



CASE-BROOKINGS CENSUS BRIEFS

No. 1

STICERD

TOYOTA CENTRE

Suntory and Toyota International Centres
for Economics and Related Disciplines

E·S·R·C
ECONOMIC
& SOCIAL
RESEARCH
COUNCIL

London School of Economics
Houghton Street
London WC2A 2AE
Tel: 020 7955 6679

The Growth and Decline of Cities and Regions

Ruth Lupton and Anne Power

July 2004

INTRODUCTION

The London School of Economics has a founding commitment to understanding the causes of social and economic change. It works to show changes in patterns of development internationally, whether at a large or small scale. Within the UK and in the capital in particular, it tries to keep a finger on the pulse of change and to influence both directly and indirectly the development of policy. This series of briefs on the 2001 census will present findings on population, on changes in the size and distribution of minority ethnic groups, on tenure and household change and on employment change, explaining their significance for wider changes. It will also look at these changes at neighbourhood level, with a particular focus on poorer neighbourhoods and how they have fared in comparison with their surrounding district, city, region, and the country as a whole. This first brief looks at changes in the distribution of population, focusing on urban and regional growth and decline. It relates these trends to government policy in the fields of economic growth, distribution of wealth, urban regeneration and social policy.

Changes in population distribution and composition help to shape and are shaped by wider trends both within the country and internationally. We focus mainly on cities and built up areas because that is where the overwhelming majority of the population live, but also because that is the focus of our work at LSE in the Centre for Analysis of Social Exclusion (CASE). Poverty, deprivation and social policy activity are all heavily concentrated within cities and towns. Problems of social exclusion are far more heavily concentrated in urban than in rural areas and the problems appear more stubborn and intractable, partly because of their very concentration. Urban areas are also central to most economic and cultural activity, including most higher education. Therefore the strength of urban areas largely dictates the strength of the overall economy. All of these reasons make cities and towns of great importance to government, particularly a government committed to eradicating social exclusion, child poverty and inequality of opportunity.

For a long time British cities have been in decline economically and in terms of their populations, and since the early 1970s successive governments have focused on attempting to reverse this decline. By 1991, there were signs that population drift was slowing and cities were beginning to recover, but the signs of growth were small - many thought insignificant - and on many counts the decline was continuing.

This is the first in a series of briefs on the 2001 census which will present findings on population, on changes in the size and distribution of minority ethnic groups, on tenure and household change and on employment change. This, and other CASE publications, are available from Jane Dickson at CASE, or can be downloaded from our internet site: <http://sticerd.lse.ac.uk/case>



The current government is extremely concerned about the progress of cities. In 1998, it set up the Urban Task Force, chaired by Lord Richard Rogers, to report on the state of England's cities and propose measures to reverse decline and promote an "urban renaissance". The report (DETR 1999) was widely hailed as a way forward, recognising that without urban regeneration on a spectacular scale, the British economy and social fabric would gradually come under threat. Shortage of land, wasteful low density building, growing polarisation, regional decline, congestion and environmental damage, inner city decline and incipient abandonment of the worst affected neighbourhoods, could all be tackled through a more coherent approach to city recovery. The report was quickly followed by an urban White Paper (DETR 2000) and an Urban Summit in 2002, where government invited every main actor in the urban field to take part in a 3-day affirmation of the growth and recovery potential of cities. The signals of population and job recovery were indeed strengthening as many claimed, but the picture was highly variable. It was impossible to judge how much further the outward drift of population and the strongly polarizing trends of the 1980s had slowed or intensified. The Census 2001 findings shed new light on cities and on the changes that were being celebrated at the Urban Summit. They allow us to quantify the urban and regional changes that we are experiencing and to understand the importance of economic, household and housing patterns alongside changes in population and ethnic composition.

The government is committed to follow up with a second Urban Summit in February 2005 and to publish a report in time for it on the state of our cities, following a preliminary report in 2000. This document on population change in Great Britain, based on the UK Census 2001, is the first in a series of Census Briefs produced by CASE that aim to help advance the debate on the future of cities and towns. They are inspired by the work of the Brookings Institution in the United States whose Center on Urban and Metropolitan Policy has played a creative role in informing and in part helping shape the recovery of US cities. By understanding and explaining the causes and directions of change, key actors can in fact also improve policy and influence outcomes.

In the United Kingdom, cities have neither declined as far as in the US nor has government ignored for so long the signs of decline. Nonetheless, in this country, we have little to be complacent about. Many studies show the chronic state of cities, the maldistribution of wealth and jobs, the growing ethnic concentrations in some of the most declining urban neighbourhoods, the regional imbalances and threat of social unravelling that some cities face (Lupton 2003, Mumford and Power 2003). This brief discusses population changes between 1991 and 2001 in the context of intense policy interest, both here and in Europe and the United States.

We owe a debt of thanks to Bruce Katz and other colleagues in Brookings for inspiring us to undertake this series jointly with them; to Professor William Julius Wilson of Harvard for his constant interest in our work on poor neighbourhoods and his willingness to join the wider urban debate in this country as well as in the US; to Professors Tony Champion, Duncan McLennan and Ivan Turok for their challenging advice and willingness to share expertise; to David Lunts, head of the Urban

Unit at ODPM and the many other colleagues in government who have encouraged us to do this work; also to Richard Best at the Joseph Rowntree Foundation for supporting our original work on the slow death of great cities and to Richard Rogers for lending his expertise and experience to our follow-up to the Urban Task Force, *Cities for a Small Country* (Rogers and Power 2000). Throughout, we draw on our work in CASE for the area study funded by the ESRC where we track 12 of the poorest urban areas in the country over 7 years, written up by Ruth Lupton (2003) and Katharine Mumford and Anne Power (2003), and on the work of our colleagues at the Center on Urban and Metropolitan Policy at Brookings, whose work on the US Census can be found at <http://www.brookings.edu/es/urban/issues/demographics/demographics.htm>.

ANALYSING POPULATION CHANGE USING THE CENSUS

The 2001 Census was conducted in England and Wales by The Office for National Statistics (ONS) and in Scotland by the General Register Office for Scotland (GRO). Data is Crown Copyright and is reproduced here with the permission of the Controller of HMSO and the Queen's Printer for Scotland. It provides the first major opportunity for ten years to examine changes in Great Britain's socio-economic geography, down to small area level.

However, as is widely known, comparing the 2001 Census with results from 1991 is not straightforward. The two Censuses differ in two important ways. First, the 1991 Census results included fewer adjustments for under-enumeration. They did include individuals and households imputed to exist by enumerators but who had not filled in forms, but they were not adjusted to take account of people who had been missed altogether by enumerators. Estimates of the numbers of such 'missing people' were subsequently derived from a post-Census survey and from rolling forward administrative data from the 1980s, and were used to feed into later population estimates. However, the original Census figures were not altered. The 2001 Census figures, by contrast, were adjusted before publication to incorporate estimates of under-enumeration. They are therefore higher than the 1991 Census figures, particularly in urban areas where under-enumeration was thought to be highest.

Second, there was an important change to the way students were enumerated. Data in 1991 was collected on a 'usual address' basis, with students counted at their vacation address rather than their term address. In 2001, they were counted at their term address. In major educational centres, this had the effect of making 2001 Census figures seem high by comparison with 1991 figures.

Both of these difficulties can be got around at the local authority level by comparing mid-year estimates of population (MYEs) rather than Census figures. MYEs are calculated in each Census year, based on the Census and any post-Census adjustments, and rolled forward each

year between Censuses on the basis of estimates of natural growth and migration. The MYE for 1991 took into account estimates of under-enumeration as well as post-Census adjustments which counted students at their term addresses rather than their vacation addresses. In this brief, which looks at overall population trends for local authority areas, we therefore compare MYEs, rather than raw Census data.¹

Further complications have subsequently arisen. Census results for 2001 showed the overall population to be considerably smaller than had been anticipated from rolled-forward MYEs based on the 1991 Census. Investigation by ONS revealed that this was due to over-estimation in the process of rolling forward the MYEs during the 1990s. It was thought that ONS had overcompensated for under-enumeration in the 1991 Census when calculating the 1991 MYE, and had also underestimated the level of international emigration during the decade. Most of the discrepancy affected the counts for young males, and affected large urban centres more than smaller settlements. As a result, ONS and GRO revised their population estimates for the years 1991-2001. However, even after this adjustment had been made, another problem came to light. It became apparent that part of the original discrepancy between rolled-forward MYEs and 2001 Census had come about not just because the MYEs were too high but because the 2001 Census counts were too low. In other words, there had been a higher level of under-enumeration in the 2001 Census than originally thought. As a result, further revised 2001 estimates were issued in September and November 2003. For many local authorities, these changes were negligible. However, for some large urban authorities, they were significant. Manchester was the most extreme case. Its estimated population went up about 27,000 from the post-Census 2001 estimate to the revised (Nov 2003) estimate.

There may well be further revisions to the figures, since ONS is still investigating the source of the problems. However, at the time of writing, the November 2003 revisions are regarded as the best estimates that can be produced. We use them here, in comparison with revised 1991 estimates, to describe population change.

Further details about the comparability of 1991 and 2001 data and the problems that have been encountered with 2001 population estimates can be found on the National Statistics website (www.statistics.gov.uk). One further methodological point to make here concerns the approach we have taken to identify and compare types of areas. Primarily to enable comparison with changes during the 1980s, we have made use of a local-authority based classification² of areas developed by Tony Champion and colleagues at the University of Newcastle and originally used to report on urban trends in England using 1981 and 1991 Census data (Atkins et al. 1996). The classification divides local authorities into types such as 'districts with industrial areas', 'resort, port and retirement areas' and 'principal metropolitan cities'. Since the original work in the mid 1990s, it has been revised to incorporate boundary changes during the 1990s and to include Scotland and Wales. It is the revised classification that is used here and we are very grateful to Tony Champion for making it available to us.

THE DISTRIBUTION OF POPULATION IN GREAT BRITAIN

Since this series has been developed partly for an international readership, we begin by making some preliminary observations about the population geography of Great Britain.

England, Scotland and Wales have between them a population of about 57.3 million. They have one very large city, London, with approximately 7.3 million people or about 13% of the entire population. Outside London, there are seven large conurbations: Tyne and Wear, Merseyside, Clydeside, Greater Manchester, West Midlands, West Yorkshire and South Yorkshire. These are the settlements built up around the major cities of the industrial revolution, in Scotland and the North and Midlands of England. Clydeside contains the city of Glasgow and its hinterland, including districts like North Lanarkshire and Renfrewshire; Tyne and Wear contains the city of Newcastle and surrounding districts like Gateshead and North Tyneside; West Yorkshire the cities of Leeds and Bradford and districts like Calderdale; West Midlands the city of Birmingham and districts like Coventry, Sandwell and Dudley; Merseyside the city of Liverpool and districts like Sefton and Knowlsey; Greater Manchester the principal city of Manchester, the city of Salford and surrounding districts like Bury, Bolton, Wigan and Trafford; and South Yorkshire the city of Sheffield and surrounding districts like Rotherham. These conurbations have populations between about 1 million and 2.5 million, making a total of about 12.5 million. The major cities within them are described in the classification we use as the 'metropolitan cities', and the other local authority districts within them as 'other metropolitan districts'. In this paper, we discuss changes in both the conurbations as a whole and the principal metropolitan cities and other metropolitan districts within them.

Cities outside the major conurbations are described in the classification we use as non-metropolitan. There are 14 large non-metropolitan cities, places such as Edinburgh, Cardiff, Swansea, Bristol and Nottingham, with populations of between about 150,000 and 450,000. These are typically large industrial centres or ports. We also have 17 'small non-metropolitan cities', with populations between 80,000 and 180,000, which are either smaller industrial centres (such as Middlesbrough), educational centres (like Oxford and Durham), and/ or the major urban settlements serving largely rural hinterlands (such as Worcester).³

Map 1 shows the distribution of these cities, and Table 1 their populations. Maps 2-8, later in this paper, show the local authorities within the conurbations, and their population sizes, and may be a useful reference at this point for those unfamiliar with the geography.

¹ Further papers in the series, looking at specific topics such as housing and employment, are based on Census counts.

² We acknowledge that there are problems with using a classification based on LA boundaries. Some cities have loosely drawn administrative boundaries, incorporating outer suburban and rural areas, while others are tightly drawn, making comparisons difficult. Census data aggregated to urban areas will make a more sensitive classification possible for these kinds of areas, but has not yet been published, and also gives incomplete coverage, because non-urban areas are not included. We therefore use a local authority-based classification for the time being, while recognising its limitations.

³ Brighton and Hove, which was created as new local authority in the mid-1990s by the amalgamation of Brighton with Hove, has retained Brighton's classification of 'small non-metropolitan city' even though its population considerably exceeds that of the others in its category.

MAP 1: CITIES IN BRITAIN

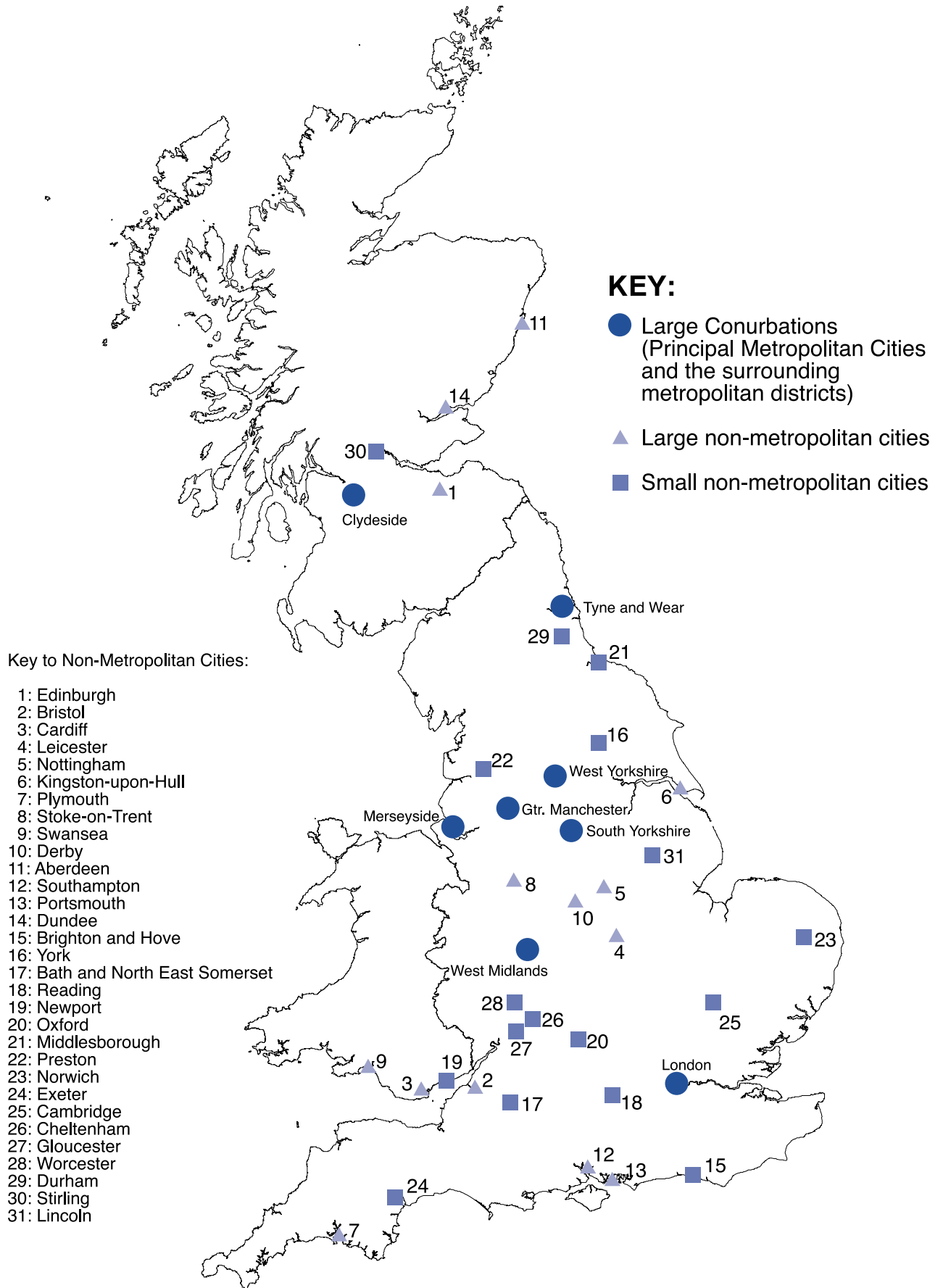


TABLE 1: Populations of Cities in Great Britain

	2001 population (thousands)
London	7308
Major Conurbations*	12542
West Midlands	2570
Greater Manchester	2513
West Yorkshire	2084
Clydeside	1666
Merseyside	1366
South Yorkshire	1266
Tyne and Wear	1078
Large Non-Metropolitan Cities	3629
Edinburgh	449
Bristol	384
Cardiff	307
Leicester	283
Nottingham	269
Kingston upon Hull	243
Plymouth	241
Stoke-on-Trent	240
Swansea	224
Derby	223
Aberdeen	212
Southampton	220
Portsmouth	188
Dundee	145
Small Non-Metropolitan Cities	2202
Brighton and Hove	250
York	181
Bath and North East Somerset	169
Reading	145
Newport	138
Oxford	136
Middlesbrough	136
Preston	131
Norwich	123
Exeter	111
Cambridge	110
Cheltenham	110
Gloucester	110
Worcester	93
Durham	88
Stirling	86
Lincoln	86

Source: ONS : 2001 MYEs (Nov 2003)

* Major conurbations are the principal metropolitan cities and their surrounding metropolitan districts

Altogether, about 26 million people (45% of the population) lives in London, the seven other conurbations and 31 other cities. The remaining local authority districts, which are not classified as cities, include smaller industrial towns outside the metropolitan areas, seaside resorts and smaller ports, towns in predominantly rural areas, and remoter rural areas. Table 2 shows the full range of district types and the distribution of population between them.⁴

TABLE 2: Local Authority District Types, and their Populations

District Type	Number of districts	Population 2001 (thousands)	% of Overall population	% of districts	Example
London	33	7308	13%	8%	Lewisham, Brent
Principal met city	7	3915	7%	2%	Manchester, Glasgow
Other met borough	36	8627	15%	9%	Knowsley, Rotherham
Large non-met city	14	3629	6%	3%	Bristol, Edinburgh
Small non-met city	17	2202	4%	4%	Oxford, Durham
District with industrial areas	71	7866	14%	17%	Slough, Blackburn
District with new towns	24	2950	5%	6%	Redditch, Milton Keynes
Resort, port and retirement	31	3447	6%	8%	Blackpool, Bournemouth
Urban and mixed urban-rural	98	10798	19%	24%	Chester, Sevenoaks
Remoter mainly rural	77	6621	12%	19%	Cotswold, Perth and Kinross
Great Britain	408	57363			

Source: ONS : 2001 MYEs (Nov 2003)

It is the cities that are the focus of our work. We first consider trends in the 1990s, then look at patterns of continuity and change over the 1980s and 1990s. We then examine data at the regional level, raising the question of whether changes between district types merely reflect regional level changes, before drawing conclusions about trends in the growth and decline of cities and regions.

THE 1990S: LONDON GROWING RAPIDLY, OTHER LARGE CITIES IN DECLINE

The population of Great Britain grew by about one and a half million people, or 2.7% of its 1991 population, between 1991 and 2001.

The population of cities, taken together, also grew, by 244,000, a 1% growth rate (i.e. less than half the growth rate of Great Britain as a whole). However, this figure masks important differences between cities. London grew very rapidly, especially Inner London which was the fastest growing district type in the country. The capital gained just under half a million people (479,000) in the 1990s, a 7% gain. Meanwhile

⁴ It will be obvious to a US readership that the terms used to classify cities in this paper are not the same as those commonly used in US commentaries. Perhaps the closest comparisons can be drawn between conurbations in the UK and 'metropolitan areas' or 'metros' in the US. For a detailed consideration of the similarities and differences between US and UK definitions, see Tunstall (2004).

the large industrial conurbations of the North, Midlands and Scotland lost, between them, about 270,000 people, 2.1% of their population at the start of the decade. Outside London, all of the large conurbations except West Yorkshire lost population. Thus while London and the other conurbations, together, showed net growth of over 200,000 people, this was almost entirely due to the large growth of London outstripping losses elsewhere (Table 3).

The fortunes of the individual conurbations outside London also varied from one another. West Yorkshire actually gained population (although a lot more slowly than the national average) whilst among the losers, Merseyside, Tyne and Wear and Clydeside did much worse than the West Midlands, Greater Manchester and South Yorkshire.

TABLE 3: Population Changes in the Conurbations 1991-2001

	1991 population (000s)	2001 population (000s)	Change 1991-2001	% change 1991-2001
London	6829	7308	479	7.0
Inner London	2599	2838	239	9.2
Outer London	4230	4470	240	5.7
Other conurbations	12812	12542	-270	-2.1
West Midlands	2619	2570	-49	-1.9
Greater Manchester	2553	2512	-41	-1.6
West Yorkshire	2062	2084	22	1.1
Clydeside	1728	1666	-62	-3.6
Merseyside	1438	1366	-72	-5.0
South Yorkshire	1288	1266	-22	-1.7
Tyne and Wear	1124	1078	-46	-4.1
All conurbations	19642	19850	209	1.1

Source: ONS : 1991 (revised) and 2001 MYEs (Nov 2003)

Other large cities also lost population, although on a smaller scale, while small cities gained population at about the national rate. Industrial areas lost population, while rural areas, mixed urban and rural areas, coastal towns, and districts with new towns all grew faster than the national average (Table 4).

TABLE 4: Population Changes for District Types outside the Conurbations 1991-2001

	1991 population (000s)	2001 population (000s)	Change 1991-2001	% change 1991-2001
CITIES (excluding the main conurbations)				
Large non-met city	3664	3629	-35	-1.0
Small non-met city	2131	2202	71	3.3
OTHER DISTRICT TYPES				
District with industrial areas	7732	7866	134	1.7
District with new towns	2829	2950	121	4.3
Resort, port and retirement	3320	3447	127	3.8
Urban and mixed urban-rural	10277	10798	521	5.1
Remoter mainly rural	6237	6621	383	6.1
Great Britain	55831	57363	1532	2.7

Source: ONS : 1991 (revised) and 2001 MYEs (Nov 2003)

CLASSIFYING RATES OF POPULATION CHANGE

Using an adapted version of a classification applied to US cities by Glaeser and Shapiro (2003), we have grouped districts according to their rate of population change in the 1990s. Glaeser and Shapiro use a four-way classification:

- High flyers: Cities growing by 10% or more
- Modest Growers: Cities growing by between 2% and 10%
- Unchanged: Cities changing by between -2% and +2%
- Decliners: Cities declining by 2% or more

Because of the less dramatic population changes in English districts, we have adapted this classification and re-oriented it around the overall population growth rate (about 3%) in Great Britain to refer to districts growing by 3%-10% as 'growers' rather than 'modest growers' and redefined the 'unchanged' category as 'in the balance', further subdividing it to distinguish between slight decliners, those with minimal change and slight growers. This gives us a six-way classification, as follows:

- High flyers: Districts growing by 10% or more
- Growers: Districts growing by between 3% and 10%
- In the Balance: Slight growers: Districts growing by between 0.5% and 3%
- In the Balance: Minimal change: Districts changing between -0.5% and 0.5%
- In the Balance: Slight Decliners: Districts declining by between -0.5% and -3%
- Decliners: Districts declining by 3% or more

Table 5 shows that 44% of all districts were 'growers' with a further 12% high flyers. Thus 56% had growth rates exceeding the approximate national rate of increase. Only 7% were in decline (more than 3% loss) and of the 37% of districts that were 'in the balance', 16% showed growth, while 13% showed decline. The overall picture is one of slightly greater growth than decline. However, with the exception of London, the general pattern was that less urban the district, the more likely it was to grow. Over two-thirds of resort, port and retirement districts and mixed urban and rural districts grew by more than the national rate, along with more than four-fifths of rural districts.

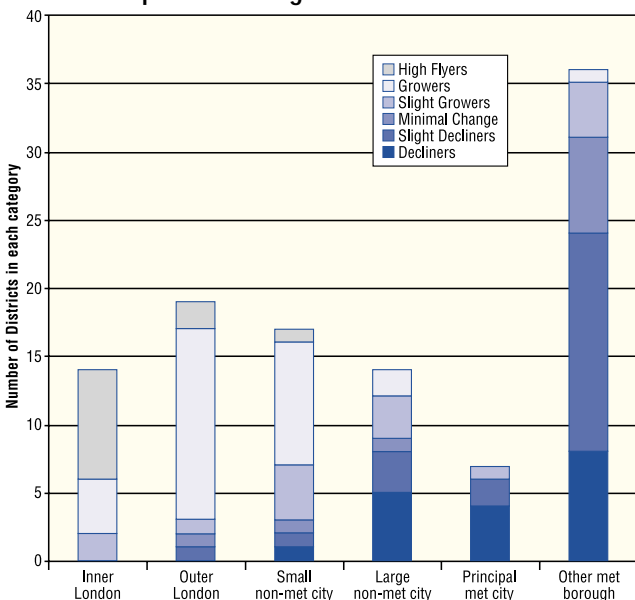
TABLE 5: Classification of Population Change by Type of District

Type of District	Number of Districts in Each Population Change Category						Total
	Decliners (more than -3% decline)	In the balance			Growers (3%-10%)	High flyers (more than 10%)	
		Slight decliners (-0.5% to -3%)	Minimal change (-0.5%-0.5%)	Slight growers (0.5%-3%)			
Inner London				2	4	8	14
Outer London		1	1	1	14	2	19
Principal met city	4	2		1			7
Other met borough	8	16	7	4	1		36
Large non-met city	5	3	1	3	2		14
Small non-met city	1	1	1	4	9	1	17
District with industrial areas	6	18	6	15	22	4	41
District with new towns	3	2	3	4	8	4	24
Resort, port and retirement	1	1	2	6	19	2	31
Urban and mixed urban-rural	1	3	10	17	58	9	98
Remoter mainly rural	1	5	2	10	41	18	77
Total	30	52	33	67	178	48	408
% of all districts	7%	13%	8%	16%	44%	12%	

CHANGES IN THE CONURBATIONS AND OTHER CITIES

Looking more closely at trends in the conurbations and other cities (Figure 1), we can see big differences between the city types.

FIGURE 1: Population Change Rates in the Cities



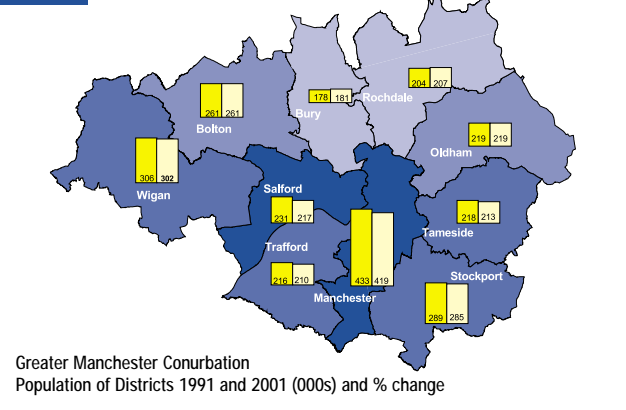
The majority of districts in London had growth in excess of the national average, and nearly one third of them came in the high flyer category, principally districts in inner London (such as Newham, Tower Hamlets, Hackney and Southwark). The population of Tower Hamlets grew by an astonishing 21.2% in the decade, and Newham's by 15.6%.⁵ The City of London saw growth of 37%, from a very low base.

About half of the small non-metropolitan cities also grew significantly - places like Worcester, Reading, Gloucester, Exeter and Oxford, and only one in this category (Middlesbrough), was a decliner.

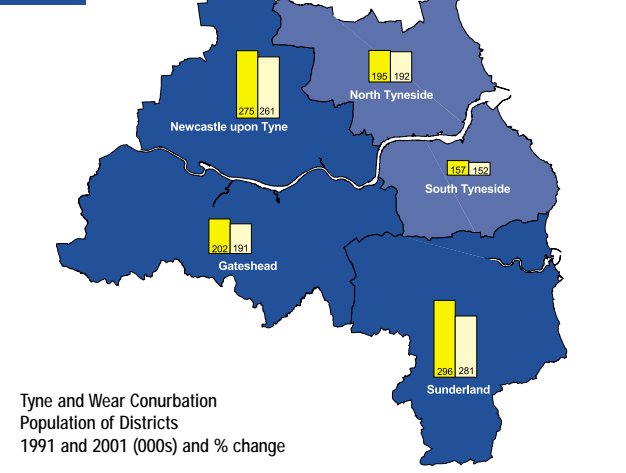
This situation can be contrasted with the position in the major conurbations outside London and in the other large cities. In the large conurbations (the principal metropolitan cities and their surrounding districts), there were no 'high flyers' and only one 'grower'. Of the metropolitan cities themselves, Manchester (-3.3%), Newcastle (-5.1%) Liverpool (-7.0%) and Glasgow (-8.0%) all declined, while Leeds, Sheffield and Birmingham were all 'in the balance', Leeds showing slight growth (1.3%) and Sheffield (-1.3%) and Birmingham (-1.9%) slight decline. The surrounding metropolitan districts followed broadly the same pattern. Districts in Greater Manchester, Merseyside, Clydeside and Tyne and Wear generally did less well than districts in West Yorkshire, and to a lesser extent in South Yorkshire and the West Midlands. But within the declining conurbations, the cities themselves did worse than the surrounding districts. These patterns are illustrated in Maps 2-8.

⁵ Although the estimates we use here are the best available, it is worth bearing in mind that there are particular problems with obtaining accurate Census counts in local authority areas such as these with high ethnic minority concentrations, younger than average populations, high proportions of recent immigrants and asylum seekers and high proportions of rented accommodation. It is not inconceivable that some of the changes reported are accounted for by underestimation in 1991, nor indeed that increases have been under-estimated because of under counting in 2001. In short, the nature of Inner London means that all population estimates have to be treated a little more cautiously than they do in areas of less mobile population.

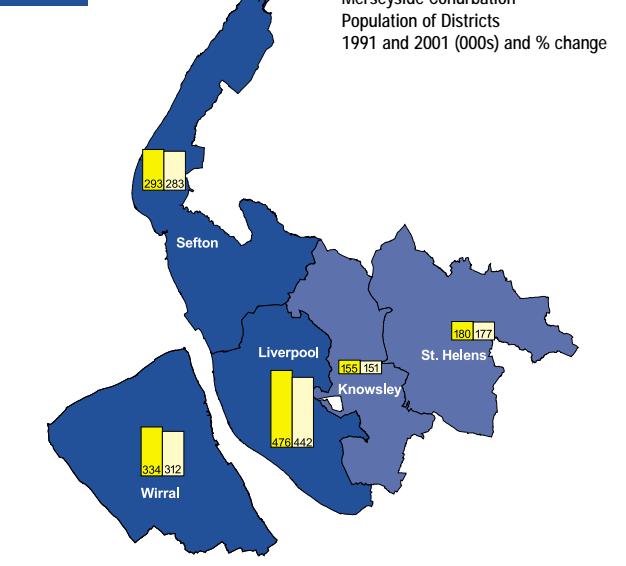
MAP 2



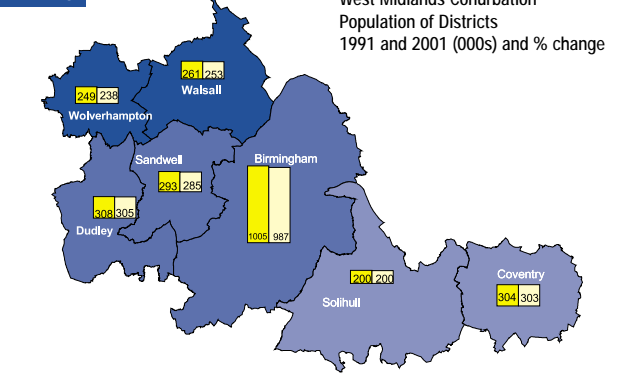
MAP 5



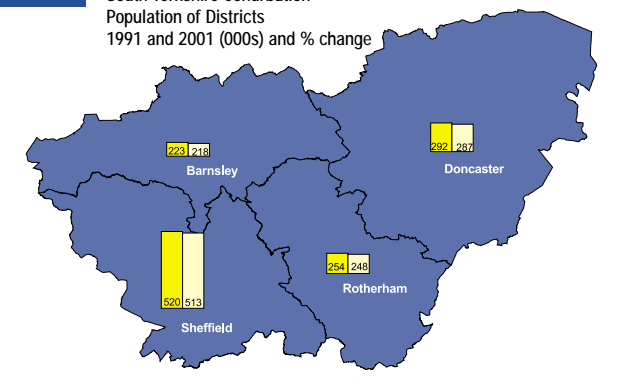
MAP 3



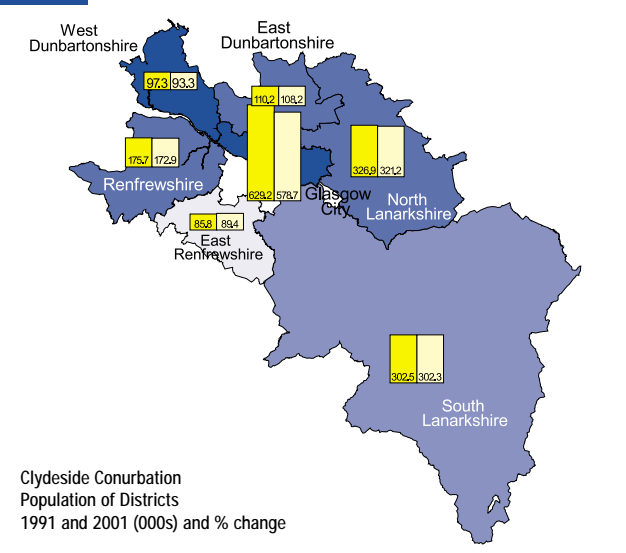
MAP 6



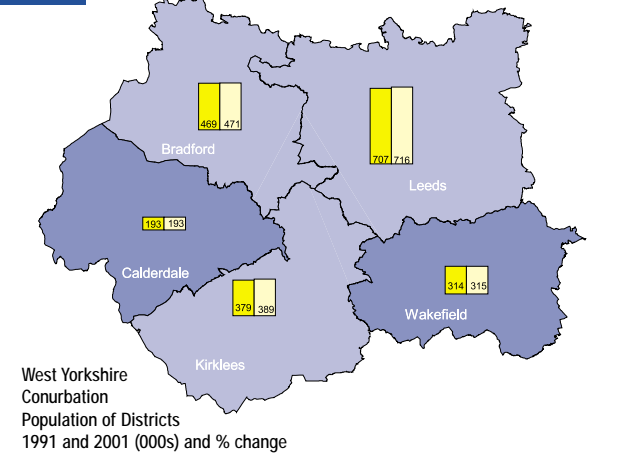
MAP 7



MAP 4



MAP 8



Population (000's)

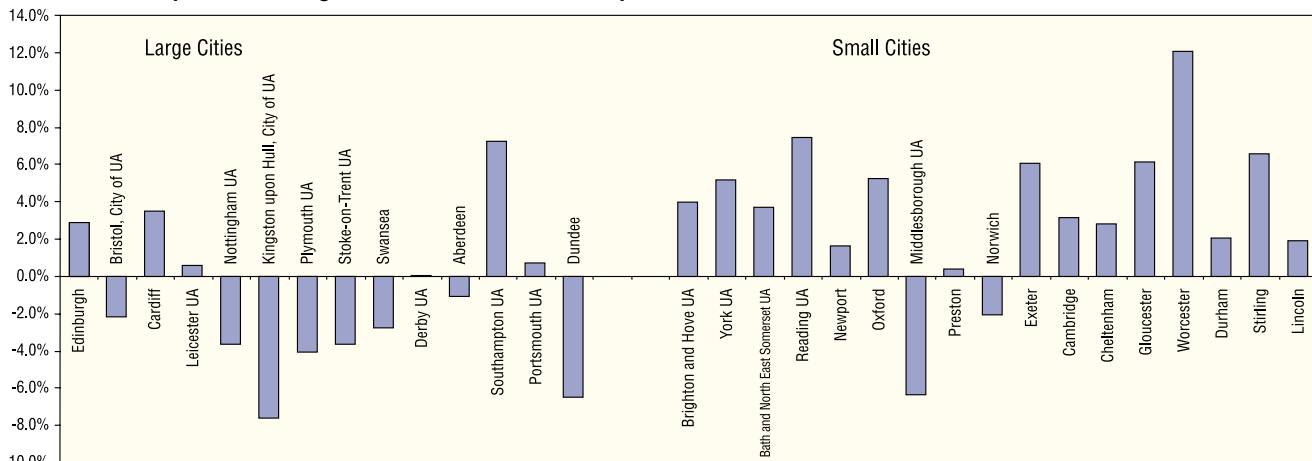
1991 (Yellow bar) 2001 (White bar)

Population change 1991-2001

- Dark Blue: Decliners (more than 3% decline)
- Medium Blue: Slight Decliners (-0.5% to -3%)
- Light Blue: Minimal Change (-0.5% to 0.5%)
- Very Light Blue: Slight Growers (0.5% to 3%)
- White: Growers (3% to 10%)
- Grey: High Flyers (10%+)

Among the large non-metropolitan cities, there were no 'high flyers' and only two 'growers', Southampton and Cardiff, although Edinburgh at 2.9% was closely behind. Figure 2 shows the rates of change for the non-metropolitan cities individually, showing the different fortunes of the large cities compared with the small cities.

FIGURE 2: % Population change 1991-2001 for Non-Metropolitan Cities



Source: ONS : 1991 and 2001 MYEs (Nov 2003)

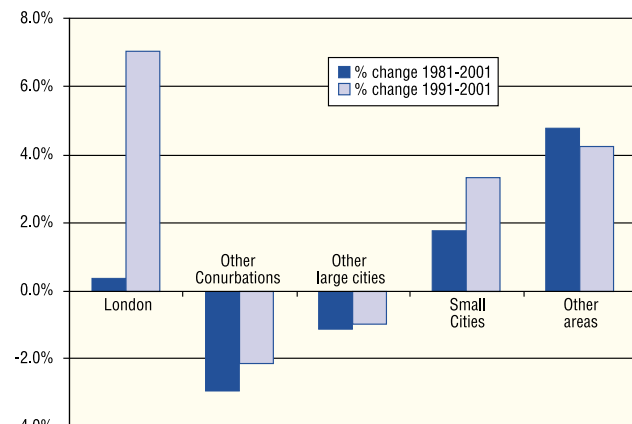
CONTINUING TRENDS

These trends were not good news for the large cities. However they did not represent a new development. Broadly, speaking the trends of the 1990s were a continuation of the trends of the 1980s (see Table 6). District types that were doing well in the 1980s continued to do well in the 1990s. Large cities outside London continued to decline, although slightly slower. Small cities continued to grow, and in fact grew more quickly than in the 1980s. Rural and mixed/urban rural areas continued to grow at much the same rate as in the 1980s (more than double the national average) while growth rates slowed in the new towns and resort, port and retirement areas, but remained higher than average.

The only dramatic change of direction was in London. In the 1980s, London had just about held its population, with a decrease in outer London being offset by an increase in inner London of about the national average. In the 1990s, as we have seen, the large population

increases throughout the conurbation, and particularly in Inner London, put London on a completely different trajectory to the other cities (see Figure 3).

FIGURE 3: Population Turnaround in London Compared with other cities



Source: ONS : 1981, 1991 and 2001 MYEs (Nov 2003)

TABLE 6: Population change in the 1990s compared with the 1980s

	Population (thousands)			Change 1981-1991	Change 1991-2001	% change 1981-2001	% change 1991-2001
	1981	1991	2001				
Inner London	2550	2599	2838	49	239	1.9%	9.2%
Outer London	4255	4230	4470	-25	240	-0.6%	5.7%
Principal met city	4262	4044	3915	-219	-128	-5.1%	-3.2%
Other met borough	8936	8769	8627	-167	-142	-1.9%	-1.6%
Large non-met city	3705	3664	3629	-41	-35	-1.1%	-1.0%
Small non-met city	2094	2131	2202	37	71	1.8%	3.3%
District with industrial areas	7632	7732	7866	99	134	1.3%	1.7%
District with new towns	2633	2829	2950	195	121	7.4%	4.3%
Resort, port and retirement	3102	3320	3447	218	127	7.0%	3.8%
Urban and mixed urban-rural	9808	10277	10798	469	521	4.8%	5.1%
Remoter mainly rural	5837	6237	6621	401	383	6.9%	6.1%
Great Britain	54815	55831	57363	1017	1532	1.9%	2.7%

Source: ONS : 1981, 1991 and 2001 MYEs (Nov 2003)

Table 7 shows the conurbations and cities individually, pointing to some variations within the overall patterns. The conurbations, with the exception of London, were all in decline in the 1980s. West Yorkshire was doing the least badly, and actually showed a slight turnaround in the 1990s while the other conurbations continued to decline. Most slowed their decline, but Tyne and Wear actually lost proportionally more population in the 1990s than the 1980s.

Similarly, there were some gainers among the large cities in the 1990s, with Portsmouth, Edinburgh and to a much greater extent Southampton turning 1980s losses into 1990s gains. However, there were also gainers in the 1980s that failed to maintain their gain in the 1990s (Nottingham, Aberdeen and Swansea) and losers in the 1980s like Hull and Stoke-on-Trent that went into worse decline in the 1990s.

The small cities showed a more consistent pattern of growth. A majority were on the up in the 1980s and continued that trend in the 1990s, being joined by a number of others like Brighton, Bath, Stirling, Oxford

TABLE 7: Population Trajectories for Major Urban Districts 1980s and 1990s

	% change 1981-1991	% change 1991-2001
CONURBATIONS		
London	0.4%	7.0%
Tyne and Wear	-2.8%	-4.3%
Merseyside	-5.5%	-5.0%
Greater Manchester	-2.5%	-1.6%
West Midlands	-2.0%	-1.9%
West Yorkshire	-0.2%	1.1%
South Yorkshire	-2.2%	-1.7%
LARGE NON-MET CITIES		
Cardiff	3.5%	3.5%
Derby UA	2.6%	0.1%
Nottingham UA	0.4%	-3.7%
Swansea	0.2%	-2.7%
Leicester UA	-0.6%	0.6%
Aberdeen	0.8%	-1.0%
Plymouth UA	-0.8%	-4.1%
Stoke-on-Trent UA	-1.2%	-3.6%
Edinburgh	-2.2%	2.9%
Bristol, City of UA	-2.2%	-2.2%
Portsmouth UA	-2.4%	0.7%
Southampton UA	-2.4%	7.3%
Kingston upon Hull, City of UA	-3.8%	-7.6%
Dundee	-8.3%	-6.5%
SMALL CITIES		
Lincoln	9.8%	1.9%
Worcester	8.0%	12.1%
Cambridge	5.7%	3.2%
York UA	4.2%	5.2%
Exeter	4.2%	6.1%
Cheltenham	4.1%	2.8%
Gloucester	3.2%	6.2%
Preston	2.8%	0.4%
Newport	2.3%	1.6%
Brighton and Hove UA	1.4%	4.0%
Bath and North East Somerset UA	1.0%	3.7%
Stirling	0.7%	6.6%
Norwich	-0.9%	-2.0%
Oxford	-1.1%	5.3%
Reading UA	-1.9%	7.5%
Durham	-2.1%	2.1%
Middlesbrough UA	-3.9%	-6.4%

Source: ONS : 1981, 1991 and 2001 MYEs (Nov 2003)

and Reading that all started to do better in the 1990s than they had done previously. However, Norwich, and to a much greater extent, Middlesbrough, were in steady decline throughout the period.

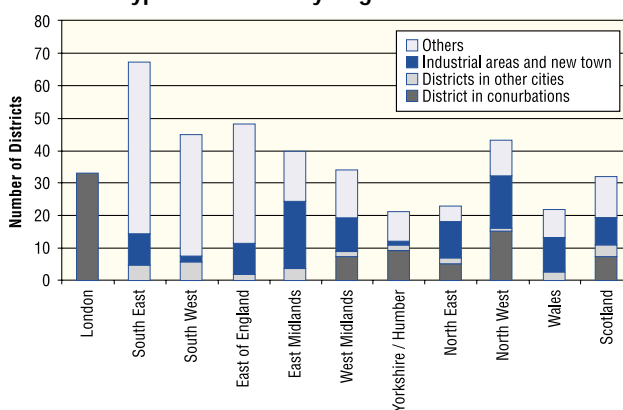
City size, then, does not entirely explain patterns of population change. While large cities have generally been doing badly for two decades, and small cities increasingly well, some cities are bucking the trends in both directions.

DECLINING CITIES OR DECLINING REGIONS?

The analysis thus far in this paper, based on local authority type, shows strong differences between types. However, this does not necessarily mean that district type is the cause of different trajectories - for example that large cities are doing badly because they are large cities and are suffering from counter-urbanisation trends. It may be the case that district-level trends are driven by wider regional characteristics, such as industrial structure or peripheral location, which merely manifest themselves in district-type analyses because of the types of districts that exist in each region. To explore this possibility, we also examine trends at the regional level.

Great Britain has eleven administrative 'regions', of which one is the whole of Scotland and one the whole of Wales.⁶ These are listed in Table 8. These have different physical, economic and social characteristics. At the crudest level, regions in the North and Midlands are largely urban and industrialised, while regions in the South have a more rural and small town tradition. These differences are reflected in their administrative structures at the local authority district level. In relation to the classification we have used throughout this paper, the regions in the South and East of the country contain mainly small rural and mixed urban/rural districts, while the Northern regions contain all of the principal metropolitan cities and their surrounding districts and a high proportion of industrial areas. (Figure 4).⁷

FIGURE 4: Types of District by Region



⁶ These are the regions at Level 1 of the Nomenclature of Units for Territorial Statistics (NUTS) hierarchy, created by the European Office for Statistics to enable a standard approach to spatial units across the EU. Level 1 is the first level below the national level. In England, NUTS1 areas correspond to Government Office Regions. The whole of Scotland is a NUTS1 area, as is the whole of Wales.

⁷ Figure 4 also highlights various anomalies in the administrative geography of regions that affect district type analyses. For example, London is the only principal city that is divided into separate local authorities. All the others have just one large authority. Yorkshire and Humberside, which is highly industrialized, has only one 'district with industrial areas', because its industrial areas are contained within its two large conurbations, West and South Yorkshire, and thus classified as metropolitan districts, whereas the East Midlands has no large conurbation and a high proportion of smaller districts classified as industrial.

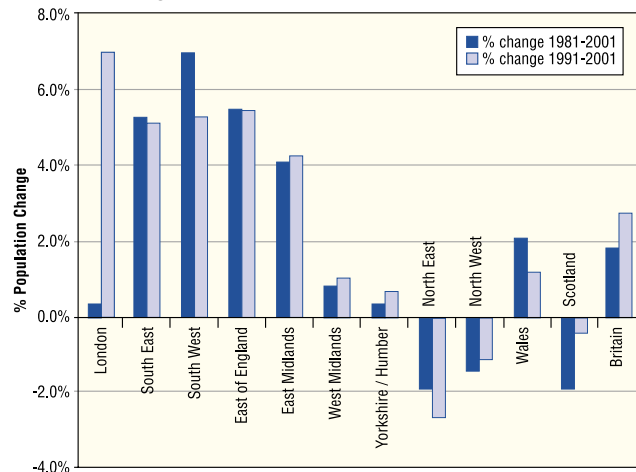
Analysis of population change at the regional level shows that in both the 1980s and 1990s, regions in the south and east of the country did better in terms of population than regions in the north and west (Figure 5). In the 1990s, which is our main focus, London's population grew by 7%, the South East, East and South West by about 5% each and the East Midlands by 4% (all higher than the national figure). Meanwhile the North East and North West and Scotland actually lost population and the West Midlands, Yorkshire and Humberside and Wales were relative losers, gaining population more slowly than the national rate.

With the exception of London (which had a rapid turnaround in the 1990s as we have already observed), regions that were doing well in the 1990s generally continued to do relatively well, while those that had been doing badly in the 1980s continued to do badly. Within this broad pattern, the South West, North East and Wales did slightly less well in the 1990s than 1980s, and Scotland did slightly better (although still declining). The different sizes of the regions combined with their growth rates to influence what share of overall population change they accounted for. With their large populations and high growth rates, London and the South-East accounted for over half the total growth in the 1990s (Table 8, final column). 75% of the growth was accounted for by what is normally regarded as the prosperous South and East of the country - London, the South-East and the East of England.

The question is whether these changes are merely a manifestation of the different composition of the regions in terms of types of districts within them, and thus explained by shifts of population between district types, or whether they reflect regional drivers of change.

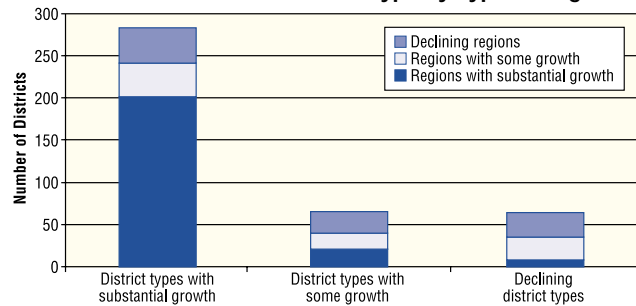
There is some evidence to support both arguments. On the one hand, it is clear that growing district types were primarily in growing regions. Figure 6 shows a very simplified representation of the situation. The regions are divided into those with substantial growth (South East, South West, London, East of England and East Midlands), those with some growth (West Midlands, Yorkshire and Humber and Wales), and declining regions (North East, North West, Scotland). District types are similarly divided according to their overall population change - substantial

FIGURE 5: Regional Trends in the 1980s and 1990s



growers (London, small cities, urban/rural, resort/port, rural and new towns), those with some growth (industrial areas) and decliners (met districts and large non met cities). The graph shows that most of the districts in growing types (i.e. with the exception of London, the less urban district types) were in growing regions.

FIGURE 6: Distribution of District Type by Type of Region



This might lead us to conclude that it is the growth of these less urban districts, at the expense of cities, that is driving the regional population shift. However, if this were the sole explanation, we would expect to see rural districts, mixed urban and rural districts, small cities and other growing types of districts gaining population or at least holding their populations even in declining regions, gaining population from declining cities within their own

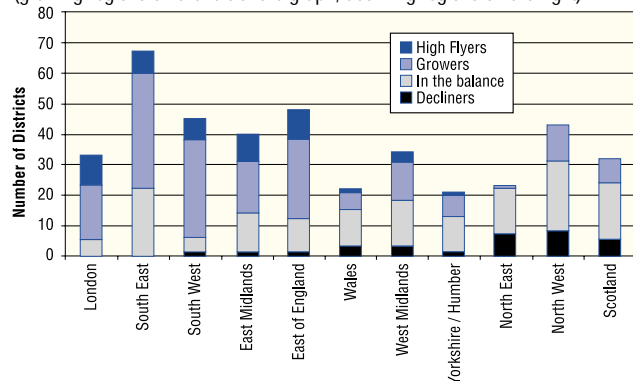
TABLE 8: Regional Population Change in the 1980s and 1990s

	Mid 1981 population (000s)	Mid 1991 population (000s)	Mid 2001 population (000s)	% Change 1981-1991	% Change 1991-2001	Share of total change 1981-2001	Share of total change 1991-2001
London	6806	6829	7308	0.4%	7.0%	2%	31%
South East	7245	7629	8022	5.3%	5.1%	38%	26%
South West	4381	4688	4937	7.0%	5.3%	30%	16%
East of England	4854	5121	5402	5.5%	5.5%	26%	18%
East Midlands	3853	4011	4183	4.1%	4.3%	16%	11%
West Midlands	5187	5230	5283	0.8%	1.0%	4%	3%
Yorks/Humber	4918	4936	4971	0.4%	0.7%	2%	2%
North East	2636	2587	2519	-1.9%	-2.6%	-5%	-4%
North West	6940	6843	6767	-1.4%	-1.1%	-10%	-5%
Wales	2813	2873	2908	2.1%	1.2%	6%	2%
Scotland	5180	5083	5064	-1.9%	-0.4%	-10%	-1%
Great Britain	54815	55831	57363	1.9%	2.7%		

Source: ONS : 1981, 1991 and 2001 MYEs (Nov 2003)

region and in other regions. This was not entirely the case. Declining regions had a complete absence of high flying districts, and few growers (Figure 7). Districts in these regions were mainly 'in the balance' or declining, whatever their type. This suggests that although less urbanised districts may be gaining population from declining cities within the region, they are not doing so at a fast enough rate to offset their own population losses (arising from net out-migration or negative natural growth) and to sustain population growth on any significant scale.

FIGURE 7: Population Change Rates, Region by Region
(growing regions on the left of the graph, declining regions on the right)



Not all districts in declining regions declined. However, in general, types of district that were, across the country as a whole, growing, were less likely to grow if they were in declining regions. Table 9 classifies population change by region, only for the types of districts that, on average, grew during the 1990s (London, small cities, urban/rural, resort/port, rural and new towns). While there was a general pattern of more growth than decline in all regions except the North East, it is evident that a much higher proportion of these districts grew in the growing regions (for example, East Midlands) than the declining ones (such as Scotland). The same pattern holds for industrial areas, which in the country as a whole grew more slowly than the national average. Industrial areas in growing regions mainly grew, whereas industrial areas in declining regions were more likely to decline (Table 10).

We do not have space here to show detailed analyses for each region individually, but Maps 9 and 10, of the West Midlands and North East, illustrate the general point. Both show the decline in the major conurbations that we reported earlier. However, the West Midlands (a slightly growing region) shows a general pattern of growth outside the

TABLE 9: Population Change for Districts in Growing District Types:
Numbers of Districts in Each Category on Population Change Classification

	Number of Districts						Total
	Decliners	In the balance			Growers	High flyers	
		Slight decliners	Minimal change	Slight growers			
London		1	1	6	18	10	33
South East		1	6	13	35	6	61
South West				4	31	7	42
East Midlands			1	2	9	7	19
East of England	1	2	2	6	25	9	45
Wales		1	1	5	3	1	11
West Midlands			2	3	10	3	18
Yorkshire and the Humber		1	1		7	1	10
North East	3	2		4			9
North West	2	1	2	3	8		16
Scotland	1	4	3	1	7		16
TOTAL	7	13	19	44	153	44	280

TABLE 10: Population Change for Districts with Industrial Areas:
Numbers of Districts in Each Category on Population Change Classification

	Number of Districts						Total
	Decliners	In the balance			Growers	High flyers	
		Slight decliners	Minimal change	Slight growers			
London							
South East				1	2	1	4
South West					1		1
East Midlands		4		4	8	2	18
East of England		1			1	1	3
Wales	3	3		1	2		9
West Midlands		1		4	3		8
Yorkshire and the Humber		1					1
North East	1	4	1	2	1		9
North West	1	3	3	1	4		12
Scotland	1	1	2	2			6
TOTAL	6	18	6	15	22	4	71

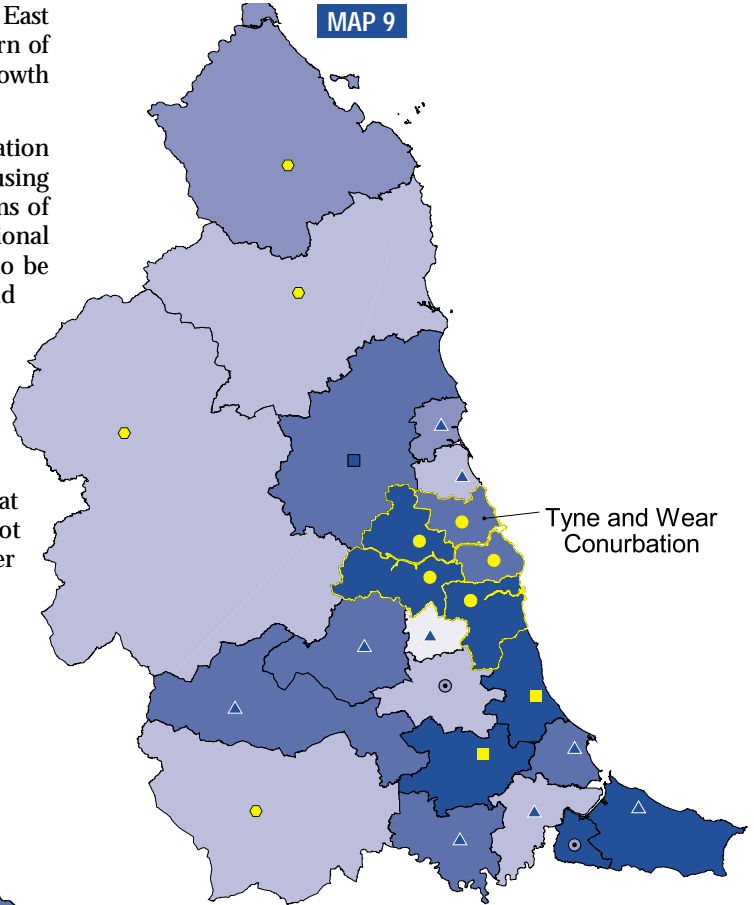
conurbation, even in industrial districts. The North East (a declining region) by contrast, shows a general pattern of decline, with even rural districts showing only small growth or even decline.

These results suggest that what determines population change is not just what type of a place a district is (using this broad classification), but also where it is, in terms of the region in which it is located. Both intra-regional (between districts) and inter-regional factors seem to be at work. To fully disentangle these and to understand their relative weight, we need a more sophisticated categorisation of area types than is used here, defined by functional rather than administrative boundaries, and classifying areas according to a range of variables including their region, location, size, industrial structure and population mix.⁸ Our analysis here merely serves to make the point that discussions of the decline and renewal of cities cannot be divorced from an understanding of their wider regional contexts.

Population change 1991-2001

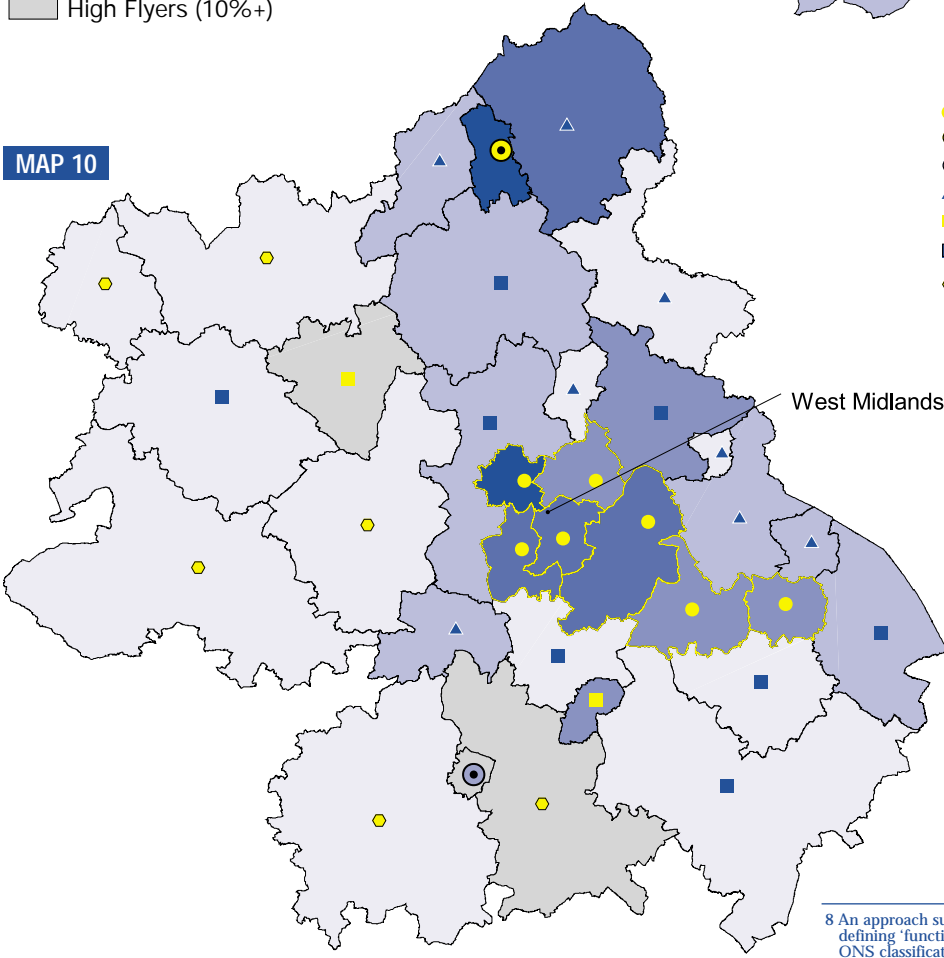
- Decliners (more than 3% decline)
- Slight Decliners (-0.5% to -3%)
- Minimal Change (-0.5% to 0.5%)
- Slight Growers (0.5% to 3%)
- Growers (3% to 10%)
- High Flyers (10%+)

MAP 9



Tyne and Wear Conurbation

MAP 10



West Midlands Conurbation

- Metropolitan District
- Large Non-Metropolitan City
- Small Non-Metropolitan City
- District With Industrial Areas
- District with New Towns
- Mixed Urban/Rural
- Rural

⁸ An approach such as this was used by Champion et al. (1987), defining 'functional regions' and local labour market areas. The new ONS classification might provide a similar basis.



CONCLUSIONS

This census brief sets out the types of district making up the urban areas of Great Britain. London is unique as the capital with 13% of the total population (7.3 million). Seven major ex-industrial conurbations, all in the Midlands, North and Scotland, have 22% of the population (12.5 million). The 14 other major cities (3.6 million people) and 17 smaller cities (2.2 million people) make up another 10%. Thus, 45% of the total population live in major urban areas. The 41 other industrial districts have nearly 8 million inhabitants (14% of the population) and the 24 new or expanded towns, built since World War Two, have another 3 million (5%). The remaining third of the population (around 20 million) lives in a mixture of smaller urban and rural areas. Our work focuses on major urban areas and cities in particular, although the interaction between different types of built up area is strong - decline in one type means growth in another.

Overall the population of Great Britain grew by 2.7% in the decade 1991-2001. 56% of all districts grew by more than this; the strongest "growers" were the remoter, more rural areas, the mixed urban and rural areas and London. 77% of all the fastest growing districts (more than 10% growth) were in these types of districts. Smaller cities were also growing with only 7 exceptions.

Larger cities and metropolitan conurbations were almost all declining or only expanding slightly. Among the seven major conurbations, the population of West Yorkshire expanded slightly - by 1% - while Merseyside suffered the steepest decline - 5%. Overall, excluding London, the conurbations lost around 2% of their 1991 population by 2001.

There is a strong overall pattern underlying the growth and decline. The industrial areas, concentrated in the North and West Midlands, as a whole, lost population; while the less industrial areas of the South West, South East and Eastern regions gained. London and its surrounding South Eastern region absorbed more than half the total population growth of the country in the 1990s - over 700,000 extra people. London stands out as the only major city to grow fast in the last decade, following several decades of steep decline, which levelled off in the 1980s.

Urban decline is about more than movement outwards to the edge of cities. The 2001 census confirmed a strong tilting in population growth towards the South East with a matching regional tilt in population concentration away from the North and Scotland. Behind these clear patterns lies a persistent regional trend that underlines the interaction between cities and their regions. Declining cities and districts are heavily concentrated in declining regions; growing cities are concentrated in growing regions.

Population change reflects the significant continuing decline of the most industrialised regions in the wake of manufacturing decline and steady growth in the less industrialised regions as new types of industry and service-based enterprise grow more readily there. The

decline, though relatively small in percentage terms, becomes much more significant in the context of overall population growth. Thus although there is measurable "de-urbanisation" going on, the decline of major industrial cities appears intimately linked with wider regional decline.

What explains these patterns? The Urban Task Force (DETR 1999), the Urban White Paper (DETR 2000) and the study of Scottish cities (2003), among many other urban studies, set out a familiar history. Industrial collapse left a legacy of high worklessness, poverty and declining social conditions. The physical environment of industrial areas was blighted by contaminated land, obsolete infrastructure and the debris of two centuries of rapid growth and exploitation of natural local resources. Too little has been invested in environmental reinstatement relative to these extensive damages and poor social conditions caused by significant economic and environmental as well as social change, prove highly resistant to improvement as the economy continues to "tilt away" from the declining industrial regions.

Meanwhile, the more diverse southern cities, generally lacking the extensive damage and sharp economic collapse of the North and Midlands, are more attractive for new investment and growth. As the investment scales continue to tilt in favour of these more attractive places, so the divide between North and South grows (Parkinson, 2003). New towns and growth areas in the South East are prospering, while the older industrial areas of the North face significant barriers to regrowing the economy - most importantly their now largely redundant industrial legacy.

Our analysis underlines this worrying trend. Yet it seems hard to imagine that the current pace of growth in London and South East will continue without some evening up of growth patterns. One obvious mechanism to increase the chances of this happening would be to invest more in remediating the damaged urban landscape of former industrial areas, particularly the major cities, which are the hub of their regional economies and the centres of new economic activity. We will move on to the signs of economic regrowth in the subsequent studies in this series.

The papers that follow, looking at the ethnic composition of populations, the distribution of economic activity, household, housing, tenure, and neighbourhood change, may shed more light on the powerful population trends that this first paper has highlighted. There is a general acceptance that London and the South are the most successful parts of the economy; that the North and Midlands contain more deprivation, more sluggish economies, and are less generally successful. Our work underlines the firm base on which these perceptions are founded, while highlighting some variations in a strong pattern. The gaps in understanding are around the role of successful regions in driving the national economy, the mechanisms for preventing over-concentrations of population within an already highly congested region, and the potential for economic, social and environmental benefits of "re-tilting" growth towards currently declining regions.

REFERENCES

- Atkins, D. et al. (1996), *Urban trends in England: Latest evidence from the 1991 Census*. London: DoE.
- Champion, A.G. et al. (1987), *Changing Places: Britain's Demographic, Economic and Social Complexion*. London: Edward Arnold.
- DETR (1999), *Towards an Urban Renaissance: Final Report of the Urban Task Force*. London: DETR.
- DETR (2000), *Our Towns and Cities: The Future: Delivering an Urban Renaissance*. London: DETR.
- Glaeser, E. and Shapiro, J. (2003), "City Growth: Which Places Grew and Why", in Katz, B. and Lang, R. (eds.), *Redefining Urban and Suburban America: Evidence from Census 2000. Volume 1*. Washington DC: The Brookings Institution.
- Lupton, R. (2003), *Poverty Street: The Dynamics of Neighbourhood Decline and Renewal*. Bristol: The Policy Press.
- Maclennan, D et al. (2003), *Better Cities, New Challenges: A review of Scotland's cities*. Scottish Executive.
- Mumford, K. and Power, A (2003), *East Enders: Family and Community in East London*. Bristol: The Policy Press.
- Parkinson, M et al. (2003), *EU non-capital cities project: Emerging findings, trends, implications. Progress report to Core Cities Working Group*.
- Rogers, R. and Power, A (2000) *Cities for a Small Country*. London: Faber and Faber.
- Tunstall, R. (2004), *Studying Urban Areas in the United States and United Kingdom using the Censuses 1980/01-2000/01*. Washington DC: Brookings Institution, Center on Urban and Metropolitan Policy.

Publications arising from work at the Brookings Institution on the US Census can be found at:

<http://www.brookings.edu/es/urban/issues/demographics/demographics.htm>

