by transiting outmovers from transition areas were over a short distance (less than 20 kilometres).

5.2 Who are the transiting outmovers?

In this section the characteristics of the transiting outmovers are examined and compared with the characteristics of individuals who made the transition into employment but stayed in the area ('transiting nonmovers'). Key demographic characteristics are explored in addition to characteristics relating to their benefit claim prior to finding employment.

5.2.1 Choice of characteristics

The research dataset has only limited information about the constituent individuals. Demographic characteristics include age and sex, while there is information about the benefit claimed prior to employment, and an estimate of the length of time on benefit can be calculated.

The age of the individual in 2007 was used (i.e. the age at the point by which the individual is known to have moved). In most instances sex remained constant over time, however for some individuals there were some discrepancies and so the most frequent sex in the time period under consideration was used.

For the analysis of characteristics relating to the benefit claim, data from each of the annual timepoints were used, rather than data for 2004 and 2007 only (as in the previous analysis in this report).

The first timepoint after 2004 where employment status had changed from workless to employed was identified for each individual. Then the benefit claimed by the individual at the timepoint immediately prior to this was used as a measure of the benefit prior to employment. This was considered more appropriate than the benefit claimed in 2004 because some individuals moved onto a different benefit before becoming employed. These shifts between benefit generally increased the proportion of people claiming Jobseeker's Allowance (JSA) directly before becoming employed.

An estimate of the length of time an individual spent on benefit was calculated by counting the number of consecutive annual timepoints at which the individual was flagged as workless prior to the spell of employment that spans the 2007 timepoint. Some individuals may have cycled between benefit and employment between 2004 and 2007, and for these individuals, the length of time on

benefit was counted from the timepoint after 2004 where their employment status first changed from workless to employed. As the dataset only dates back as far as 1999, the longest length of time on benefits that can be captured is eight years. Some of the individuals identified as having been claiming for eight years will have been claiming for longer than this. In addition, because the data are only available on an annual basis it is not possible to capture short-term transitions between employment and benefits.

It is important to remember that the analysis of individuals who made the transition into employment only takes into account those who could be geographically located at both timepoints (i.e. claiming tax credits in 2007). Therefore the characteristics of the transiting outmovers analysed in the next section (and the comparisons with the transiting nonmovers) refer only to a subset of individuals. This will be discussed further below.

5.2.2 Demographic characteristics of transiting outmovers

Age

In Table 5.2 the age profile of transiting outmovers and transiting nonmovers in England is shown. The outmovers are mainly fairly young. The 25 to 34 age group accounts for the highest proportion of outmovers (40.5 per cent) and the majority of transiting outmovers are aged between 16 and 44. The 16 to 24 age group is smaller than the others in terms of the number of years included and is also the age group which covers people who are in school or in further or higher education. The proportion in this age group is therefore understandably lower than in the other 'young' age groups. The proportion of transiting outmovers aged 45 or older is smaller (12.4 per cent).

Overall, the outmovers have a younger age profile than the nonmovers, consistent with higher rates of mobility reported for younger people (Beatty *et al.*, 2009; Burrows, 1999; Champion *et al.*, 1998; Kearns and Parkes, 2003; Meen *et al.*, 2005; Oldman, 1991). The proportion of outmovers in the 16-24 age group (18.8 per cent) is over twice that of the nonmovers (8.0 per cent), and the proportion of outmovers in the 25 to 34 age group is also higher than the proportion of nonmovers of this age (40.5 per cent compared to 33.0 per cent). Conversely, there are more nonmovers than outmovers aged 35 or older (40.6 per cent compared to 59.1 per cent).

	Transiting outmovers	Transiting nonmovers
Age group	(%)	(%)
16 to 24 years	18.8	8.0
25 to 34 years	40.5	33.0
35 to 44 years	28.4	36.2
45 to 54 years	10.4	18.0
55 to 64 years	1.9	4.9
Total	100.0	100.0
Ν	6,240	6,460

Table 5.2Age of transiting outmovers and transiting nonmovers, transition
areas in England

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean. There are 468 transition areas in England. A transiting outmover is an individual who made the transition from worklessness into employment between 2004 and 2007 and moved out of the LSOA. A transiting nonmover is an individual who made the transition from worklessness into employment between 2004 and 2007 and employment between 2004 and 2007 and stayed in the LSOA.

Sex

The sex composition of transiting outmovers and transiting nonmovers in England is shown in Table 5.3. Approximately two-thirds of outmovers who made the transition into employment and moved away are female¹⁸. A very slightly higher proportion of nonmovers are female, and conversely, a slightly higher proportion of outmovers are male.

This finding needs to be treated with caution, however. The research dataset only captures individuals who made the transition into employment where they were claiming tax credit. For 2007, across the entire dataset (England only), over 60 per cent of the claimants of tax credit are women. Women are more likely to claim tax credits, particularly if they are lone parents. Therefore the pattern seen in Table 5.3 is likely to be a reflection of the transiting outmovers captured by the research dataset, rather than the true breakdown of transiting outmovers by sex.

Indeed, when all transiting individuals in transition areas are considered (i.e. all those who made the transition from worklessness into employment), the breakdown by sex is as follows: male 47.1 per cent; female 52.9 per cent. Women are over-represented in the group of transiting individuals for whom the location in 2007 is known (i.e. the transiting outmovers and transiting nonmovers), which can only be explained by the tax credit data used to geographically locate them. Tables relating to this analysis can be found in Appendix H.

Table 5.3	Sex of transiting outmovers and transiting nonmovers, transition
	areas in England

	Transiting outmovers	Transiting nonmovers	
Sex	(%)	(%)	
Male	34.3	31.6	
Female	65.7	68.4	
Total	100.0	100.0	
Ν	6,230 ¹	6,460	

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean. There are 468 transition areas in England. A transiting outmover is an individual who made the transition from worklessness into employment between 2004 and 2007 and moved out of the LSOA. A transiting nonmover is an individual who made the transition from worklessness into employment between 2004 and 2007 and stayed in the LSOA.

¹ Cases with a missing sex are excluded from the analysis.

Age and sex combined

Table 5.4 displays the combined age and sex of transiting outmovers in England. A higher proportion of women than men are aged between 16 and 24, and the proportion of women aged between 25 and 34 is higher than the proportion of men, although the proportions are more similar. In contrast, the proportion of men in the 35 to 44 age group is around ten percentage points higher than the proportion of women, and a larger proportion of men are aged 45 to 64.

	Male	Female
Age group	(%)	(%)
16 to 24 years	10.8	23.0
25 to 34 years	36.7	42.5
35 to 44 years	34.3	25.3
45 to 54 years	15.1	8.0
55 to 64 years	3.2	1.2
Total	100.0	100.0

Table 5.4 Age and sex of transiting outmovers, transition areas in England

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean. There are 468 transition areas in England. A transiting outmover is an individual who made the transition from worklessness into employment between 2004 and 2007 and moved out of the LSOA.

5.2.3 Characteristics relating to benefit claim of transiting outmovers

Benefit type

The benefit claimed by transiting outmovers and transiting nonmovers prior to making the transition into employment is fairly similar, as shown in Table 5.5 for England. Approximately half had been lone parents claiming Income Support (IS-LP), and a further quarter had been receiving JSA¹⁹. The proportion of individuals who had claimed JSA and Incapacity Benefit (IB)/Severe Disablement Allowance (SDA) is also similar for both groups²⁰.

There is a slightly higher proportion of individuals who had been in receipt of Carer's Allowance (CA) in the nonmovers group than the outmovers group. The caring responsibilities of the nonmovers may have made a move out of the LSOA more difficult.

The relatively small differential in the proportion of JSA and IB/SDA claimants is perhaps surprising. However, as with sex, this is likely to be a reflection of the research dataset. Looking again at all transiting individuals in transition areas, the breakdown by benefit type for the three main client groups is as follows: JSA 39.4 per cent; IB/SDA 22.4 per cent; IS-LP 31.5 per cent. JSA claimants are under-represented in the group of transiting individuals for whom the 2007 location is known, while IS-LP claimants are over-represented (over 90 per cent of these individuals are in the known location group). The results seen with respect to JSA and IS-LP are therefore again a function of the geographical movements of employed people captured in the research dataset. Tables relating to this analysis can be found in Appendix H.

¹⁹ In Scotland and Wales the proportion is higher for outmovers and the differential is greater.

²⁰ In Scotland and Wales the proportion is higher for nonmovers.

	Transiting outmovers	s Transiting nonmovers	
Client group	(%)	(%)	
JSA	26.2	24.5	
IB/SDA	19.4	19.5	
IS-LP	48.2	48.8	
CA	3.4	5.3	
Other	2.8	1.8	
Total	100.0	100.0	
Ν	6,240	6,460	

Table 5.5Benefit type prior to employment of transiting outmovers and
transiting nonmovers, transition areas in England

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean. There are 468 transition areas in England. A transiting outmover is an individual who made the transition from worklessness into employment between 2004 and 2007 and moved out of the LSOA. A transiting nonmover is an individual who made the transition from worklessness into employment between 2004 and 2007 and stayed in the LSOA.

Benefit type and sex combined

The benefits claimed by male and female transiting outmovers in England are shown in Table 5.6. Looking first at females, over two-thirds of female transiting outmovers had received IS-LP. This supports the contention that women, who are overrepresented among tax credit claimants and therefore among the group for whom the 2007 location is known, are more likely to be claiming IS-LP, and this in turn impacts on the pattern of benefit receipt seen for transiting outmovers. The next largest proportion is women who had claimed IB/SDA, followed by those who had claimed JSA.

For men, almost 60 per cent of transiting outmovers had been in receipt of JSA and approximately one-third had claimed IB/SDA²¹.

	Male	Female
Client group	(%)	(%)
JSA	58.2	9.6
IB/SDA	31.4	13.2
IS-LP	5.8	70.4
CA	2.3	3.9
Other	2.3	3.0
Total	100.0	100.0

Table 5.6Benefit type prior to employment of male and female transiting
outmovers, transition areas in England

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean. There are 468 transition areas in England. A transiting outmover is an individual who made the transition from worklessness into employment between 2004 and 2007 and moved out of the LSOA.

²¹ In Wales fewer males had been receiving JSA and a higher proportion had been claiming IS-LP, CA and other out-of-work benefits.

Length of time on benefits

The length of time in years that individuals had been receiving out-of-work benefits before making the transition into employment is presented for transiting outmovers and transiting nonmovers in England in Table 5.7. Outmovers vary in the length of time spent on benefits. There is not a clear pattern, except that fewer transiting outmovers had been on benefit for three to four years than either one to two or five or more years²².

A higher proportion of nonmovers (46.3 per cent) had been claiming benefits for five or more years compared to the outmovers (34.2 per cent). Conversely, a higher proportion of outmovers (38.0 per cent) had been in receipt of benefits for one or two years compared to the nonmovers (30.4 per cent).

The length of time spent on benefit may help to explain why some people did not move having made the transition into employment. A long period out of work is likely to have a significant impact on financial resources available to support a geographical move.

Table 5.7Length of time on benefits of transiting outmovers and transiting
nonmovers, transition areas in England

	Transiting outmovers	Transiting nonmovers
Number of years on benefit	(%)	(%)
One to two	38.0	30.4
Three to four	27.8	23.6
Five or more	34.2	46.0
Total	100.0	100.0
Ν	6,240	6,460

Notes: A transition area is a non-improver deprived area that had a transiting outmover rate and workless inmover rate above the national mean. There are 468 transition areas in England. A transiting outmover is an individual who made the transition from worklessness into employment between 2004 and 2007 and moved out of the LSOA. A transiting nonmover is an individual who made the transition from worklessness into employment between 2004 and 2007 and stayed in the LSOA.

Logistic regression model to explore the probability of moving

The above analysis suggests that benefit type, age, sex and length of time on benefits are all interrelated and it is the combination of these factors which may determine an individual's propensity to move following the transition into employment. However, it is not clear which of the single characteristics examined above actually has a statistically significant impact on moving when you take into account all the other characteristics.

Logistic regression explores the probability of an outcome on a binary dependent variable, controlling for a range of explanatory variables. In this case the dependent variable is whether someone moves having found employment, and the model specified contains the continuous explanatory variables age and length of time on benefit, the binary explanatory variable sex, and a dummy variable for every category of the categorical explanatory variable 2004 benefit type.

The results from the logistic regression are shown in Table 5.8^{23} .

²² In both Scotland and Wales a higher proportion of individuals had been on benefit for five or more years than one to two years.

²³ Due to the smaller number of cases in Scotland and Wales, a logistic regression model has only been produced for England.

Table 5.8	Odds ratios from logistic regression modelling probability of moving
	following transition into employment

Explanatory variable	Odds ratio	Std. error	Z	P> z	95% Confid	ence Interval
Age	0.953	0.002	-22.72	0.000	0.949	0.957
Benefit duration	0.923	0.008	-9.43	0.000	0.908	0.939
Female (base=male)	0.806	0.042	-4.17	0.000	0.728	0.892
IB/SDA (base=JSA)	1.226	0.071	3.53	0.000	1.095	1.373
IS-LP (base=JSA)	1.013	0.060	0.22	0.829	0.902	1.138
CA (base=JSA)	0.882	0.090	-1.23	0.218	0.721	1.077
Other (base=JSA)	1.369	0.181	2.38	0.017	1.057	1.773

Notes:

N = 12,700. Prob > chi2 = 0.0000. Log likelihood = -8404.4695. Pseudo R2 = 0.0446.

The results (odds ratios) show that when other factors are held constant:

- each year of age leads to a 4.7 per cent decrease in the odds of moving;
- each year spent on benefit prior to making the transition into employment leads to a 7.7 per cent decrease in the odds of moving;
- being female compared to being male leads to a 19.4 per cent decrease in the odds of moving.

These results are all statistically significant (p = 0.000). The broad findings on age and length of time on benefit are unsurprising given the results presented above. The finding on sex supports the contention that the patterns seen above with respect to sex (i.e. that more women move than men) are largely a function of the research dataset. When other factors are taken into account, the odds of women moving after finding employment are lower than the odds of men moving.

The findings on benefit type are less straightforward to interpret, and in some cases perhaps a little surprising. For example, being on IB/SDA in 2004 compared to JSA leads to a 22.6 per cent increase in the odds of moving (p = 0.000). The only other significant result is for other out-of-work benefits, which compared to having claimed JSA leads to a 37.3 per cent increase in the odds of moving (however, although significant at the p < 0.05 level, the 95 per cent confidence intervals are very wide).

However, it should be noted that the model only explains 4.5 per cent of the variance (although the pseudo R-square measure in logistic regression should be treated with caution). There are a number of other characteristics which it is not possible to measure with the research dataset but which may be important explanatory factors and may shed light on some of the findings, particularly those relating to benefit type.

Summary:

- The transiting outmovers captured in the research dataset are mainly fairly young.
- Almost half of the transiting outmovers had been claiming IS-LP prior to becoming employed. However, when broken down by sex, the majority of male transiting outmovers were actually claimants of JSA and the majority of female transiting outmovers were claimants of IS-LP.
- Age, length of time spent on benefit and sex are all significant predictors of whether an individual will move having found employment. The probability of an individual moving increases the younger they are, the less time they have spent on benefit prior to finding employment and if they are male.
- Other factors not included in the regression model may be important predictors of an individual moving when they have made the transition into employment.

6 Conclusion

The analysis in this report has broken new ground in using individual-level data on employment transitions and geographical movements to try to shed light on some unanswered questions about the worklessness dynamics taking place in deprived areas. Inevitably, when one is trying something new, it is not always possible to predict how successful it will be. Due to underlying issues of data quality, it has not proven possible to fully answer all of the questions that were posed at the outset of the study.

The factor that has been the most problematic was the data available on the geographical location of people who made the transition into employment: in around 40 per cent of cases this information was missing such that it was not possible to ascertain if they had relocated or stayed in the same place following job entry. In addition, as the available data were much better for lone parents who had claimed Income Support (IS-LP) (who are mostly women), this caused difficulty in interpreting the demographic and benefit characteristics of those who moved.

These data issues should be taken into account when considering any further research: it is possible that the development of Universal Credit may in time lead to more complete address data being available over time periods and status changes.

Nevertheless, the research has made the following important contributions to knowledge:

- 1 It has been shown that there was a widespread, but not universal, phenomenon of 'catching up', whereby deprived areas narrowed the gap with the national average during the favourable economic climate of 2004-07.
- 2 However, it has also been shown that there are deprived areas in Great Britain where worklessness actually became more entrenched during the years 2004-07. This was despite a backdrop of strong and stable economic growth and very substantial investment in neighbourhood renewal. It should provoke debate both at a national and local level about the causes of worklessness and the nature of regeneration and employment support that is required.
- 3 This debate should be informed by the detailed investigation undertaken into the issue of whether workless people who secure employment tend to move out of deprived areas into 'better' areas. Some local areas have wondered whether this is the reason for their worklessness rates remaining stubbornly high when they believe that worklessness programmes in their area are effective. It was found that:
 - A higher proportion of individuals stayed in the Lower layer Super Output Area (LSOA)/ datazone than moved out when they made the transition into employment. For those who had been living in social housing, this may partly relate to availability of social housing elsewhere or ability to access the private rented or owner occupier market.
 - It was possible to classify 577 LSOAs/datazones as 'transition areas'. These areas are characterised by a relatively high rate of individuals who made the transition into employment and moved out of the area, and a relatively high rate of workless people moving into the area to replace the outmovers.
 - Over one-fifth of transition areas are in seaside towns. It is possible that the nature of the housing market is a major factor in many of these areas (i.e. cheap and/or temporary accommodation). The seasonal labour market may also be a factor.

- On average in transition areas:
 - the majority of moves were shorter than 20 kilometres;
 - the majority of people who moved LSOA/datazone went to a less deprived area, sometimes markedly so;
 - younger people were more likely to move than older people.
- Although the geographical location of people who made the transition into employment is not known in all cases, modelling showed that even if it is assumed that they all moved out, and were replaced by workless people moving in, this would not have changed worklessness rates significantly. Therefore, whatever the 'true' outmovement of individuals who found employment, it does not seem that it is a key factor in the persistence of high worklessness rates in deprived areas.
- 4 On average, approximately 15 per cent of workless people living in deprived LSOAs/datazones in 2004 were in employment in 2007. The proportion of individuals who made the transition into employment was much higher among those who had been claiming Jobseeker's Allowance (approximately 34 per cent) and Income Support (approximately 23 per cent) in 2004. In contrast, only approximately seven per cent of people on Incapacity Benefit/Severe Disablement Allowance secured a job over this period. These figures highlight that people in the most deprived areas are more in contact with the labour market than might be assumed, and are consistent with the view that active benefits are more effective in promoting job entry.
- 5 The results of the additional analysis funded by Greater Manchester local authorities accords well with this national report, suggesting that these findings have broad applicability in local areas.
- 6 In classifying LSOAs/datazones by their performance in reducing worklessness during the economic boom, this project has also provided a resource to facilitate further local investigation of the factors that may have resulted in 'improvement', 'non-improvement' or 'transition' within neighbourhoods. A list of each LSOA/datazone and its classification can be found in the data annexes, published separately on the Department for Work and Pensions' website.

Appendix A Defining deprived areas

As mentioned in Chapter 2, deprived areas were selected on the basis of their worklessness rates (specifically areas in the most deprived decile of worklessness in each country). However, two other possibilities for the defining indicator were considered: first, the most deprived decile according to the relevant Index of Multiple Deprivation (IMD) in each country; and second, the most deprived decile according to the Employment Domain of the IMD.

The IMD in each country comprises a number of indicators that relate to different dimensions (or 'domains') of deprivation and was therefore considered too broad a measure to be used to define deprived areas where the specific focus is worklessness patterns. Although the Employment Domain of each IMD relates to worklessness, it is based on a somewhat narrower definition than was thought suitable for this project. In practice, the three methods showed reasonable agreement in the selection of deprived areas.

Once the defining indicator was chosen, this then needed to be applied to the relevant years of data (2004-07). Three possibilities were considered for selecting the final group of deprived areas: 1) including areas identified as deprived at the first timepoint; 2) including areas identified as deprived at **all four** timepoints; and 3) including areas identified as deprived at deprived at any of the four timepoints.

If areas are selected on the basis of falling in the most deprived decile at the first timepoint in the period of analysis, in a relative sense, that group of areas cannot get any worse over the remainder of the time period, although they can improve relative to other areas. Such a method would result in a skewed sample in which only a particular subset of deprived areas was included. A similar objection applies to selecting only areas that were deprived at all four timepoints. These areas would be those that were making little or no improvement to their worklessness rates and therefore few declining or improving areas would be expected in such a sample. This would again result in a skewed sample in which only a particular subset of deprived areas was included.

The decision was made to include any area that was in the most deprived worklessness decile at any of the four timepoints. This ascribes equal importance to all years and should capture areas that remain fairly stable with respect to their worklessness rates as well as areas that are improving or declining. This method also limits the influence of yearly fluctuations in worklessness, in that areas which fell just outside the most deprived decile for one year would still be classified as deprived. However, on the other hand, those areas which just crept into the most deprived decile for one year would be captured in the deprived group.

Appendix B Driver of change in worklessness rate

It might be assumed that a change in worklessness rate over time is driven by a change to the workless population – so the rate improves because the number of people who are workless decreases, or conversely, the rate gets worse because the number of people who are workless increases. However, the change in worklessness rate can be driven by either a change to the numerator (i.e. the workless count) or a change to the denominator (i.e. the population count), or there can be a change to both.

Table B.1 shows the breakdown of Lower layer Super Output Areas (LSOAs)/datazones in terms of the change to workless and population counts. The 'direction of change' columns show whether the workless and population counts increased, decreased or stayed the same. The 'driver' column shows whether it is the percentage change in the workless count or the percentage change in the population count that is greater.

Analysis reveals that for the majority of LSOAs/datazones (approximately 74 per cent) the driver of change in the worklessness rate is a change to the number of workless people (i.e. the percentage change in the workless count is greater than the percentage change in the population count, although in some cases only marginally so). LSOAs/datazones labelled as 'genuine' in the table are those where a change to the workless count is the main driver.

There are some LSOAs/datazones where the change in worklessness rate is more likely driven by a change to the population count. Taking the decliner group as an example, there are 89 areas which saw a decrease in the workless count, but a greater decrease in the population count, and therefore overall the area was classified as a decliner, despite an improvement in the number of workless people. A second smaller group did not see any change to the workless count, but a decrease in the population, meaning they were classified as decliners. Similar patterns are evident for the improver areas, although the proportion of areas affected is higher than for the decliner areas. As discussed in Chapter 3, these cases (labelled as 'false decliners' and 'false improvers' in the table) were excluded from subsequent analysis.

The two groups labelled 'other decliner' and 'other improver' require additional consideration. These are cases where, although the workless count has either increased (in the case of decliners) or decreased (in the case of improvers) as expected for the broad type, population change is actually greater than workless change, but in the opposite direction (e.g. the workless count increased but the population count decreased). For the majority of these cases, there is only a small difference between the population and workless change (see Figures B.1 and B.2). It would be quite difficult to select a threshold to distinguish cases where the driver is very obviously population change, and therefore this group in its entirety is regarded as 'genuine'.

Direction of change							
Broad type	Workless count	Population count	Number of LSOAs/ datazones	Percentage of broad type	Percentage of all LSOAs/ datazones	Driver	Label
Decliner	Decrease	Decrease	89	2.8	0.2	Population	False decliner
	Increase	Increase	1,467	45.9	3.6	Workless	Genuine decliner
	Increase	Decrease	234	7.3	0.6	Population	Other decliner
	Increase	Decrease	1,350	42.2	3.3	Workless	Genuine decliner
	No change	Decrease	18	0.6	0.0	Population	False decliner
	Increase	No change	39	1.2	0.1	Workless	Genuine decliner
Improver	Increase	Increase	782	6.5	1.9	Population	False improver
	Decrease	Decrease	3,914	32.5	9.6	Workless	Genuine improver
	Decrease	Increase	2,055	17.1	5.0	Population	Other improver
	Decrease	Increase	5,120	42.5	12.5	Workless	Genuine improver
	No change	Increase	82	0.7	0.2	Population	False improver
	Decrease	No change	83	0.7	0.2	Workless	Genuine improver
Stayer	Increase	Increase	2,603	10.1	6.4	Population	
	Increase	Increase	4,808	18.7	11.8	Workless	
	Increase	Increase	1	0.0	0.0	Same % increase	
	Decrease	Decrease	1,409	5.5	3.4	Population	
	Decrease	Decrease	7,060	27.5	17.3	Workless	
	Increase	Decrease	678	2.6	1.7	Population	
	Increase	Decrease	2,294	8.9	5.6	Workless	
	Decrease	Increase	1,375	5.4	3.4	Population	
	Decrease	Increase	3,942	15.4	9.6	Workless	
	No change	Decrease	545	2.1	1.3	Population	
	No change	Increase	663	2.6	1.6	Population	
	Decrease	No change	163	0.6	0.4	Workless	
	Increase	No change	90	0.4	0.2	Workless	
	No change	No change	18	0.1	0.0	No driver	
	No population	recorded in 2007	1	0.0	0.0	N/A	
			25,649	100.0	62.7		
			40,882		100.0		

Table B.1Classification of areas in terms of the change to workless and population counts

57

	England		Scotland		Wales	
Broad type	Ν	%	Ν	%	Ν	%
Improver	8,033	24.7	2,392	36.8	747	39.4
Stayer	20,833	64.1	3,766	57.9	1,050	55.4
Decliner	2,812	8.7	216	3.3	62	3.3
Excluded	804	2.5	130	2.0	37	2.0
Total	32,482	100.0	6,504 ¹	100.0	1,896	100.0

Table B.2Number and percentage of improver, decliner, stayer and
excluded areas

¹ Although Scotland contains a total of 6,505 datazones, one of these (S01003031 located in Glasgow City) had no population recorded for the years 2006 and 2007 due to the demolition of housing. For this reason it was not possible to calculate the change in worklessness rate between 2004 and 2007 and therefore this datazone was unable to be classified into one of the three groups. All analysis relating to Scotland therefore only considers 6,504 datazones.

Figure B.1 Difference between percentage change in workless count and percentage change in population count for other decliners





Figure B.2 Difference between percentage change in workless count and percentage change in population count for other improvers

Appendix C Location of deprived improver areas

There are three regions in England where half or more of the deprived Lower layer Super Output Areas (LSOAs) are improvers: the North East, North West and London. A relatively high proportion of the North East's deprived LSOAs are improver areas (60.6 per cent). Deprived LSOAs are located in 219 local authorities in England, of which 45 do not contain any improver areas. All of these 45 local authorities contain just a small number of deprived LSOAs. There are 15 local authorities in England where every deprived LSOA is an improver area, however each contains just one or two deprived LSOAs. All of Camden's 19 deprived LSOAs are improver areas, and a high proportion of the LSOAs in Islington, Gateshead, Manchester and Southwark are classified as such.

Deprived datazones are located in 28 local authorities in Scotland and only one of these local authorities (East Lothian) does not contain any improver areas. In East Renfrewshire and Aberdeenshire every deprived datazone is an improver area, however, East Renfrewshire contains only three deprived datazones and Aberdeenshire contains only two. In contrast, 200 of Glasgow City's 257 deprived datazones (77.8 per cent) are classified as improver areas, and over 70 per cent of datazones in Aberdeen City, North Lanarkshire and South Lanarkshire are improver areas.

There are deprived LSOAs in 21 local authorities in Wales, but four of these (Denbighshire, Gwynedd, Powys and The Vale of Glamorgan) do not contain any improver areas. In three local authorities (Ceredigion, Flintshire and Pembrokeshire) every deprived LSOA is an improver area, but each contains just one or two deprived LSOAs. Nearly three-quarters (72.0 per cent) of deprived LSOAs in Cardiff are classified as improver areas and in a further four local authorities (Caerphilly, Merthyr Tydfil, Neath Port Talbot and Swansea) over half of the deprived LSOAs are improver areas.
Appendix D Location of deprived decliner areas

There are three regions in England where one-quarter or more of the deprived Lower layer Super Output Areas (LSOAs) are decliners: the South East, East of England and West Midlands. The region with the highest proportion of deprived LSOAs that are decliner areas is the South East (29.6 per cent). Deprived LSOAs are located in 219 local authorities in England, and there are 57 that do not contain any decliner areas. Five local authorities (Camden, Ealing, Lancaster, Norwich and Bournemouth) contain ten or more deprived LSOAs but none of these are decliner LSOAs. There are 13 local authorities in England where every deprived LSOA is a decliner area, but each of these contains just one, two or three deprived LSOAs. North East Lincolnshire and Blackpool have a relatively high number of deprived LSOAs and are two of the local authorities with the highest proportion of deprived LSOAs that are decliner areas.

Deprived datazones are located in 28 local authorities in Scotland, but only 15 of these contain any decliner areas. Given that there are only 40 deprived decliner areas in Scotland, most of these local authorities contain only one or two decliner areas. The local authorities with the most deprived datazones that are decliners are Dundee City (8) and Glasgow City (7), which respectively account for 18.6 and 2.7 per cent of the deprived datazones in these local authorities.

There are deprived LSOAs in 21 local authorities in Wales, but only nine of these contain any decliner areas. Given that there are only 40 deprived decliner areas in Scotland, most of these local authorities contain only one or two decliner areas. The largest number of decliner areas are found in Bridgend and Newport (three each), representing 27.3 per cent of Bridgend's deprived LSOAs and 20.0 per cent of Newport's.

Appendix E Identifying individual-level dynamics

Labels 1-12 are where there is complete information for an individual (i.e. status and location are known at both timepoints). Labels 13-28 are where there is missing information for an individual (i.e. various combinations of status and location are unknown at the two timepoints). Of these labels, 12 represent true cases of incomplete data, and 4 represent cases which can be attributed to individuals ageing in and out of the data. Labels 13 and 15 are where an individual disappears from the dataset at the second timepoint and this can be attributed to the fact that they are no longer of working age and so have been dropped from the data (aged out). Labels 21 and 23 are where an individual appears in the dataset at the second timepoint and so were not included in the data (aged in). These four labels can be regarded as complete in the sense that the missing information can be explained.

Label	Description	Category
1	Employed person (at both timepoints) moves in	Flow
2	Workless person (at both timepoints) moves in	Flow
3	Employed person (at both timepoints) moves out	Flow
4	Workless person (at both timepoints) moves out	Flow
5	No change to employment status (employed) and remains in area	Stock
6	No change to employment status (workless) and remains in area	Stock
7	Employed person becomes workless and remains in area	Stock
8	Workless person becomes employed and remains in area	Stock
9	Employed person becomes workless and moves in	Flow
10	Workless person becomes employed and moves in	Flow
11	Employed person becomes workless and moves out	Flow
12	Workless person becomes employed and moves out	Flow
13	Workless person is aged out	Aged out
14	Workless person's status and location now unknown	Incomplete
15	Employed person is aged out	Aged out
16	Employed person's status and location now unknown	Incomplete
17	Workless person's location now unknown	Incomplete
18	Employed person's location now unknown	Incomplete
19	Workless person becomes employed and location now unknown	Incomplete
20	Employed person becomes workless and location now unknown	Incomplete
21	Workless person is aged in	Aged in
22	Workless person's previous status and location unknown	Incomplete
23	Employed person is aged in	Aged in
		Continued

Table E.1 Complete list of labels of individual dynamics

Table E.1 Continued

Label	Description	Category
24	Employed person's previous status and location unknown	Incomplete
25	Workless person's previous location unknown	Incomplete
26	Employed person's previous location unknown	Incomplete
27	Workless person becomes employed and previous location unknown	Incomplete
28	Employed person becomes workless and previous location unknown	Incomplete

Appendix F Worked examples

The following worked example shows how, under the first assumption (i.e. that all unknowns stay in the area), a decrease of 3.6 percentage points occurred in one particular Lower layer Super Output Area (LSOA) in England²⁴.

LSOA A

The observed data:

Number of workless people in 2004 = 415 Number of workless people in 2007 = 425

Total working-age population in 2004 = 875 Total working-age population in 2007 = 900

Worklessness rate in 2004 = (415/875) * 100 = 47.4% Worklessness rate in 2007 = (425/900) * 100 = 47.2%

Number of transiting individuals who stayed = 7 Number of transiting individuals who moved = 33 Number of transiting individuals with unknown location = 40

Transiting outmover rate (known cases only) = (35/415) * 100 = 8.4%

However, if all unknowns stay:

Number of additional transiting individuals who stayed = 33 (this is the number of unknowns who would have moved out, assuming the observed ratio of stayers to movers applies to the unknowns)

Number of workless people in 2007 = 425 - 33 = 392(as the unknowns do not move out, fewer workless people move in to replace them

Worklessness rate in 2007 = (392/900) * 100 = 43.6%

Difference between actual and recalculated 2007 worklessness rate = 47.2 - 43.6 = 3.6 percentage points

The following worked example shows how, under the second assumption (i.e. that all unknowns move from the area), an increase of 3.0 percentage points occurred in one particular LSOA in England²⁵.

LSOA B
The observed data:
Number of workless people in 2004 = 650 Number of workless people in 2007 = 640
Total working-age population in 2004 = 1,110 Total working-age population in 2007 = 1,080
Worklessness rate in 2004 = (650/1,110) * 100 = 58.6% Worklessness rate in 2007 = (640/1,080) * 100 = 59.3%
Number of transiting individuals who stayed = 30 Number of transiting individuals who moved = 25 Number of transiting individuals with unknown location = 60
Transiting outmover rate (known) = (25/650) * 100 = 3.8%
However, if all unknowns move:
Number of additional transiting individuals who moved out = 33 (this is the number of unknowns who would have stayed, assuming the observed ratio of stayers to movers applies to the unknowns)
Number of workless people in 2007 = 640 + 33 = 673 (as more workless people move in to replace those who moved out)
Worklessness rate in 2007 = (673/1,080) * 100 = 62.3%
Difference between actual and recalculated 2007 worklessness rate = $59.3 - 62.3 = 3.0$ percentage points

Appendix G Transiting outmovers in Scotland and Wales

Deprivation status of destination area







Figure G.2 Change in IMD rank for transiting outmovers, transition areas in Wales

Demographic characteristics

Age

Table G.1Age of transiting outmovers and transiting nonmovers, transition
areas in Scotland

	Transiting outmovers	Transiting nonmovers
Age group	(%)	(%)
16 to 24 years	16.3	8.3
25 to 34 years	45.8	33.0
35 to 44 years	28.7	33.9
45 to 54 years	7.6	19.6
55 to 64 years	1.7	5.2
Total	100.0	100.0
Ν	600	680

areas in Wales		
	Transiting outmovers	Transiting nonmovers
Age group	(%)	(%)
16 to 24 years	20.9	9.1
25 to 34 years	39.5	32.6
35 to 44 years	27.7	35.8
45 to 54 years	9.3	18.2
55 to 64 years	2.5	4.3
Total	100.0	100.0
Ν	350	560

Table G.2Age of transiting outmovers and transiting nonmovers, transition
areas in Wales

Sex

Table G.3Sex of transiting outmovers and transiting nonmovers, transition
areas in Scotland

	Transiting outmovers	Transiting nonmovers
Sex	(%)	(%)
Male	33.4	32.8
Female	66.6	67.2
Total	100.0	100.0
Ν	6001	680

¹ Cases with missing sex are excluded from the analysis.

Table G.4Sex of transiting outmovers and transiting nonmovers, transition
areas in Wales

	Transiting outmovers	Transiting nonmovers
Sex	(%)	(%)
Male	26.8	27.7
Female	73.2	72.3
Total	100.0	100.0
Ν	350	560

Age and sex combined

Table G.5 Age and sex of transiting outmovers, transition areas in Scotland

	Male	Female
Age group	(%)	(%)
16 to 24 years	7.5	20.7
25 to 34 years	41.2	48.0
35 to 44 years	35.2	25.5
45 to 54 years	13.1	4.8
55 to 64 years	3.0	1.0
Total	100.0	100.0

Table G.6 Age and sex of transiting outmovers, transition areas in Wales

	Male	Female
Age group	(%)	(%)
16 to 24 years	12.6	23.9
25 to 34 years	34.7	41.3
35 to 44 years	31.6	26.3
45 to 54 years	14.7	7.3
55 to 64 years	6.3	1.2
Total	100.0	100.0

Characteristics relating to benefit claim

Benefit type

Table G.7Benefit type prior to employment of transiting outmovers and
transiting nonmovers, transition areas in Scotland

	Transiting outmovers	Transiting nonmovers
Client group	(%)	(%)
Jobseeker's Allowance (JSA)	25.8	28.9
Incapacity Benefit (IB)/Severe Disablement Allowance (SDA)	19.0	20.5
Lone parents claiming Income Support (IS-LP)	51.0	45.0
Carer's Allowance (CA)	2.0	4.6
Other	2.2	1.0
Total	100.0	100.0
Ν	600	680

Table G.8	Benefit type prior to employment of transiting outmovers and
	transiting nonmovers, transition areas in Wales

	Transiting outmovers	Transiting nonmovers
Client group	(%)	(%)
JSA	18.6	20.0
IB/SDA	18.1	21.5
IS-LP	55.1	50.1
CA	4.2	6.6
Other	4.0	1.8
Total	100.0	100.0
Ν	350	560

Benefit type and sex combined

Table G.9Benefit type prior to employment of male and female transiting
outmovers, transition areas in Scotland

	Male	Female
Client group	(%)	(%)
JSA	59.3	9.1
IB/SDA	29.1	13.9
IS-LP	5.0	74.0
CA	3.5	1.3
Other	3.0	1.8
Total	100.0	100.0

Table G.10Benefit type prior to employment of male and female transiting
outmovers, transition areas in Wales

	Male	Female
Client group	(%)	(%)
JSA	46.3	8.5
IB/SDA	31.6	13.1
IS-LP	8.4	72.2
CA	8.4	2.7
Other	5.3	3.5
Total	100.0	100.0

Length of time on benefits

Table G.11Length of time on benefits of transiting outmovers and transiting
nonmovers, transition areas in Scotland

	Transiting outmovers	Transiting nonmovers	
Number of years on benefit	(%)	(%)	
One to two	34.2	28.9	
Three to four	27.3	22.3	
Five or more	38.4	48.8	
Total	100.0	100.0	
Ν	600	680	

Table G.12Length of time on benefits of transiting outmovers and transiting
nonmovers, transition areas in Wales

	Transiting outmovers	Transiting nonmovers		
Number of years on benefit	(%)	(%)		
One to two	36.2	27.0		
Three to four	24.0	22.9		
Five or more	39.8	50.1		
Total	100.0	100.0		
Ν	350	560		

Appendix H Analysis of transiting individuals

The tables in this appendix relate to transiting individuals (i.e. those who made the transition from worklessness to employment between 2004 and 2007). The distributions of four characteristics (age, sex, benefit type prior to employment and length of time on benefit) are presented for individuals for whom geographical location is known in 2007 (i.e. transiting outmovers and nonmovers – those claiming tax credits in 2007) and for individuals for whom geographical location is unknown (i.e. those not claiming tax credits in 2007).

Table H.1 Age of transiting individuals, transition areas in England

	Known	Unknown	Total
Age group	(%)	(%)	(%)
16-24 years	13.3	23.0	17.2
25-34 years	36.7	29.3	33.7
35-44 years	32.4	22.2	28.3
45-54 years	14.3	16.3	15.1
55-64 years	3.4	9.1	5.7
Total	100.0	100.0	100.0
Ν	12,700	8,620	21,320

Table H.2 Sex of transiting individuals, transition areas in England

	Known	Unknown	Total
Sex	(%)	(%)	(%)
Male	32.9	68.0	47.1
Female	67.1	32.0	52.9
Total	100.0	100.0	100.0
N	12,700	8,620	21,320

Table H.3Benefit type prior to employment of transiting individuals, transition
areas in England

	Known	Unknown	Total
Client group	(%)	(%)	(%)
Jobseeker's Allowance (JSA)	25.3	60.0	39.4
Incapacity Benefit (IB)/Severe Disablement Allowance (SDA)	19.5	26.7	22.4
Lone parents claiming Income Support (IS-LP)	48.5	6.4	31.5
Carer's Allowance (CA)	4.4	3.6	4.0
Other out-of-work	2.3	3.4	2.7
Total	100.0	100.0	100.0
Ν	12,700	8,620	21,320

	Known	Unknown	Total
Number of years on benefit	(%)	(%)	(%)
One to two years	34.1	53.2	41.8
Three to four years	25.7	23.7	24.9
Five years or longer	40.2	23.1	33.3
Total	100.0	100.0	100.0
Ν	12,700	8,620	21,320

Table H.4Number of years on benefit of transiting individuals, transition areas
in England

References

Bailey, N. and Livingston, M. (2007). Population turnover and area deprivation. Bristol: The Policy Press.

Batty, E., Cole, I. and Green, S. (2011). *Low-income neighbourhoods in Britain: The gap between policy ideas and residents' realities.* York: Joseph Rowntree Foundation.

Beatty, C. and Fothergill, S. (2003). *The Seaside Economy*. Sheffield: Centre for Regional Economic and Social Research, Sheffield Hallam University.

Beatty, C., Lawless, P., Pearson, S. and Wilson, I. (2009). *Residential mobility and outcome change in deprived areas: Evidence from the New Deal for Communities Programme*. London: Department for Communities and Local Government.

Burrows, R. (1999). Residential Mobility and Residualisation in Social Housing in England. *Journal of Social Policy*, 28, 27-52.

Böheim, R. and Taylor, M. P. (2002). Tied Down Or Room To Move? Investigating The Relationships Between Housing Tenure, Employment Status And Residential Mobility In Britain. *Scottish Journal of Political Economy*, 49, 369-392.

Cole, I., Lawless, P., Manning, J. and Wilson, I. (2007). *The Moving Escalator? Patterns of Residential Mobility in New Deal for Communities areas*. London: Neighbourhood Renewal Unit/Department for Communities and Local Government.

Champion, T., Fotheringham, S., Rees, P. H., Boyle, P. J. and Stillwell, J. (1998). *The Determinants of Migration Flows in England: A review of existing data and evidence*. Department of the Environment, Transport and the Regions.

Fenton, A., Tyler, P., Markkanen, S., Clarke, A. and Whitehead, C. (2010). Why Do Neighbourhoods Stay Poor? Deprivation, Place and People in Birmingham. London: Barrow Cadbury Trust.

Fothergill, S. (2008). *England's coastal towns: A short review of the issues, evidence base and research needs.* Report to CLG, published as supplementary government evidence to the Communities and Local Government Committee.

Glennerster, H., Lupton, R., Noden, P. and Power, A. (1999). *Poverty, Social Exclusion and Neighbourhood: Studying the area bases of social exclusion*. London: Centre for Analysis of Social Exclusion, London School of Economics.

Kearns, A. and Parkes, A. (2003). Living in and leaving poor neighbourhood conditions in England. *Housing Studies*, 18, 827-851.

Meen, G., Gibb, K., Goody, J., McGrath, T. and Mackinnon, J. (2005). *Economic segregation in England: Causes, consequences and policy*. Bristol: Policy Press.

Oldman, C. (1991). Financial Effects of Moving in Old Age. Housing Studies, 6, 251–62.

ONS (2009). Analysing Change over Time for Small Areas: A Strategy. Version 2 5/11/2009. London: Office for National Statistics.

O'Reilly, D. and Stevenson, M. (2003). Selective migration from deprived areas in Northern Ireland and the spatial distribution of inequalities: implications for monitoring health and inequalities in health. *Social Science and Medicine*, 57, 1455-1462.

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

SEU (2001). A New Commitment to Neighbourhood Renewal: National Strategy Action Plan. London: Social Exclusion Unit, Cabinet Office.

Shuttleworth, I., Gould, M. and Barr, P. (2010). Short-distance migration, residential segregation and spatial scale: Perspectives from the Northern Ireland Longitudinal Study. *Association of American Geographers Annual Meeting*. Washington, DC.

Shuttleworth, I. and Green, A. (2011). Spatial Mobility Intentions, the Labour Market and Incapacity Benefit Claimants: Evidence from Northern Ireland. *Urban Studies*, 48, 911-927.

If you would like to know more about DWP research, please contact: Kate Callow, Commercial Support and Knowledge Management Team, Upper Ground Floor, Steel City House, West Street, Sheffield, S1 2GQ. http://research.dwp.gov.uk/asd/asd5/rrs-index.asp



DWP Department for Work and Pensions

Published by the Department for Work and Pensions November 2011 www.dwp.gov.uk Research report no. 779 ISBN 978 1 908523 31 0