The state of the countryside 2007

Commission for
Rural Communities
Tackling rural disadvantage

Acknowledgements
We would like to acknowledge the contributions of external partners to this work, both through the provision of data and wider evidence and also through the provision of general comments and support. In addition, we would like to thank the Countryside and Community Research Unit of the University of Gloucestershire for their work in gathering evidence and in developing and delivering the content of this report. As always, all errors and omissions remain entirely our responsibility.

Contents

Foreword

I have great pleasure in welcoming you to the 2007 edition of the *State of the countryside* report. This is the ninth such report, and the third under the Commission for Rural Communities' banner.

This year we have had access to a range of new information at a detailed level, often thanks to the good work of the Office for National Statistics and their neighbourhood statistics programme. This has enabled us to explore many new topics such as accessibility to services, improved indicators of levels of health, the amount and nature of pollutant emissions in rural areas, and to have a 'first shot' at assessing the contribution of rural areas to climate change.

From the wealth of information in the new report, two specific issues stand out for me - the changing demographics of the rural population and the way that the use of land is starting to change.

We know that people in rural areas tend to be older than those living in urban centres – however, as the report highlights, the scale of the difference has increased in recent years. Since 1985, there has been a notable fall in the proportion of young people in our rural communities and an increase in the numbers of more elderly people (in some local rural areas, more than half of the population is now over 60). This should not be seen as a negative story – older people make a huge contribution to our rural communities and we are seeing more rural residents continuing to work after the state retirement age. However we do need to understand how best to make the most of these changes. It may be that, in responding to demographic change in rural areas, we will learn lessons of value to urban areas which may face similar challenges in future years.

How we use the land is now an increasingly important issue – particularly as we respond to the challenges created by climate change. David Miliband has initiated an important debate about our future land use and, as this report shows, we are already seeing key changes such as the use of land for non-food crops, especially for energy generation, and the substantial growth in the number of wind turbines for generating electricity. At the same time, we are still working through the changes in farming triggered by the new system of government subsidies. These changes will, I believe, continue. My plea is that, in determining the future priorities and strategies for land use, we ensure that the voices of rural communities themselves are heard clearly.

Finally, we return to a previous theme of inequity. This report again highlights the significant disparities between outcomes experienced in the 'mainstream' of rural England and those experienced in the sparsely populated rural areas. As you will see as you read through the report, for most, if not all, social and economic measures – whether it be income, health, educational attainment or housing affordability, sparsely populated areas do less well. This has been a consistent pattern for a number of years and the challenge for action – both for government and for those of us concerned with rural England – still remains.

My encouragement to all readers is to draw your own conclusions from this *State of the countryside* report. It is, I believe, a key means by which we can all understand the way in which rural England is changing and by which we can all start to identify the actions that will ensure a just and a sustainable future.

Stuart Burgess
Chairman of the Commission for Rural Communities


ENGLAND
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1 Introduction

1.1 The state of the countryside report

This report aims to be a 'first call' for those seeking quantitative information on social, economic and environmental issues in rural areas. It also adds commentary on the information that we show, and on the trends that are emerging. This report is one of the ways in which the Commission for Rural Communities (CRC) seeks to deliver the 'watchdog' and 'advisor' roles set out for CRC in the Natural Environment and Rural Communities (NERC) Act 2006.

We hope that this report provides a valuable resource for policy makers and for those who live in, and care about, rural England.

1.2 The evidence

The report seeks to present as wide a range of evidence as is possible on issues relating to rural England. This means that our analysis is necessarily broad rather than being highly detailed on any individual topic. The report does not aim to set out the detailed policy positions of the Commission. It does, however, comment on issues that may be of concern. In particular, the discussion chapter raises challenges that those governing rural England may need to bear in mind. We try to present information so others can draw policy related conclusions in the knowledge that information has not been selected to 'make a point'.

We look for information that can give a reliable and quantitative picture providing insight into the different conditions across rural England and into the key recent trends. As such, most of the evidence is from:

- Nationally collected data.
- Large scale national surveys.
- Selected information from other research reports.

What's new for 2007?
There has been a wealth of new information available for this report, and we have been able to include many new areas of analysis. These include:

- Indicators of health levels and healthy lifestyles.
- Indices of accessibility to services.
- Air quality mapping.
- Carbon emissions.
- Indices of competitiveness.
- New indicators of economic well-being.

Many indicators that we have used in the past are very stable, and we have summarised what is known rather than replicate previous analyses. We have included pointers to tables and figures used in the previous two years' reports at the end of each section so that readers can access further information on specific topics.

1.3 Analysis and presentation of the evidence

Evidence comes from a variety of sources. The amount of information that we can analyse from an rural/urban perspective has grown very rapidly in the last few years. This has been largely due to the increasing amount of information that others place in the public domain, and the increasing use of geo-coding (attaching detailed locations to data). This has meant that we can classify many more pieces of information as 'rural' or 'urban'.

Defining and classifying rural areas

In this report we concentrate on two classifications that have been recognised by government – the Office of National Statistics' categorisation of small areas, and Defra's Classification of District and Unitary Authorities.

i) Office of National Statistics (ONS, 2004) Definition.

This is the primary definition that we use. It defines settlements of over 10,000 people as 'urban' and places smaller, 'rural' settlements, into three categories; 'town and fringe', 'villages', or 'hamlets and isolated dwellings'. In addition settlements are defined as to whether they are in 'sparse' or 'less sparse' areas.

Figure 1.1.1 shows the populations (from the 2001 census) that are in each of these areas.

Figure 1.1.1
Populations of rural and urban England, 2001

Area definition		Population	%
Less sparse	Hamlet and isolated dwellings	1,380,115	2.8
	Village	3,285,346	6.7
	Town and fringe	4,230,458	8.6
	Urban >10K	39,527,964	80.4
Sparse	Hamlet and isolated dwellings	145,234	0.3
	Village	246,448	0.5
	Town and fringe	217,811	0.4
	Urban >10K	103,126	0.2
Rural		9,505,412	19.3
Urban >10K		39,631,090	80.7
England		**49,136,502**	**100.0**

Source: Office for National Statistics, 2001, Census.

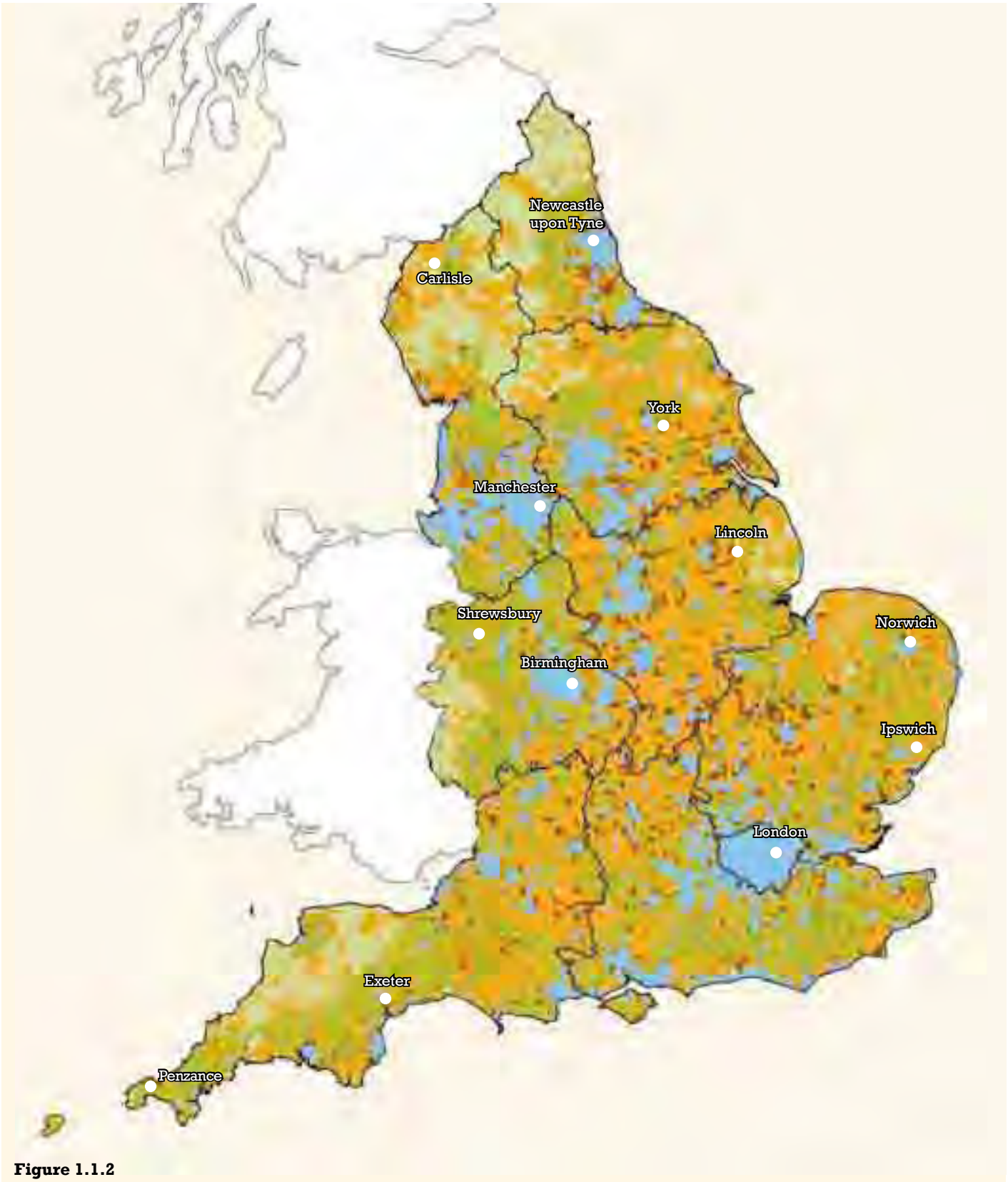


Figure 1.1.2
Rural and urban definition, 2004

Area definition

- Hamlet and isolated dwellings – Less sparse
- Hamlet and isolated dwellings – Sparse
- Village – Less sparse
- Village – Sparse
- Town and fringe – Less sparse
- Town and fringe – Sparse
- Urban > 10K – Less sparse
- Urban > 10K – Sparse
- Boundaries

Source: Office for National Statistics, 2004. Rural and Urban Definitions.

Under this definition rural areas comprise 19.3% of the population of England, about half of whom live in small towns. Only 3% live in settlements smaller than villages and only 1.4% are defined as living in sparse areas. Figure 1.1.2 shows how the definitions are distributed around England.

ii) Defra Classification (2005)

The ONS Definition cannot be applied to large geographical areas such as Local Authorities. To meet the need for a way of categorising such larger administrative units from a rural perspective, Defra produced a supplementary classification of Local Authority Districts and Unitary Authorities. This classification specifies six categories of authority from Major urban (the most urban) through to Rural 80 (the most rural).

Figure 1.1.3
Classification of Local Authority District and Unitary Authorities, 2005

Source: Defra, 2005. Classification of Local Autho District and Unitary Authorities.

The maps in this report

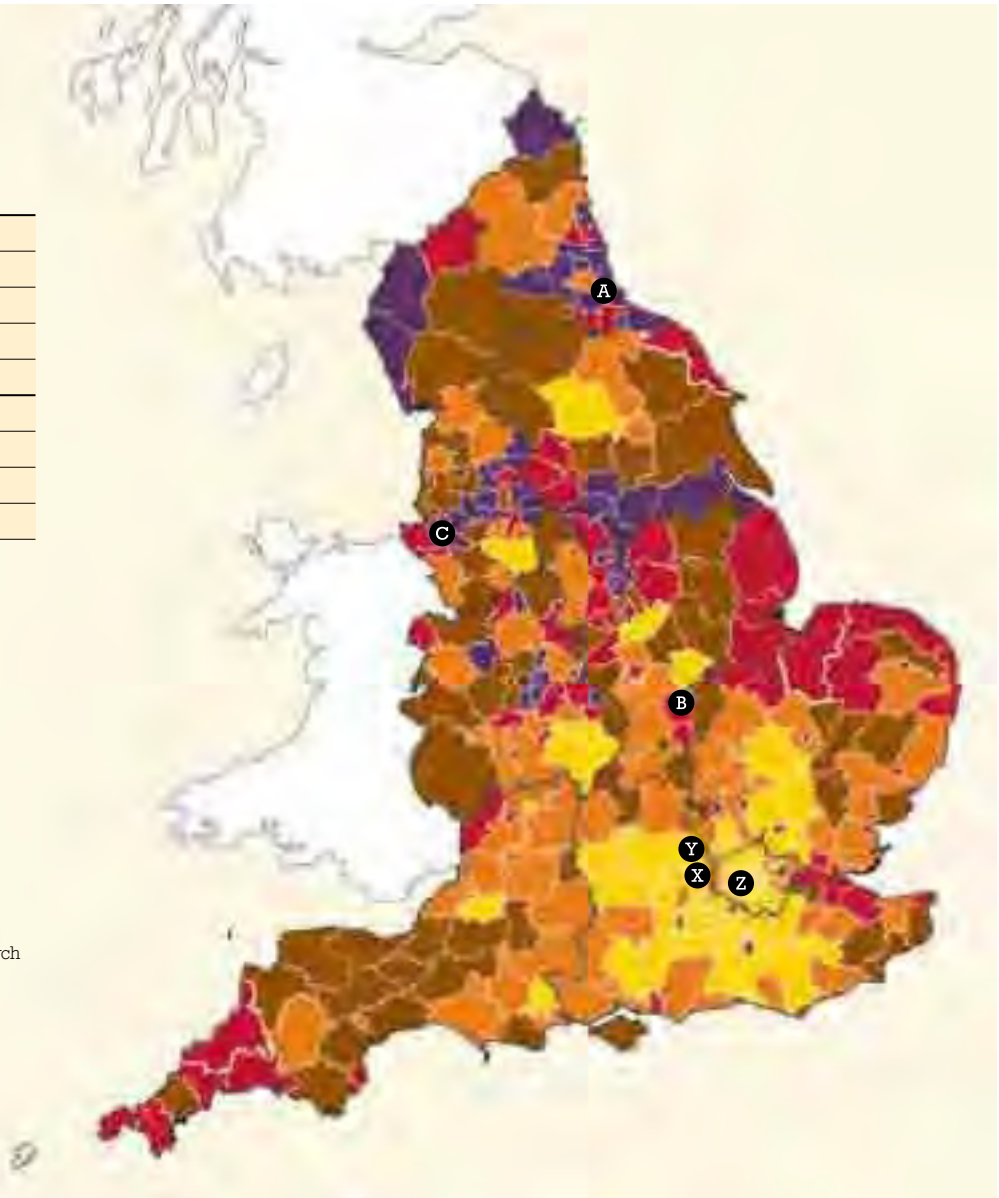
In addition to applying the different classifications, we also use maps, where the data allows it, to show how conditions vary across England. There are certain patterns that emerge that can help show whether variation in what we measure relates to, say, settlement size, region of the country, economic performance of an area, or other factors. This helps us to understand whether any variation in recorded conditions might be related to specific localities or to factors such as peripherality or settlement size.

This year we are showing maps that have detailed level data as full page maps. Maps showing information for local authorities are shown at a smaller scale and, where possible, the presentation indicates the 'best' and 'worst' Districts for any given topic. For example, as shown in Figure 1.1.4, we may indicate the highest and lowest values for 'rural' areas (i.e. the Rural 80 and Rural 50 categories), for 'mixed' areas (i.e. the Significant Rural and Other Urban categories) and for 'urban' areas (i.e. the Large Urban and Major Urban categories).

Figure 1.1.4
Sample map – Expected risk of obesity, 2006

	Highest		
A	Rural	122	Easington
B	Mixed	121	Corby
C	Urban	120	Knowsley

	Lowest		
X	Rural	80	South Bucks
Y	Mixed	80	Chiltern
Z	Urban	63	Kensington and Chelsea



Index (100 = average risk of obesity)

- 63 – 92
- 93 – 98
- 99 – 103
- 104 – 108
- 109 – 122
- Boundaries

Note:
(i) The analysis by Experian and Dr Foster Intelligence used data from the Department of Health's Health Survey for England, Body Mass Index information from the British Market Research Bureau's TGI quarterly survey and MOSAIC lifestyle categories.

Source: Experian and Dr Foster. 2006. Risk of obesity index.

The structure of the report

The three central chapters of this report now follow, which contain the bulk of information, dealing with:

- Living in the countryside (social issues).
- Economic wellbeing (economic issues).
- Land and environment (environmental issues).

We then conclude with a short discussion chapter which draws out some of the key themes that emerge from this report and then presents an assessment of current and future sustainability issues.

2 Living in the countryside

2.1 Introduction

This chapter sets out to describe and analyse some of the social elements of life in the countryside. The data shows that living in the countryside can have many benefits for the majority of rural people. But this broad level view hides a number of complex patterns and trends on a range of social issues. The way that issues manifest themselves in rural areas is explored in more detail in this chapter. It provides an analysis of the pattern and distribution of the main characteristics of life for people in the countryside, many of which remain significant policy issues for national, regional and local government.

The chapter will focus on six topics:

2.2 Population and migration
The changing characteristics of the people who live in our rural communities.

2.3 Access to services
The availability of selected public and private sector services, and how people reach them.

2.4 Housing and homelessness
Demand for, and supply of, rural housing, tenure patterns and homelessness trends.

2.5 Health and healthcare
How patterns of health vary across rural England.

2.6 Education
Characteristics of educational attainment.

2.7 Rural communities and governance
The characteristics of governance in rural communities, participation in community and governance activities and strength of community activity.

This is followed by a discussion on themes of rural disadvantage that run through these topics. While recognising that, for most, life in rural areas is of a higher quality than in urban areas, we focus on rural disadvantage since it is a key remit of the Commission, and because we wish to point to issues where improvement could be made.


St. Marys Church
Old Vicarage
Activity Centre
POUND the BOUNDS
OIL FIRED BOILER
Annual Service and
Repair Specialist

2.2 Population and migration

Introduction

This section is concerned with the basic demographic characteristics of the people who live in rural England.

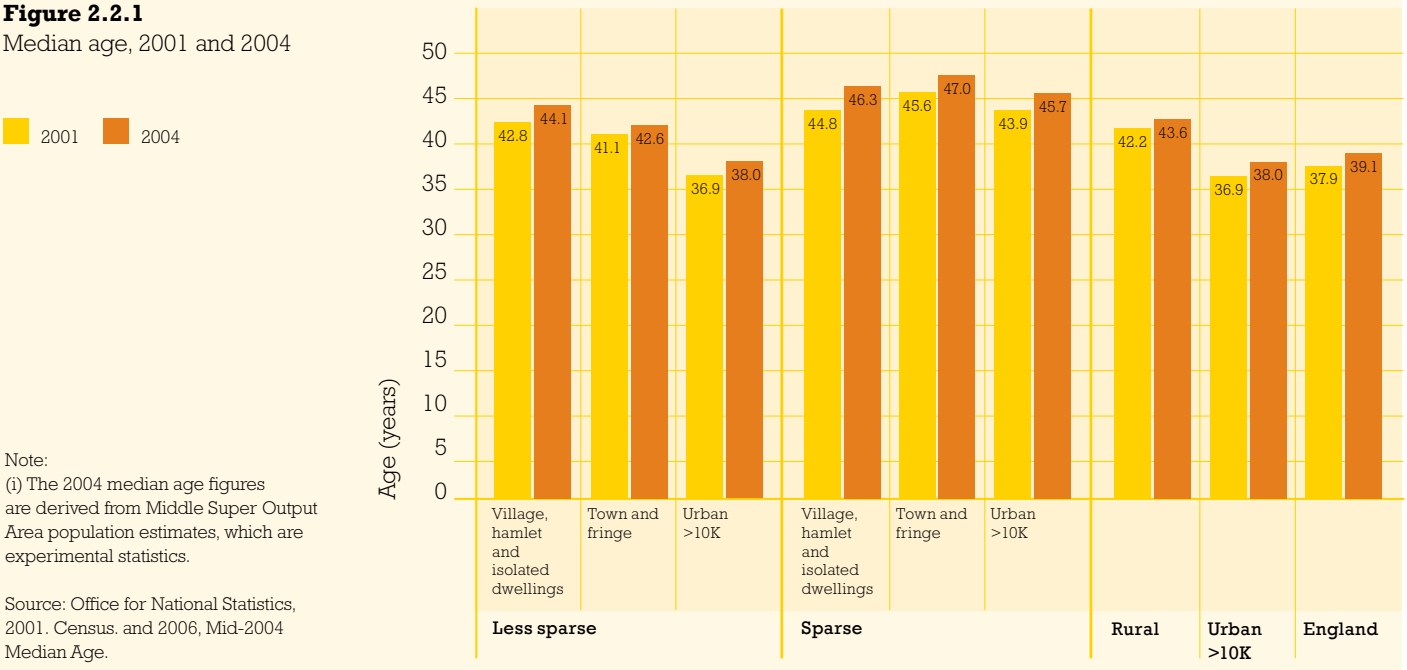
Previous reports (eg CRC 2007a) have explored this subject thoroughly. We know that:

- There were just over 9.5 million people across rural England at the time of the 2001 Census, representing over 19% of the overall English population. Within this total, just over 600,000 people live in the sparsely populated areas.
- There has been a long standing trend of urban to rural migration.
- Most in-migration into rural areas continues to be by those aged 30 to 45, often with children. There is also a steady inflow from those aged between 45 to 65. However there is a net outflow of people aged between 15 and 30.

Age

Twenty years ago, rural districts had a very similar demographic profile to urban districts, but now there are significant differences as shown in Figure 2.2.2. Compared to urban areas, rural communities, especially the smaller ones, now have a higher proportion of people in the age group between 40 and 65. Rural communities also now have higher proportions of people in the age group above 65 than is the case in urban settlements. Conversely, over the last 20 years the proportion of young people (ages 15-24) in rural areas has fallen from 21% to 15%.

Figure 2.2.1
Median age, 2001 and 2004



Note:
(i) The 2004 median age figures are derived from Middle Super Output Area population estimates, which are experimental statistics.

Source: Office for National Statistics, 2001. Census. and 2006, Mid-2004 Median Age.

Figure 2.2.2
Age profile, 1985 and 2005

Source: Office for National Statistics, 2006. Mid-year Population Estimates.

The median age for urban England as a whole is 38 compared to the median age in rural areas of 44. This median figure is ageing faster in rural than urban areas. Figure 2.2.1 shows that between 2001 and 2004 the median age in rural areas rose by 1.4 years, compared with 1.1 in urban areas. Sparse areas are seeing the fastest rises.

Behind this headline median age figure are strong geographic patterns - see Figure 2.2.3. There are some significant concentrations of areas with median ages between 45 and 62 in rural northern England, Lincolnshire, Shropshire and East Anglia, as well as along some rural coastal strips of southern England and in Devon and Cornwall. The concentration of older people in the South West is particularly striking – one area in East Devon having a median age of 62.9.

Figure 2.2.3
Median age, 2004

Median age (years)

- 21.3 – 34.9
- 35.0 – 39.9
- 40.0 – 44.9
- 45.0 – 49.9
- 50.0 – 62.9
- Boundaries

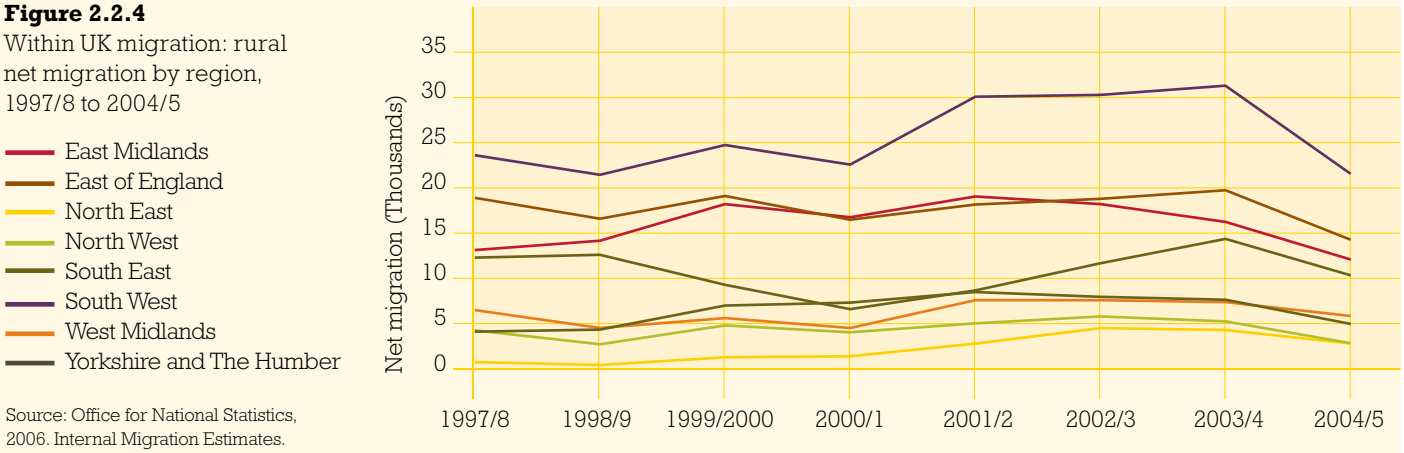
Note:
(i) The 2004 median age figures are derived from Middle Super Output Area population estimates, which are experimental statistics.

Source: Office for National Statistics, 2006.
Mid-2004 Median Age.

Migration

The trend of net inward migration (within the UK) to rural areas amongst specific age groups has been referred to in earlier reports. But there are some interesting recent changes to the pattern. Figure 2.2.4 shows that there has been a downturn in the scale of internal migration over the period 2003/4 to 2004/5. The downturn is consistent across all regions, but it will be necessary to wait a year to see whether it is a temporary fall or the start of a new trend. In 2004/5 net inward migration to rural areas was 75,000 in total.

Figure 2.2.4
Within UK migration: rural net migration by region, 1997/8 to 2004/5



Source: Office for National Statistics, 2006. Internal Migration Estimates.

Figure 2.2.5 compares the top ten districts experiencing the greatest rates of inward migration in 2003-5 with the equivalent list for 1997-9. This shows some key changes – in particular a greater recent focus on inward migration to the more rural areas.

Figure 2.2.5
Within UK migration: top ten LAD/UAs based on average migration per 10,000 people, 1997/8 to1999/2000 and 2002/3 to 2004/5

LAD/UA	Region	Area classification	1997/8 to 1999/2000
City of London	London	Major urban	388.9
North Kesteven	East Midlands	Rural 80	208.4
East Northamptonshire	East Midlands	Rural 50	198.2
Tendring	East of England	Rural 50	193.4
Maldon	East of England	Rural 80	189.0
East Lindsey	East Midlands	Rural 80	183.2
Arun	South East	Large urban	181.5
South Holland	East Midlands	Rural 80	177.0
Christchurch	South West	Large urban	174.0
Rother	South East	Rural 50	173.9

LAD/UA	Region	Area classification	2002/3 to 2004/5
Torridge	South West	Rural 80	197.0
North Dorset	South West	Rural 80	182.9
Fenland	East of England	Rural 80	175.4
West Lindsey	East Midlands	Rural 80	169.4
East Lindsey	East Midlands	Rural 80	166.2
South Holland	East Midlands	Rural 80	159.6
East Devon	South West	Rural 50	157.1
West Dorset	South West	Rural 80	155.3
South Northamptonshire	East Midlands	Rural 80	149.1
South Derbyshire	East Midlands	Significant rural	148.8

Note:
(i) Figures have been calculated using average net migration (using Internal Migration Estimates data) and average population (using Mid-Year Population Estimates) for the period.

Source: Office for National Statistics, 2006. Internal Migration Estimates and Mid-year Population Estimates.

In addition to the within-UK migration reported here, the movement of migrant workers into many rural communities, principally from EU Accession countries, is having an increasingly significant impact on those host communities in terms of demands placed on education, training, housing and support services. The scale and economic impact of this trend is analysed more extensively in our recent update report (CRC 2007b) and in Chapter 3 on Economic Wellbeing.

2.2 Key summary points: Population and migration

- We continue to see net migration of people into rural areas (and associated population increases). However, the latest information shows a slowing of the inward flows across all English rural regions.
- We are seeing clear and growing differences between the age profiles of rural and urban England with rural areas showing more older people, and a reduction in proportion of people aged between 20 and 35.

See also (from the 2005 and 2006 reports):

Population and its distribution

2006	Figure 6, 7	Distribution of the rural population, 2001 regions
2005	Table 2.3	Population by gender
2005	Table 4.6	Populations of working age 2003
2005	Figure 2.6	Profile of rural settlements by region

Population projections

2006	Figure 12	Population projections

Household size and structure

2005	Figure 2.7	Mean household size
2005	Table 2.8	Household type

Age Profile

2005	Figure 2.1	Age profile diagram by year
2005	Table 2.2	Age profile summary
2005	Figure 2.2	% of pop aged over 60 (map)
2005	Figure 2.3	Age profile of 0-18 yr olds

Migration

2006	Figure 10	Age profile of (net) migrants
2006	Figure 11	Proportion of people resident in an area for 40 years or more
2006	Table 2	Main reasons why people moved to their current area

2.3 Access to services

Introduction

This section is about the geographical distribution of services that people rely on. Access to services continues to be an important issue for rural residents. Distances to service outlets tend to be longer than in urban areas, and public transport provision is usually worse. For those with cars in rural areas, travel times can actually be quite short, but for those without, journey times can be very much longer. We examine new measures of accessibility to service outlets and look at aspects of transport that affect access to services. Finally we consider access to internet services.

Figure 2.3.1
Distribution of service outlets, 2007

Service	Less sparse				Sparse						
	Hamlet and isolated dwellings	Village	Town and fringe	Urban >10K	Hamlet and isolated dwellings	Village	Town and fringe	Urban >10K	Rural total	Urban total	England total
Banks & building societies	28	30	1,209	10,086	2	20	230	66	1,519	10,152	11,671
Cashpoints (all)	759	1,457	3,069	46,915	61	157	315	142	5,818	47,057	52,875
Cashpoints (free)	253	342	1,752	29,081	22	43	247	99	2,659	29,180	31,839
GP surgeries (principal sites)	36	240	859	7,158	9	32	77	16	1,253	7,174	8,427
GP surgeries (all sites)	48	329	1,058	7,691	10	50	81	18	1,576	7,709	9,285
Jobcentres	2	0	26	763	1	0	9	8	38	771	809
NHS Dentists	35	98	726	6,823	4	7	79	25	949	6,848	7,797
Petrol stations	585	957	761	4,757	71	110	72	26	2,556	4,783	7,339
Post offices	380	2,283	1,516	6,156	113	331	103	27	4,726	6,183	10,909
Primary schools	589	2,487	1,741	11,921	94	253	97	27	5,261	11,948	17,209
Public houses	2,039	4,976	3,226	22,810	211	465	254	106	11,171	22,916	34,087
Secondary schools	55	90	342	2,740	5	11	47	16	550	2,756	3,306
Supermarkets	25	62	796	5,017	6	9	79	25	977	5,042	6,019

Notes:
(i) Figures presented here are for all outlets and may not represent unique service locations - for example, a branch of a bank may have two cashpoints, in which case they will both be counted in the table above.
(ii) NHS Dentists: in 2006 the new dental contract was introduced. As a result of this, the central record of dental surgeries carrying out work for the NHS has been improved. Consequently, the data used to produce the 2007 figures is more accurate than that used in the calculation of the 2006 figures. It is likely that much of the observed change between 2006 and 2007 is due to these improvements, as such care should be taken when drawing conclusions from these results.
(iii) GP surgeries (all sites): surgeries with a permanently based member of staff.
(iv) Primary schools: includes schools defined as 'Middle deemed primary'.
(v) Secondary schools: includes schools defined as 'Middle deemed secondary'.
(vi) Public houses: includes the categories 'Pubs, bars and inns' and 'Pub food restaurants' as self-defined by owners of individual establishments.
(vii) Supermarkets: a grocery store of over 3,000 sq ft.
(viii) Service location data from; Retail Locations (Banks and building societies, and Supermarkets); LINK (Cashpoints); Binleys (GP surgeries); DWP (Jobcentres); NHS Business Services Authority (NHS Dentists); Catalist (Petrol stations); Post Office Ltd (Post offices); Edubase (Primary and Secondary schools); and Point X (Public houses).

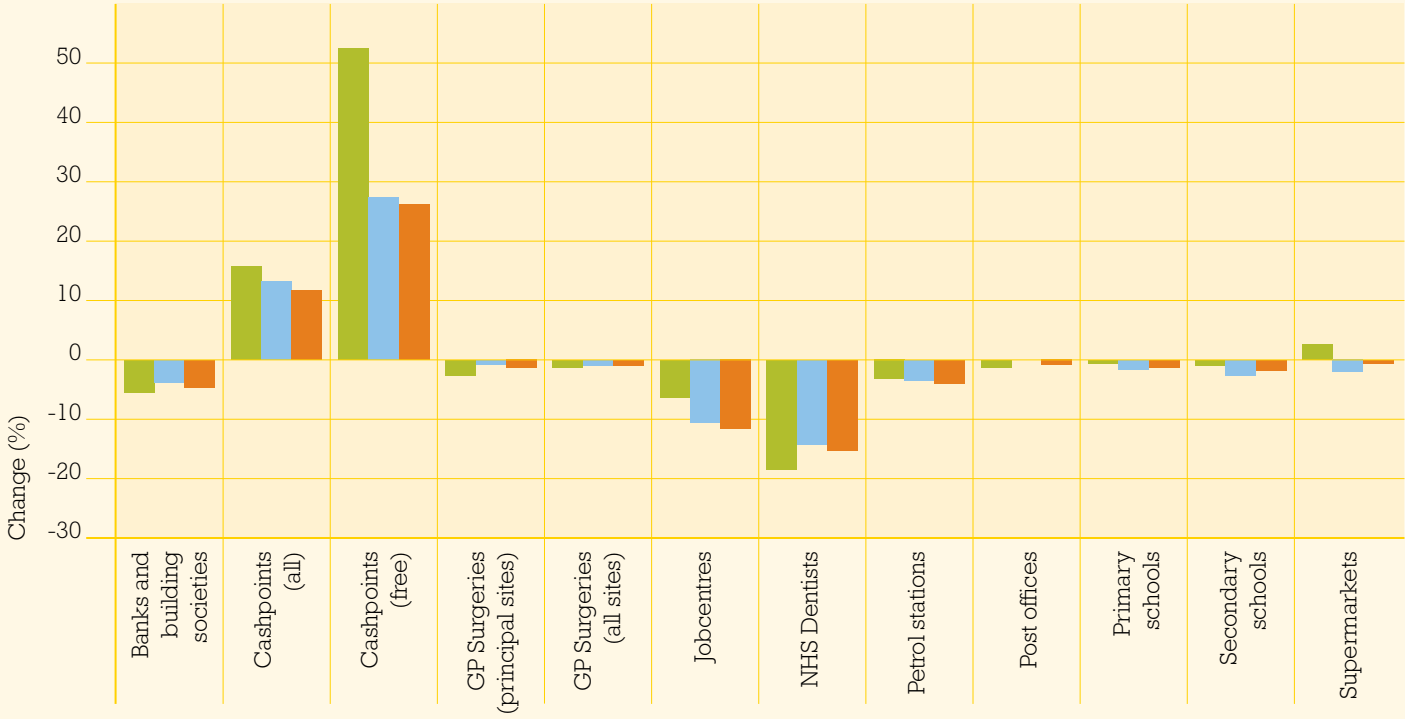
Source: Commission for Rural Communities, 2007. Rural Services Series. Analysis by Defra RSU.

Service availability

Analysis of straight line distance to service outlets in rural areas has been a regular feature of previous *State of the countryside* reports. We first look at the numbers of, and changes in numbers of service outlets (Figures 2.3.1 and 2.3.2), and then at the proportions of people who have an outlet within a certain number of kilometres (Figures 2.3.3 and 2.3.4). Figure 2.3.1 shows that the distribution of different service type outlets differs considerably between the different settlement types, which is not surprising. While job centres, banks and supermarkets are predominantly found in urban areas, post offices, primary schools and public houses are more likely to be found in smaller settlements.

Figure 2.3.2 shows that most services have seen reductions in the number of outlets between 2006 and 2007, in both urban and rural areas, though cashpoints (as in recent years) have seen an increase. Over the last year we have seen a notable increase in the number of free cash points in rural (and urban) areas. But NHS dentists, banks and building societies, job centres and petrol stations all show appreciable falls.

Figure 2.3.2
Percentage change in the number of service outlets, 2006-7



Notes:
(i) Some of the change observed may be due to improvements in the service location datasets - this is particularly true of NHS dentists, where the new dental contract has resulted in a more accurate database of dental surgeries completing work for the NHS.
(ii) GP surgeries (all sites): surgeries with a permanently based member of staff.
(iii) Primary schools: includes schools defined as 'Middle deemed primary'.
(iv) Secondary schools: includes schools defined as 'Middle deemed secondary'.
(v) Public houses: includes the categories 'Pubs, bars and inns' and 'Pub food restaurants' as self-defined by owners of individual establishments.
(vi) Supermarkets: a grocery store of over 3,000 sq ft.
(vii) Service location data from; Retail Locations (Banks and building societies, and Supermarkets); LINK (Cashpoints); Binleys (GP surgeries); DWP (Jobcentres); NHS Business Services Authority (NHS Dentists); Catalist (Petrol stations); Post Office Ltd (Post offices); Edubase (Primary and Secondary schools); and Point X (Public houses).

Source: Commission for Rural Communities, 2007. Rural Services Series. Analysis by Defra RSU.

Figure 2.3.3 shows the level of service availability across England in 2007, measured as the percentage of households that have an outlet within a set number of kilometres. It should be noted that these straight line distances ignore the transport network, as well as barriers such as rivers or mountains.

Figure 2.3.3
Availability of services, 2007
(% of households within specified distance)

	Less sparse				Sparse			
Service	Hamlet and isolated dwellings	Village	Town and fringe	Urban >10K	Hamlet and isolated dwellings	Village	Town and fringe	Urban >10K
Banks and building societies (4km)	57.1	45.7	78.8	99.7	30.5	29.0	94.4	99.9
Cashpoints (all) (4km)	85.9	84.9	98.3	100.0	59.6	67.4	99.2	100.0
Cashpoints (free) (4km)	70.0	63.1	90.9	100.0	38.5	38.7	95.4	100.0
GP surgeries (principal sites) (4km)	73.5	68.5	92.3	99.9	38.2	40.8	94.7	98.3
GP surgeries (all sites) (4km)	77.8	73.6	96.0	100.0	43.8	51.2	97.1	100.0
Jobcentres (8km)	56.6	53.4	58.7	97.3	17.3	25.2	35.7	87.0
NHS Dentists (4km)	61.3	53.2	82.6	99.8	27.4	25.9	88.5	100.0
Petrol stations (4km)	83.6	81.6	94.5	100.0	52.8	62.2	93.5	100.0
Post offices (2km)	66.7	74.2	98.7	99.8	45.0	74.4	99.6	99.4
Primary schools (2km)	71.8	80.6	99.0	99.9	41.9	71.2	99.7	99.6
Public houses (2km)	81.9	88.2	98.2	99.9	52.0	78.1	96.0	99.6
Secondary schools (4km)	56.9	48.4	76.2	99.8	25.3	25.0	79.2	98.8
Supermarkets (4km)	63.0	55.5	86.9	99.9	27.3	27.7	90.4	98.7

Notes:
(i) Some of the changes observed will be due to improvements in the quality of service location datasets rather than changes in service availability.
(ii) NHS Dentists: in 2006 the new dental contract was introduced. As a result of this, the central record of dental surgeries carrying out work for the NHS has been improved. Consequently, the data used to produce the 2007 figures is more accurate than that used in the calculation of the 2006 figures. It is likely that much of the observed change between 2006 and 2007 is due these improvements, as such care should be taken when drawing conculsions from these results.
(iii) NHS Dentists: the figures presented here are based on the distance to the nearest dental surgery offering some amount of NHS treatment. The data does not indicate whether or not practices are accepting new NHS patients.
(iv) GP surgeries (all sites): surgeries with a permanently based member of staff.
(v) Primary schools: includes schools defined as Middle deemed primary.
(vi) Secondary schools: includes schools defined as Middle deemed secondary.
(vii) Public houses: includes the categories 'Pubs, bars and inns' and 'Pub food restaurants' as self-defined by owners of individual establishments.
(viii) Supermarkets: a grocery store of over 3,000 sq ft.
(ix) Figures are based on calculations using service location data from; Retail Locations (Banks and building societies, and Supermarkets); LINK (Cashpoints); Binleys (GP surgeries); DWP (Jobcentres); NHS Business Services Authority (NHS Dentists); Catalist (Petrol stations); Post Office Ltd (Post offices); Edubase (Primary and Secondary schools); and Point X (Public houses).

Source: Commission for Rural Communities, 2007. Rural Services Series. Analysis by Defra RSU.

Our table does not show the same distance as an indicator for all service types. Primary schools and post offices tend to be more widely distributed – we use 2km as the break point here, whereas 4km is used for most others. Job centres are fewer in number and we use 8km. We choose these distances because of the geographic distribution – we are not implying that these levels represent target levels of service. It is also true that, for many people and for many services remote access (usually telephone or internet) can be used.

While virtually all households in urban areas have services available within the measured number of kilometres, and most in towns do, a much smaller proportion of those in villages and hamlets and isolated dwellings have similar availability of services. Sparse areas tend to have lower availability, though for some, for instance post offices, the difference is not very large. Hamlets and isolated dwellings, on average, tend to be as well or better served as villages probably due to many hamlets and isolated dwellings being just outside urban areas. Most service outlets are in towns – post offices and primary schools are the exception here as they also tend to be provided in larger villages.

Figure 2.3.4 shows change in the availability of rural service points across rural England. It is apparent that the proportions of households with a service outlet within the measured distance are falling for job centres and NHS dentists in particular. In many cases it appears that the reduction in service availability has accelerated over the last year. Of the services shown, only cashpoints and supermarkets show an increase in availability over recent years.

Figure 2.3.4
Availability of services in rural areas, 2000 and 2005-7

	% of rural households				% point change	
Service	2000	2005	2006	2007	2000-7	2006-7
Banks and building societies (4km)	63.9	63.7	63.7	63.0	-0.9	-0.7
Cashpoints (all) (4km)	85.4	-	88.5	90.7	5.3	2.2
Cashpoints (free) (4km)	-	-	70.1	76.6	-	6.5
GP surgeries (principal sites) (4km)	79.5	79.6	79.7	79.5	0.0	-0.2
GP surgeries (all sites) (4km)	-	-	84.3	84.0	-	-0.3
Jobcentres (8km)	59.2	58.9	55.8	54.5	-4.7	-1.3
NHS Dentists (4km)	-	-	71.4	67.5	-	-3.9
Petrol stations (4km)	89.9	88.8	88.0	87.1	-2.8	-0.9
Post offices (2km)	85.6	-	85.2	84.7	-0.9	-0.5
Primary schools (2km)	88.1	88.1	88.0	87.5	-0.6	-0.5
Public houses (2km)	-	-	-	91.3	-	-
Secondary schools (4km)	62.8	62.6	62.5	62.1	-0.8	-0.5
Supermarkets (4km)	67.2	69.8	69.9	70.6	3.4	0.7

Notes:
(i) Some of the changes observed will be due to improvements in the quality of service location datasets rather than changes in service availability.
(ii) NHS Dentists: in 2006 the new dental contract was introduced. As a result of this, the central record of dental surgeries carrying out work for the NHS has been improved. Consequently, the data used to produce the 2007 figures is more accurate than that used in the calculation of the 2006 figures. It is likely that much of the observed change between 2006 and 2007 is due these improvements, as such care should be taken when drawing conculsions from these results.
(iii) NHS Dentists: the figures presented here are based on the distance to the nearest dental surgery offering some amount of NHS treatment. The data does not indicate whether or not practices are accepting new NHS patients.
(iv) GP surgeries (all sites): surgeries with a permanently based member of staff.
(v) Primary schools: includes schools defined as Middle deemed primary.
(vi) Secondary schools: includes schools defined as Middle deemed secondary.
(vii) Public houses: includes the categories 'Pubs, bars and inns' and 'Pub food restaurants' as self-defined by owners of individual establishments.
(viii) Supermarkets: a grocery store of over 3,000 sq ft.
(ix) Figures are based on calculations using service location data from; Retail Locations (Banks and building societies, and Supermarkets); LINK (Cashpoints); Binleys (GP surgeries); DWP (Jobcentres); NHS Business Services Authority (NHS Dentists); Catalist (Petrol stations); Post Office Ltd (Post offices); Edubase (Primary and Secondary schools); and Point X (Public houses).

Source: Commission for Rural Communities, 2007. Rural Services Series. Analysis by Defra RSU.

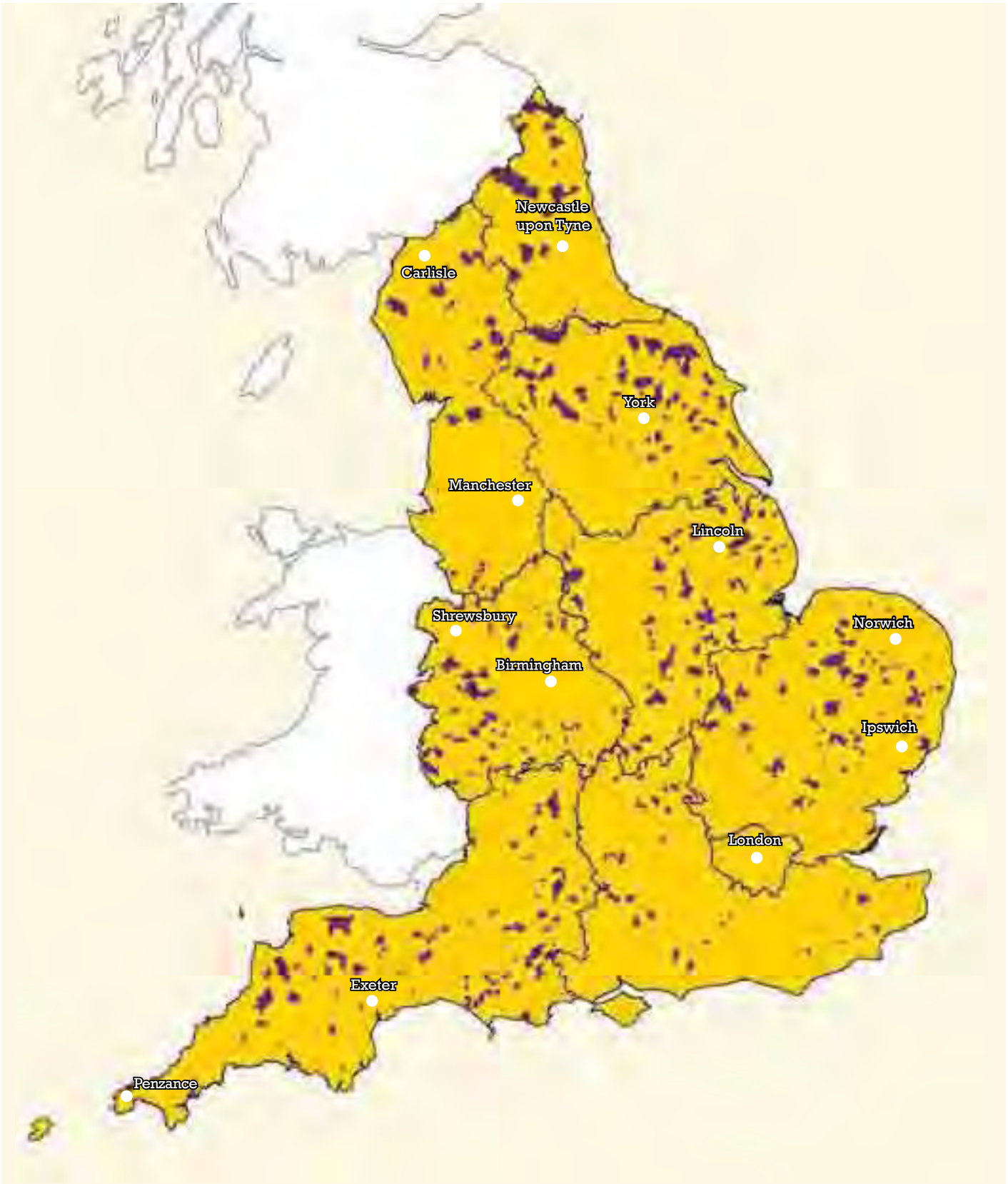


Figure 2.3.5
Areas lacking key financial services, 2007

Areas where no households are within:
2km of a Post Office, or
4km of a Bank or Building Society, or
4km of a free ATM

Financial services 'deserts'

Boundaries

Notes:
(i) This map is based upon the calculation of straight line distances between centres of postcodes and the nearest outlet of a particular service.
(ii) Calculations use service outlet data provided by: Post Office Ltd (Post Offices); Retail Locations (Banks and Building Societies); and LINK (ATMs) – it is not possible to identify specific service locations from this map.

Source: Commission for Rural Communities, 2007. Rural Services Series, Analysis by Defra RSU.

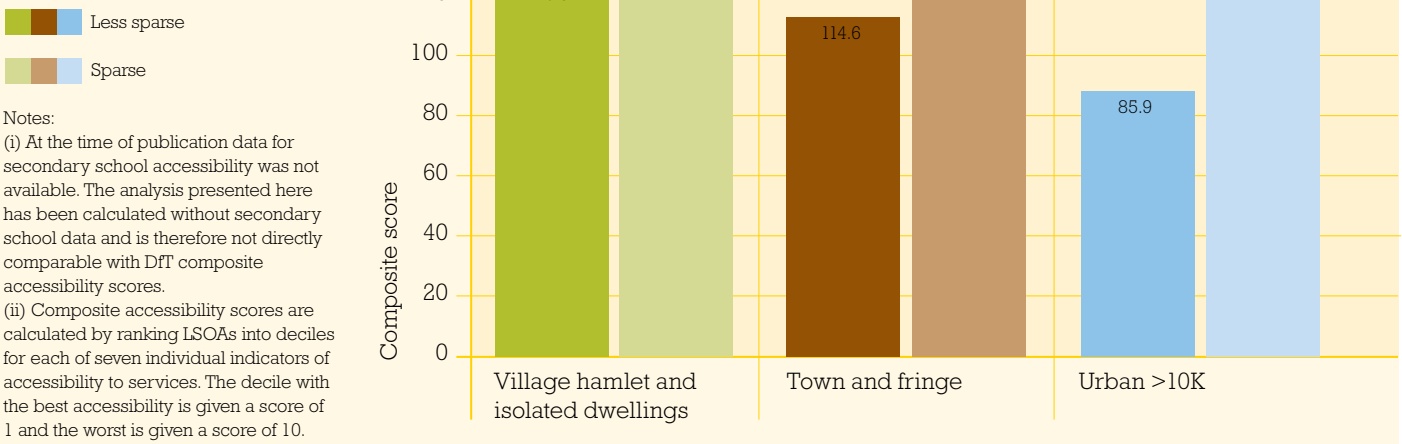
Figure 2.3.5 shows how the lack of availability of a number of key services can lead to 'service deserts'. It shows those areas that do not have a bank or building society, a post office or a free cashpoint nearby. These areas, which contain 233,000 people, are not as concentrated in sparse areas as one might expect – although most are in low population areas, some are in relatively populated areas. While many of the functions of these services can now be accessed electronically by many peoople, services such as cash withdrawals cannot, and many people rely on face to face contact for financial services.

Service accessibility

Straight line distance (availability) is important in measuring how easily people can reach service outlets, but it does not take transport availability into account. Accessibility to services has been recognised by government as an important issue of social inequality, and since 2005 Local Authorities have been required to produce Accessibility Plans to help ensure that those with poor accessibility see an improvement. To this end the Department for Transport (DfT) produces indicators of accessibility for access to various service outlets, measured in terms of the percentage of people living in an area who can get to a service outlet within a specified time by public transport, cycling or walking (DfT, 2007).

Figure 2.3.6 shows how different degrees of access to transport in practice affect the accessibility indicators for key services. These 'composite indicators' are based on travel times needed by different modes of transport, weighted by the proportions of trips in different types of area that are made by different modes – it should be noted that higher figures mean lower levels of accessibility. Because more people use cars in rural areas, the effect of distance is lessened and therefore the difference between urban and rural areas is also lessened.

Figure 2.3.6
Composite accessibility, 2005
(Highest values represent worst accessibility)



Notes:
(i) At the time of publication data for secondary school accessibility was not available. The analysis presented here has been calculated without secondary school data and is therefore not directly comparable with DfT composite accessibility scores.
(ii) Composite accessibility scores are calculated by ranking LSOAs into deciles for each of seven individual indicators of accessibility to services. The decile with the best accessibility is given a score of 1 and the worst is given a score of 10. The composite score is the combined total of these individual scores. The highest values therefore indicate where access to a range of services is worst.

Source: Department for Transport, 2007. National accessibility threshold indicators.

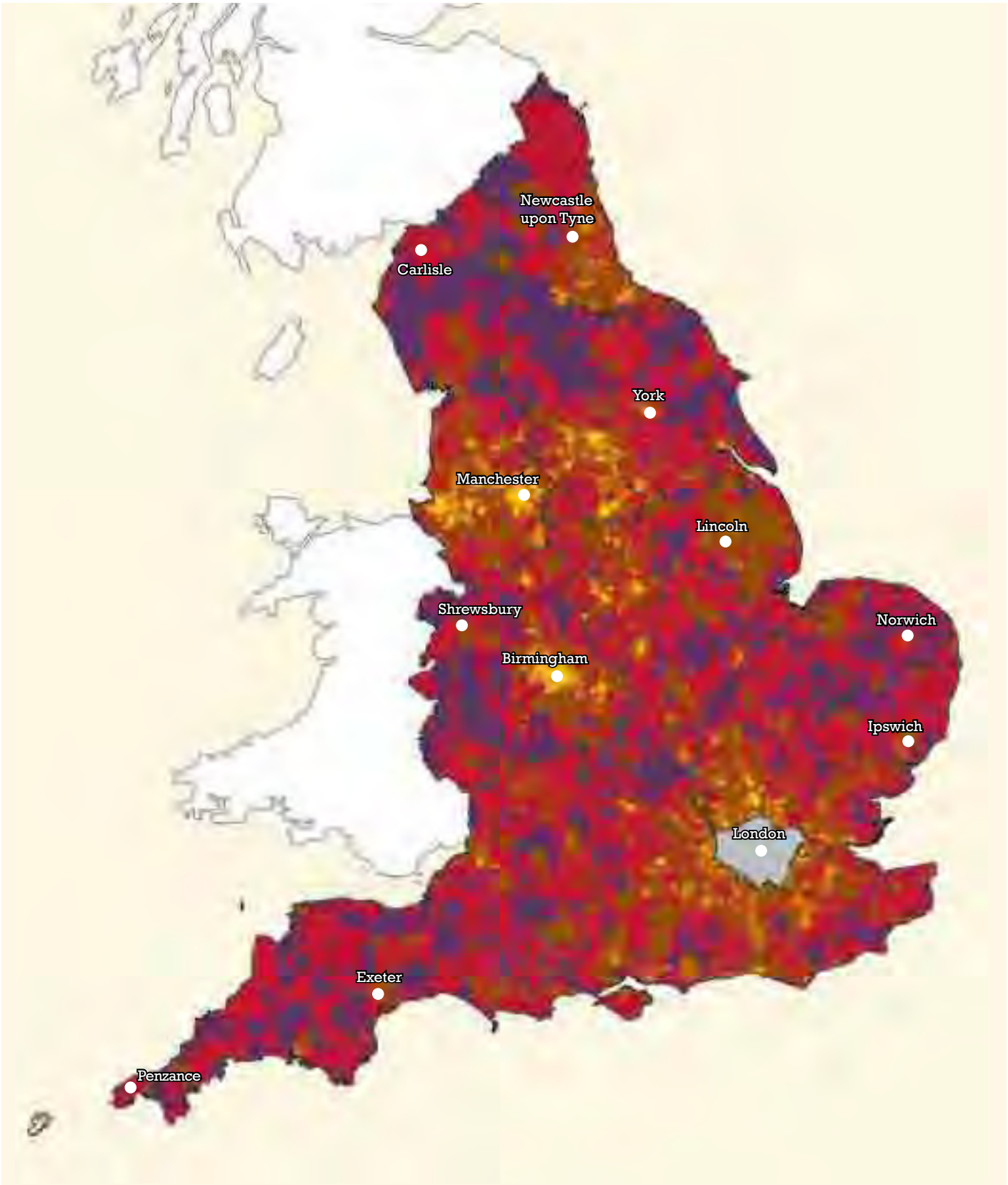


Figure 2.3.7
Composite accessibility, 2007

Composite score

- 17 – 47 (greatest accessibility)
- 48 – 77
- 78 – 108
- 109 – 138
- 139 – 170 (least accessibility)
- London data not available
- Boundaries

Notes:
(i) At the time of publication data for secondary school accessibility was not available. The analysis presented here has been calculated without secondary school data and is therefore not directly comparable with DfT composite accessibility scores.
(ii) Composite accessibility scores are calculated by ranking LSOAs into deciles for each of seven individual indicators of accessibility to services. The decile with the best accessibility is given a score of 1 and the worst is given a score of 10.

The composite score is the combined total of these individual scores. The highest values therefore indicate where access to a range of services is worst.

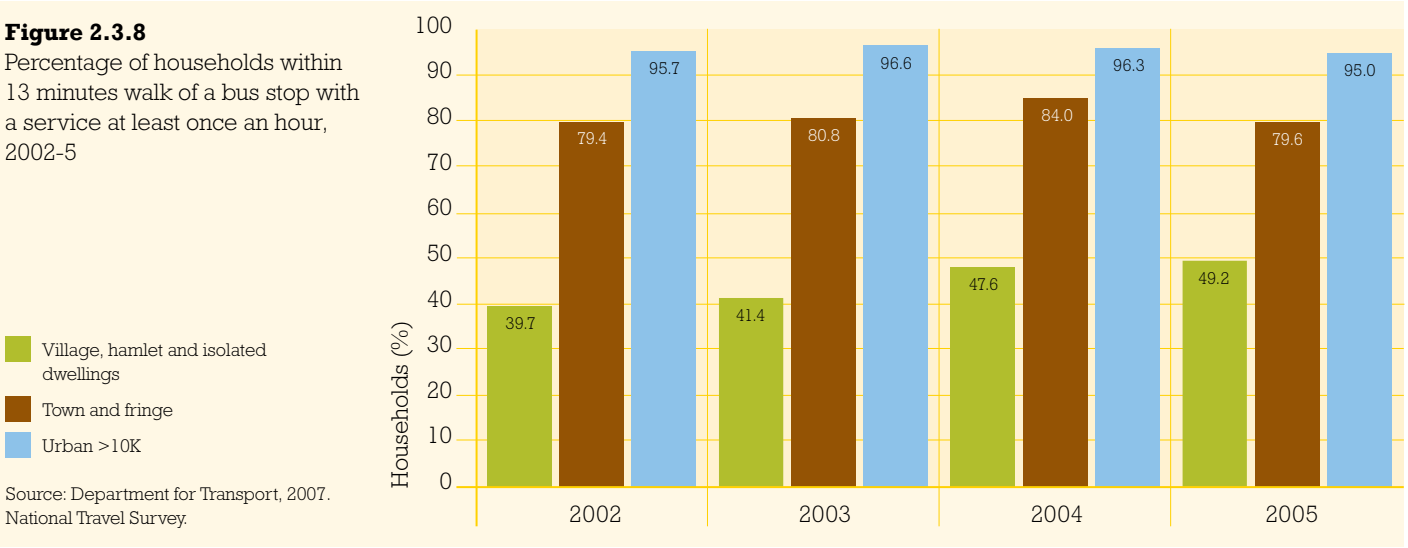
Source: Department for Transport, 2007. National accessibility threshold indicators.

Despite this, urban areas still have higher levels of accessibility for nearly all service types. There are exceptions, notably for people in rural towns accessing GP practices and schools. For widely spaced services (further education and hospitals) sparse areas show as having very poor accessibility, while for supermarkets it is notable that villages and hamlets have markedly lower levels (DfT, 2007).

Figure 2.3.7 shows how the overall composite indicator is distributed geographically. The pattern is similar to that seen for availability, with areas more distant from centres tending to have worse accessibility. But transport availability does have an impact. Some areas in the more densely populated South East show poor levels of accessibility, even though car availability is generally perceived as being very high, and distances to service outlets are not as great as in more remote areas.

Much of the difference in accessibility is due to access to bus services. Hourly bus services have long been used as an indicator of a 'good level of service' and Figure 2.3.8 shows that access at this level for people living within 13 minutes' walk has risen in village and hamlet settlements since 2002, though, not surprisingly, remains markedly lower than for towns and urban areas.

Figure 2.3.8
Percentage of households within 13 minutes walk of a bus stop with a service at least once an hour, 2002-5



Source: Department for Transport, 2007. National Travel Survey.

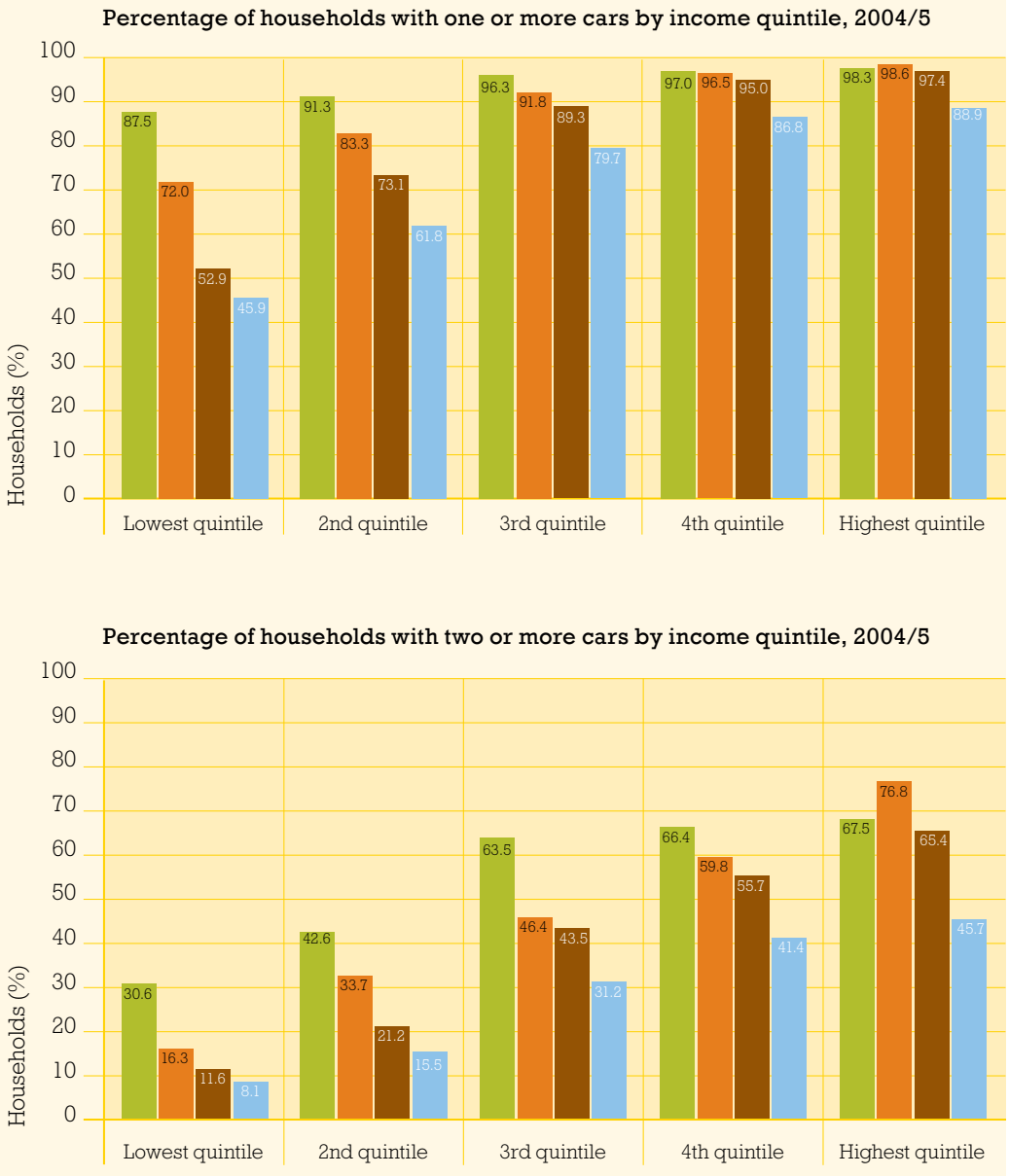
Transport and accessibility

Accessibility indicators are only crude measures. For example, a person with mobility difficulties may not be able to use a bus, so these broad indicators of accessibility would not be accurate for them. The indicators can only show what is available to people – not the use that they make of them. This subsection looks at travel behaviour in practice.

Car ownership and disadvantage

Figure 2.3.9 shows the pattern of car ownership for people in different income groups. It shows that car ownership increases with income for all areas and that this is a greater determinant of car ownership than location. But significantly, it also illustrates that even in the lowest income group, between 72% and 88% of households in hamlets and villages own a car, compared to between 46% and 53% in towns and urban areas. This strongly suggests that a lack of accessibility is making low income households in rural communities run a car when they might not if they lived in areas with better transport services.

Figure 2.3.9
Household car ownership by income quintile, 2004/5



Note:
(i) Income quintile is defined as 20% of households ranked by income.

Source: Department for Transport, 2007. National Travel Survey.

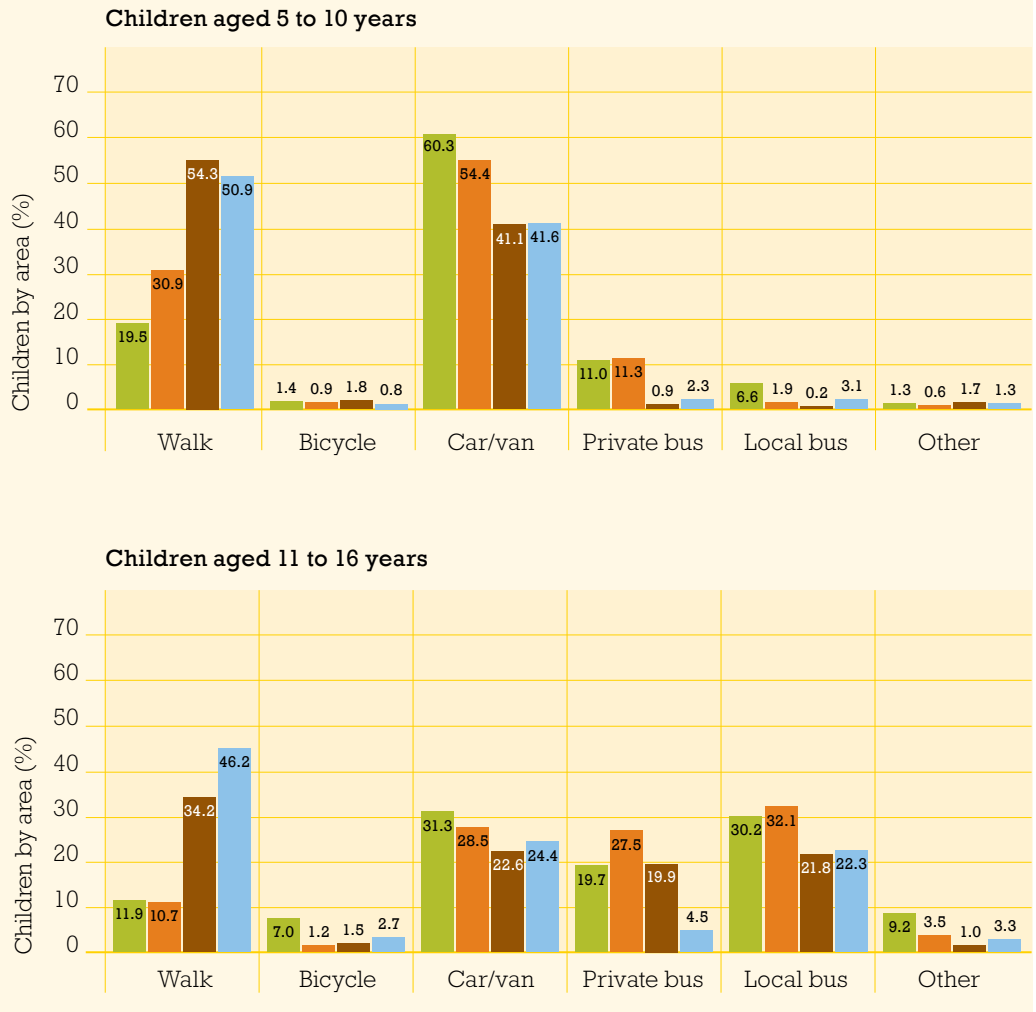
Figure 2.3.9 also shows that 31% of even the lowest income households in hamlets run two or more cars. This figure is close to the average for all areas across all the income quintiles, emphasising the point that rural households in low income groups are reliant on car ownership.

Walking remains the second most frequently used mode of transport in rural areas, with around 20% of trips being made on foot. But those walk journeys tend to be shorter than those in urban areas. In urban areas just over 50% of walk journeys are under one mile, but in villages and hamlets this figure is over 80%. A combination of higher car availability, a lack of footways on busy roads, and less chance of congestion (making car travel more convenient) may account for this difference.

Journeys to school

Although the car dominates for travel to school for primary school age children in rural areas, it does not for secondary schools (Figure 2.3.10). For primary school children walking remains common, and public or schools buses play a significant role with about 15% of journeys from villages and hamlets. For secondary school children, buses (school or public) are the most frequently used modes in villages and hamlets, carrying a higher percentage than in towns and urban areas. This is mainly due to current government policy to provide free transport to school for those living more than two miles from a primary school and three miles from a secondary school. Cars are used slightly more for travel to secondary school in rural areas, but not markedly so.

Figure 2.3.10
Method of travel to and from school, 2002/5



Source: Department for Transport, 2007. National Travel Survey.

Access via the internet

More and more services are being made available through the internet and interactive digital television. Many can now bank online, purchase a television licence online (even if they are no longer available from a post office) or even undertake distance learning online.

To enable the public to access some of these services it is critical to have access to a personal computer, interactive digital television or a publicly accessible internet point, as well as the ability to use the internet. Also critical is the speed at which these services can be provided. As recently as 2005 we reported on the digital divide between rural and urban areas at a time when urban areas enjoyed access to broadband which was not available to all in rural areas – now virtually all areas have the potential for access via broadband.

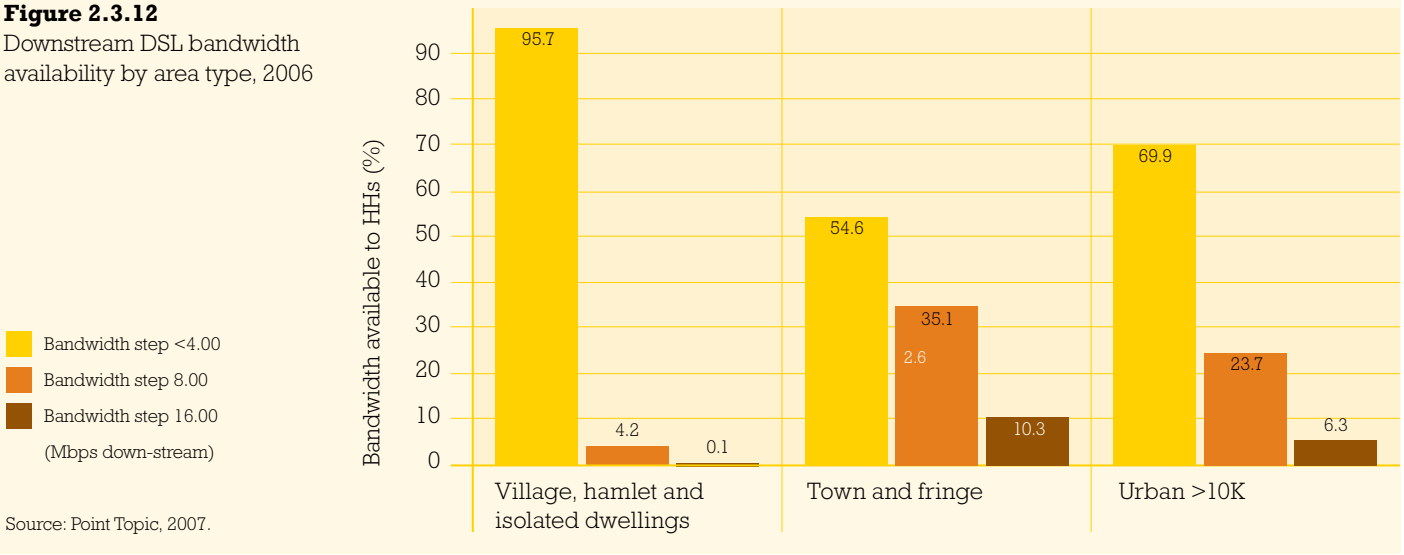
The internet can be accessed through various technologies. These are cable, digital subscriber line (DSL), local loop unbundled (LLU), satellite and standard telephone dial up (which is slower unless converted for DSL). Figure 2.3.11 shows proportions of households that have some of these services assigned by area type.

Figure 2.3.11
Proportion of services assigned to households by area type, 2006

Source: Point Topic, 2007.

Urban and rural households both have broadly comparable levels of general internet access, but general internet access does not indicate whether it is accessed via broadband or standard telephone dial up. DSL broadband appears to be assigned to rural households more than urban households, but urban households have cable broadband assigned more than rural households.

Figure 2.3.12
Downstream DSL bandwidth availability by area type, 2006



Source: Point Topic, 2007.

Figure 2.3.12 shows bandwidth downstream speeds, by area type. Downstream means the speed at which information can be downloaded to the user. The downstream bandwidth available by area type is proportionately slower in village, hamlet and isolated dwellings compared to urban and town and fringe areas. 4 Mbps (4 million bits of information per second) is considered slow for broadband access while 16 Mbps is considered fast (in 2007). DSL broadband speeds tend to be less in villages and hamlets, partly because the speed is related to distance from an exchange – consequently small rural towns tend to have higher speeds, since the small area is likely to have an exchange nearby.

Until now rural areas have tended to lag behind urban areas in terms of internet provision. Until recently this was due to rural areas experiencing 'noise' on telephone lines rather than a lack of access to broadband. Now lack of 'cable' and slower DSL speeds mean that, although access exists, performance is often slower.

2.3 Key summary points: Access to services

- There are ongoing reductions in the proportions of rural households that are close to key services such as banks, Job Centres and petrol stations.
- There has been a welcome increase in the availability of free cashpoints (although the proportion of fee-paying ones remains higher in rural areas than it is in urban areas).
- Wider accessibility to services (which takes transport availability into account) remains variable and the car remains central to the way in which most rural people access services.
- One third of the poorest households in rural areas have two or more cars – in urban areas the figure is less than one in twelve.
- There are significant differences in accessibility to 'high-end' Broadband. Access has improved significantly in rural areas, but it lags behind urban areas in terms of higher speeds.

See also (from the 2005 and 2006 reports):

Internet access

2006	Figure 24	Broadband (DSL) availability (showing change 2004-5)
2006	Figure 25	Broadband availability (Cable and FWA)
2006	Figure 26	Broadband usage
2005	Table 3.15	Geographical availability of broadband 2004

Travel behaviour

2006	Figure 30	Average number of trips per person per year by main mode and area type 2002-4
2006	Figure 31	Average distance travelled by main mode of travel and area type 2002-4
2006	Figure 32	Average distance to work
2006	Figure 33	People travelling to multiple locations for work
2006	Table 12	Modes of travel to work
2006	Figure 34	Proportion of people travelling to work by car who feel that they have no choice
2006	Table 13	Proportion of people who always travel by car
2006	Table 14	Proportion of people making at least one trip a month over 20 miles
2005	Figure 3.9	% of population who travel 5-10kms to work (map)
2005	Table 3.16	Bus availability indicator 1991-3 to 2003
2005	Figure 3.11	Household expenditure on transport

Utilities

2006	Figure 27	Perceptions of the occurrence of power cuts
2006	Figure 28	Perceptions of the occurrence of water supply cuts
2006	Figure 29	Perceptions of the occurrence of telephone service interruptions

2.4 Housing and homelessness

Introduction

This section looks at the demand for and supply of housing in rural communities, as well as the number of building completions, affordability information and trends in homelessness.

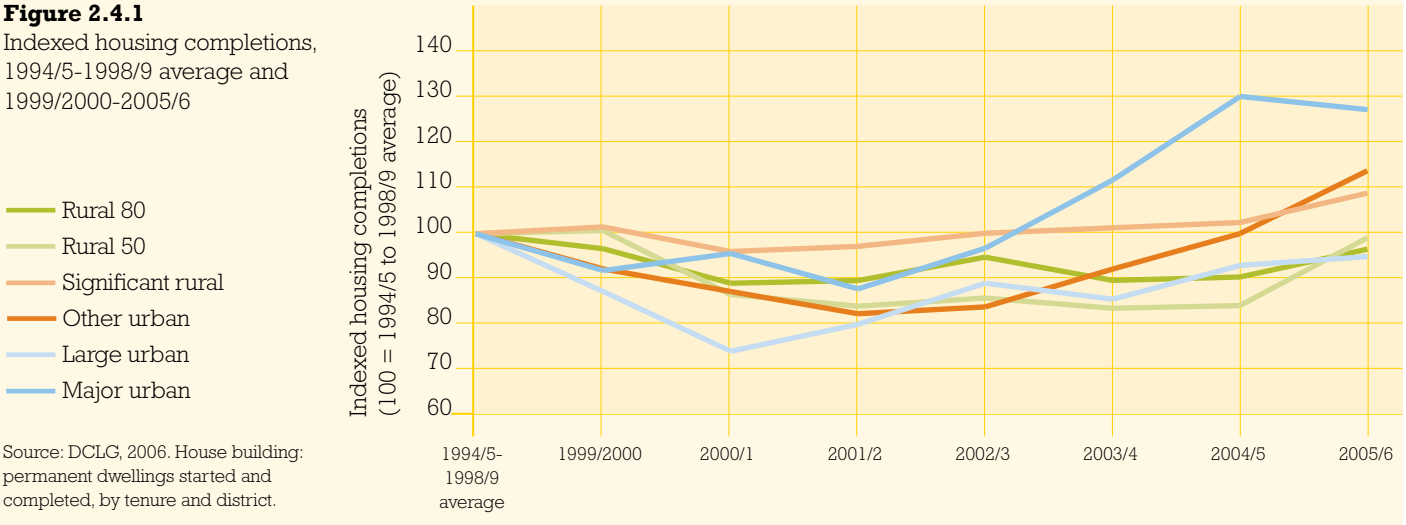
The lack of affordable housing for people who live and work in rural communities has been a serious problem for many years. Evidence shows that private market housing has become increasingly less attainable to young households in particular (CRC, 2006) – with limited numbers of affordable homes being made available for rent or shared ownership. These issues were recognised by the Government when it set up the Affordable Rural Housing Commission (ARHC) which reported in May 2006, setting out a series of practical recommendations for Government and independent bodies at all levels; aiming to allow rural communities to benefit from the small developments of affordable housing that could make a real difference to their viability (AHRC, 2006).

Previous *State of the countryside* reports have looked at housing in detail and it is worth restating here some statistics about the pattern of tenure of housing in rural communities. Census 2001 showed that around 12% of rural households lived in social housing compared with 21% of urban households. Furthermore, 7% of rural households lived in accommodation rented from a private landlord or letting agency (9% of urban) and 77% in owner occupied housing (67% in urban).

Supply and demand

Rural areas continue to see a high demand for housing – 77% of people in less sparse urban areas want to live in rural areas [SOCR 2006 – Figure 13]. In terms of supply, there has been a recent increase in house building completions, but the increase has been much more rapid in urban areas, and remains lower than the average level between 1994/5 and 1998/9 in the most rural Local Authority area types. The amount of this housing that is built as affordable housing has remained low, but Figures 2.4.1 and 2.4.2 shows that this provision is increasing.

Figure 2.4.1
Indexed housing completions, 1994/5-1998/9 average and 1999/2000-2005/6



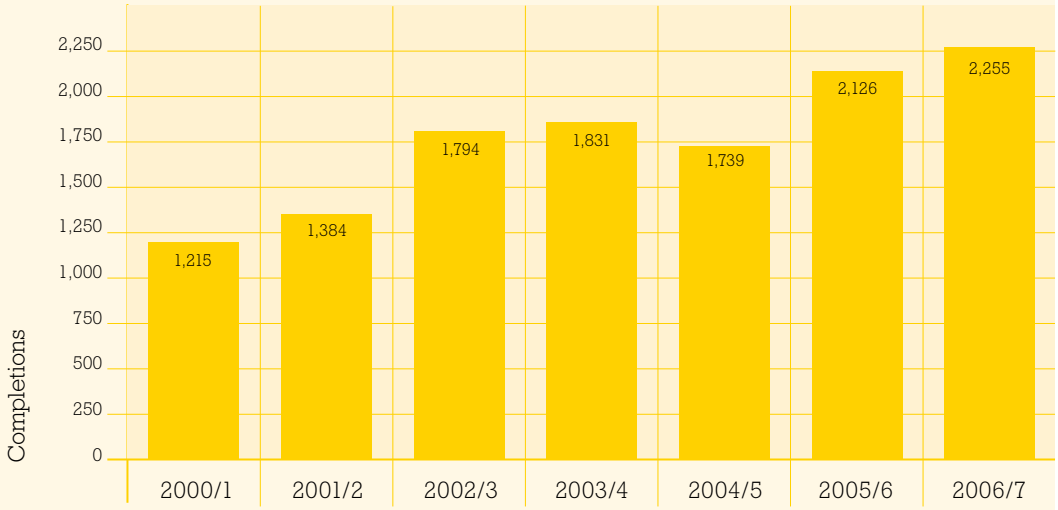
Source: DCLG, 2006. House building: permanent dwellings started and completed, by tenure and district.

Figure 2.4.2
Affordable home[1] completions in settlements with a population of fewer than 3,000 people, 2000/1 to 2006/7

[1] Housing provided to households whose needs are not met by the market at a cost low enough for them to afford and with provision for the home to remain at an affordable price for future households or for any subsidy to be recycled for alternative affordable housing provision.

Note:
(i) The figure for 2006/7 is a forecast.

Source: Housing Corporation, 2007. Rural housing strategy.



The chapter on Land and Environment will show that housing densities are rising for new house build in rural areas, and there is evidence that more is being built on previously developed land.

House prices and affordability

House prices have risen rapidly everywhere across England in recent years. Urban prices have risen slightly more slowly than rural prices, though sparse areas (of all types) have seen a much higher rate of increase (Figure 2.4.3). Overall house prices remain higher in rural areas, and are highest in less sparse hamlets and isolated settlements, where homes are 67% more expensive than in less sparse urban areas.

Figure 2.4.3
Average house prices and change in average house prices, 2000-6

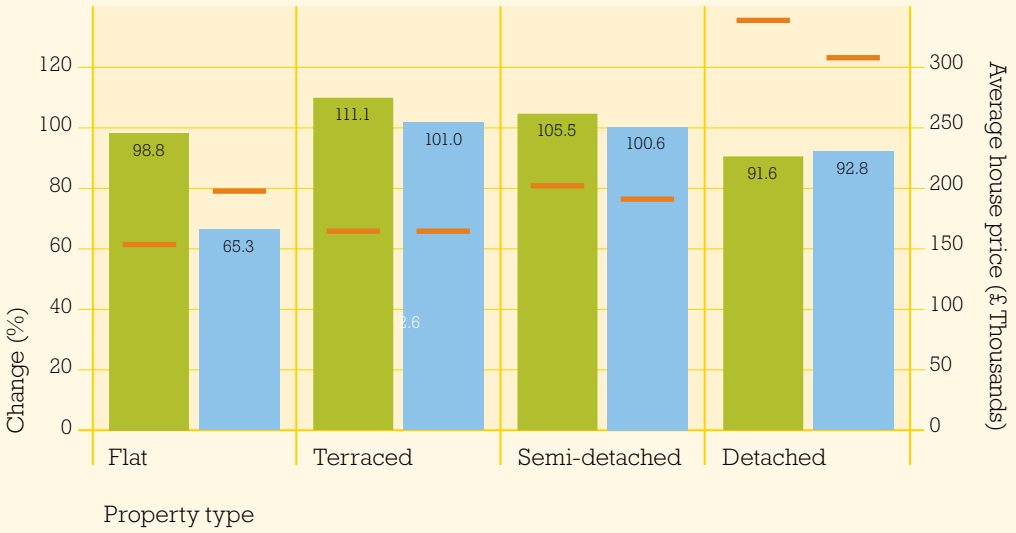
Area definition		£ 2000	2002	2004	2006	% Change 2000-6	Average annual change 2000-6
Less sparse	Hamlet and isolated dwellings	£178,495	£222,861	£283,114	£329,320	84.5	10.8
	Village	£148,700	£188,461	£243,590	£275,258	85.1	10.9
	Town and fringe	£104,134	£133,946	£178,166	£200,912	92.9	11.7
	Urban >10K	£104,592	£131,770	£168,608	£196,806	88.2	11.1
Sparse	Hamlet and isolated dwellings	£129,721	£175,536	£241,651	£277,886	114.2	13.6
	Village	£103,277	£141,912	£206,654	£236,330	128.8	15.0
	Town and fringe	£86,286	£116,433	£170,397	£192,985	123.7	14.6
	Urban >10K	£72,355	£93,064	£143,465	£159,058	119.8	14.3
Rural		£125,618	£161,545	£212,109	£240,222	91.2	11.5
Urban		£104,488	£131,650	£168,535	£196,700	88.3	11.2
England		**£108,508**	**£137,152**	**£176,265**	**£204,537**	**88.5**	**11.2**

Notes:
(i) Figures may differ to those published by the Land Registry.
(ii) Figures for 2000 are based on sales made from 1st April to 31st December. Figures for subsequent years are based on sales for the full year.

Source: Land Registry, 2006. Price Paid Dataset.

Increases have not been uniform across all types of housing (Figure 2.4.4). While rural detached houses have seen slightly slower price rises than urban areas, cheaper types of housing – flats, terraced and semi-detached houses (less common in rural areas) have risen somewhat faster.

Figure 2.4.4
Change in average house prices by type, 2000-6, and average house prices by type, 2006

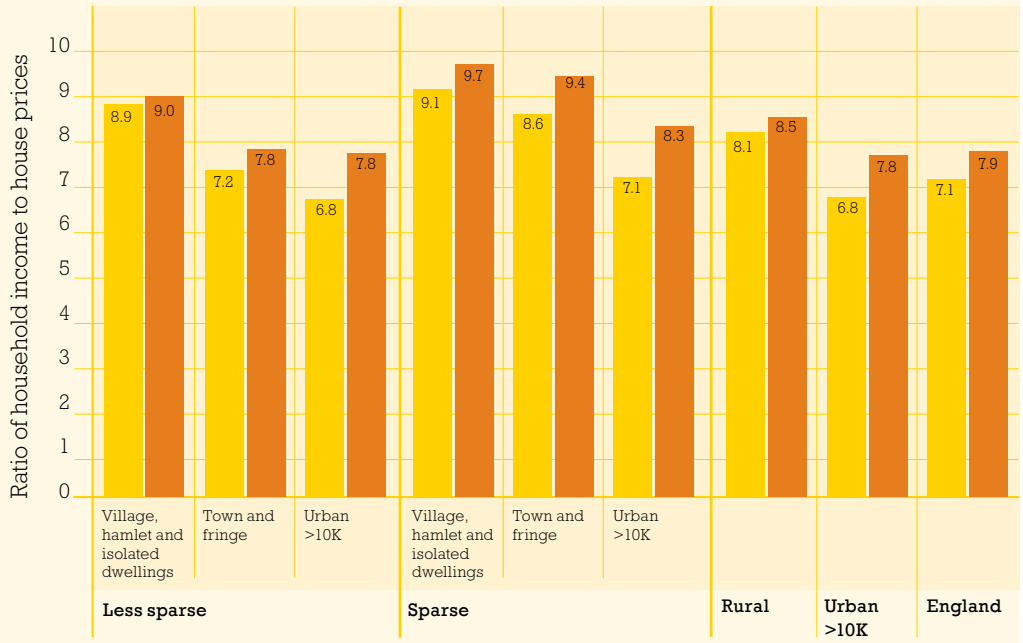


Note:
(i) Figures may differ to those published by the Land Registry.

Source: Land Registry, 2006. Price Paid Dataset.

Housing affordability remains an issue in rural areas. Figure 2.4.5 shows that housing affordability is worse in rural areas (in particular within smaller settlements and sparse areas).

Figure 2.4.5
Comparing housing affordability with lower quartile housing affordability, 2006



Notes:
(i) This analysis has been completed at Middle Super Output Area (MSOA) level.
(ii) As figures increase houses become less affordable.
(iii) Affordability figures represent the ratio between the average house price and average median income.
(iv) Lower quartile is defined as the value below which 25% of the observations were recorded.
(v) Lower quartile affordability figures represent the ratio between the lower quartile house price and lower quartile income.
(vi) Figures differ to those previously presented in State of the Countryside reports because 1) different methodologies have been used in the calculation of the affordability ratios, and 2) the analysis has been completed using different geographical units (MSOAs).

Source: Land Registry, 2006. Price Paid Dataset. and CACI Ltd, 2007. Paycheck.

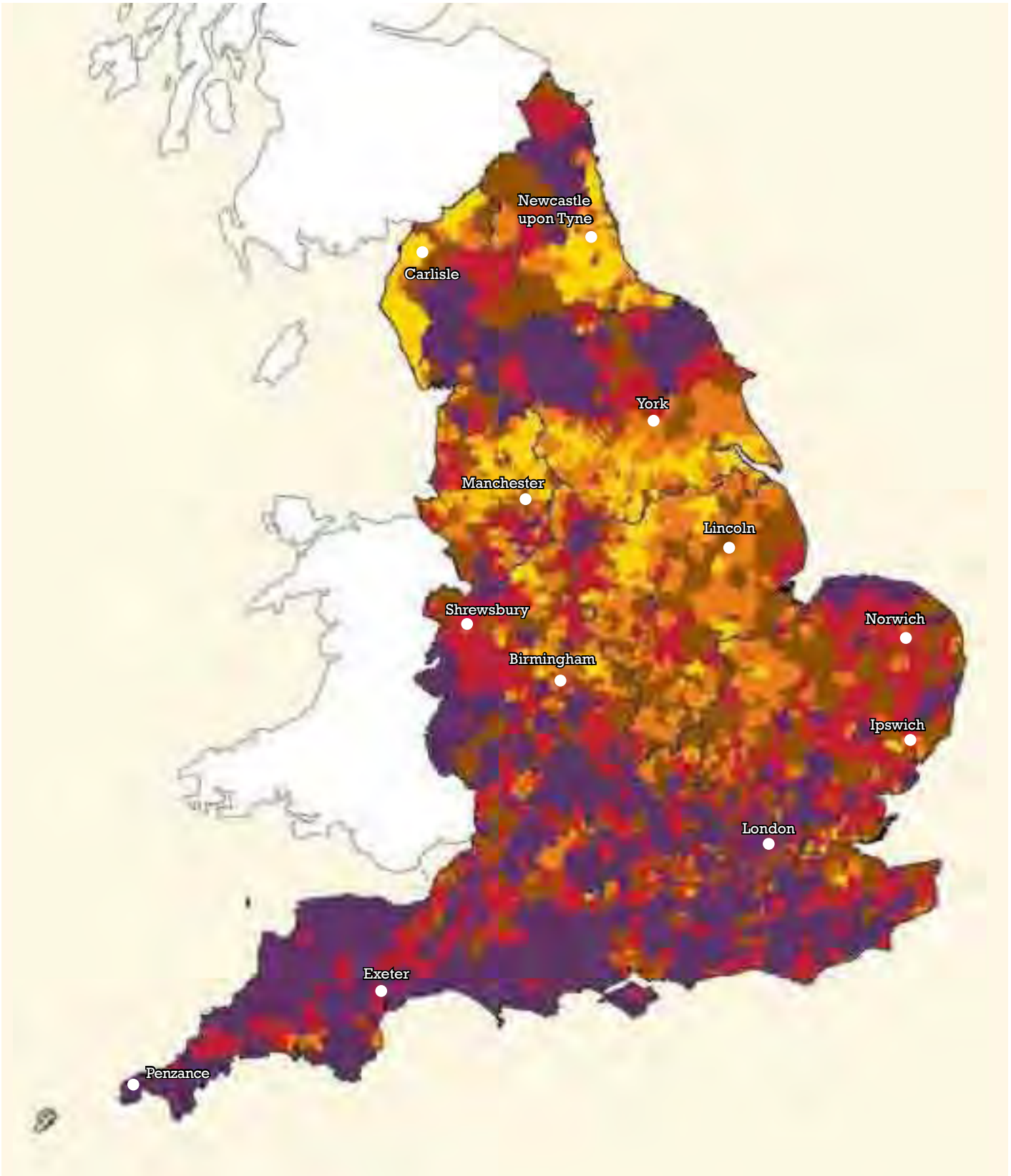


Figure 2.4.6
Lower quartile housing affordability, 2006

Ratio of lower quartile incomes to lower quartile house prices

- 1.6 – 6.1
- 6.2 – 7.1
- 7.2 – 8.0
- 8.1 – 9.3
- 9.3 – 24.8
- Boundaries

Notes:
(i) This analysis has been completed at Middle Super Output Area (MSOA) level.
(ii) As figures increase houses become less affordable.
(iii) Lower quartile represents the bottom 25% of house prices and the bottom 25% of household incomes.
(iv) Lower quartile affordability figures represent the ratio between the lower quartile house price and lower quartile income.
(v) Figures differ to those previously presented in State of the Countryside reports because 1) different methodologies have been used in the calculation of the affordability ratios, and 2) the analysis has been completed using different geographical units (MSOAs).

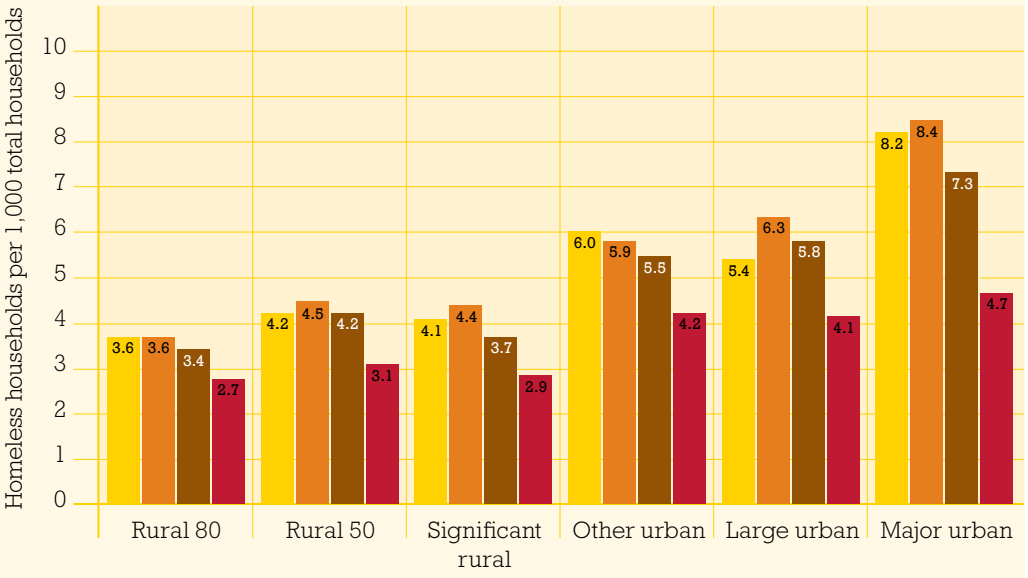
Source: Land Registry, 2006. Price Paid Dataset. and CACI, 2007. Paycheck.

The distribution of housing affordability for those with incomes in the lower quartile of all incomes, trying to buy a lower quartile priced house locally is shown in Figure 2.4.6. Outside some parts of London the most unaffordable areas are nearly all rural, with the South West showing as the 'worst' area for affordability. There is a consistent pattern (CRC, 2007c) that areas with poor affordability also tend to have higher levels of inward migration and high levels of homes that are sold for cash.

Homelessness

Homelessness can be defined in many different ways, and local authorities assess people as to whether or not they can be 'accepted' as being homeless. Figures 2.4.7 and 2.4.8 show the distribution of local authority homelessness acceptances and those households placed in temporary accommodation over the period 2002-3 and 2005-6 across rural and urban classifications. Homelessness acceptance rates are lower in rural areas than in urban areas and the numbers have declined in all area types.

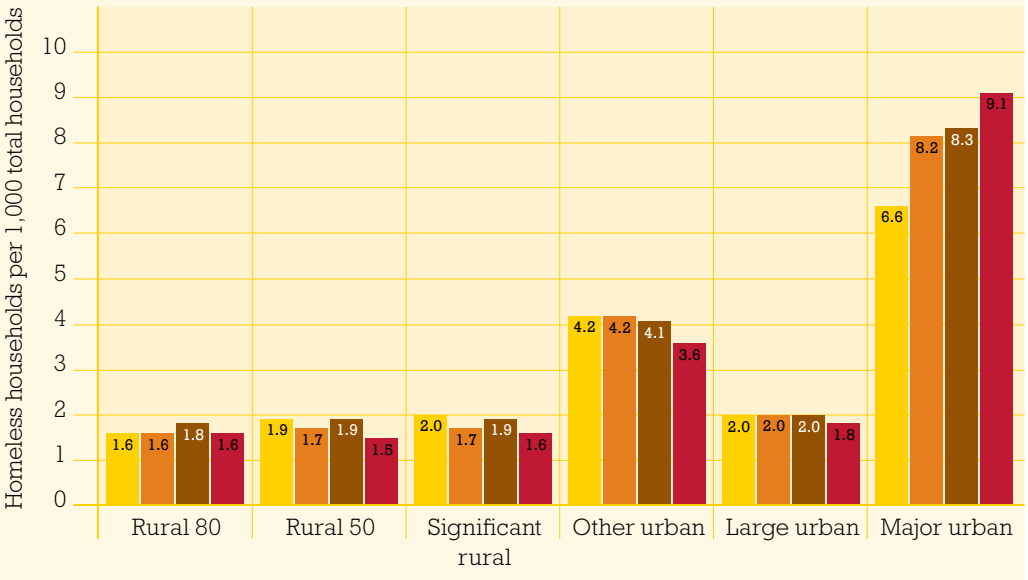
Figure 2.4.7
Homeless and priority need households per 1,000 total households, 2002/3 to 2005/6



Note:
(i) Total household figures are taken from mid-year household estimates. Currently the most recent available year is 2004.

Source: DCLG, 2006. Numbers accepted as being homeless and in priority need. and Mid-year household estimates.

Figure 2.4.8
Homeless households in temporary accommodation per 1,000 total households, 2002/3 to 2005/6



Note:
(i) Total household figures are taken from mid-year household estimates. Currently the most recent available year is 2004.

Source: DCLG, 2006. Numbers accepted as being homeless and in priority need. and Mid-year household estimates.

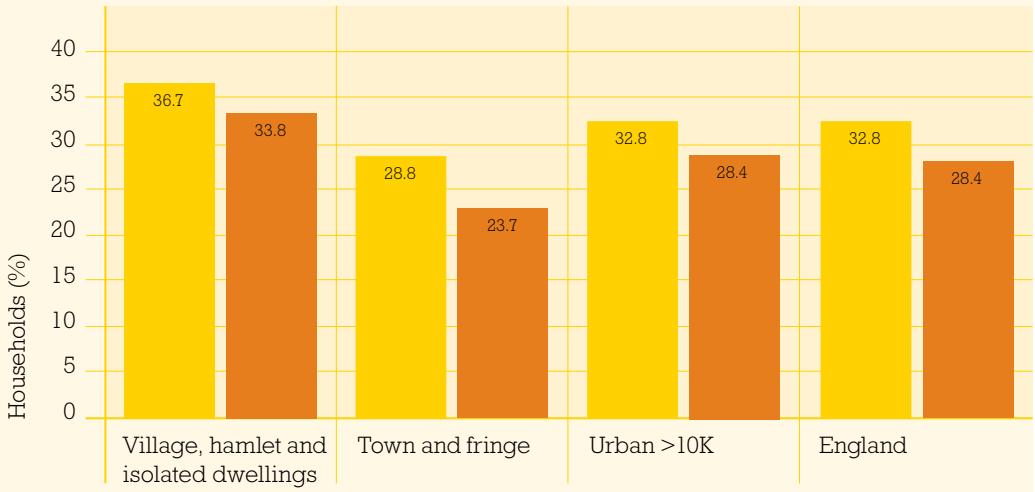
A notable difference between the rural and urban contexts is in respect of the percentage of homeless households accommodated in temporary accommodation (Figure 2.4.8). In rural areas a smaller proportion of households accepted as homeless are in temporary accommodation. In urban areas the figure for households in temporary accommodation (72,400) is actually higher than the urban homelessness figure of 47,000.

This suggests differences in the way that homelessness is experienced in rural and urban areas and in the way that rural and urban local authorities are meeting their statutory responsibilities under homelessness legislation. A number of factors could explain this variation. In rural areas, homeless households are possibly more likely to rely on staying with family and friends, or are being housed in neighbouring urban locations rather than their needs being met locally where there is pressure on affordable housing and less available temporary accommodation.

Housing condition and fuel poverty

Figure 2.4.9 shows that there is a higher percentage of people living with poor housing conditions in village and hamlet areas than in urban areas, but rural towns have the lowest levels. The percentage living in non-decent homes fell for all area types between 2001 and 2004.

Figure 2.4.9
The percentage of households living in non-decent homes, 2001 and 2004



Note:
(i) A decent home is one that; is above the current statutory minimum standard for housing; is in a reasonable state of repair; has reasonably modern facilities and services; and provides a reasonable degree of thermal comfort.

Source: ODPM, 2001 and 2004. English House Condition Survey.

There are many implications of living in houses in poor condition related to health, fuel poverty and other issues. A household is considered to be fuel poor if it spends more than 10% of its income on fuel used to heat the home to an adequate standard of warmth. A number of surveys have shown that fuel poverty is both more widespread and more acute in rural areas than in urban areas. Fuel poverty can damage people's health as well as impact on their quality of life. In sparsely populated rural areas, just over 10% of households experience levels of extreme fuel poverty (where households have to spend more than 20% of their income on fuel).

There are links between the standard and quality of housing, and fuel poverty – many fuel poor households live in houses with solid walls that, though often seen as desirable, have low energy insulation efficiency. There is limited availability of mains gas (which provides the cheapest source of fuel) in rural areas. These two indicators provide good proxy indicators for the extent of fuel poverty as illustrated in Figure 2.4.10 (using data provided by the Centre for Sustainable Energy).

Figure 2.4.10
Proportion of homes with solid walls and not on mains gas supply, 2006

Source: Centre for Sustainable Energy, 2007.

2.4 Key summary points: Housing and homelessness

- Rural housing remains on average, more expensive than urban – although the price gap is static.
- Housing affordability remains a major issue in rural areas.
- There has been a recent and welcome increase in rural housing supply. However, the number of near completions remains lower than in the late 1990's.
- There has been a welcome reduction in homelessness but some complex issues remain.
- Fuel poverty is a rural concern with much higher proportions of solid walled homes and lower supply of mains gas.

See also (from the 2005 and 2006 reports and SOCR updates):

Second homes

2006	Figure 14	Second homes, 2004
2005	Table 3.2	% unoccupied space and 2nd homes
2005	Figure 3.2	2nd homes as % of all household space (map)

House prices

2006	Figure 15, 16	Homes purchase for cash
2006	Figure 19	Lower Quartile Household incomes, 2005 (map)
2006	Figure 20	Lower Quartile House Prices, 2005 (map)
2005	Figure 3.3	Median of quarterly house prices, 1996-2004
2005	Figure 3.4	House prices by region and classification, 2000 and 2004
2006	Figure 17	Likelihood of moving house

Housing tenure

2005	Table 3.1	Housing tenure, 2001

Housing affordability

2005	Figure 3.5	Average house prices and average household incomes
2005	Figure 3.6	Map of incomes against mortgage costs (map)

Fuel poverty

2005	Table 2.11	Central heating fuel

2.5 Health and healthcare

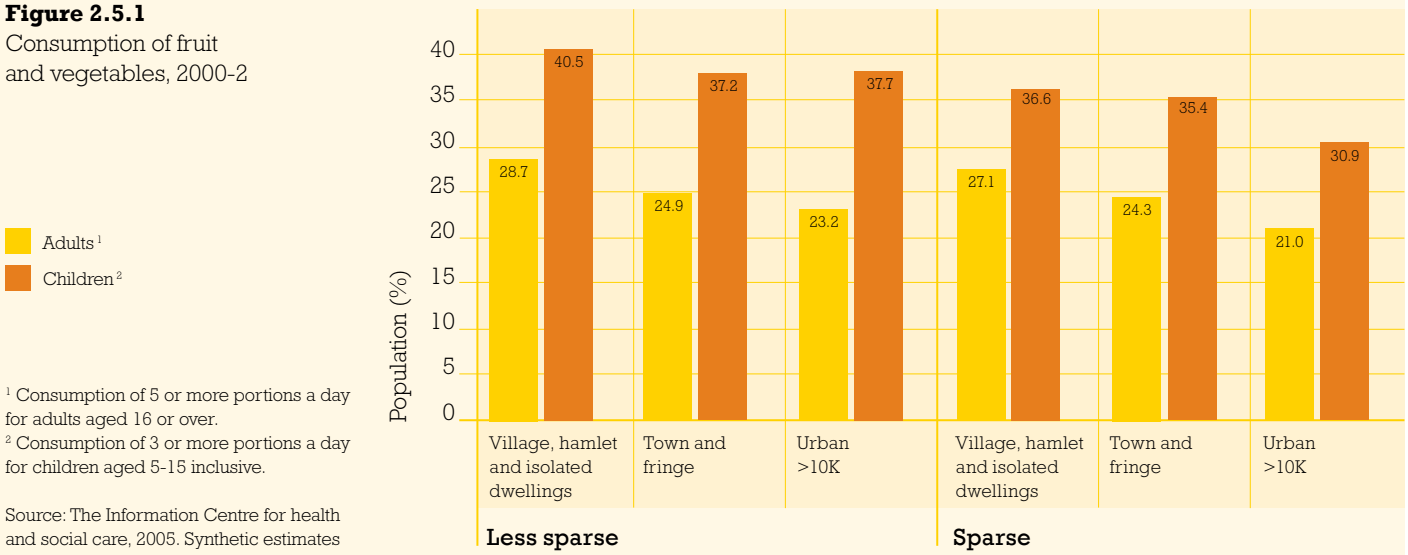
Introduction

This section provides a broad overview of health issues in rural areas. It looks mainly at indicators of health and activity rates. It shows a tendency towards better health in rural areas but some marked variations within rural areas..

Indicators of physical health and healthy lifestyles

Using survey data related to local census characteristics gives 'synthesised' data on healthy lifestyles, covering smoking, obesity, binge drinking, and the eating of fruit and vegetables by adults and by children. Figures 2.5.1and 2.5.2 show that rural residents, by and large, have more healthy lifestyles. But people in sparse areas generally display less healthy lifestyles, with higher obesity and smoking levels. Binge drinking is relatively evenly spread showing that it is not just an urban phenomenon (although more of this binge drinking may take place in town and city centres).

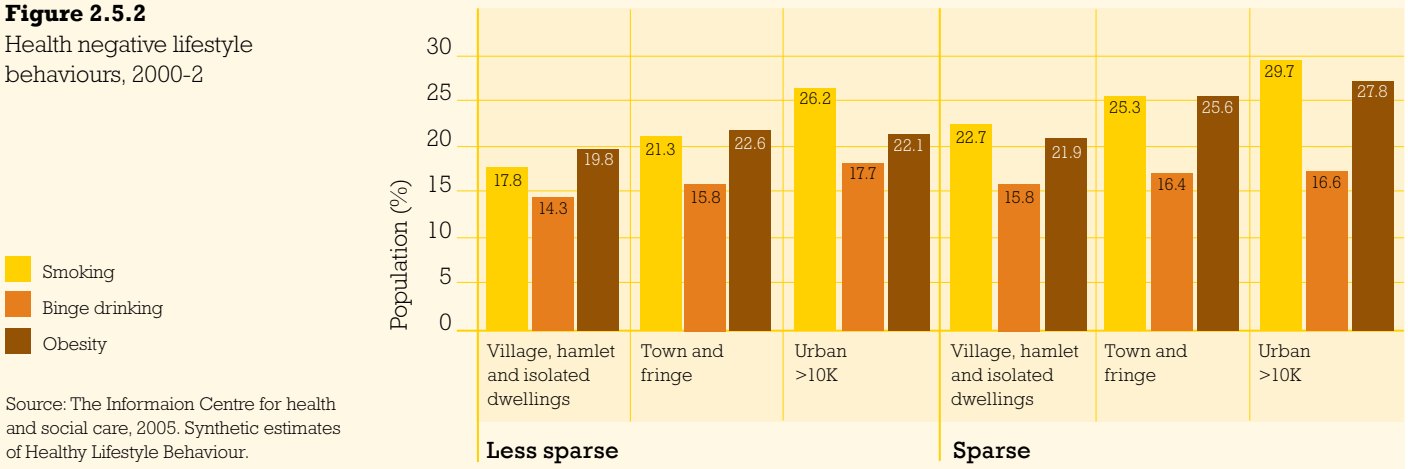
Figure 2.5.1
Consumption of fruit and vegetables, 2000-2



[1] Consumption of 5 or more portions a day for adults aged 16 or over.
[2] Consumption of 3 or more portions a day for children aged 5-15 inclusive.

Source: The Information Centre for health and social care, 2005. Synthetic estimates

Figure 2.5.2
Health negative lifestyle behaviours, 2000-2



Source: The Informaion Centre for health and social care, 2005. Synthetic estimates of Healthy Lifestyle Behaviour.

The proportion of the population eating the recomended number of portions of fruit and vegetables is higher in rural areas, but not markedly so. Indeed children in most rural areas types have lower levels of fruit and vegetable eating than less sparse urban areas.

Figure 2.5.3
Expected risk of obesity, 2006

	Highest		
A	Rural	122	Easington
B	Mixed	121	Corby
C	Urban	120	Knowsley

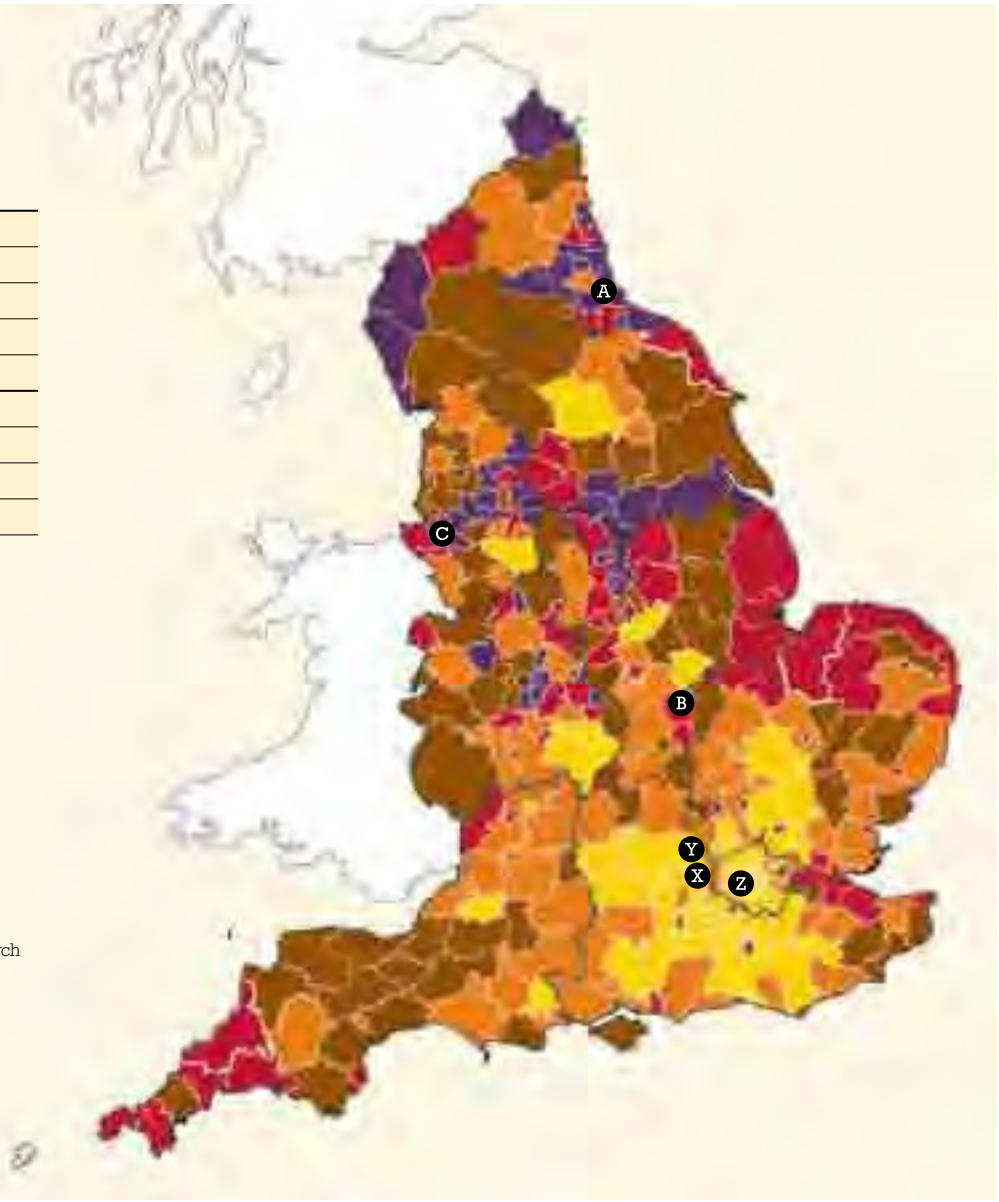
	Lowest		
X	Rural	80	South Bucks
Y	Mixed	80	Chiltern
Z	Urban	63	Kensington and Chelsea

Index (100 = average risk of obesity)

- 63 – 92
- 93 – 98
- 99 – 103
- 104 – 108
- 109 – 122
- Boundaries

Note:
(i) The analysis by Experian and Dr Foster Intelligence used data from the Department of Health's Health Survey for England, Body Mass Index information from the British Market Research Bureau's TGI quarterly survey and MOSAIC lifestyle categories.

Source: Experian and Dr Foster, 2006. Risk of obesity index.

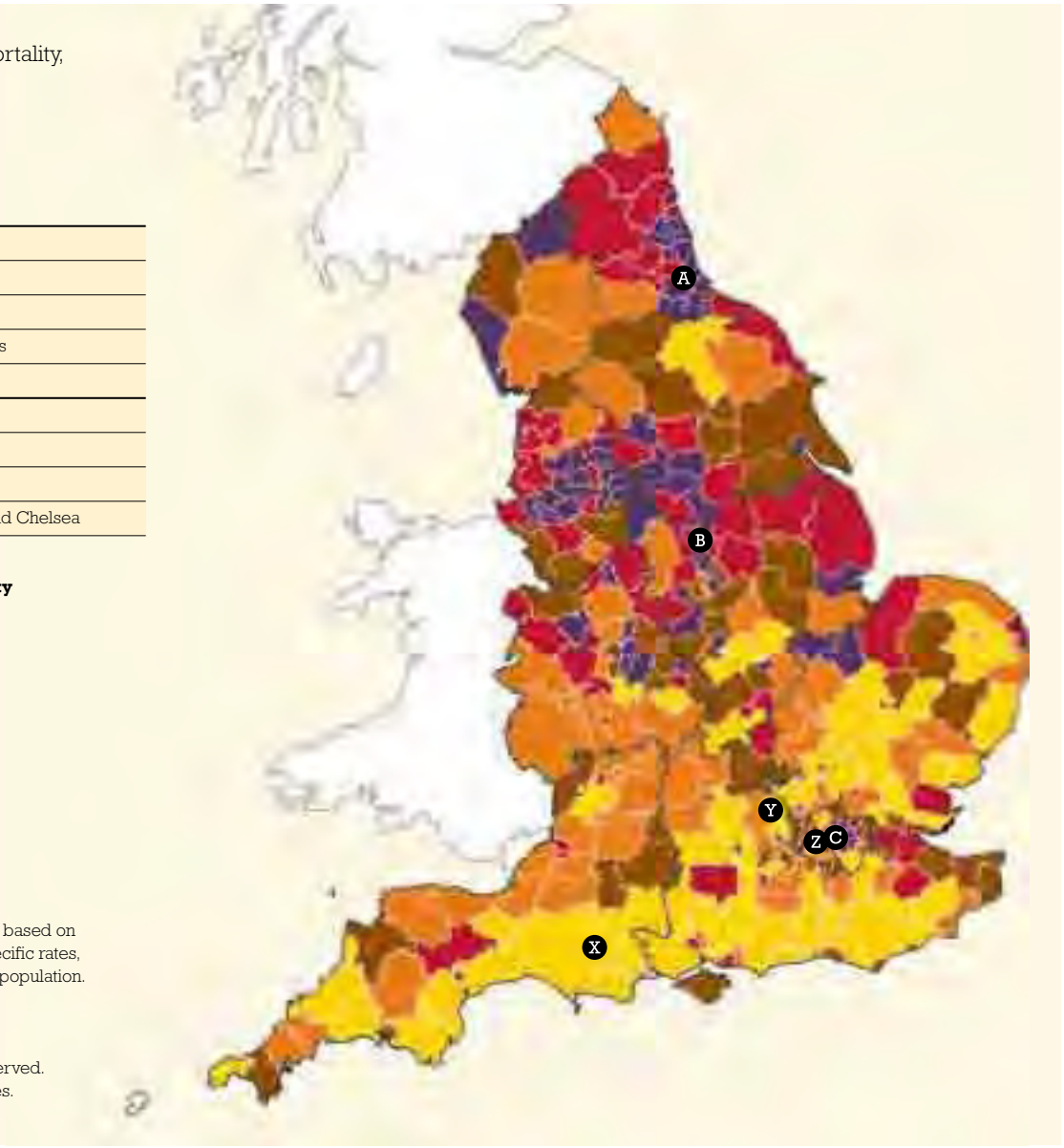


Figures 2.5.3 and 2.5.4 show that, for the risk of obesity and for recorded mortality for 65-74 year olds from coronary heart disease, many rural areas score higher, or lower, on both counts. But the distributions are different. Coronary heart disease is generally lower along the south coast and in the East of England, while the risk of obesity is lowest in central south England. The highest levels of coronary heart disease in rural areas are found in Easington, while the risk of obesity is more widespread across rural areas. These maps suggest that health is maybe related more to incomes, education and employment than rurality, but do show regional and local patterns of interest.

Figure 2.5.4
Coronary heart disease mortality, 65 to 74 years, 2002/4

	Highest		
A	Rural	**672.7**	Easington
B	Mixed	**644.3**	Bolsover
C	Urban	**707.1**	Tower Hamlets

	Lowest		
X	Rural	**218.1**	North Dorset
Y	Mixed	**230.3**	Chiltern
Z	Urban	**219.5**	Kensington and Chelsea



Directly standardised mortality rate per 100,000 population

- 218.1 – 317.6
- 317.7 – 378.8
- 378.9 – 428.5
- 428.6 – 497.8
- 497.9 – 707.1
- Boundaries

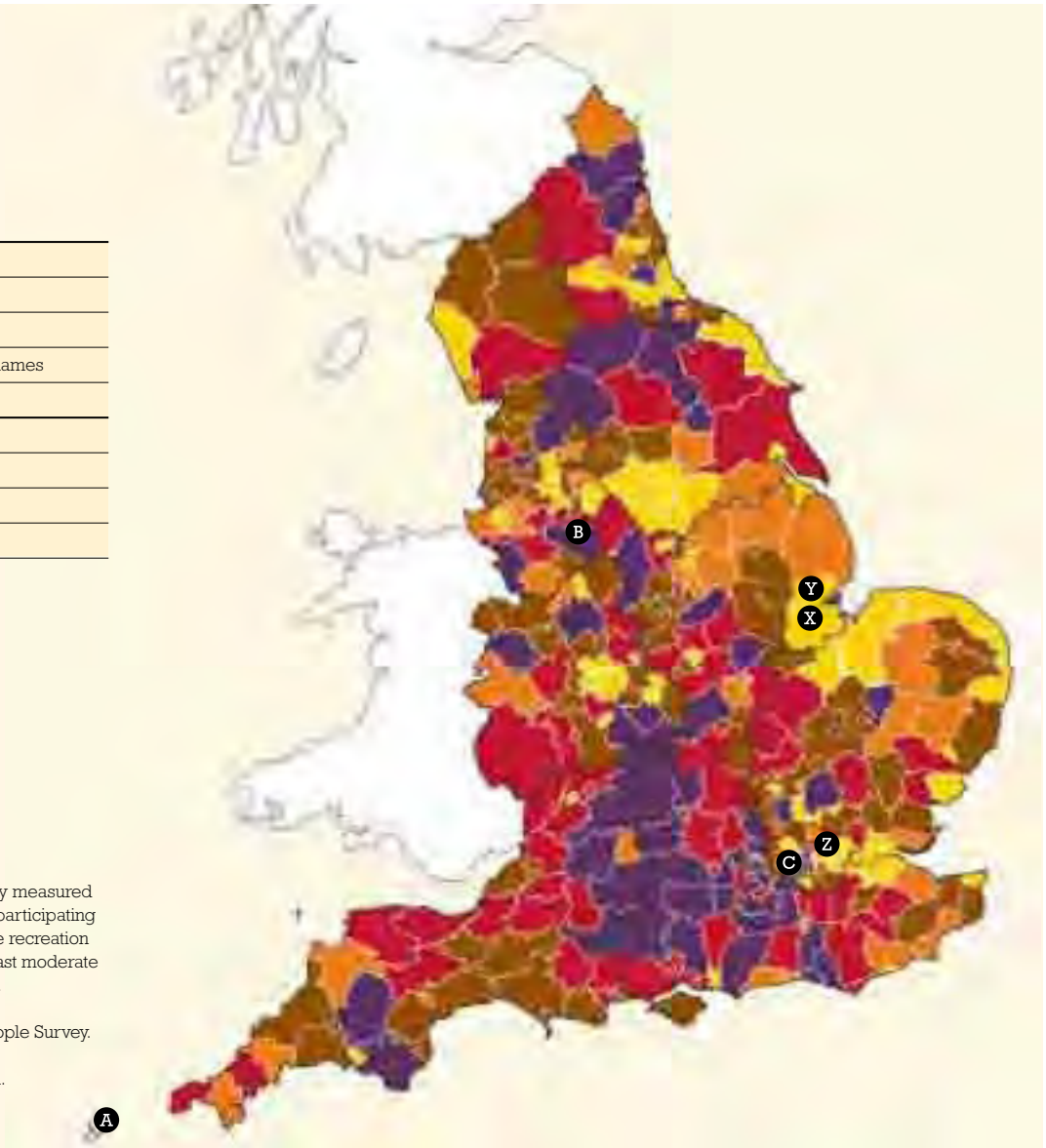
Note:
(i) Directly Standardised Rates are based on an average of local age or sex-specific rates, weighted according to a standard population.

Source: SEPHO, 2006. CHD Atlas.

Figure 2.5.5
Participation in sports, 2005

	Highest		
A	Rural	**32.0%**	Isles of Scilly
B	Mixed	**29.3%**	Macclesfield
C	Urban	**29.8%**	Richmond upon Thames

	Lowest		
X	Rural	**16.1%**	South Holland
Y	Mixed	**14.3%**	Boston
Z	Urban	**14.5%**	Newham



Percentage of adult population

- 14.3 – 18.9
- 19.0 – 19.9
- 20.0 – 21.9
- 22.0 – 23.9
- 24.0 – 32.0
- Boundaries

Note:
(i) Sport England's Active People Survey measured the percentage of the adult population participating in at least 30 minutes of sport and active recreation (including walking and cycling) of at least moderate intensity on at least 3 occasions a week.

Source: Sport England, 2006. Active People Survey.

Over recent years the Government has put an increasing emphasis on the health benefits of regular participation in exercise. Figure 2.5.5 shows the percentage of people taking part in moderate or strenuous physical exercise for 30 minutes, 3 or more times per week. Patterns broadly reflect those for obesity, with much of eastern England showing the lowest levels of activity and central southern England showing the highest.

Indicators of mental health and stress

A mental health indicator has been developed, based on visits to doctors for symptoms relating to depression and anxiety. For urban areas the index score is 0.06 (the average for England is set as zero, with a positive number showing generally poorer mental health). As Figure 2.5.6 shows, rural areas generally fare better than urban areas, but there are also more complex geographic patterns. Less sparse rural areas show markedly better levels, while sparse towns show worse levels than the average, with sparse urban areas having the worst levels.

Figure 2.5.6
Mental health indicator, 1999/2003

Area definition		Indicator
Less sparse	Village, hamlet and isolated dwellings	-0.40
	Town and fringe	-0.20
	Urban >10K	0.06
Sparse	Village, hamlet and isolated dwellings	-0.09
	Town and fringe	0.22
	Urban >10K	0.61
Rural		-0.28
Urban		0.06
England		**0.00**

Notes:
(i) The indicator is the proportion of adults under 60 suffering from mood or anxiety disorders in each area.
(ii) The indicator represents derived scores rather than actual counts. It is assumed that a figure of 0 is the value that would be expected to be found, given the age and sex distribution within the area. Positive scores therefore represent higher than expected levels of mood or anxiety disorder sufferers.

Source: DCLG, 2004. Indices of deprivation.

Figure 2.5.7 suggests that geographically, mental health appears to correlate broadly with economic health, with the areas of central southern England and rural Yorkshire faring best. The highest scores (poor mental health) are found in coastal areas (especially those with high numbers of retired people, or seaside towns with poor economies), the South West, Norfolk, the far North of England, and a band from Lincolnshire across to Lancashire. This pattern shows some correlation with healthy lifestyles.

Linked to wider mental health issues, farmers have been particularly identified as being at risk of stress, often being distant from settlements and contact with other people. The Rural Stress Information Network (RSIN), funds 25 rural support groups and took just under 1,500 calls in a three year period between 2001 and 2003, mainly triggered by money, health and relationship problems. About 66% of callers were aged over 50 (Boys, 2007).

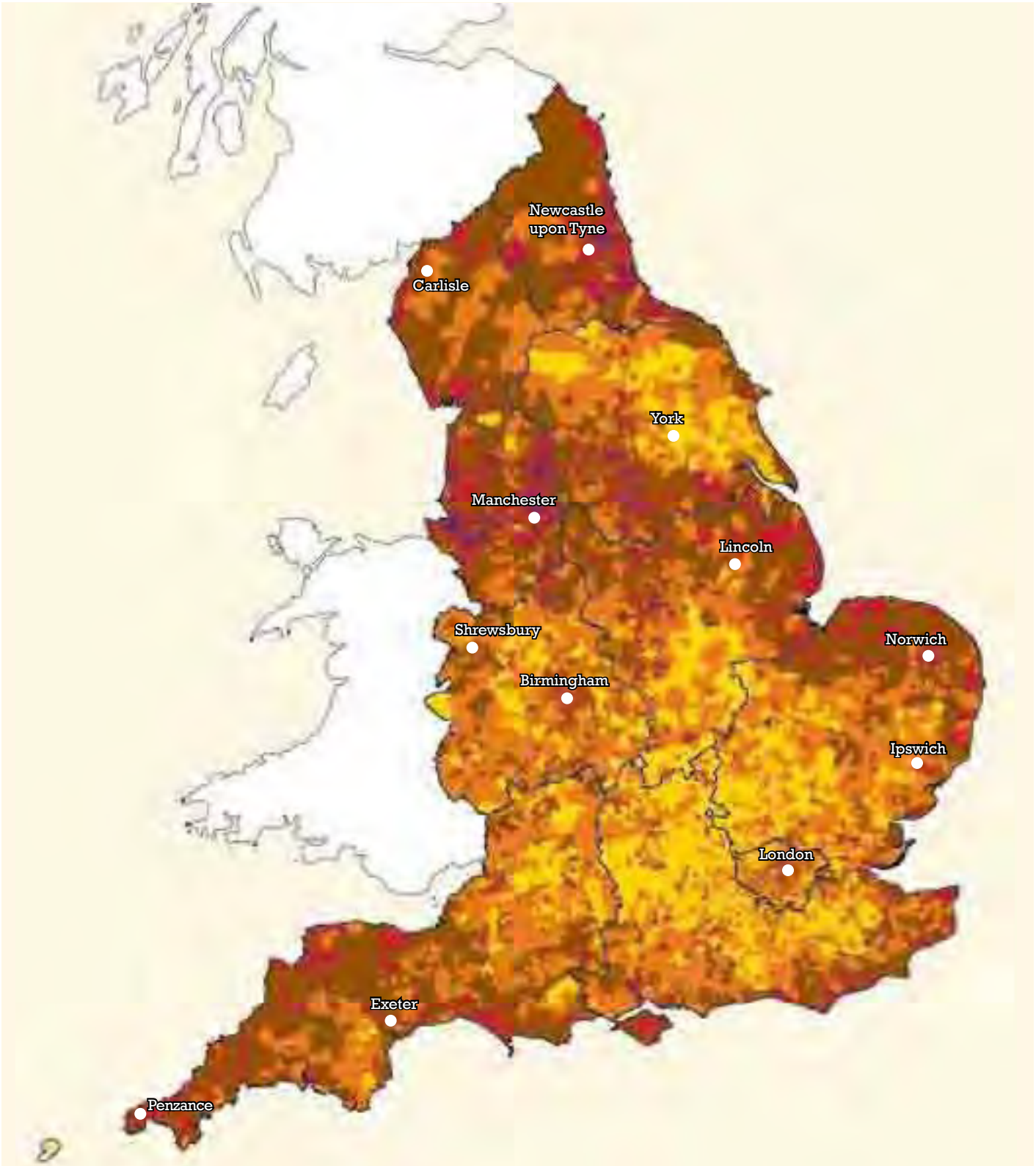


Figure 2.5.7
Mental health indicator, 1999-2003

Expected mental health score

- -2.64 – -0.85
- -0.84 – -0.23
- -0.22 – 0.34
- 0.35 – 1.19
- 1.20 – 3.05
- Boundaries

Notes:
(i) The indicator is the proportion of adults under 60 suffering from mood or anxiety disorders in each area.
(ii) The indicator represents derived scores rather than actual counts. It is assumed that a figure of 0 is the value that would be expected to be found, given the age and sex distribution within the area. Positive scores therefore represent higher than expected levels of mood or anxiety disorder sufferers.

Source: DCLG, 2004. Indices of deprivation.

The supply of healthcare in rural areas

The Access to Services section has shown that rural areas tend to be more distant from health service provision than urban areas (which is not surprising). Over 50% of households in villages and hamlets in sparse rural areas are more than 4km from a GP or a NHS dentist.

The development of health care policy over recent years has seen a trend towards more flexible service delivery. A number of these changes have a particular resonance for rural areas including a new system of out-of-hours primary care, and changes to NHS dentistry contracts. Our forthcoming study about the Choice Agenda in rural areas has concluded that many reforms in the health sector will provide increasing choice in health, but that while those with good accessibility and on high incomes may benefit, others may suffer poorer service access which may impact specifically on rural health.

2.5 Key summary points: Health and healthcare

- Physical and mental health are, on average, better in rural areas and people appear to have more healthy lifestyles.
- Beneath the averages, there is a complex rural picture - with people in the sparse areas tending to experience consistently lower levels of physical and mental health.

See also (from the 2005 and 2006 reports):

Health

2006	Figure 22	Distribution of long-term illness 2001 (map)
2006	Table 10	Male suicide rates
2006	Figure 23	Average cost per head for out of hours care
2005	Table 3.8	Geographic availability of GP practices 2005
2005	Figure 3.7	% of households within 4kms of GP surgery (map)
2005	Table 3.9	Satisfaction with health service provision 2003-4

2.6 Education

Introduction

Much information on education related matters is collected at the Local Education Authority level (generally counties in rural areas), which means that rural specific data is limited. Here we present a few key indicators of educational attainment that allow a fuller rural/urban analysis.

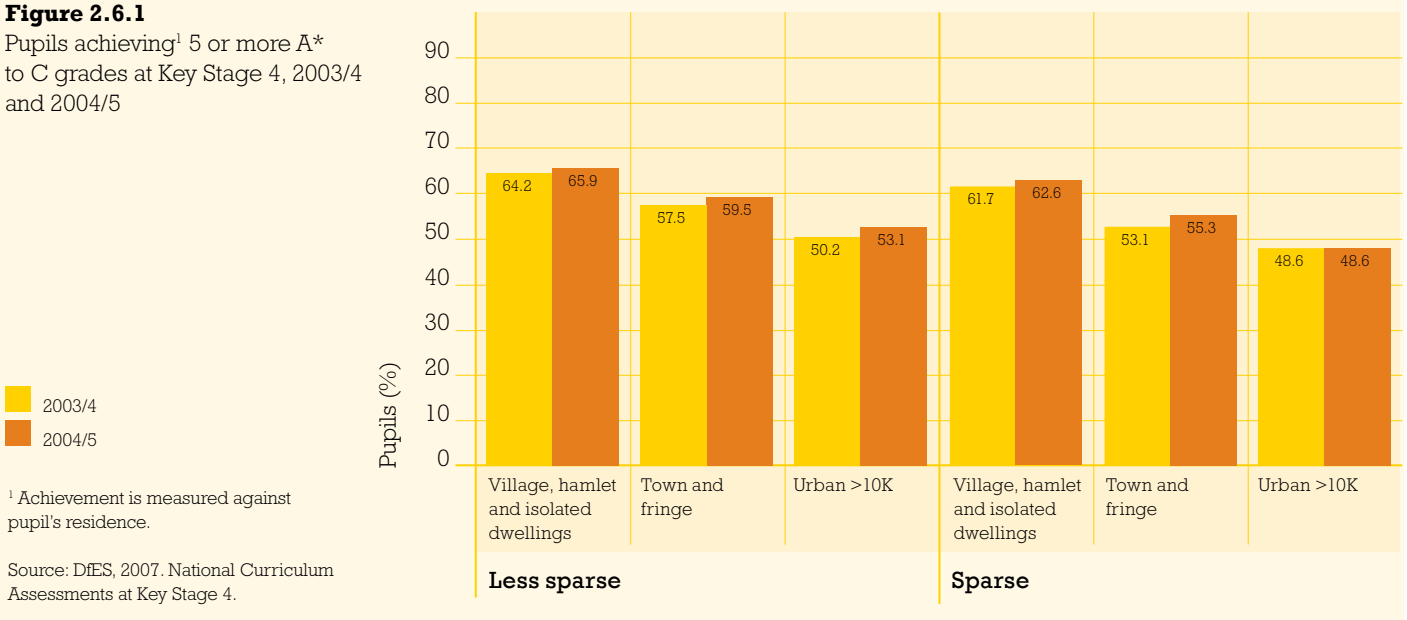
Education and training play a crucial role in ensuring people's full participation in society, particularly through influencing the ability to gain employment. This section considers educational performance in rural areas, through a range of key indicators. Previous *State of the countryside* reports have reflected the better academic achievements of pupils from rural communities in relation to their urban counterparts. Some of that information will be updated here, but also with additional information on those taking up university places.

Educational attainment at school

As in previous years, educational attainment for Key Stage 2 (ages 11 to 13) is slightly higher in rural areas as a whole than for urban. At KS2, the percentage of children achieving level 4 results exceeds the figure for urban areas in each of English, Maths and Science. The rates for sparse areas are consistently lower than for less sparse areas. Figure 2.6.2 shows these patterns and also the change between 2003/4 and 2004/5. Improvements are seen in all subjects and all rural/urban categories, but less sparse rural areas show slightly better improvements than others.

At Key Stage 4 level, over 65% of pupils in less sparse villages, hamlets and isolated dwellings achieved 5 or more A*-C GCSE passes in the 2004/5 academic year (Figure 2.6.1). This compares with 53% for pupils in less sparse urban areas. Again, the pattern that pupils from sparse areas fare less well continues.

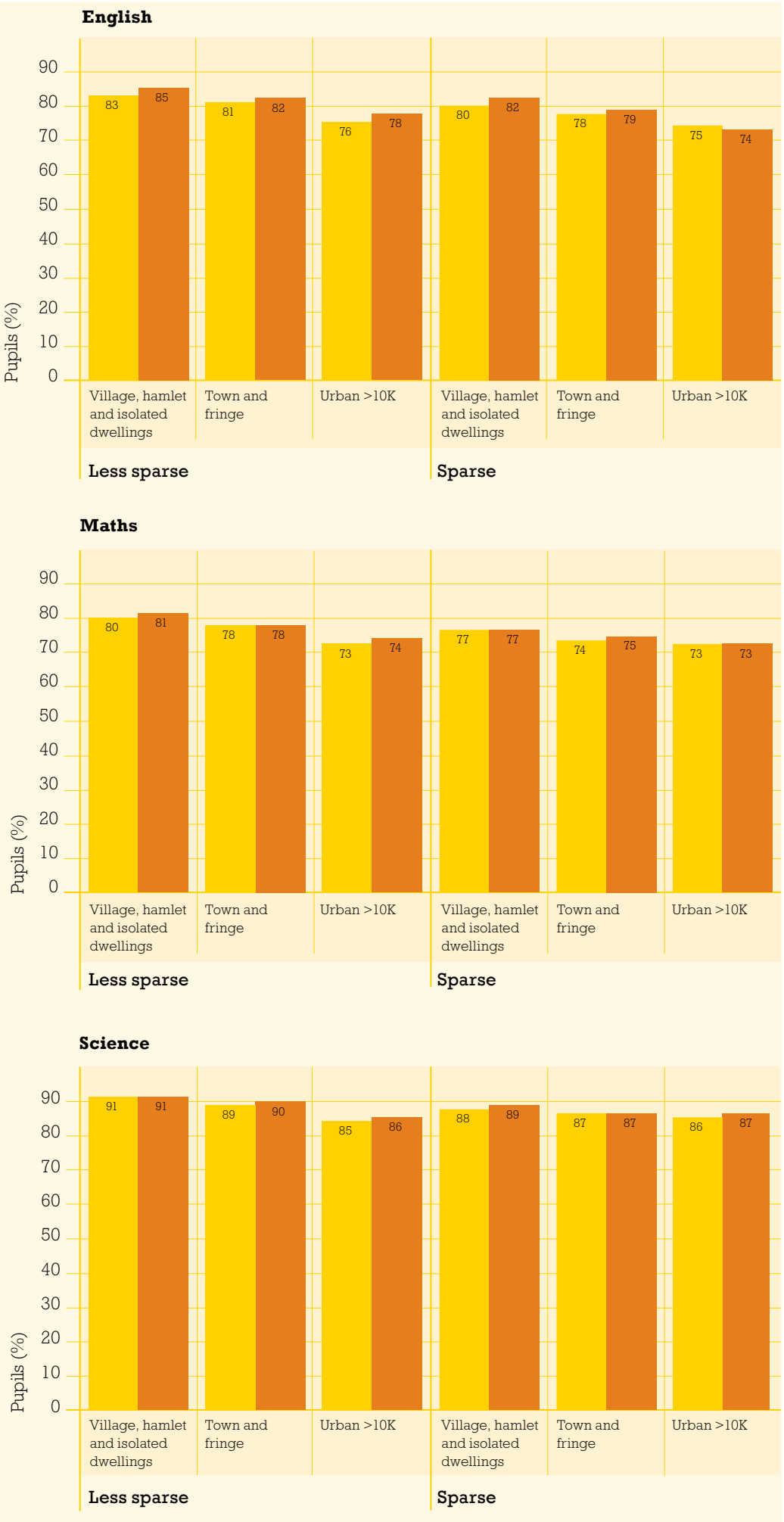
Figure 2.6.1
Pupils achieving[1] 5 or more A* to C grades at Key Stage 4, 2003/4 and 2004/5



[1] Achievement is measured against pupil's residence.

Source: DfES, 2007. National Curriculum Assessments at Key Stage 4.

Figure 2.6.2
Pupils achieving[1] level 4 or above at Key Stage 2 by subject, 2003/4 and 2004/5



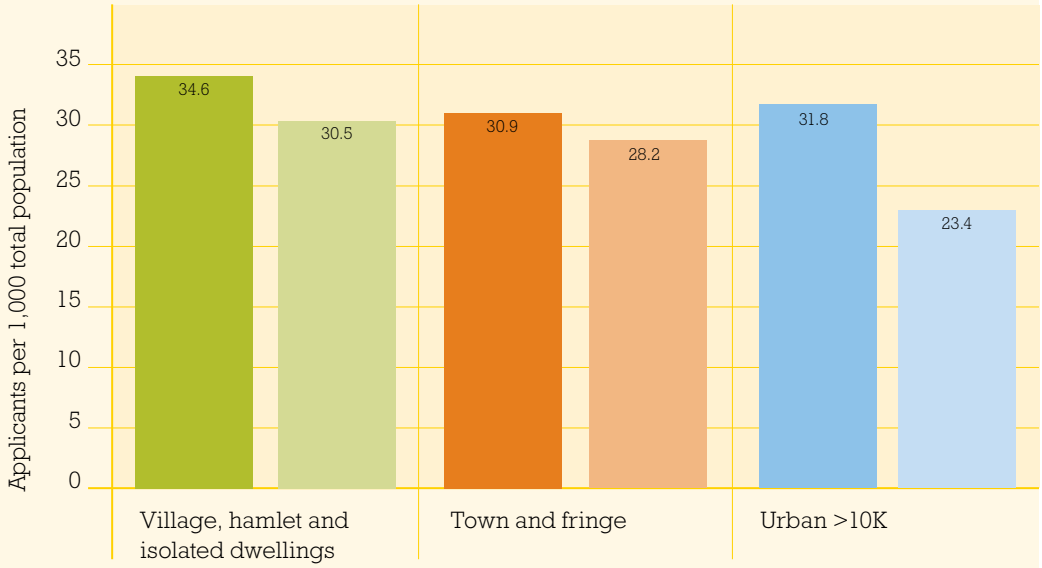
[1] Achievement is measured against pupil's residence.

Source: DfES, 2007. National Curriculum Assessments at Key Stage 2.

Successful applications at higher education institutions

Rural residents are slightly more likely to go to higher education institutions than urban residents. Figure 2.6.3 is based on data from the Higher Education Statistics Agency and shows that successful application rates per 1,000 people for less sparse villages and hamlets are somewhat higher than for urban areas. Sparse areas show lower rates, with sparse urban areas showing the lowest rates. Higher rates of Key Stage 2 and 4 achievement do not always seem to be translating into such high rates of university attendance. It should be noted, however, that urban areas may contain higher proportions who apply for courses as mature students in the area they reside.

Figure 2.6.3
Number of full-time higher education applicants per 1,000 population[1] by origin, 2005-6



[1] Mid year population estimates, 2004

Source: HESA, 2006. Student Record

The geographic distribution (Figure 2.6.4) shows that within rural areas there are large differences in application rates, with parts of the East of England, the East Midlands and some areas of the South West having very low rates. Higher rates are found in the more affluent southern and central areas, but equally in many sparser areas with lower economic performance. Major urban areas show great variability.

2.6 Key summary points: Education

- Rural areas see continuing higher levels of pupil performance but with a consistent pattern of lower pupil achievement in the sparsely populated areas.
- University applications vary across rural areas. Less sparse areas tend to have higher rates of applications, but there are many rural areas (in sparse and less sparse areas) that have low rates of successful applications.

See also (from the 2005 and 2006 reports):

Education

2005	Table 3.11	Key Stage 3 attainment by ward
2005	Figure 3.8	Education skills and training deprivation 2004

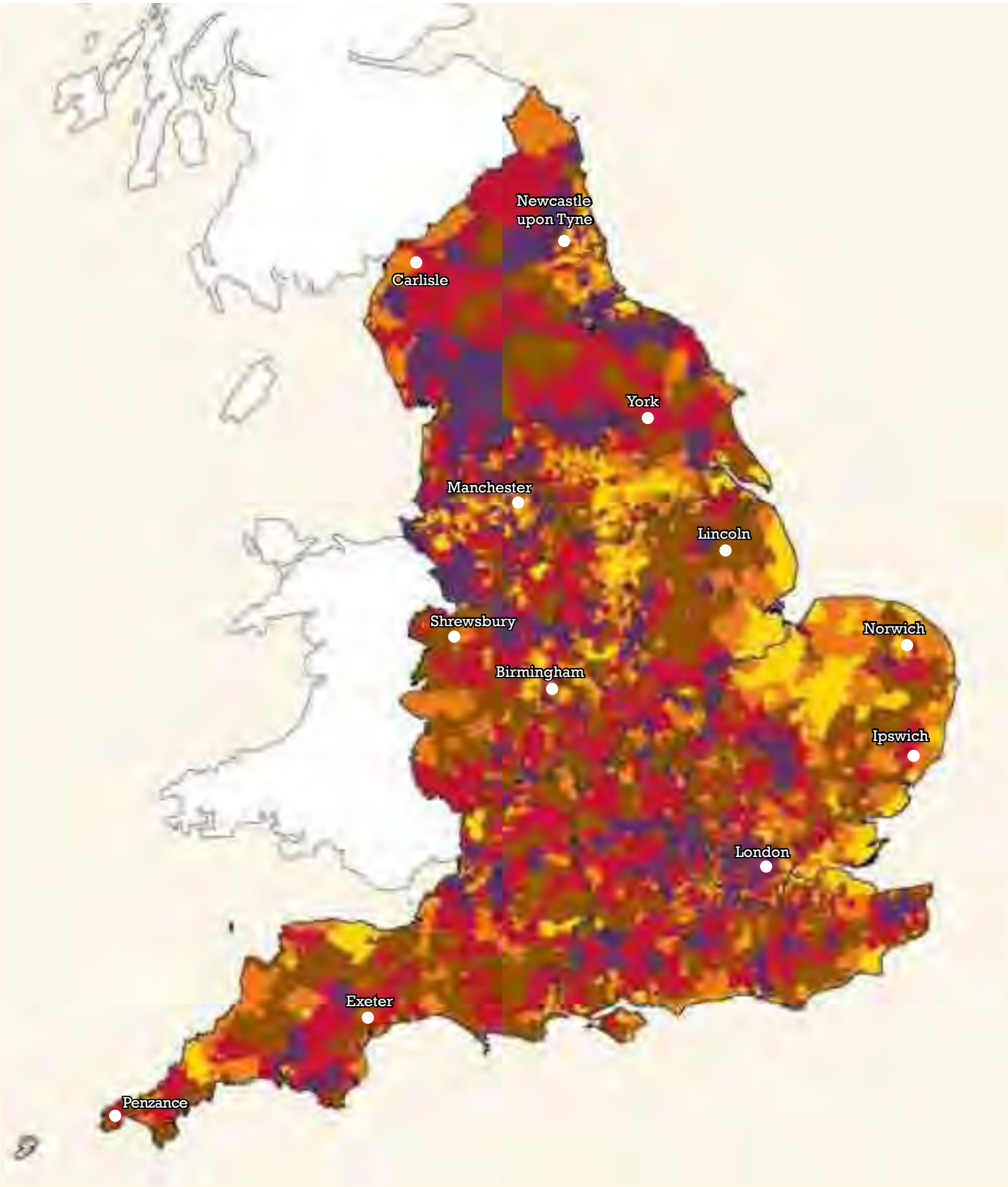


Figure 2.6.4
Number of full-time higher education applicants per 1,000 population[1], by origin, 2005-6

Applicants per 1,000 population

- 5.6 – 21.6
- 21.7 – 27.7
- 27.8 – 33.9
- 34.0 – 41.5
- 41.6 – 116.7
- Boundaries

[1]Mid-year population estimates, 2004.

Source: HESA, 2006. Student Record.

2.7 Rural community and governance

Introduction

This section is concerned with the way rural communities 'operate'. It examines the pattern of local governance in rural areas, looking at some aspects of community engagement and participation. We also analyse the role of the voluntary sector and social enterprise in rural areas and, briefly, look at rural crime levels. There is a common perception that community is alive and well in rural areas, compared to a decline in urban areas, and this sections shows that the picture is more complex than that.

Rural governance

Government policy has taken steps to try to increase local decision making. The Local Government White Paper in 2006 and the Lyons Review into Local Government in Spring 2007 placed greater emphasis on the link between community empowerment, community well-being and governance. 2006 saw the creation of the Office of the Third Sector within the Cabinet Office and a major review led by the Cabinet Office and HM Treasury into the sector's contribution to economic and social regeneration.

Within most rural communities there is already a long established form of statutory and elected neighbourhood council, the Parish or Town Council, often collectively called 'local councils'. England had over 10,000 Town or Parish councils (or less formal forums) in 2004, of which about 9,000 were in rural areas.

The value of Parish and Town Councils has traditionally been seen to derive from their proximity to the community. But in recent years, Government has been keen to drive up the quality and professionalism of the sector, notably, through the DCLG/Defra Quality Parish Scheme (QPS), which is intended to equip Parish Councils to take on a stronger role in their communities. The QPS scheme has been the subject of a recent evaluation led by the University of Wales from which we present findings here – the findings relate to urban and rural town/parish councils together, but as noted above around 90% of these are in rural areas. It is often the case that the clerk is the only paid official within the council; and in some cases even this post might not be salaried. Figure 2.7.1 shows that 44% of Quality Parish Clerks are paid for over 35 hours work and 18% are paid for 9 hours or less – 1% are not paid. The report also shows that while 73% of accredited and 59% of non-accredited councils have other paid staff, the majority are only paid part time.

Figure 2.7.1
Number of hours per week that paid parish and town council clerks are contracted to work, 2006.

Notes:
(i) 99% of Parish and Town clerks are paid. 1% are volunteers
(ii) Quality Parishes are those which had been awarded Quality Parish status up to 31st May 2006. There were 303 Quality Parish councils at this time.
(iii) Figures in this table are based on responses from both rural and urban parishes, however, the vast majority of parishes in England are predominantly rural.

Source: Defra, 2007. Report by Institute of Geography and Earth Sciences, University of Wales, Aberystwyth

Hours clerk contracted	Clerks to QPS councils %	Clerks to non-QPS accredited councils %
Full time (>35hrs/week)	44	30
15-34 hrs/week	31	35
10-14 hrs/week	7	8
5-9 hrs/week	14	15
<5 hrs/week	4	12

Most Parish and Town Councils had engaged with the public. 89% of quality councils and 76% of non-accredited councils had undertaken public surveys. Direct engagement with specific groups varied. 74% of quality councils and 59% of non-accredited councils had engaged with young people. Smaller proportions had engaged with the elderly and with people with disabilities. Fewer than 10% had engaged with gypsies and other travellers, migrant workers, or ethnic minorities.

Parish and Town councils have a precept raising power. Figure 2.7.2 shows that the precept is the key income generating mechanism for all Parish and Town councils, whether QPS accredited or not. But it also illustrates the significance of the Parish council as a trading body. This data on income generation also underlines the value to the community of other resources, such as the local village hall or community space.

Figure 2.7.2
Parish and Town council sources of income, 2005-6
(Median income per council £)

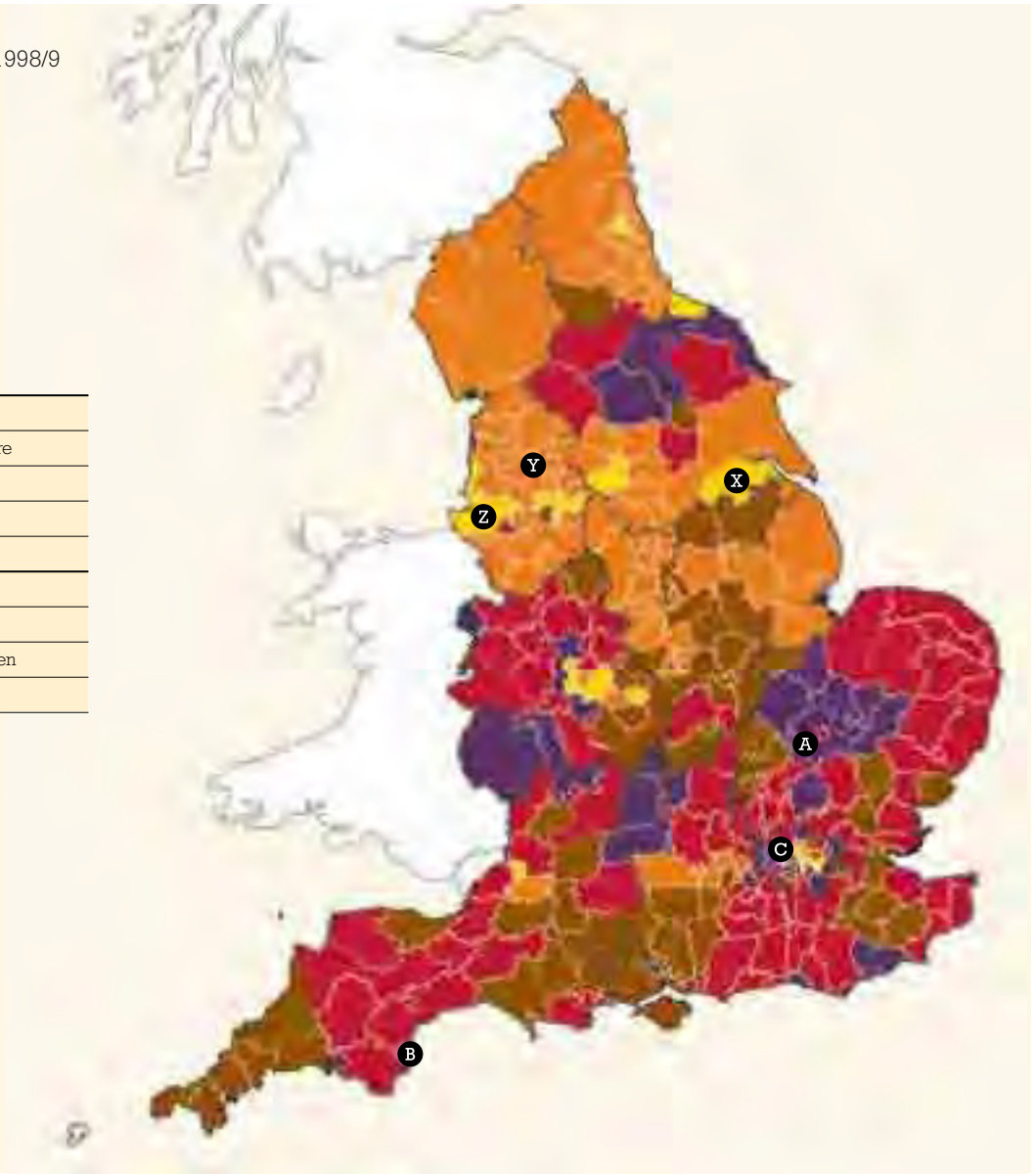
Notes:
(i) Quality Parishes are those which had been awarded Quality Parish status up to 31st May 2006. There were 303 Quality Parish councils at this time.
(ii) Figures are calculated only for those councils receiving income from sources, based on data provided by 183 Quality councils and 252 non-accredited councils.
(iii) Figures in this table are based on responses from both rural and urban parishes, however, the vast majority of parishes in England are predominantly rural.

Source: Defra, 2007. Report by Institute of Geography and Earth Sciences, University of Wales, Aberystwyth

Source of funding	Quality Parish Scheme councils	Non-accredited councils
Precept	85,584	54,000
Trading fees	22,284	10,163
Charges for recreation facilities	3,828	1,786
Other charges and fees	4,221	2,000
Letting of village/community hall	18,000	15,595
Other rents and lettings	2,095	3,000
Investment income	2,453	2,385
Income from LA	6,000	3,000
Other revenue income	5,280	4,331
Total	**117,404**	**74,847**

Council Tax is the main mechanism that principal authorities have to raise taxes locally to spend on local services. Figure 2.7.3 analyses the increases in Band D council tax rates between 1998-9 and 2006-7. It shows a slightly greater level of increases across many parts of rural England with increases having been markedly lower in most northern areas.

Figure 2.7.3
Change in band D Council Tax, 1998/9 to 2006/7



	Highest		
A	Rural	**106.0%**	South Cambridgeshire
B	Mixed	**96.9%**	Torbay
C	Urban	**110.3%**	Brent

	Lowest		
X	Rural	**39.2%**	North Lincolnshire
Y	Mixed	**51.6%**	Blackburn with Darwen
Z	Urban	**13.4%**	Liverpool

Percentage change

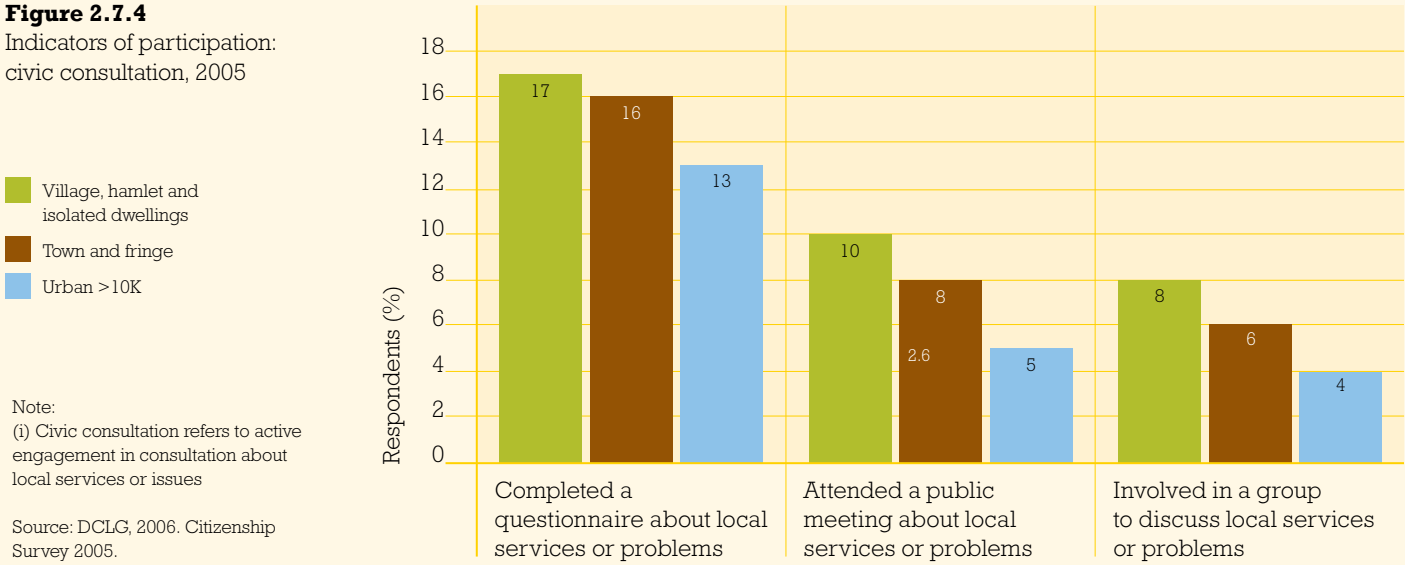
- 13.4 – 49.8
- 49.9 – 66.9
- 67.0 – 78.1
- 78.2 – 88.3
- 88.4 – 110.3
- Boundaries

Source: DCLG, 2006. Council Tax.

Civic participation

Social capital is a characteristic of social networks. It has been recognised as a critical element of broader social policy. Figure 2.7.4 shows a marked increase in consultation activities moving from urban to rural, with people in smaller communities more involved in each of the activities. But other results from the survey show the pattern of participation is uneven, with fewer rural residents contacting MPs and Government officials, suggesting that rural people are more likely to participate on issues where there is a clear local relevance.

Figure 2.7.4
Indicators of participation: civic consultation, 2005



Note:
(i) Civic consultation refers to active engagement in consultation about local services or issues

Source: DCLG, 2006. Citizenship Survey 2005.

The Third Sector

The Third Sector is defined by the Government as non-governmental organisations that are value driven and which re-invest their surpluses to further social, environmental or cultural objectives (Office of the Third Sector, 2007). It includes voluntary and community organisations, charities, social enterprises, cooperatives and mutuals. The sector has long performed a valuable role delivering services for rural communities and providing them with a voice. It plays a critical role in advocacy, campaigning, advice and information, and in some cases, direct delivery of services. This is particularly important in many rural areas, where public and private services can sometimes be patchy or non-existent (see section on access to services).

The UK Voluntary Sector Almanac 2006 (NCVO, 2006) shows that in 2004 there were 169,000 active 'general' charities in the UK, an increase of 28,000 since 2000. The sector had an income of £26.3 billion, and had a paid workforce of at least 608,000. Against this national trend, the pattern of voluntary and community group activity in England's rural areas is more complex. Rural areas generally have greater numbers of smaller voluntary organisations.

Social enterprise firms (founded for a social or environmental purpose, reinvesting their profits for that purpose in the company or the community) are now playing an increasingly significant role in rural communities. Identifying the extent of social enterprise in rural areas has been difficult. The Social Enterprise Unit estimated that there were 15,000 social enterprises in England, of which 1,650 were in rural areas. Using another definition (Plunkett Foundation, 2004) estimated that there are around 1,500 rural social enterprises in England, and these were classified into three broad categories:

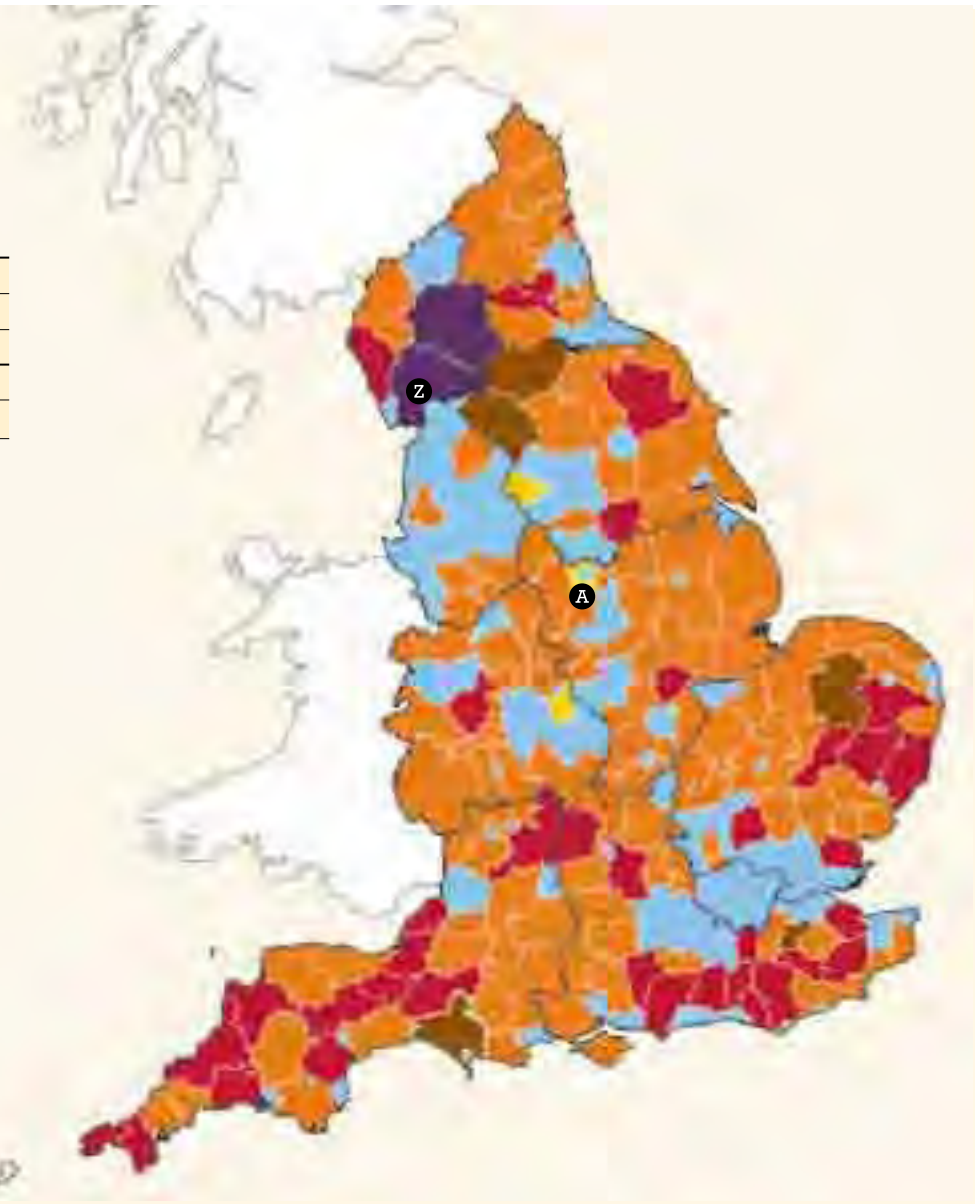
- 700 Community Service Businesses, which are community-owned enterprises providing essential services to their local communities Examples include: Community-owned village shops, pubs or cafes; community transport schemes; community childcare facilities; credit unions.
- 600 Rural Economic Collaborations, where groups or individuals come together primarily to improve their economic prospects, by jointly procuring common services, jointly marketing types of products or by working together in a jointly-owned business. Examples include: Craft marketing co-operatives; farmers markets; and agricultural co-operatives.
- 200 Community Development Enterprises where organisations are providing social and economic benefits to their host communities through a range of commercial activities, or by working together. Examples include: Rural development trusts; social firms and other forms of community development enterprise such as community land trusts and trading charities.

Data on social enterprises varies, partly due to its loose definition. The Annual Small Business Survey 2005 (Small Business Service 2006) identified over 55,000 social enterprises nationally, with a combined turnover of £27 billion per year.

Rural crime

Crime in rural areas continues at a lower rate than in urban areas with burglary at around half that of urban areas, and vehicle related thefts and violence around two thirds of urban levels (SOCR 2006, Table 20). Figure 2.7.5 maps the percentage change in rural crime between 2003/4 and 2004/5. Whilst the dominant trend across rural England is a fall in recorded crime of up to 27%, a significant minority of rural districts have seen an increase, and two districts in Cumbria have experienced an increase of over 20%, albeit from a low level.

Figure 2.7.5
Percentage change in recorded crime levels, 2003/4 to 2004/5



Lowest			
A	Rural	-27%	North East Derbyshire

Highest			
Z	Rural	23%	South Lakeland

Percentage change

- Fall of 20% or more
- Less than 20% fall
- No change
- Less than 20% rise
- Rise of 20% or more
- Urban districts
- Regional boundaries

Source: Home Office, 2006. Recorded crime for key offences.

Financial disadvantage

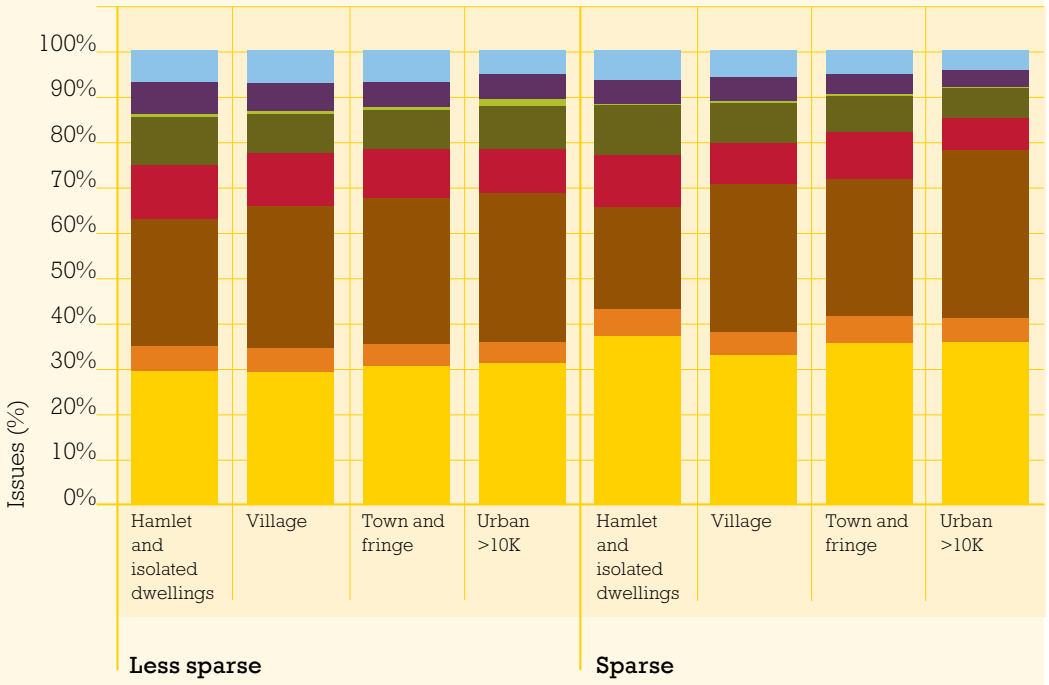
Financial disadvantage relates to more than just incomes – those on low incomes are particularly at risk of other forms of disadvantage. The following chapter 'Economic Wellbeing' will consider low pay and low incomes as a factor in disadvantage in more detail, and shows where most rural households with the lowest fifth of incomes are found – mainly in the sparse rural areas.

Based on the Family Resources Survey 2003-4, it is reckoned that just over 5% of households in remote areas and over 4% of households in accessible rural areas do not have a bank account, totalling around 300,000 households (New Policy Institute, 2005).

Whilst it is difficult to gain precise information about the distribution of financial disadvantage, some evidence suggests that for those aged under 60, being in debt is most common in the larger cities and towns and in sparse rural areas (McKay S and Collard S, 2006). A survey by the Citizens Advice Bureaux in 2001 found that although rural clients seeking help on debt problems owed less than the average CAB client, their lower average income meant that their debt to income ratio was higher than the average for all their clients. Figure 2.7.6 shows the reason for calls to Citizens Advice Bureaux as a percentage. It shows that calls related to benefits are higher in sparse areas, but that calls on debt are higher in more urban areas.

Many initiatives to tackle financial disadvantage come from communities themselves. The last few years have seen a growth in the number of Community Development Finance Institutions (CDFIs). These provide capital and support to enable individuals or organisations to develop and create wealth, primarily in disadvantaged communities or under-served markets. This can be through loans or advice or other support services. CDFIs are a relatively recent phenomenon and have until recently been associated with urban areas. However, there are an increasing number serving rural areas. Well served counties include Dorset, Suffolk and Lancashire.

Figure 2.7.6
Citizens' Advice Bureau issues, 2006

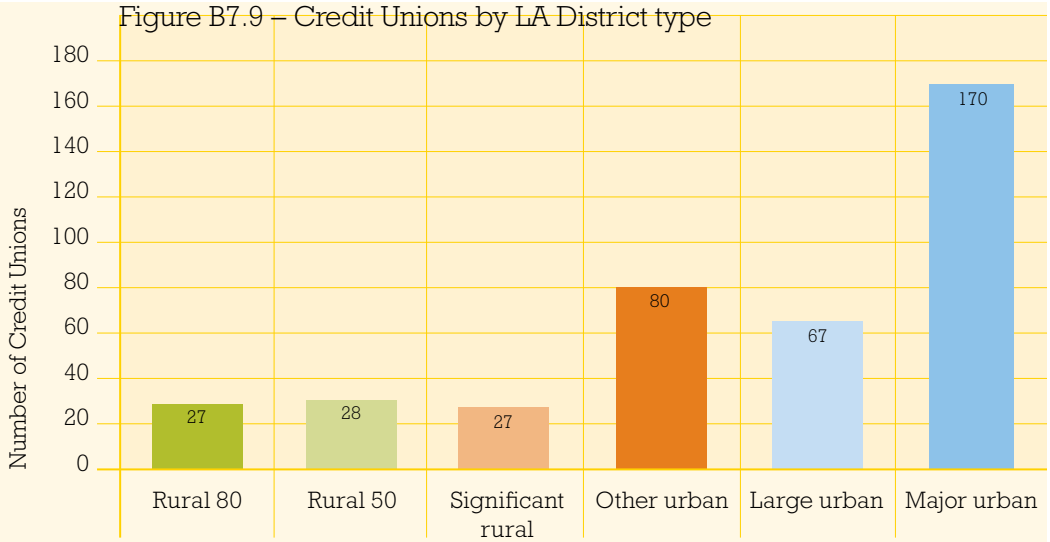


Notes:
(i) The sample of data used is from 286 bureau member entities, representing 66% of total bureau membership.
(ii) Data relates to Q3 of 2006.

Source: Citizens Advice, 2007

Similarly, Credit Unions are now making some inroads into rural areas. They are financial co-operatives owned and controlled by their members, often on a local scale, offering savings and loans. The 2000 Financial Services and Markets Act now enables them to operate in a wider range of circumstances. Whilst there are still barriers to their effective operation in rural areas, Figure 2.7.7 shows that significant numbers exist in 2007.

Figure 2.7.7
FSA authorised Credit Unions, 2007



Source: FSA, 2007

2.7 Key summary points: Rural community and governance

- Different governance structures cover rural areas and in some areas may change – but in some ways there is stronger local governance with more Parish and Town councils.
- There is continuing evidence of strong social capital in terms of social and political activity by rural people.
- The third sector plays a strong role in rural areas, though many urban areas have developed more in this direction
- We see ongoing reductions in rural crime (although there are some notable local variations).
- Community initiatives are starting to set up credit unions and other mechanisms to aid financial disadvantage in rural areas.

See also (from the 2005 and 2006 reports):

Voluntary activity

2006	Figure 36	Regular Participation in voluntary activities in the last 12 months, 2001 & 2003
2006	Figure 37	% of people involved in any local organisation in last 3 yrs.
2006	Table 17	Socio/political activity
2006	Table 18	Perception of Community strength
2006	Table 19	Church affiliation

Neighbourhood

2005	Table 3.22	Respondents satisfaction with the area they live in
2005	Table 3.23	View on whether area has improved or deteriorated
2005	Table 3.17	Respondents view of their local neighbourhood

Crime

2006	Table 20	Reported Crime
2006	Table 21	Fear of Crime Table
2005	Table 3.19	Feelings of personal safety 2001-2 to 2003-4
2005	Table 3.20	Perception of the risk of victimisation 2001-2 to 2003-4
2005	Figure 3.12	Experience of crime
2005	Table 3.21	Rating of local police 2001-3

Ethnicity

2005	Table 2.5	% of pop by ethnic group

Religious affiliation

2005	Table 2.6	Religious affiliation

Residence (area of)

2006	Table 3	What makes a place a good place to live?
2006	Figure 13	Where would you like to move to?

Local governance

2005	Table 2.9	Civil and non Civil Parish communities

Traffic levels and road safety

2006	Table 16	Traffic flows chart
2006	Figure 35	Fatal and serious accidents by road class

2.8 Commentary – disadvantage within a context of healthy rural communities

This chapter has shown that most of those who live in rural areas experience a high quality of life (when measured by available indicators). On average, people in rural communities live longer, they suffer lower crimes rates and educational achievement is generally higher. Hence there is a strong foundation to support the broad perception that rural areas offer a higher general quality of life.

But this broad level view hides a number of complex patterns and trends on a range of social issues, such as the distribution of disadvantage and the ways in which rural-urban interdependencies impact on people's opportunities. Rural communities face a number of challenges from a lack of public transport and access to services, through to the affordability of housing.

The study *Rural disadvantage* (Commission for Rural Communities, 2006) shows a significant minority of rural people face a range of different forms of disadvantage. Their experience can be different to the typical urban experience since they are likely to be surrounded by the better-off or dispersed over wide geographic areas. Disadvantage is likely to be multi-dimensional: not just about financial resources, but also about a range of factors that prevent a person from participating fully in society. Whilst low incomes are a key characteristic, disadvantage also relates to lack of skills, poor health and wellbeing.

This chapter has identified data and evidence consistent with the Commission's Disadvantage study which suggested that there are 3 critical factors for rural people, in both experiencing and escaping disadvantage:

- Financial poverty: This will be discussed in more depth in the following chapter. Section 2.7 considered some specific examples of rural financial exclusion.
- Access poverty: People's access to transport, and to services that require travel is vital. There are some specific rural implications around affordability and car ownership as discussed in Section 3.
- Network poverty: The part played by informal contact with, and help from, friends and neighbours should not be under-estimated.

Other aspects of disadvantage with rural dimensions include fuel poverty and access to affordable housing.

But in discussing disadvantage in rural areas, the key issue does not concern whether some aspects are worse or better than elsewhere, but to the ease of overcoming it. That there is less disadvantage in rural areas does not mean that those who experience disadvantage face fewer barriers to overcoming their problems than those in urban areas. Indeed they may face more, and a number of arguments can be used to support this assertion.

Firstly, under-reporting and ignorance of rural disadvantage exists. The Commission's *Rural disadvantage* study highlighted the importance of cultural attitudes in influencing rural disadvantage. Rural people often delay seeking help, trying to cope by themselves, or hiding their disadvantage, for example with regard to mental health problems, domestic violence, or financial poverty. The fear of receiving criticism or being marginalised, the traditional values of pride and coping strategies of self-reliance can all lead to disadvantaged people not wishing to draw attention to themselves.

Secondly, although there is an ever-growing evidence base available about disadvantage and social exclusion, much of this does not look specifically at rural issues, even where the research has national coverage. Similarly, there is a wealth of information about rural issues, but often this has not identified why some people are disadvantaged in rural areas (nor who those people are). This is particularly important for the *State of the countryside* series of reports, that rely on strong, robust and rurally relevant evidence across a range of subjects.

Thirdly, a key characteristic about disadvantage in rural areas is that it is dispersed and that affluence and poverty exist in close proximity, even at the very local scale. This means that rural disadvantage is often not picked up in programmes that target poverty or disadvantage using indicators covering a large geographic scale. Policy targets can sometimes be met without having to make an impact in rural areas.

3 Economic wellbeing

3.1 Introduction

This chapter reviews the economic state of rural England, going beyond the usual indicators of output or drivers of wealth creation – employment, productivity, enterprise, business performance and competitiveness. Adam Smith noted that consumption is the core driver of economic performance – consumers lie at the heart of economic wellbeing. Whether of working age, retired or as young people, employees or business owners, consumers affect economic health as purchasers of goods and services. They also contribute to economic health through personal investments, by owning and trading economic assets and by volunteering.

3.2 Income, wealth and consumption

This focuses on the income and expenditure profiles of rural consumers. We set out several components of rural income and spend, and offer a summary financial statement – at the household and area level. The analysis leads us to suggest that the development and use of indicators of Disposable Household Income alongside the more traditional Gross Value Added per head may lead to greater understanding of the drivers of economic well being in England's rural economies.

3.3 Full and fulfilling employment

This looks at the extent to which rural England has full employment and then considers the influence that health and wealth have on levels of entry to, and exit from, labour markets for older workers. We explore other ways that rural residents are choosing to improve their work/life balance.

3.4 Enterprise and entrepreneurs in rural England

This looks at new data about business start-ups. We then explore, from different perspectives, the productivity of England's small and rural economies. We also look at how an index of competitiveness shows rural/urban differences in the vibrancy of economies.

In the concluding section we show that while mainstream indicators show many rural areas as economically healthy, this health often fails to translate into beneficial outcomes for residents. Perhaps by starting with a portrait of consumption, rather than production, we can encourage future economic interventions to be defined to reach desired outcomes for rural (and urban) residents.

3.2 Income, wealth and consumption

Consumers' ability to purchase daily and durable goods and services is determined in major part by their levels of income and wealth. Some wealth may be tied up in homes, land or business properties, in savings and investments or in family firms. In this section we explore the profile of income and spending levels of rural residents and of some tax and benefit payments as they affect rural consumers.

We start with a general profile for all rural residents and workers. This is then extended particularly for one group in transition – residents of 50 or more years of age approaching or exceeding the state retirement age. The income, economic activity and wealth of these older people are making an increasingly important contribution to the health of rural economies – yet they do not feature in official employment rates beyond state retirement age. An understanding of what influences continued economic activity by the 12% of rural residents who are currently over state retirement age may offer some clues as to the potential transitions and effects on local economies of pension reforms.

As Chapter 2 showed, the population of rural England is growing fast and is getting older. The higher proportion of older people will have implications for demands on housing, services, and generation of wealth and will alter the labour market. Younger residents may be pushed out of rural economies by the lack of high quality jobs, by the lack of affordable housing, higher education or social networks. Incoming or returning families may bring new businesses, or wages earned in distant economies but they may place different pressures on housing markets and services. Changes in consumers' profiles will have implications for the wealth of localities and in turn on levels of self-employment, paid work and inactivity.

Levels of income

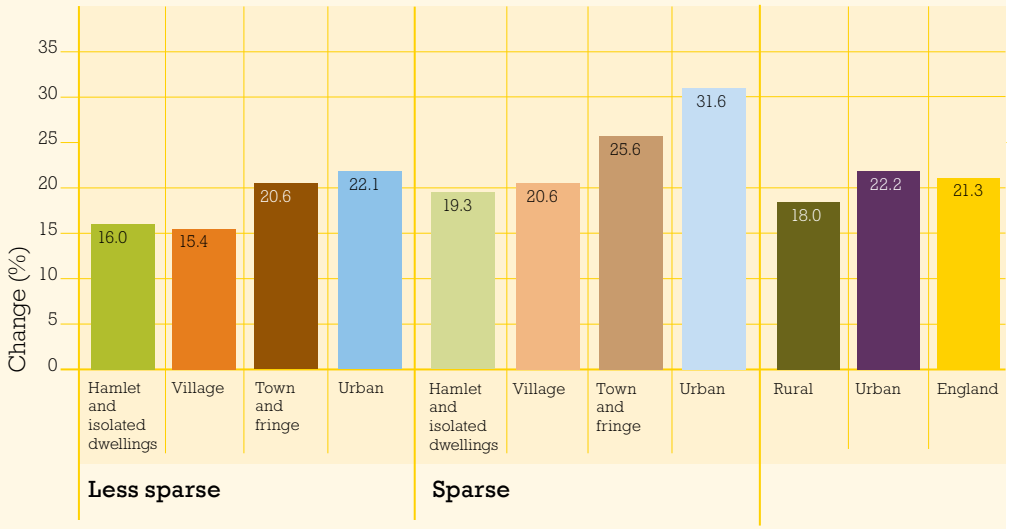
In 2007 the rural mean household income was £34,175 (Figure 3.2.1), higher than the urban level. The general pattern is that incomes are higher in the smaller settlements and are lower in the sparsely populated areas. Between 2004 and 2007 the relative changes in median income (Figure 3.2.2) have tended to reduce differences between the different rural and urban categories.

Figure 3.2.1
Mean household income in England, 2004-7 (£)

Area definition		2004	2005	2006	2007	% change 2004-7
Less sparse	Hamlet and isolated dwellings	35,685	36,802	39,144	37,359	4.7
	Village	34,037	34,819	36,614	35,599	4.6
	Town and fringe	29,838	30,630	31,864	32,853	10.1
	Urban >10K	29,163	29,191	30,878	32,256	10.6
Sparse	Hamlet and isolated dwellings	26,834	29,008	29,953	29,848	11.2
	Village	25,772	28,043	28,572	28,749	11.6
	Town and fringe	22,577	24,442	24,900	26,429	17.1
	Urban >10K	21,676	23,448	23,930	26,099	20.4
Rural		31,845	32,774	34,330	34,175	7.3
Urban		29,142	29,175	30,859	32,239	10.6
England		**29,679**	**29,890**	**31,548**	**32,623**	**9.9**

Source: CACI, 2007. Paycheck

Figure 3.2.2
Change in median household income, 2004-7



Source: CACI, 2007. Paycheck

Geographical distribution of household and personal income

Levels of income vary by age and composition of household and across the rural/urban and regional geography of England. Figure 3.2.3 confirms, at a more detailed level, that the largest increase in household incomes has been amongst different settlement types within sparse areas. The lowest increases have tended to be seen in specific rural settlement types in the South East and North West.

Figure 3.2.3
Top and bottom 5 regions by change in median household income, 2004-7 (£)

Region	Area Definition	2004	2005	2006	2007	% change 2004-7
Top 5						
East Midlands	Town and fringe – Sparse	16,494	19,932	20,214	23,157	40.4
North East	Urban >10K – Sparse	16,397	20,737	20,802	22,797	39.0
East of England	Hamlet and isolated dwellings – Sparse	19,885	25,247	25,413	26,809	34.8
East Midlands	Urban >10K – Sparse	17,298	20,875	20,653	23,196	34.1
South West	Urban >10K – Sparse	16,682	20,293	20,640	21,852	31.0
Bottom 5						
South East	Hamlet and isolated dwellings – Less sparse	32,286	36,957	38,436	36,874	14.2
South East	Village – Less sparse	30,275	33,993	35,258	34,437	13.7
North West	Village – Less sparse	27,757	30,002	32,440	30,985	11.6
North West	Hamlet and isolated dwellings – Less sparse	29,620	31,762	35,813	33,059	11.6
North West	Hamlet and isolated dwellings – Sparse	24,926	27,665	28,098	27,312	9.6

Note:
(i) Sparse rural areas in the South East and less sparse rural areas in London have been withdrawn from the bottom 5 of this table due to small sample size.

Source: CACI, 2007. Paycheck

Household income of less than 60% of the English median income is the widely used indicator of poverty in England. In 2007 that amounted to £16,492 or the equivalent of £317 (gross) per week. The proportion of households at or below this level has risen every year over the 2004-7 period across all categories. By 2007 there were over 928,000 households in rural England at or below this level (or nearly 32% of all rural households). As we will see later, levels of average income decline for older people.

Mean income also falls when measured at rural workplaces rather than rural residency, by up to £3,500. This difference can partly be explained by commuting, variations in the number and gender balance of working age people per household, and by the proportions of full time/part time/unemployed or inactive profile of members of the household. Figure 3.2.4 shows how personal income varies across the rural/urban classification.

Figure 3.2.4
Mean personal income, from principal economic activities, 2004-5 (£)

Classification	Self-employment income	Employment income	Pension income	Total income
Rural 80	17,865	20,119	11,342	22,614
Rural 50	18,552	21,515	11,369	23,485
Significant rural	19,498	22,238	11,338	24,113
Other urban	16,308	19,645	10,200	20,875
Large urban	16,331	19,576	10,342	20,900
Major urban	23,183	25,084	11,260	26,893
Rural	18,153	20,705	11,353	22,979
Mixed	17,874	20,918	10,758	22,464
Urban	20,635	23,036	10,919	24,664
England	**18,918**	**21,569**	**11,022**	**23,399**

Note:
(i) Total mean income in this table does not equal the sum of the mean income in the preceding columns. The mean income in each column has been calculated from the total income for each geographical category divided by the number of tax payers with income from the named source. Some tax payers have income from multiple sources and are therefore recorded in several columns.

Source: HM Revenue and Customs, 2007. Survey of Personal Incomes

Strong and weak areas

Figure 3.2.5 shows some geographical proximity between areas of high and low income. Rural areas have more settlements with high levels of median income – these are often the smaller settlements in the less sparse ares. In contrast, over a third of rural towns in sparse areas have household median income of less than £21,605. Rural areas with lower incomes are found in more peripheral locations, whilst those with high income mainly fan out from London, and some other large cities.

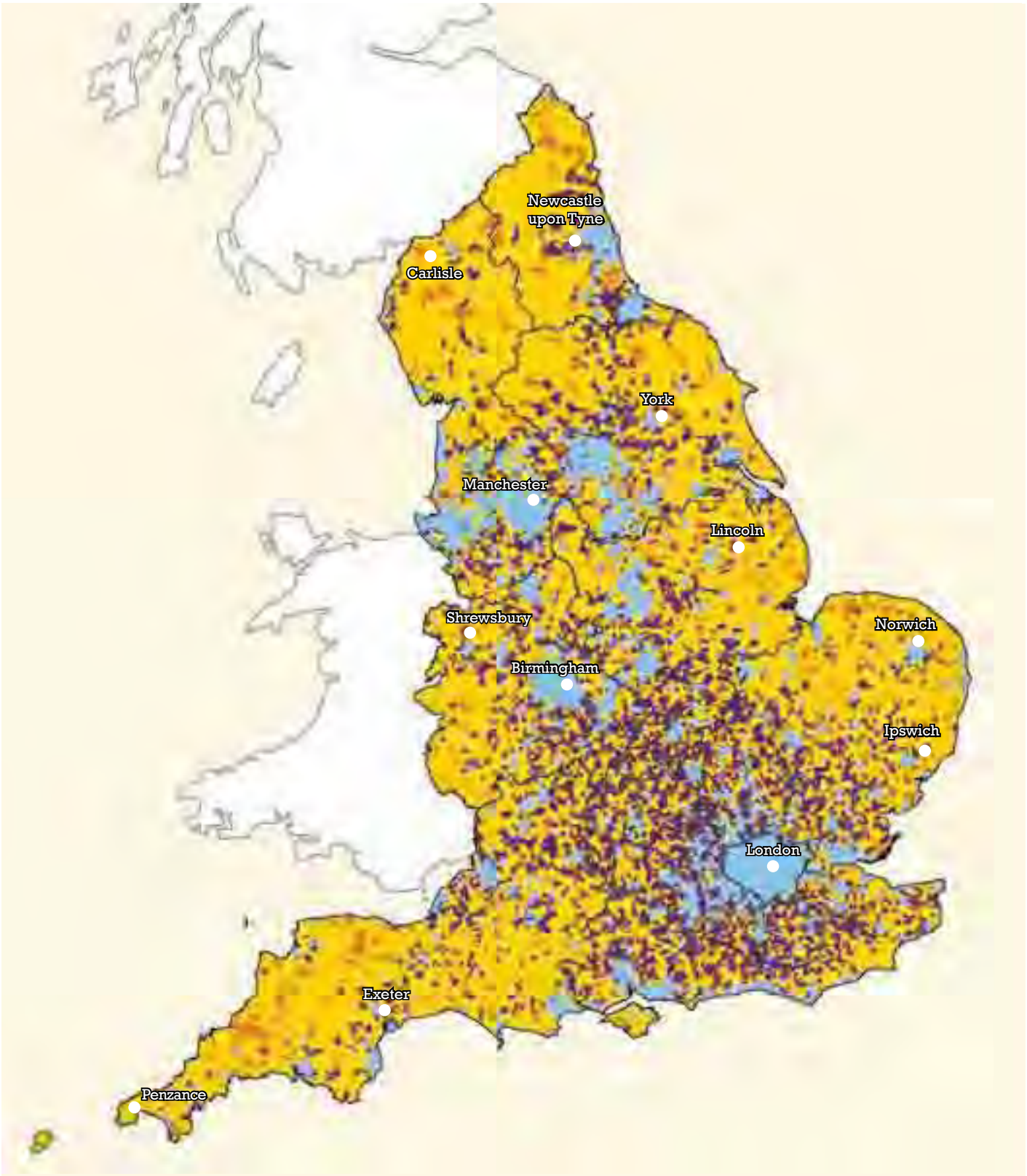


Figure 3.2.5
Upper and lower quintile median household income (rural areas only), 2007

Quintile

- Lower quintile (£11,482 – £21,604)
- 2nd, 3rd and 4th quintile (£21,605 – £35,349)
- Upper quintile (£35,349 – £67,617)
- Urban >10K
- Boundaries

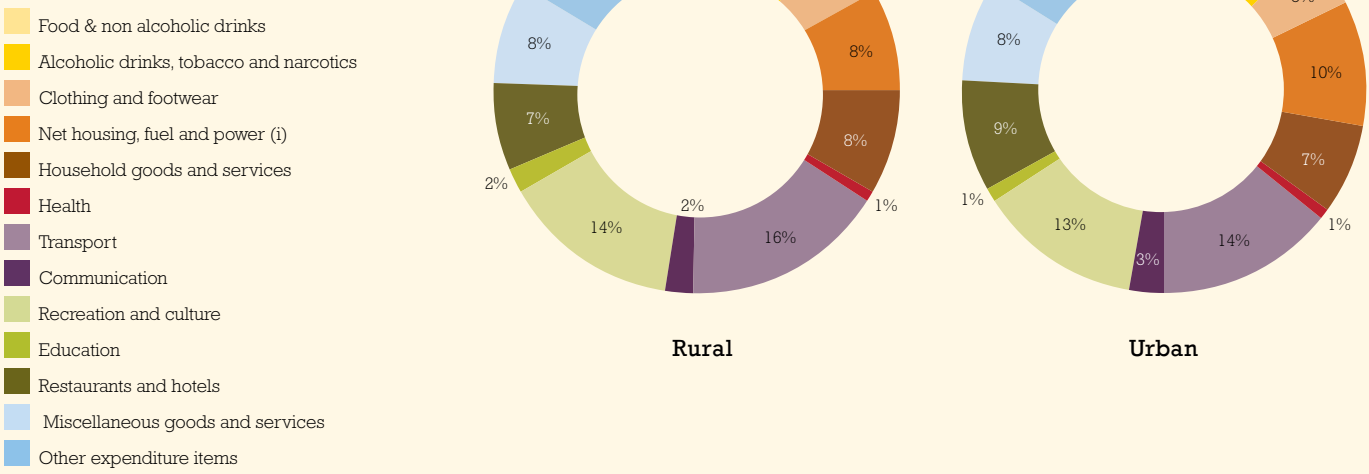
Notes:
(i) This map highlights rural output areas with median household incomes in the upper or lower quintiles.
(ii) The lower quintile represents the bottom 20% of output areas based on their median household income values.
(iii) The upper quintile represents the top 20% of output areas based on their median household income values.
(iv) Output areas with values in the 2nd, 3rd and 4th quintiles have been grouped together so as to identify which areas have particularly high and particularly low median household incomes.

Source: CACI, 2007. Paycheck.

Household expenditure

As with household income, levels and composition of household expenditure will vary by the age, gender and numerical composition of the household as well as by location. Figures 3.2.6 and 3.2.7 illustrate the average weekly expenditure for rural and urban households.

Figure 3.2.6
Proportion of average weekly household expenditure by rural and urban areas, 2005-6



Notes:
(i) Excluding mortage interest payments and council tax.
(ii) All figures are for Great Britain households, the survey does not allow for a rural/urban breakdown for England alone.

Source: Office for National Statistics, 2007. Family Spending Survey

Figure 3.2.7
Average weekly household expenditure, 2005-6 (£)

	Rural	Urban
Food & non alcoholic drinks	48.7	43.2
Alcoholic drinks, tobacco and narcotics	11.5	11.2
Clothing and footwear	23.9	22.6
Net housing, fuel and power (i)	40.5	41.7
Household goods and services	38.3	28.8
Health	5.5	5.1
Transport	74.5	57.1
Communication	11.3	11.7
Recreation and culture	65.9	56.1
Education	7.6	5.8
Restaurants and hotels	35.7	35.9
Miscellaneous goods and services	39.1	33.0
Other expenditure items	77.2	67.3
Total expenditure	**479.7**	**419.5**

Notes:
(i) Excluding mortage interest payments and council tax.
(ii) All figures are for Great Britain households, the survey does not allow for a rural/urban breakdown for England alone.

Source: Office for National Statistics, 2007. Family Spending Survey

The average rural household spent £479.7 per week in 2005. This was £60 per week higher than was paid by the average household in urban areas. Rural households spent markedly more for 6 of the 13 commodities and services:

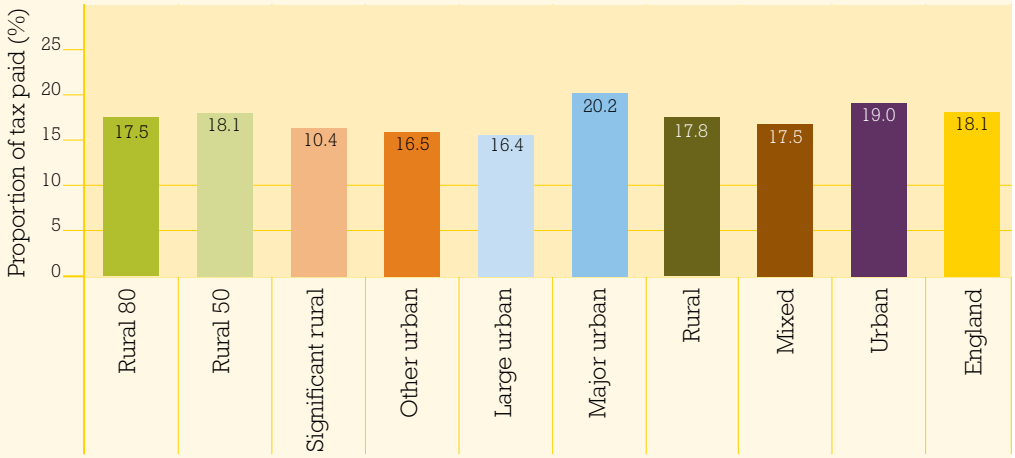
- Food and non alcoholic drinks.
- Household goods and services.
- Transport.
- Recreation and culture.
- Miscellaneous goods and services.
- 'Other' expenditure items.

In contrast the average urban household has almost no items or services for which they pay markedly more than the average rural household, although housing (excluding council tax and mortgage interest payments) and fuel and power were marginally more expensive for urban households.

At this level of spending the average rural household would require £24,934 per annum expenditure. As we have shown in Figure 3.2.1, this was considerably lower than the mean household income for English rural households in 2005.

One of the standard, and almost inevitable, first calls on household and personal income are national and local taxes. Households in rural areas pay a marginally greater proportion of their income as tax than do those living in mixed localities, but less than urban areas (Figure 3.2.8). Residents in 'Rural 80' and 'Rural 50' districts paid more than £25.4 billion in income related tax in 2005.

Figure 3.2.8
Proportion of tax paid on average personal income, 2004-5



Source: HM Revenue and Customs, 2007. Survey of Personal Incomes

When measured at an area level, total household income in some rural economies is considerable. Much of this income including pension, benefit payments and investment returns, may not be directly derived from the areas' businesses and economies.

Financial statement for rural and urban households

Using comparable data from the Family Spending Survey (ONS, 2007a), on the average rates of weekly household income and expenditure, the levels of household usable income can be seen to be lower in rural households than in urban areas. The weekly amount for spending on occasional goods and services or for saving is consequently less (Figure 3.2.9).

Figure 3.2.9
Summary financial statement for average rural and urban households, 2005-6

Note:
(i) All figures are for Great Britain households, the survey does not allow for a rural/urban breakdown for England alone.

Source: Office for National Statistics, 2007. Family Spending Survey

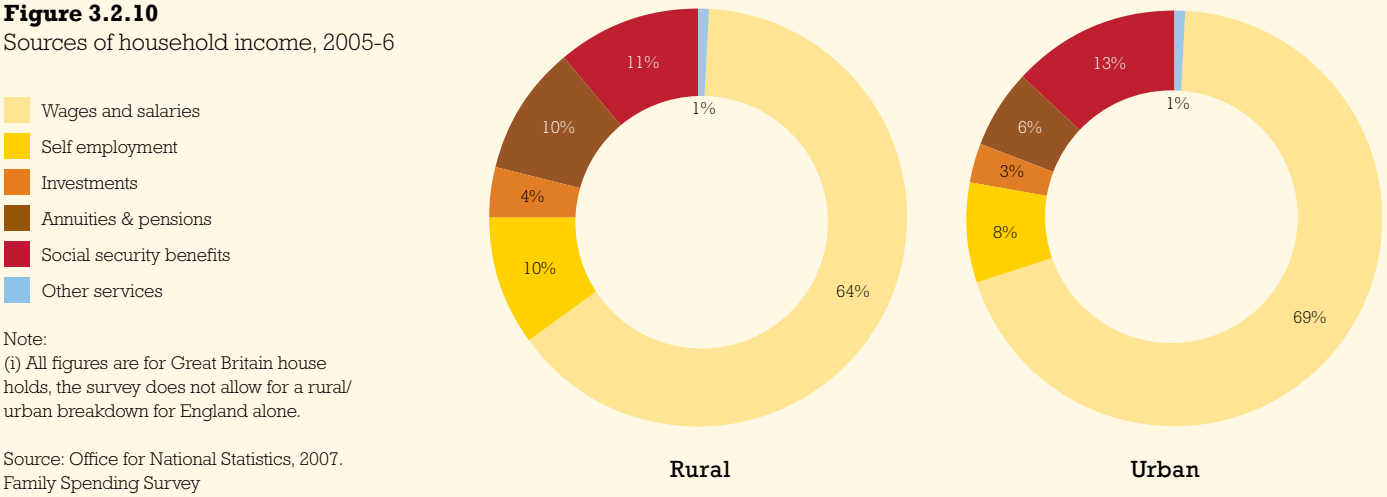
	Gross weekly household income (£)	Disposable weekly household income (£)	Average weekly household expenditure (£)	Income less expenditure (£)
Rural	647	522	479.7	42.3
Urban	585	476	419.5	56.5

The deductions from gross to disposable household income is close to the average proportion paid in taxes by rural households (18%). These figures should therefore offer a fair indicator from which to compare expenditure and savings by English households.

Sources of household and personal income

Households' income comes from a variety of sources. Figure 3.2.10, drawn again from the Family Spending Survey, shows that rural households rely less upon wages and social security payments than do urban households. In contrast the average rural household in Great Britain derived a larger proportion than their urban equivalents from pensions and annuities and self-employment. The Survey of Personal Incomes (HMRC, 2007) for English households confirms some of these features in 2004-5, with most rural categories exhibiting a proportionally greater reliance on self employment and pension income. In turn this echoes the different demographic and employment geography of rural and urban areas.

Figure 3.2.10
Sources of household income, 2005-6



Note:
(i) All figures are for Great Britain house holds, the survey does not allow for a rural/ urban breakdown for England alone.

Source: Office for National Statistics, 2007. Family Spending Survey

Who is claiming benefits?

In the *State of the countryside* update Working Age Benefit Claimants (CRC, 2007a) we have described and commented on benefits that are the main focus of the government's Welfare Reforms Bill. However, the 532,000 rural claimants of working age benefit represent less than a quarter of total rural benefit claimants. In 2005 more than 2.3 million rural residents claimed benefits or credits. As claimants can be paid more than one benefit the total number of benefit payments made exceeded 2.8 million. Although those on state pensions make up a substantial portion of these claimants (35% in rural England and 26% in urban areas), a majority of urban claimants and close to half of all claimants in rural England were aged between 25 and 50 years (49% in rural areas and 54% in urban).

The largest number of working age claimants are in administrative or secretarial occupations. However, in less sparse hamlets and isolated dwellings, just less than 1 in 5 of all benefit claimants are managers or senior officials – a similar proportion to administrative and secretarial claimants in urban settlements.

Child benefit payments make up the largest proportion (41%) with state pension claims being the second most populous benefit claim in rural areas. But income support other than for unemployed people and housing or council tax benefits are both paid in larger proportions in urban areas. Thus both the levels of benefit payments and the composition of such claimants change across rural/urban geography.

What does this mean for England's rural economies?

In preceding sections we have shown that:

- Mean household and personal income is higher in rural households than in urban households.
- Average rural households have a greater dependency on self employed income, pension and investment income.
- Urban households depend more on wages from paid employment and benefits payments.
- More benefit claims relate to family circumstances in the rural areas, and to low income and health in urban areas.
- Average rural households spend more and pay a larger proportion of their income in taxes, than the average in many urban districts.

Taken together the shape and scale of these differences produces different summary fiscal statements for England's rural and urban economies (Figures 3.2.11 and 3.2.12). Such differences imply that different forms or levels of intervention should be taken by economic agencies in rural areas.

Figure 3.2.11
Total income and tax, 2004-5
(£ billion)

Classification	Total income	Total tax
Rural 80	70.1	12.3
Rural 50	73.5	13.3
Significant rural	83.9	15.5
Other urban	72.6	11.9
Large urban	75.6	12.4
Major urban	230.4	46.6
Rural	143.1	25.4
Mixed	156.3	27.3
Urban	300.6	57.2
England	**593.7**	**107.7**

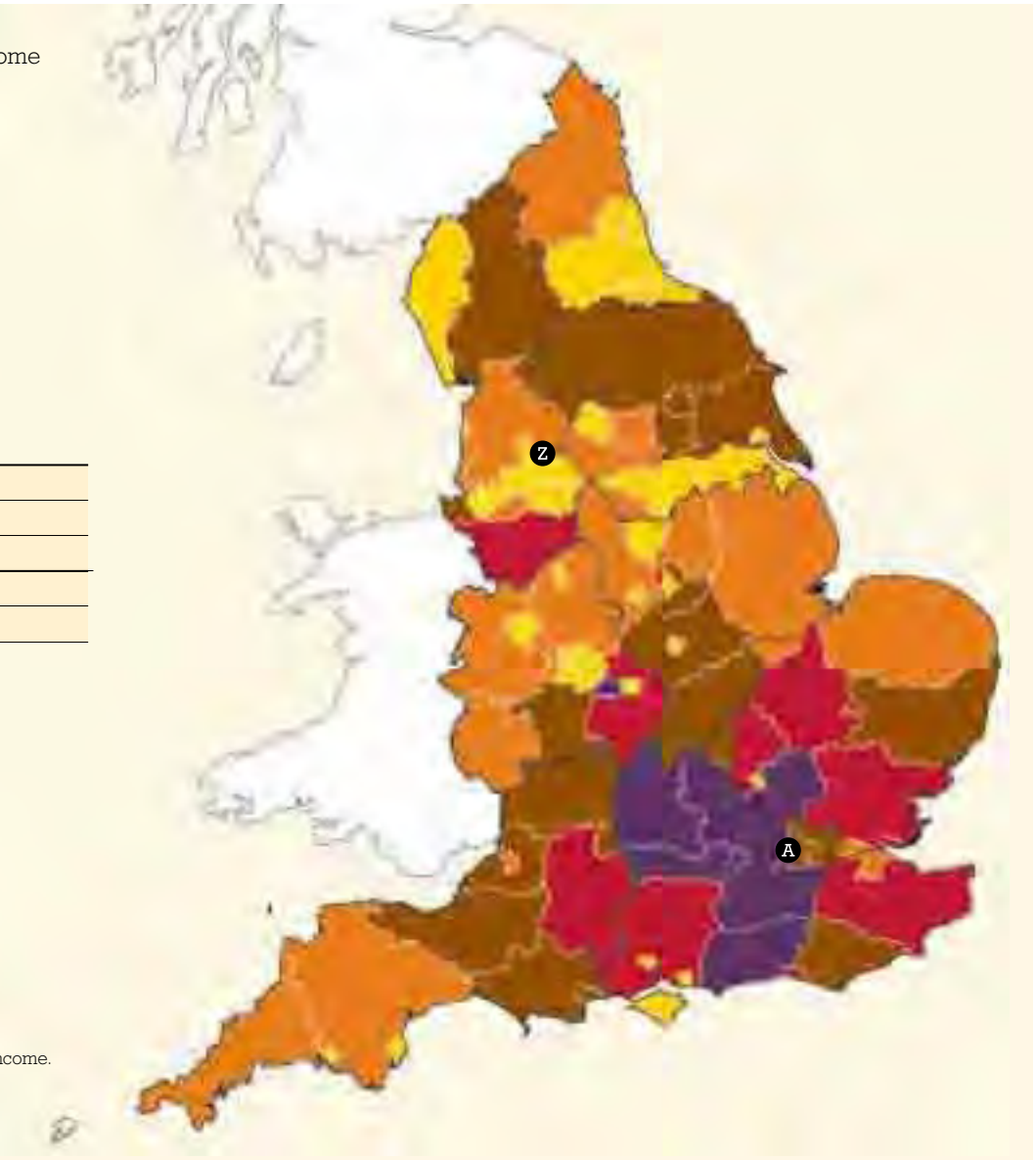
Source: HM Revenue and Customs, 2007. Survey of Personal Incomes

Figure 3.2.12
Total income from principal economic activities 2004-5
(£ billion)

Classification	Self-employment income	Employment income	Pension income
Rural 80	8.6	44.9	9.3
Rural 50	7.6	50.1	9.0
Significant rural	8.2	59.3	9.2
Other urban	5.8	54.0	7.3
Large urban	6.2	56.1	7.9
Major urban	22.0	171.6	18.0
Rural	16.2	94.5	18.3
Mixed	13.9	113.4	16.4
Urban	27.4	223.5	25.8
England	**56.6**	**424.6**	**60.6**

Source: HM Revenue and Customs, 2007. Survey of Personal Incomes

Figure 3.2.13
Gross disposable household income per head, 2004 (£)



	Highest	
A	£22,417	Inner London

	Lowest	
Z	£9,475	Blackburn

England Average = £12,435

- < £11,499
- £11,500 – £12,499
- £12,500 – £13,499
- £13,500 – £14,499
- £14,500 >
- Boundaries

Note:
(i) This map is based on NUTS 3 areas.

Source: ONS, 2007. Regional Household Income.

The total incomes – and hence purchasing power – are large in many rural economies and appear to compare favourably with the turnover per head earned by the areas' businesses. The distribution of Gross Disposable Household Income (GDHI) per head (Figure 3.2.13) offers an interesting comparison with Figure 3.4.5 later in this chapter that shows the distribution of Gross Value Added (GVA) per head (the value produced by local businesses rather than the income of its residents).

The spatial distribution of GDHI shows a marked concentration of higher earning households in the areas surrounding the major conurbations of London, Birmingham and Manchester, with lower levels in major cities and in more peripheral areas.

Groups in transition – the younger and the older

For some rural communities, the local demographic, educational, wealth and cultural characteristics, and the householders' health and wealth are important influences on participation and activity in local labour markets. Chapter 2 notes that young people at the start of their working lives are leaving rural England for urban areas in large numbers. These are the next generation of the labour force. Recent studies in the West Midlands (ECOTEC, 2006) and Northern England (IPPR 2006) show that many are being pushed to leave by poor local opportunities for further and

higher education, poor quality of jobs, low wages and difficulties in finding somewhere affordable to live.

At the other end of the age spectrum older people aged 50+ may have a marked influence on income levels in many rural localities. This group includes people preparing for, or retiring to, rural areas. In many instances they have businesses in tow, or ideas for businesses. For some, self employment makes an important contribution to their income in later years, including after State Retirement Age (SRA).

The English Longitudinal Study of Ageing (ELSA)(IFS, 2006) studied a group of people aged 50+ in 2002-3 and repeated the study for the same people in a second wave in 2004-5. For the ELSA survey sample, the average weekly income was £394 for rural residents between 50 and 65, declining to £188 per week for those over 75 years (Figure 3.2.14). As for the general population, the most affluent were in less sparse hamlets. The rural/urban differences in income are greatest for the 50 to 65 category and are non-existent for the over 75's.

Figure 3.2.14
Equivalised average income components, 2005 (£ per week)

Area definition		Under 65	65 to 75	Over 75	All over 50
Less sparse	Hamlet and isolated dwellings	493.1	261.1	170.6	342.9
	Village	433.5	266.3	197.6	334.1
	Town and fringe	350.4	235.6	179.6	279.4
	Urban >10K	310.3	227.3	188.6	257.1
Sparse	Hamlet and isolated dwellings	385.7	291.9	249.7	312.6
	Village	289.9	201.3	262.9	252.3
	Town and fringe	200.4	206.5	169.1	190.2
	Urban >10K	220.9	215.7	199.0	214.6
Rural		394.0	249.3	188.0	304.3
Urban		309.8	227.3	188.7	256.9
England		**330.9**	**232.8**	**188.5**	**268.7**

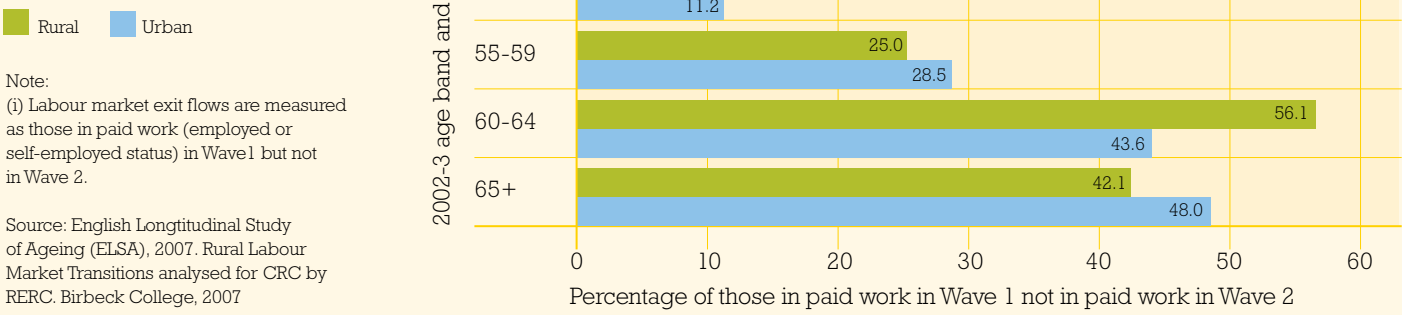
Note:
(i) Equivalised income takes into account economies of scale and household size and allows comparisons across different household types.

Source: English Longtitudinal Study of Ageing (ELSA), 2007. Rural Labour Market Transitions analysed for CRC by RERC. Birbeck College, 2007

Retirement is the form of economic activity that is unique to this age group. state retirement age for women in this period was 60 and for men was 65, but many move from work to retirement earlier. Older male rural residents appear to be staying in paid work for longer, this is less true for rural women (Figure 3.2.15). In recent political debates on the future of pensions, employees are being encouraged to see work beyond current state retirement ages as necessary to secure reasonable income in retirement. This appears to be the case for more rural residents already.

Unsurprisingly the mean weekly income from state pensions for the 50 to 65 age group remains low, making up around 5% of all incomes. In contrast the proportion of income from private pensions is much higher. This proportion ranges from almost 30% in sparse town and fringe areas and hamlets and isolated dwellings to below 10% in sparse villages. These sources of income increase in absolute and proportional terms up to 75 years of age, when most sources show a varied decline.

Figure 3.2.15
Labour market exits of older workers, 2002-3 to 2004-5



Note:
(i) Labour market exit flows are measured as those in paid work (employed or self-employed status) in Wave1 but not in Wave 2.

Source: English Longtitudinal Study of Ageing (ELSA), 2007. Rural Labour Market Transitions analysed for CRC by RERC. Birbeck College, 2007

Importantly, for both older residents and for local economies, other forms of income are more substantial, showing different profiles across the rural/urban geography. Income from self employment reaches its peak for older people in sparse villages and in less sparse hamlets. The average of £90 per week from self employment is similar to the average weekly income from paid employment for this group.

Asset income (e.g. rents from property) is also substantial amongst 50 to 65 year old residents in rural areas. Those living in sparse hamlets drew more than 16% from this source, an amount four times greater than for residents of sparse urban areas. In absolute terms, older residents in hamlets and isolated dwellings earned over £60 per week from this source, including farm and land incomes.

Taken together, these varied sources combine to make the ELSA participants between 50 and 65 in less sparse hamlet areas the richest older residents, with an average weekly income of £493 (or £25,636 a year). The pattern described for all rural residents in Figure 3.2.4 is shared, and undoubtedly influenced, by older rural residents. Similarly aged residents in sparse rural towns lived off an average weekly income of almost £300 less per week whilst their less sparse urban counterparts received £180 less in weekly income.

Residents in these dispersed dwellings are not always affluent and ELSA reveals the dynamics over time. Incomes fall most markedly from 50 to 75+ years old residents in these less sparse hamlets with a decline close to a 66% fall (£493 to £170). This contrasts with sparse urban areas, where the equivalent fall was less than 10% to £198.

It will come as no surprise then that sparse town and fringe areas support the largest proportion of benefit claimants aged between 50 and state retirement age across all rural and urban categories.

3.2 **Key summary points:** Income, wealth and consumption

- Overall, rural areas have higher average incomes than urban areas, though in sparse areas, incomes are lower.
- Incomes tend to be made up less from wages and more from pensions, savings income and self employment in rural areas.
- Median incomes have been rising more rapidly in urban areas than in rural areas, though sparse areas have seen the highest rates of increase.
- Expenditure in rural areas for equivalent incomes is higher than in urban areas, leaving less disposable income after necessary weekly expenditure.
- Although older people (over 50) in rural areas (especially in the smaller settlements) have higher incomes than their urban equivalents, this differential does not exist for the very oldest (over 75) residents.

See also (from the 2005 and 2006 reports):

Expenditure

2005	Table 3.24	Average weekly expenditure by category
2005	Figure 3.13	Household fuel expenditure

Incomes and pay

2006	Figure 39	Change in median incomes 2004-6
2006	Table 22	Change in median incomes across regions
2006	Figure 40	Proportion of households in income poverty 2006
2006	Figure 41	Proportion of households on low incomes 2006 (map)
2006	Figure 45	Changes in mean weekly pay 1998-2005 (map)
2006	Table 23	Weekly pay – top and bottom 10 districts
2005	Figure 4.1	Median gross weekly pay 2002 and 2004
2005	Figure 4.2	Gross mean weekly earnings (map)
2005	Table 4.2	Lowest and highest earning districts
2005	Figure 4.4	Income deprivation 2004

Income deprivation

2005	Figure 3.14	English indices of deprivation
2005	Table 3.25	Regional distribution of the most disadvantaged areas
2005	Figure 4.8	Economic deprivation 2004

Benefits

2006	Figure 46	Income support claimants 2004
2006	Figure 47	Proportions of incapacity benefit 2004
2006	Figure 48	State pension claimants 2004
2006	Table 24	Current pension scheme membership
2005	Table 2.7	Claimants of disability living allowance
2005	Table 4.4	Benefit claimants 2003
2005	Table 4.5	Actual and % change in income support claimant numbers

3.3 Full and fulfilling employment

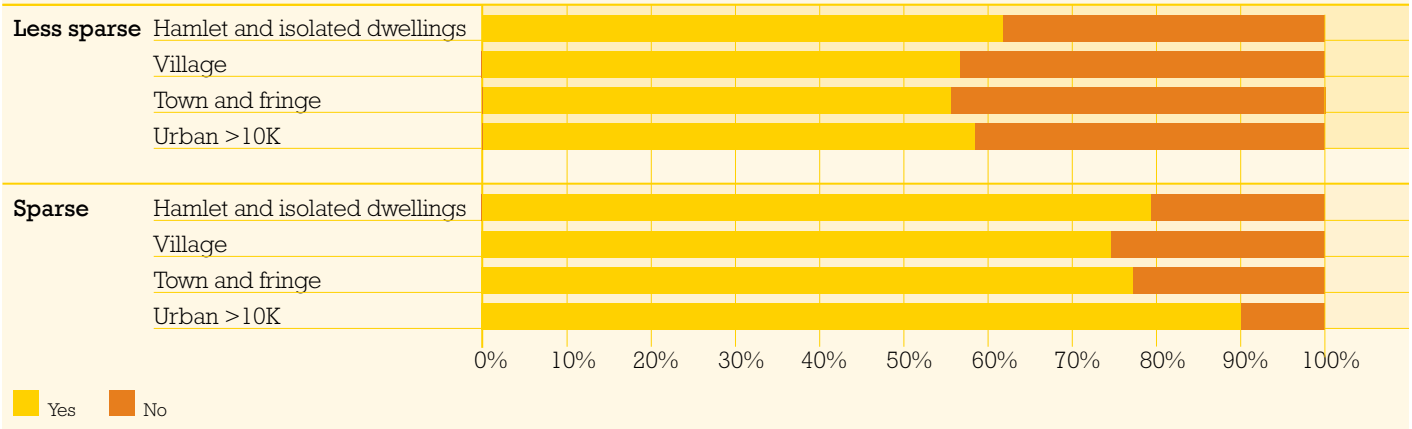
Government aims for 80% employment across the United Kingdom – a rate described by economists and politicians as representing 'full employment'. In this section we will show that more rural than urban local authority areas have achieved this level. We will also examine the nature and characteristics of economic inactivity that show some interesting differences across the rural/urban geography.

A second aspect of government strategy speaks of 'fulfilling' jobs, which depends on many characteristics, both of employees and the type and place of employment. Fulfilling employment has been shown to affect both productivity and innovation of firms and the health and wider wellbeing of employees (DTI, 2006a). In rural areas we are beginning to be able to trace the influence of some of these features as they affect those leaving (or re-entering) employment, and the nature of rural employment (DTI, 2006b).

Rural England supports 5.4 million employees, (ONS, 2007b); 74% of these are full time, and 26% are in part time employment. 4.6 million people work in rural workplaces. Over the period 2003-5 employment in rural firms registered on the Inter Departmental Business Register (IDBR) (ONS, 2006a) increased by nearly 6% to reach 3 million, but many rural firms do not meet the criteria for being recorded in this census. Nevertheless this rate of increase exceeded that for urban firms (2.7% increase).

We have shown in previous *State of the countryside* reports that many rural residents work in urban areas. In 2006 the Labour Force Survey (ONS, 2007c) recorded that whilst 2.7 million residents of rural areas were living and working in the same local authority area, close to 42% or 1.9 million worked and lived in different local authority areas. As can be seen in Figure 3.3.1 self-containment is most marked in sparse localities.

Figure 3.3.1
People who live and work in the same local authority area, 2006



Source: Office for National Statistics, 2006. Labour Force Survey Data Service

High and low employment

Rural areas have an overall higher employment rate. In 2005 employment rates were 78% for rural, 77% for mixed and 74% in urban districts (Local Area Labour Markets analysis for CRC 2007) (ONS, 2006b). Figure 3.3.2 shows the best and worst performing authorities in each of these categories.

Figure 3.3.2
Top and bottom local authority areas by employment, 2005-6

Rural	Region	District Name	Employment (%)
Top 5	East Midlands	South Northamptonshire	92
	South West	Cotswold	89
	South East	West Oxfordshire	87
	North West	Eden	86
	South East	South Buckinghamshire	86
Bottom 5	South West	Caradon	68
	North East	Easington	67
	East of England	Tendring	67
	North East	Sedgefield	64
	South West	West Somerset	58

Mixed	Region	District Name	Employment (%)
Top 5	South East	Surrey Heath	86
	West Midlands	Bromsgrove	86
	South East	Basingstoke and Deane	85
	South East	Hart	85
	South East	Cherwell	84
Bottom 5	East Midlands	Bolsover	69
	North East	Hartlepool	67
	East of England	Luton	67
	East Midlands	Mansfield	66
	North West	Blackburn with Darwen	66

Urban	Region	District Name	Employment (%)
Top 5	East Midlands	Blaby	89
	East of England	Dacorum	85
	South East	Adur	84
	East of England	Watford	84
	London	City of London	84
Bottom 5	North West	Liverpool	61
	London	Lambeth	60
	London	Newham	59
	London	Hackney	56
	London	Tower Hamlets	54

Source: Office for National Statistics, 2007. Local Area Labour Markets

More rural local authority districts than urban districts have reached 80% employment rates (Figure 3.3.3) with a level around 40% for all the rural categories.

Figure 3.3.3
Proportion of local authority areas with over 80% employment, 2005-6

Area Definition	% of local authorities
Rural 80	42%
Rural 50	44%
Significant rural	38%
Other urban	7%
Large urban	29%
Major urban	12%
Rural	43%
Mixed	22%
Urban	18%
England	**28%**

Source: Office for National Statistics 2007.
Local Area Labour Markets

Dynamic rural labour markets

These core statistics, give little hint of the dynamic nature of rural labour markets. Evidence from several recent studies shows considerable activity, movement and choices by different groups. Employment may start with young people working in family firms, may be delayed as they leave for higher education and better job opportunities, may take several forms including part time and economic inactivity by choice, may be terminated by ill health or early retirement, or people may continue in paid work or self employment well beyond state retirement ages. Formally recorded employment in rural England takes many forms including part time, full time, seasonal or temporary waged employment and self-employment. Some residents combine more than one job and more than one form. This mix is made more complex by forms of hidden employment that include time banks, volunteering and family members working in family firms.

Figure 3.3.4
Working age households by combined economic activity status of household, 2006

Area definition		Working households		Mixed households		Workless households		All households with known status
Less sparse	Hamlet and isolated dwellings	229,991	46%	115,060	23%	158,311	31%	503,362
	Village	633,538	45%	313,278	22%	455,710	32%	1,402,526
	Town and fringe	866,186	46%	349,106	19%	665,708	35%	1,881,000
	Urban >10K	7,548,414	46%	3,333,136	20%	5,630,960	34%	16,512,510
Sparse	Hamlet and isolated dwellings	22,355	42%	11,023	21%	20,264	38%	53,642
	Village	35,333	37%	15,258	16%	45,175	47%	95,766
	Town and fringe	37,144	39%	19,376	20%	39,693	41%	96,213
	Urban >10K	18,321	38%	7,897	16%	22,399	46%	48,617
Rural		1,824,547	45%	823,101	20%	1,384,861	34%	4,032,509
Urban		7,566,735	46%	3,341,033	20%	5,653,359	34%	16,561,127
England		**9,391,284**	**46%**	**4,164,134**	**20%**	**7,038,220**	**34%**	**20,593,638**

Source: Office for National Statistics, 2007.
Labour Force Survey Data Service

At a broad level the proportions of working, mixed and workless households are similar in rural and urban England. However, at a more detailed level, we can see that smaller settlements tend to have fewer workless households and that sparsley populated areas tend to have more (see Figure 3.3.4)

Our *State of the countryside update on Working age benefit claimants* (CRC, 2007a) described the declining proportion of rural residents on incapacity benefit, lone parents and bereaved claimants. However, since 2000 the proportion of carers has increased. This echoes in the profiles of exits from labour markets amongst the 50+ year olds as revealed by ELSA Wave 2 (Figure 3.2.15). Two factors exert a substantial influence on rates of exits and re-entry to the labour market – health and wealth (IFS, 2006).

Employment rates start to decline among residents aged 50 and over, through retirement and disability. Thus lower employment rates in some sparse rural districts may reflect an older demographic profile rather than an inherently weak labour market or high levels of unemployment. However, rural residents appear to want or need to remain in work for longer than their urban counterparts. The ELSA study also describes higher rates of entry or re-entry to employment for this older group. Part of the explanation may lie in higher rates of self employment – one in eight of the 2004/5 rural participants aged 50 to 65 years were self employed, this figure was close to one in five in sparse areas compared with one in 12 in urban areas. These rates for rural participants aged between 65 to 75 years remained more than four times higher than those from urban England.

3.4 million rural employees worked more than 35 hours a week (full time) and a further 1.2 million worked in part time jobs – a higher ratio of part time to full time than in urban areas. More significantly only a tiny proportion of part time rural employees worked part time because they could not find a full time job (e.g. less sparse villages: 1.7%, sparse villages: 2.8%). On this evidence part time employment appears to be more a matter of choice than necessity in rural England (ONS, 2007c).

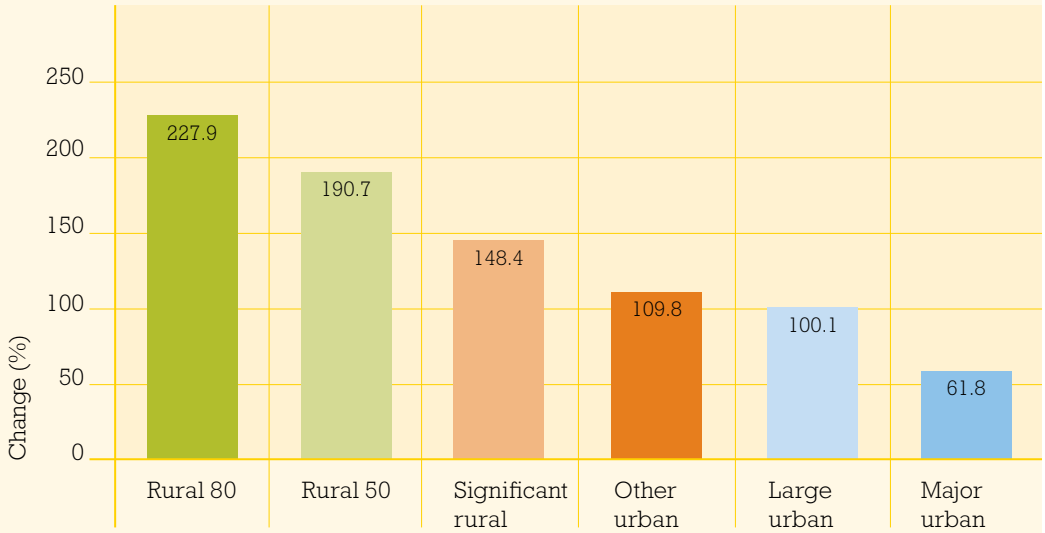
Such expression of choice is only one face of the dynamic of rural labour markets. Many still face activity or inactivity not of their choosing. Although unemployment rates are low in rural England, other forms of poor economic opportunity or job security are evident.

- In 2005 over 130,000 workers were dismissed, made redundant or resigned from their jobs in firms in less sparse rural areas (ONS, 2007c). A further 164,000 left for health reasons.
- A study of rural youth transitions in 2006 (IPPR North, 2006) estimated that the rate of 16 to 18 year olds Not in Employment, Education or Training (NEET) was 6.8%. A study of young people in Suffolk reported levels as high as 19% (IPPR North, 2006).
- Short term, seasonal and temporary jobs may be seen as a way into the job market, but these often carry low security and little commitment or opportunity for advancement. Increasingly young people may find non-UK nationals taking such jobs.

Rural labour markets are being boosted by non-UK nationals

Between 2002/3 and 2005/6, rural local authorities experienced a 209% growth in the numbers of non-UK migrant workers; (as measured by National Insurance registrations by non-UK nationals). In comparison, mixed authorities saw a growth of 123%; and urban authorities, 67% (Figure 3.3.5), although the urban absolute numbers were nearly 4 times greater than in rural districts. The highest growth rate was experienced in Rural 80 districts where eight of the districts had growth of over 500%. The county of Herefordshire experienced 933% increase. Even North Wiltshire, the rural district with the lowest percentage change in people registered by the National Insurance Recording System (NINo) in this period, supported growth of over 50%.

Figure 3.3.5
Percentage change in the number of NINo[1] registrations in respect of non-UK nationals, 2002/3 to 2005/6



[1] National Insurance Number

Source: DWP, 2006. National Insurance Number Allocations to overseas Nations Entering the UK.

Our report on A8 Migrant workers (CRC, 2007b) shows how Accession 8 Member State migrant workers are spread amongst rural England. While agriculture and manufacturing have high concentrations in the East and areas such as Herefordshire, those in domestic, hotels and retail are more widely spread, with, for instance, Cumbria showing as having a very high rate.

The nature of rural businesses and impacts on employment

Rural firms are traditionally smaller than those in our towns and cities. Job opportunities and career development may be more limited in rural areas as rural areas are likely to contain more sole traders and fewer employees per enterprise. In 2005 the average firm located in rural areas employed 6.2 including the owner (ONS, 2006a). This compares with 16.3 workers in the average urban firm.

In 2005, the Annual Survey of Small Businesses (SBS, 2006) recorded that 70% of businesses in urban areas had no employees. The rate increased inversely with settlement size, to 79% in hamlets and isolated dwellings.

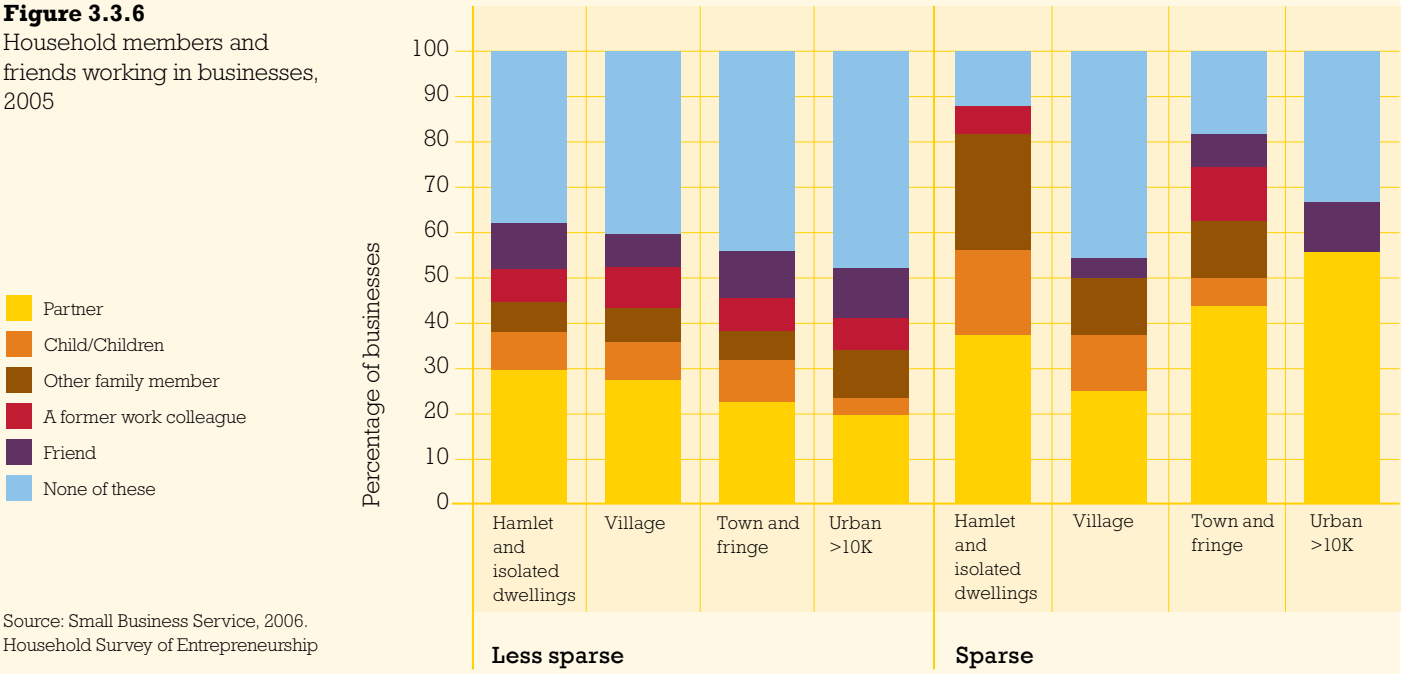
Not all of these enterprises will be large enough to register for Value Added Tax (VAT) or otherwise be recorded in the Inter Departmental Business Register (IDBR). Nevertheless, this register allows estimates of the scale of sole trader and employer jobs by comparing numbers of employees with total employment in registered firms. By this method we can show that in sparse hamlets, over 30% of all employment may consist of employers and sole traders.

This contrasts with urban firms where this group make up only 3.2% of all employment. By measuring enterprise creation solely by the numbers of firms registering for VAT or Pay as You Earn (PAYE) we may be unfairly ignoring large numbers of rural firms. This issue is returned to in the enterprise and enterpreneurship section of this chapter.

Another form of employment, inadequately recognised by official indicators, is the use of family and friends in small firms. This appears to be especially important in rural firms. In the Household Survey of Entrepreneurship (SBS, 2005) respondents running an enterprise were asked about the contribution to the business made by family and friends of the entrepreneur (Figure 3.3.6). The rate of input made by children, partners or other family members was consistently higher in across rural firms, increasing for the most part with the degree of rurality.

In the CRC's Rural Insights Business Survey (CRC, 2007c) 21% of respondents had inherited or taken over the firm from a family member, a degree of family firms significantly higher than found in rural towns (10%) or urban areas (8%).

Figure 3.3.6
Household members and friends working in businesses, 2005



Source: Small Business Service, 2006. Household Survey of Entrepreneurship

Employment of groups in transition

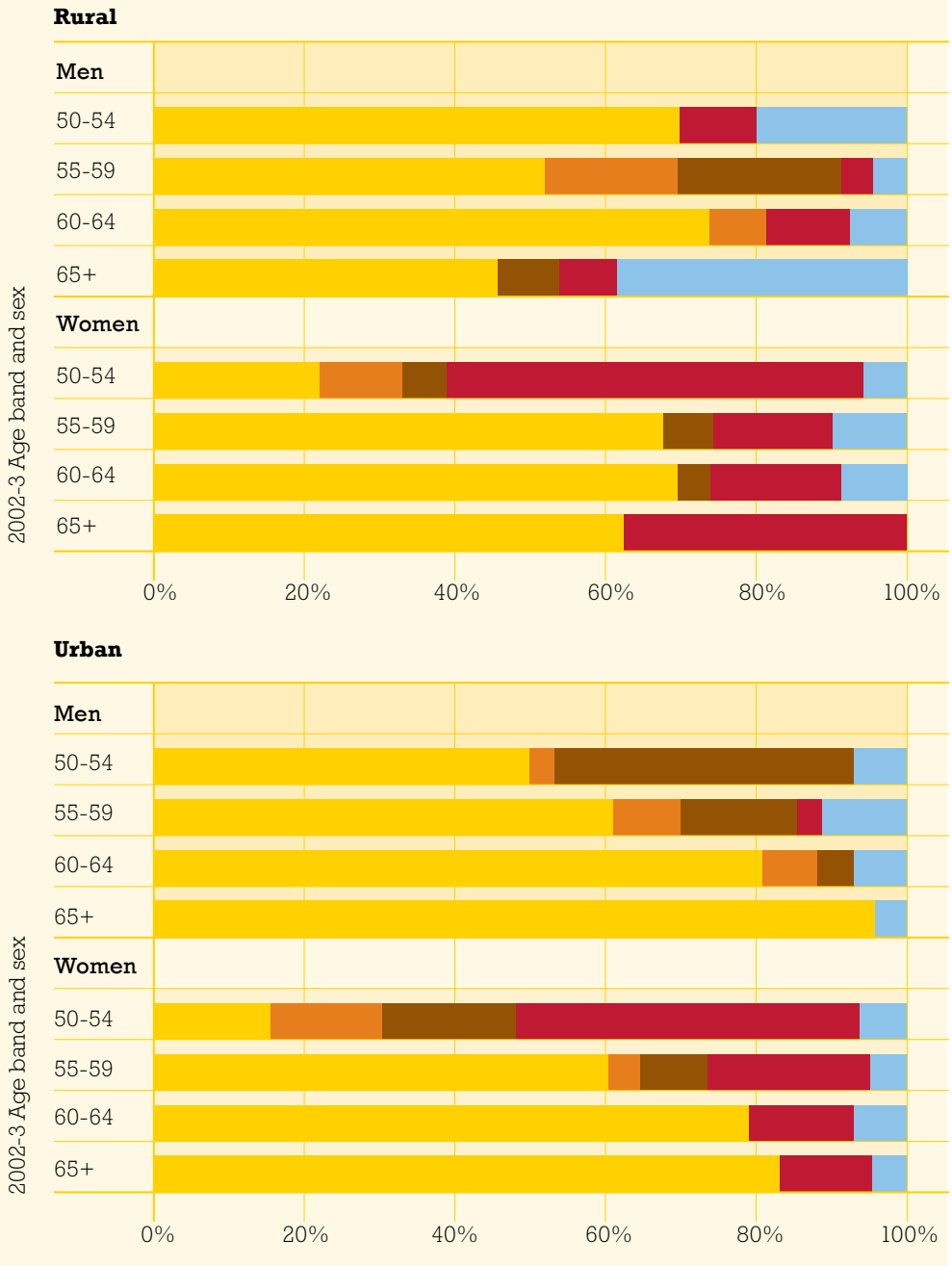
In the previous section we considered the income and expenditure patterns of older workers, as a group in transition. We extend this analysis here to show that for workers aged over 50, attachment to the labour market is influenced by individual wealth and health.

Analysis by the Rural Evidence Research Centre (ELSA, 2007) for this report, showed that by the time they reach state retirement age, a large proportion of rural men and women have left paid work. However, a higher proportion of rural men remain in work above retirement age. (7.2% in 2004/5 compared with 3.1% for urban).

However, some noticeable differences in the reasons for exit emerge. Not all of the men and women who have left the labour market in rural areas declare themselves as retired, indeed less than half of rural men over 65 state this to be the reason. (In urban areas over 95% of similarly aged men declare themselves as retired.)

As shown in Figure 3.3.7 a large proportion of women aged 50 to 54 in rural areas report that they left paid work to look after family or home. This is more substantial than exit from employment in urban areas. We suggest that it merits further attention by economic and social agencies. This profile of transitions from rural labour markets has implications for central and local government.

Figure 3.3.7
Activities of older residents exiting the labour market, 2002-3 to 2004-5



Note:
(i) Labour market exit flows are measured as those in paid work (employed or self-employed status) in Wave1 but not in Wave 2.

Source: English Longtitudinal Study of Ageing (ELSA) - Rural Labour Market Transitions analysed for CRC by RERC. Birbeck College, 2007

The ELSA analysis sets out two main influences on the scale and timing of labour market exits in rural areas.

- Rural men and women aged 55 to 59 in poor health appear to leave paid work at almost twice the rate of their equivalents in urban labour markets. This a potential issue for health authorities and welfare reform. Those with poor health are also more likely to exit paid work earlier than those in excellent health – but also to stay out of work beyond retirement age.
- Those aged 50 to 59 in wealthier groups are more likely to leave paid work than the poorest groups. Women generally have higher rates of exit than men. Rural and urban men and women in similar wealth quintiles have broadly similar rates of exit.

The growing message that people need to work longer in recognition of longer life expectancy or to make up for pension deficits is already a reality for many older people in rural England. Those who measure the health of local labour markets by using employment rates of working aged residents may wish to consider how to better record the scale and contribution made by older people to local economies.

3.3 Key summary points: Full and fulfilling employment

- More rural than urban local authorities report employment rates at or above the EU and UK government targets for 'full' employment (80%).
- Rural England offers high rates and diverse forms of employment and self-employment.
- Total employment has grown faster in rural areas, with strong growth especially in sparse rural town areas. There is some evidence however that much of this may be as sole traders or in very small firms, with a smaller average workforce per enterprise than in urban areas.
- Non-UK National Migrant workers have doubled across rural districts.
- Children and other family members working in family firms is a more prevalent feature in rural areas and may be a hidden form of employment.
- At the same time rural areas host large numbers of economically inactive residents, most of whom do not appear to want or be seeking employment. Rural areas are also characterised by large numbers of employees working part time by choice as opposed to necessity, and by many retiring before state retirement age.
- Most residents retire at around 60 to 65 and those who leave labour markets tend to be amongst the richest or poorest groups, in poor health, or do so to look after home and family. Nevertheless many rural residents older than state retirement age remain in employment.

See also (from the 2005 and 2006 reports):

Employment and unemployment

2006	Table 25	Employment pattern 2005
2006	Figure 49	Unemployment rate 1994-2005
2006	Figure 50	Economic inactivity rate 1994-2005
2006	Figure 53	Part-time employment 2004-5
2006	Figure 54	Percentage of part-time employed people preferring to stay part time
2006	Table 26	Distribution of jobs by sector 2004
2006	Figure 56	Distribution of Jobs Density by district classification 2000-4
2006	Figure 57	Jobs Density by district type by region 2000-4
2006	Figure 58	Changes in Jobs Density against regional averages
2006	Table 27	Regional rural/urban employment flows
2005	Table 4.7	Working age pop by economic status
2005	Figure 4.6	Unemployment rates 1995-2004
2005	Figure 4.7	Unemployment rates 2001
2005	Table 4.9	Economic activity over retirement age 2003
2005	Figure 4.10	Full time employees working over 49 hrs 2001
2005	Figure 4.11	Working at or from home 2001
2005	Table 4.10	Employment by Standard Industrial Classification 2001
2005	Table 4.11	Distribution of job types 2001
2005	Figure 4.5	Jobs Density across English regions

Self employment

2006	Figure 51	Self employment levels
2006	Figure 52	Percentage of self-employed people who would prefer to become employed
2005	Figure 4.9	Self employment 2001

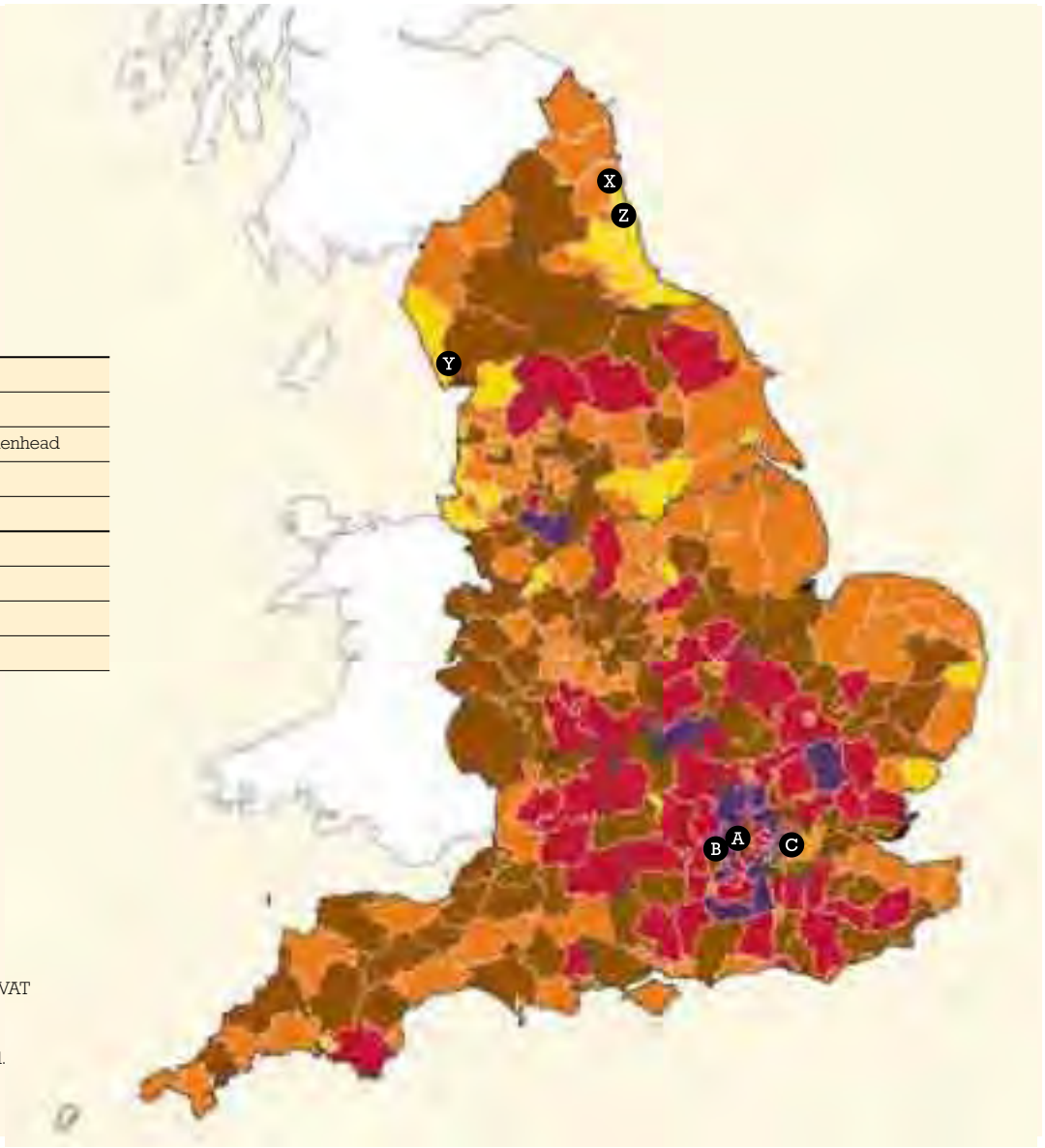
3.4 Enterprise and entrepreneurs in rural England

New enterprises

Government encourages and supports the creation of new businesses and business growth as a general aim of economic policy; particularly in specific locations such as disadvantaged areas and cities; amongst specific groups such as women, black and ethnic minority groups and young people; and particularly those which will yield employment and competitive advantage - for example in the knowledge industries or others with high growth potential.

One of the core performance measures is the change in the number of enterprises registered for VAT. It is argued that an area's or sector's competitiveness improves by increasing the numbers of new businesses, more than by retaining long surviving businesses with little competition from new entrants. Between 1995 and 2004 rural districts saw an increase of over 7% in the number of new businesses registering for VAT (or 37,000 per year). This was marginally higher than the rate of increase in urban or mixed authorities. At the same time the number of de-registrations (a proxy for closures) declined by 13.9%, more than the English and urban rate. When this data for local authorities is presented per 1,000 working age residents, a clear south and central England growth pattern is apparent (Figure 3.4.1).

Figure 3.4.1
VAT registrations per 1,000 people of working age, 2005



	Highest		
A	Rural	7.2	South Bucks
B	Mixed	6.2	Windsor and Maidenhead
C	Urban	161.5	City of London

	Lowest		
X	Rural	1.4	Wansbeck
Y	Mixed	1.5	Barrow-in-Furness
Z	Urban	1.4	South Tyneside

England Average = 4.4

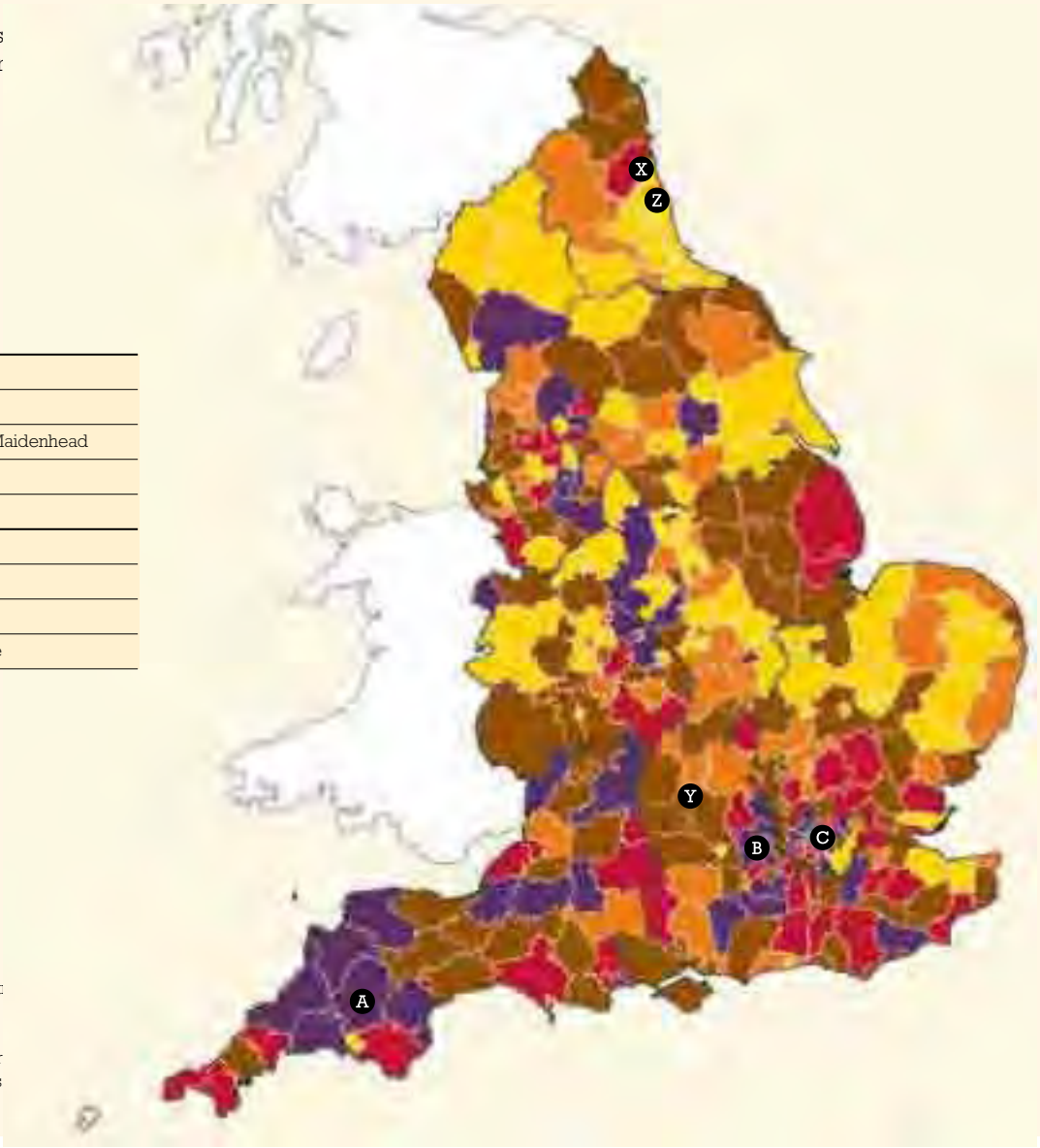
- < 2.0
- 2.1 – 3.0
- 3.1 – 4.0
- 4.1 – 5.0
- 5.1>
- Boundaries

Source: Small Business Services, 2006. VAT Registrations and De-registrations.

However, businesses may take some time after establishment to reach levels of turnover requiring registration for VAT, or employees who are registered for PAYE taxation. Thus, VAT registrations may under report business formation. As we have shown that rural areas may contain large proportions of sole traders, this characteristic may affect reporting new firm start-ups in rural areas.

The stock of businesses registered for VAT is currently estimated at around 1.7 million in the UK - the total business stock is just over 4.3 million, as many do not need to register for VAT due to their smaller scale. High street and mainstream clearing banks provide another source of information and a useful insight into business start-ups rates. In recent years they have been reporting the numbers of new and separate business accounts opened. In 2006 this data was published and made available to us by Barclays Bank for English local authority areas. Application of Defra's district classification to this data reveals a different geography to VAT registrations (Figure 3.4.2).

Figure 3.4.2
Barclays Bank start-up rates per thousand people of wor age, 2005



	Highest		
A	Rural	22	West Devon
B	Mixed	16	Windsor and Maidenhead
C	Urban	44	City of London

	Lowest		
X	Rural	4	Wansbeck
Y	Mixed	6	Oxford
Z	Urban	5	South Tyneside

England Average = 10

- < 7
- 8 – 9
- 10 – 11
- 12 – 13
- 14 >
- Boundaries

Source: Barclays Bank, 2007. Mainst Business Start-up Rates.

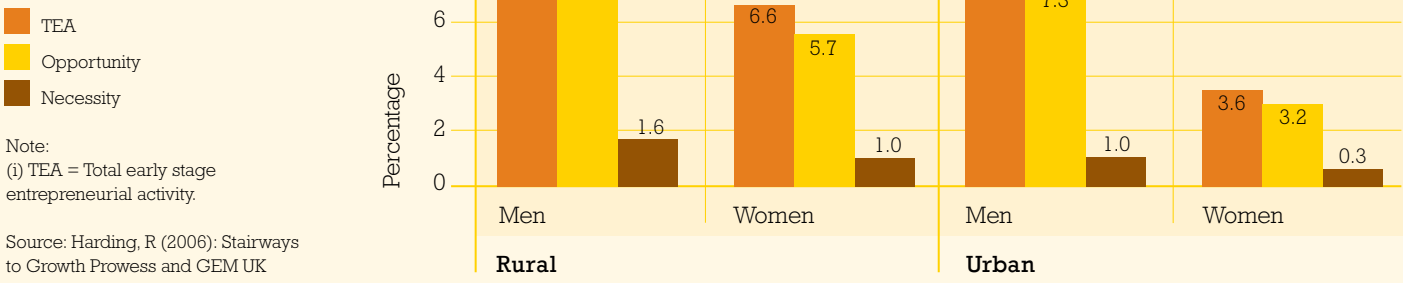
The Barclays Bank data shows a higher concentration of new firms in different areas to those in Figure 3.4.1,with a higher proportion in the South West and a lower proportion in the central south. Also, it shows very many more new business bank accounts than VAT registrations. The rates are roughly three times higher, implying that there are about three accounts opened for every VAT registration.

Who are the entrepreneurs – current and future?

The banks' records also show that an increasing proportion of new businesses are started by women, on their own or in association with others. In combination they concluded that women played a part in nearly one third of all new start-ups in 2005, a rate that rose to more than half in some rural areas such as Derbyshire Dales, Eden, South Lakeland and Forest of Dean (Barclays Bank, 2007). Such parity of business starts between men and women has been a goal of government in recent years and in 2003 a national strategy for women's enterprise (Strategic Framework for Women's Enterprise) (SBS, 2003) was agreed between many economic and business organisations and now provides one target for Business Link operators in most regions.

This higher rate of entrepreneurial activity amongst rural women is confirmed by a special survey of women entrepreneurship for the Global Entrepreneurship Monitor (Harding, R. 2006) (Figure 3.4.3). This records total early stage entrepreneurial activity (or TEA).

Figure 3.4.3
Early stage entrepreneurial activity, 2005



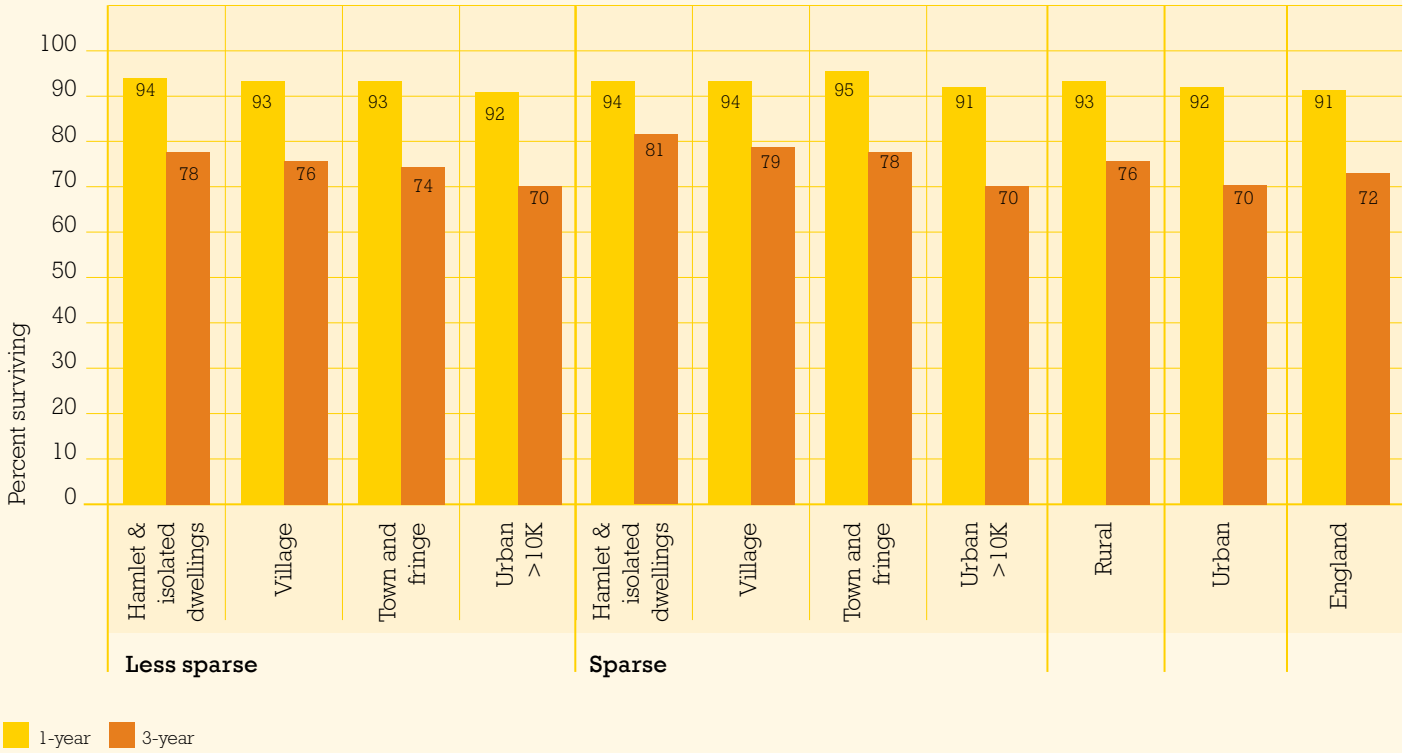
Note:
(i) TEA = Total early stage entrepreneurial activity.

Source: Harding, R (2006): Stairways to Growth Prowess and GEM UK

Survival, growth or stability

In recent years the DTI's Small Business Service have reported the survival rates of new businesses. The 2007 release by the SBS of 1 and 3 year survival rates was analysed for the first time by the degree of rurality. This shows that the rate of (3 year) survival is higher for businesses in smaller settlements and sparse areas. The overall one year survival rates for England and Wales in 2005 was around 92% (Figure 3.4.4).

Figure 3.4.4
One-year survival rates of enterprises registering in 2004 and three-year survival rates for those registering in 2002, England and Wales



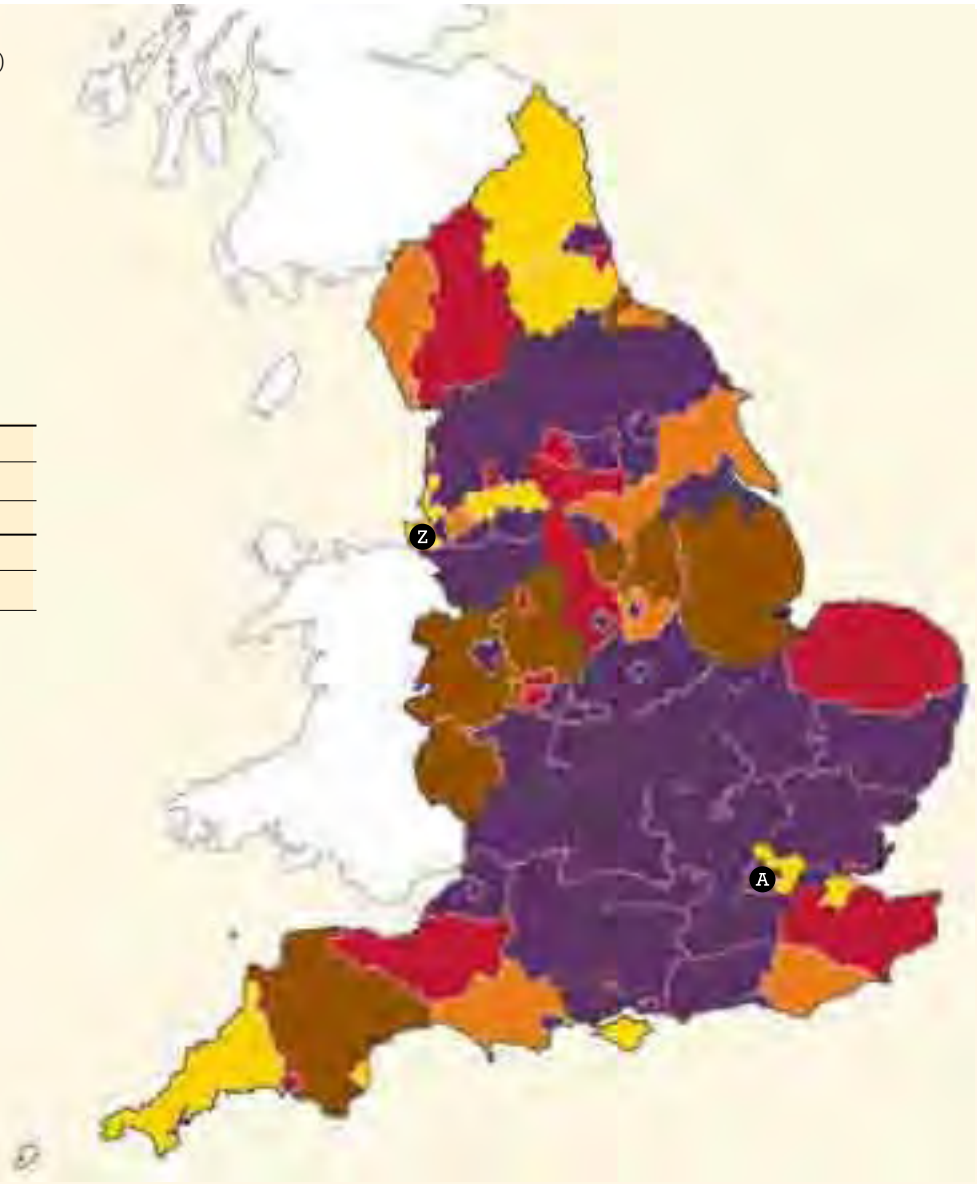
Source: Small Business Service, 2007.
Survival Rates of VAT-Registered Enterprises

Survival is a central aim and achievement for owners of most businesses, but prevailing economic thought raises the possibility that the high survival rates amongst firms in many parts of rural England results from a lack of competition or is indicative of a distinct sectoral mix. For example, the survival rates report (SBS, 2007) also identifies that the highest one-year survival rates are found in health and social work enterprises, which as we shall show below achieves relatively low levels of productivity. Agriculture, fishing and financial intermediation are most likely to still be registered after 3 years and these sectors are well represented in rural areas.

Revenue change in rural firms – growth and productivity

Alongside their aim of achieving full employment the UK Government also promotes an increase in productivity. This objective is set out for rural areas in Defra's Public Service Agreement (PSA) 4 which seeks to raise the productivity of the lowest performing rural districts to the English median. Little improvement had been recorded when we last reported on this in *State of the countryside 2006*. The mainstream productivity indicator for this is Gross Domestic Product (GDP) or Gross Value Added (GVA) per capita – a measure of output or value of output achieved by every employee. Unfortunately this measure is usually only calculated and presented for statistical units that are too large to allow a rural/urban breakdown. Figure 3.4.5 shows the spatial distribution of this measure and suggests that the lowest rates are in the more peripheral, often rural, economies.

Figure 3.4.5
Gross Value Added per head, 2004 (£)



	Highest	
A	£72,485	Inner London

	Lowest	
Z	£9,891	Wirral

England Average = £16,497

- < £11,499
- £11,500 – £12,499
- £12,500 – £13,499
- £13,500 – £14,499
- £14,500 >
- Boundaries

Note:
(i) This map is based on NUTS 3 areas.

Source: Office for National Statistics, 2007.
Regional Gross Value Added.

It is difficult to assess the data presented above to compare rural and urban districts. To obtain a better insight we have applied a method (used by Business Link) to calculate GVA from changes (sales/revenue) and the numbers and costs of employees.

Our analysis shows that over the three years to 2005, IDBR-registered enterprises with postcodes in less sparse urban areas achieved the largest increase in turnover, amounting to over £545 billion. This equates with growth of nearly 21% over this period. The greatest growth in percentage terms was achieved, however, by enterprises in sparse hamlets. This increase of £2.8 billion amounted to 83% growth. By 2005 firms with a head office in rural England realised £304 billion of turnover.

A wide range of turnover per employee is recorded across England as shown in Figure 3.4.6.

Figure 3.4.6
Highest and lowest percentage change in turnover per employee (£000's), 2003-5

Local Authority name	Local Authority classification	Turnover per employee 2003	Turnover per employee 2005	% change 2003-5
Top				
Islington	Major urban	208.1	795.2	282.1
South Derbyshire	Significant rural	89.4	327.2	266.0
Worthing	Large urban	37.5	119.3	218.3
Swindon	Other urban	166.6	335.8	101.6
Castle Morpeth	Rural 80	28.6	48.9	71.4
Dover	Rural 50	121.3	180.7	49.1
Bottom				
Portsmouth	Large urban	130.6	77.1	−40.9
Hackney	Major urban	183.1	108.0	−41.0
Peterborough	Other urban	357.1	122.6	−65.7
Calderdale	Significant rural	242.3	74.6	−69.2
Aylesbury Vale	Rural 50	275.7	71.2	−74.2
Penwith	Rural 80	312.2	57.9	−81.5

Source: Office for National Statistics, 2005, Inter Departmental Business Register

Data for turnover per employee, as a proxy productivity measure, establishes that extraction of petroleum, manufacture of coke, and financial intermediation excluding insurance, were the most productive sectors in rural and urban areas in 2005. Financial service industries are often perceived as an indicator of urban industry in much the same way that agriculture is viewed as a rural indicator. The English average revenue per employee in this sector was £2,120,000 in 2005 (Figure 3.4.7). Turnover per employee is highest and its growth is fastest in major and large urban local authority areas. Nevertheless, even in Rural 50 districts - the only other category where revenue per employee has grown in recent years - each employee generated an average of £418,000.

This picture is in stark contrast with the more substantial employing and business sectors of rural England. The four least productive sectors by this proxy are industries with large numbers of employees and businesses in rural communities – hotels, education, health and social work, and public administration. Taken together the three public services sectors employed 1.3 million people of the rural workforce and 1.9 million in mixed areas in 2006. These sectors are substantially, though not entirely, dependent on public funds – for example private dentists, hospitals, schools, colleges and training companies aren't.

Whilst the average revenue per rural employee in the best performing sectors achieved six figure sums, hotels earned just £44,000 per employee. Nevertheless this was close to £4,000 per employee, higher than for urban hotels – and in Rural 50 districts, hotels' business earnings per employee increased by 23% in the three years. So our analysis confirms growth in rural areas, even amongst the business sectors with the lowest level of output per employee.

Forty percent of rural and urban firms interviewed for the CRC Rural Insights Business Survey in 2007 (CRC, 2007c) had increased turnover in the last 12 months, almost double the rate that had experienced decline. An average 46% of such firms expected to increase revenue in the next 12 months.

Figure 3.4.7
Local authorities where the turr
per employee in the financial se
greater than £1 million, 2005

Definitions

- Rural 80
- Rural 50
- Significant Rural
- Urban
- Boundaries

Source: Office for National Statistics, 200
Inter Departmental Business Register.

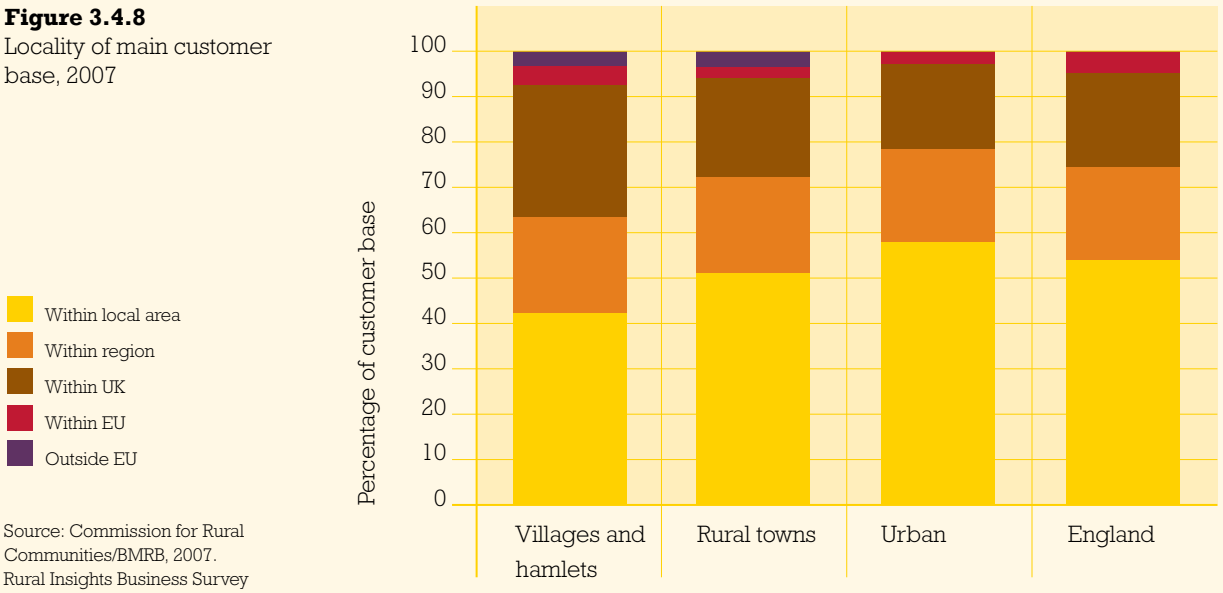
In the Annual Survey of Small Businesses (SBS, 2006) growth aspirations and experience were measured by change in employment. Business owners in the smallest settlements had the highest growth aspirations for the following two to three years, with almost three in four (73%) saying that they aim to grow, a contrast to those in rural towns where growth aspirations fell to 64%. However, over the previous 12 months only one quarter had actually increased employment, with such growth most likely in urban and rural villages.

Rural to urban markets. Linked enterprises across rural and urban geography

The application of the rural/urban definition and Defra classification allows differences in economic activity to be identified and analysed. However many forms of economic activity are not organised and contained within geographical categories. In this section we show the degree of linkages and interdependencies of enterprises between rural and urban areas. This is one of the many linkages that should encourage city decision makers to engage, embrace and support the rural economies that surround their cities and make City Region strategies and investment plans truly city regional.

In the Rural Insights Business Survey 2007 (CRC, 2007c) respondents were asked to define the location of their main customer, supplier and employee base (Figure 3.4.8). The resulting picture showed that firms in villages and hamlets secured less than half of their custom locally compared with nearly 60% in urban areas. Regional and national markets and suppliers play a more significant role for village businesses than do local markets and suppliers.

Figure 3.4.8
Locality of main customer base, 2007



Source: Commission for Rural Communities/BMRB, 2007. Rural Insights Business Survey

Detailed analysis of the location of firms in the IDBR (ONS, 2006a) now reveals that a considerable proportion have enterprise or head offices in one geographical category and local units in another. Of the 1.6 million enterprises in England, almost 52,000 had more than one local site or unit (Figure 3.4.9). Of the 2 million local units, 298,000 were located in both rural and urban areas. Rural firms had fewer local sites on average than urban firms (Figure 3.4.10) but the extent of multiple/cross-geography trading is immediately apparent.

Figure 3.4.9
Enterprise and local units for firms recorded in IDBR 2005 (firms registered for VAT and/or PAYE)

Enterprise location		Numbers of enterprises	Local units location			
			Rural	Both	Urban	Total
Single Local Unit	Rural	433,809	433,809	-	-	433,809
	Urban	1,097,002	-	-	1,097,002	1,097,002
	England	1,530,811	433,809	-	1,097,002	1,530,811
Multiple Units	Rural	3,959	9,116	-	-	9,116
	Rural	4,511	-	29,433	-	29,433
	Rural	741	-	-	2,286	2,286
	Urban	33,508	-	-	122,859	122,859
	Urban	8,839	-	268,721	-	268,721
	Urban	191	422	-	-	422
	England	51,749	9,538	298,154	125,145	432,837
Total		1,582,560	443,347	298,154	1,222,147	1,963,648

Source: Office for National Statistics, 2005. Inter Departmental Business Register

Figure 3.4.10
Mean local units per enterprise, 2005

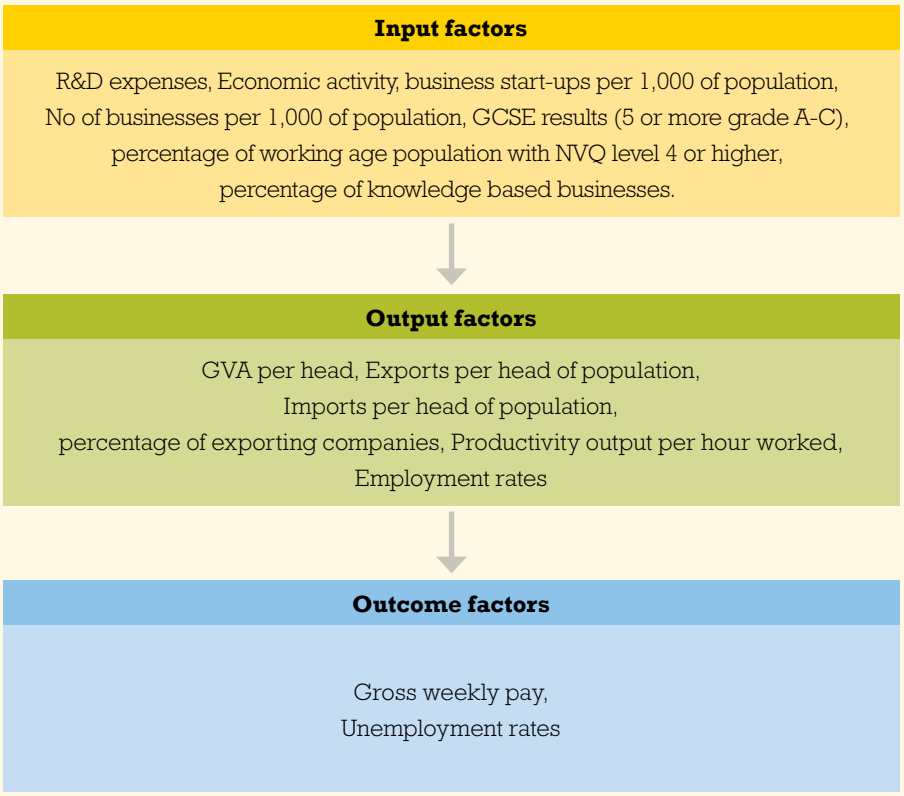
Location of enterprises/ local unit	Mean local units per enterprise
Rural/ Rural	2.3
Rural/ Both	6.5
Rural/ Urban	3.1
Urban/ Rural	2.2
Urban/ Both	30.4
Urban/ Urban	3.7

Office for National Statistics, 2005.
Inter Departmental Business Register

An index of competitiveness

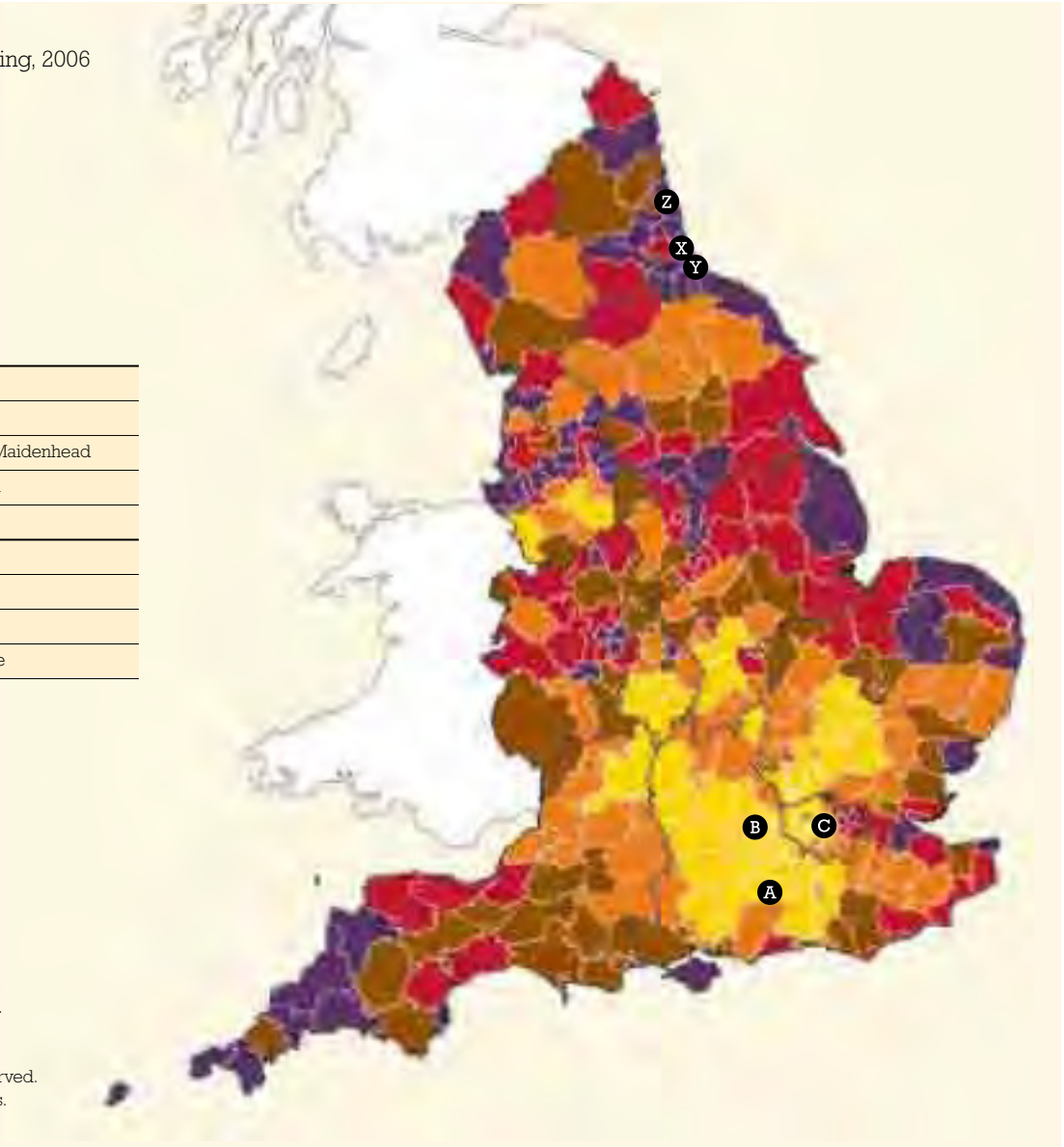
Robert Huggins at the University of Sheffield (Work Foundation and Robert Huggins Associates, 2006) has analysed performance against many economic indicators. The method of calculation is shown in Figure 3.4.11. The resulting Index of Competitiveness was reported at and above local authority levels (Figure 3.4.12). This allows Defra's rural/urban classification to be applied and enables strengths and weaknesses to be identified and comparisons to be made within rural economies and between rural and urban economies. Indicators are gathered by inputs (to achieve competitiveness), outputs and outcomes.

Figure 3.4.11
Competitiveness Index flow diagram, 2006



Source: R. Huggins and J. Day. UK Competitiveness Index

Figure 3.4.12
Competitiveness Index ranking, 2006



	Highest		
A	Rural	23	Waverley
B	Mixed	6	Windsor and Maidenhead
C	Urban	1	City of London

	Lowest		
X	Rural	354	Easington
Y	Mixed	351	Hartlepool
Z	Urban	352	South Tyneside

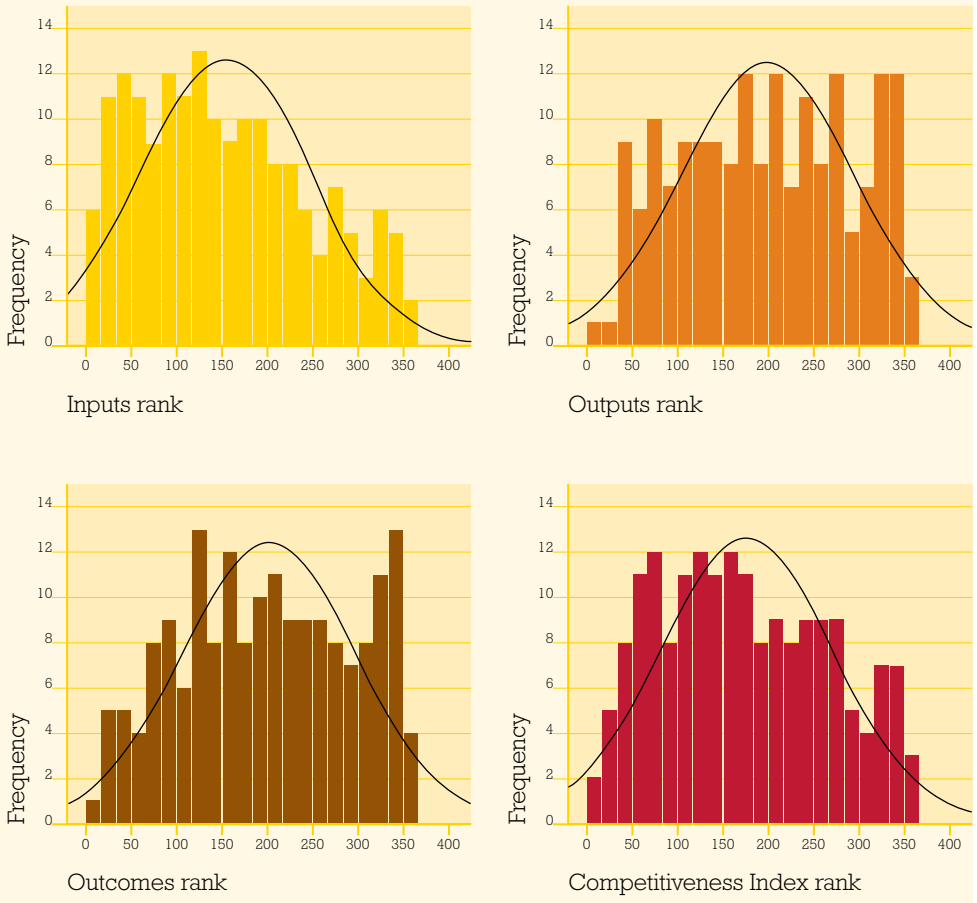
1 – 68
69 – 139
140 – 212
213 – 281
282 – 354
Boundaries

Source: R. Huggins and J. Day, 2006.
UK Competitiveness Index.

By ranking all local authorities we are able to show how competitive rural economies are. The lower numbers represent the better perfomers. The Competitiveness Index shows that rural districts are fairly well distributed with few authority areas being amongst the country's most competitive areas, but with only slightly more amongst the least competitive districts in England. Figure 3.4.12 confirms, perhaps unsurprisingly, that these lowest ranked rural authorities are located in England's periphery.

The breakdown of local authority ranking within this Index of Competitiveness to its constituent parts – inputs, outputs and outcomes – detailed in Figure 3.4.13, however, shows that rural authorities' performance is weaker in the outcome characteristics that matter to rural consumers – pay and levels of unemployment rather than in performance within firms.

Figure 3.4.13
Competitiveness Index in rural areas, 2006



Notes:
(i) In the above graph all rural local authorities have been ranked to indicate their performance on the Index of Competitiveness and its constituent parts (see Figure 3.4.12) The lower the number on the ranking indices, the higher the rank and the better the performance. The larger numbers identify lower ranking and the worse perfomance. Local authorities have been grouped by their ranks. The frequency axis shows the number of local authorities that meet the ranking shown on the bottom axis. Thus 29 rural local authorities are ranked in the top 50 for Inputs to competitiveness.

(ii) The distribution curve in each graph hints at the overall performance and the spread of scores. The skew to the left or higher ranks on both the Overall Index of Competitiveness and the Input measures and the shorter tail confirming greater signs of health in rural local authorities on these measures, than the skew to the right or lower ranks and longer tail on the Output and Outcome measures.

Source: R. Huggins and J. Day, 2006. UK Competitiveness Index

3.4 Key summary points: Enterprise and entrepreneurs in rural England

- England's peripheral areas appear to report the lowest rates of new business formation. However, this is partly the product of the indicator chosen. Use of records of new business accounts opened in mainstream clearing banks suggests greater entrepreneurial activity in rural than in urban areas and describe a different pattern and scale of formation from VAT registrations.
- Entrepreneurial activity amongst rural women and older people is higher than in urban areas.
- Rural firms have been growing in employment, turnover and new products at least as well as urban firms and their owners aspire more strongly than their urban counterparts to grow.
- Large numbers of employees in rural areas work in the lowest productivity business sectors. Local area productivity may reflect more on the sector composition of local labour markets than on weaknesses in other drivers of productivity.
- Rural businesses are more likely to have regional, national and international markets than urban businesses.
- Enterprises should not be seen as operating only in one part of the rural/urban continuum. For many they operate in several.
- There is evidence that rural areas in the centre and south are amoung the most competitive in England, but other rural areas lag behind.

See also (from the 2005 and 2006 reports):

Businesses

2006	Table 28	Business stock 2005 (by rural district type)
2006	Figure 61	Profile of the business stock across sectors 2004
2006	Figure 62	Map of changes in rural business stock, 1994-2004 (map)
2006	Figure 63	Map of changes in rural business stock against regional averages, 1994-2004 (map)
2006	Table 29	% changes in the business stock 1994-2005 (by rural district type)
2006	Figure 64	Net changes in the business stock 1994-2005
2006	Figure 65	Change in National Insurance registrations by non-UK nationals 2002/3 to 2004/5
2005	Table 2.12	Business stock
2005	Figure 4.12	Businesses per 10,000 people 2003
2005	Figure 4.13	VAT registrations 2000-3
2005	Figure 4.14	VAT deregistrations 2000-3
2005	Table 4.12	Change in stock of businesses by Standaard Industrial Classification 1994-2003

Lagging areas

2006	Figure 66	Public Service Agreement (PSA) districts (map)
2006	Figure 67	Productivity of PSA districts 1999/2000 to 2003/4
2005	Figure 4.15	PSA indicator districts (map)

City regions

2006	Figure 59	English city regions (map)
2006	Figure 60	Occupational breakdown (SEG) by city region nature

3.5 Conclusions

England's rural areas host diverse and dynamic economies. These are economies with considerable flows and linkages of people as household members, as employees and of businesses. For many people, economic activities vary over their lifetime and rural residents' engagement with their place of work carries on longer than simply up to state retirement age. This is one of several instances in which the adequacy and appropriateness of traditional and mainstream economic indicators fails to capture the vibrancy and challenges of rural economies. Economic wellbeing which recognises the links between employee decisions and business performance on the one hand and other influences on the quality of consumers' lives on the other, requires a new set of performance measures and indicators if policy is to target effectively.

Using mainstream indicators, many rural economies have achieved rates of income, employment, enterprise and productivity that are amongst England's best and compare well with government targets. But some groups, localities and components of economic wellbeing show signs of weakness and are in need of attention.

This chapter has shown that traditional indicators of economic performance do not reflect many of the more complex aspects of rural economies that result from the geography of rural areas, from the nature of rural businesses and factors such as the large proportion of rural residents who live in one area, but work in another.

4 Land and environment

4.1 Introduction

This chapter explores the quality of the environment in broad terms of air and water quality, biodiversity and new measures such as 'tranquillity'. It also examines the nature of land use in rural areas and new pressures from waste and energy uses.

The land in its broadest sense of soil, landscape, water, forests and wildlife provides the natural resource base on which rural communities depend. It provides economically valuable products and services for both rural and urban communities such as: water resources, food, timber, game, and provision of space for recreation. It also provides vital environmental functions such as waste assimilation, flood mitigation, and carbon sequestration at scales from local to global. The pattern of land use and management practices affects the availability of environmental services, the quality of some of these resources, and the aesthetic aspects of the landscape.

The chapter describes current land use and management practices, indicates patterns of change, and analyses some of the consequences for a range of environmental goods and services.
The chapter is divided into four parts:

4.2 Land use
The pressures for change of land use, such as new housing and the price differential for agricultural and development land.

4.3 The value of the land
Resource flows and outputs, and the demands of society for multi-functional land use focusing on food production, the recent emphasis on energy production, water supply, forest and wildlife resources, recreational value, and land used for deposition of waste.

4.4 Environmental quality
Looking at a range of indicators such as water and air quality, biodiversity and countryside character.

4.5 Climate change
The rural contribution to climate change, and climate change effects on rural areas.

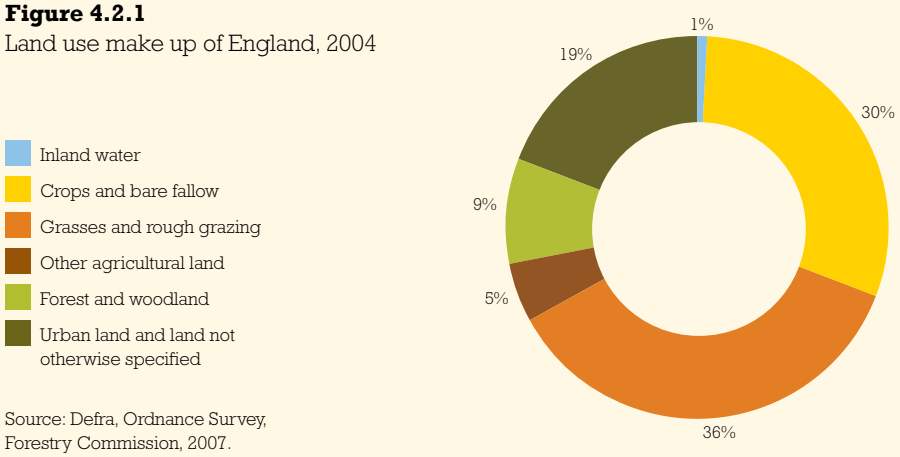
4.2 Land use

This section describes in general terms how land is used in England. It looks at overall statistics of land use before discussing the development of land, agricultural land, and finally woodland and forestry.

Land use make up

At a basic level, 19% of England is classed as 'urban' or 'built-up' (Figure 4.2.1) while 71% is agricultural and 9% forest and woodland. But this simple chart hides differences of use within these categories and differences in intensity of use across the country.

Figure 4.2.1
Land use make up of England, 2004

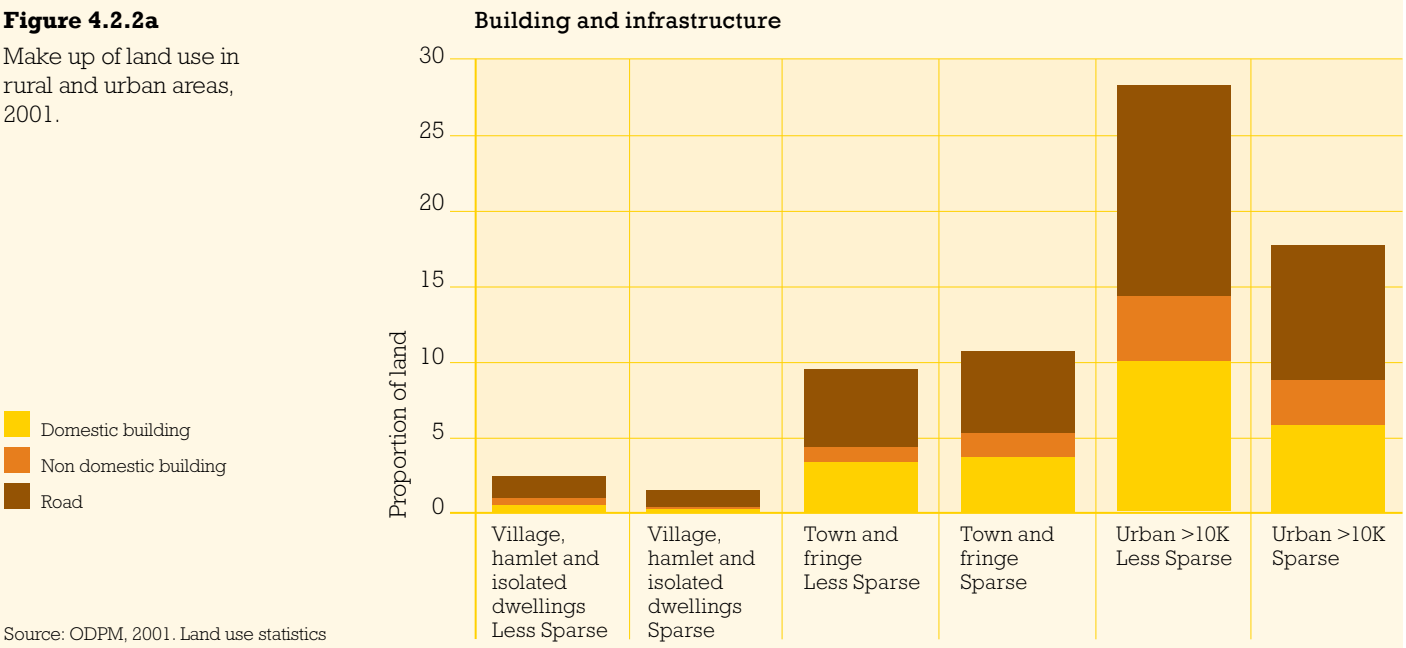


Source: Defra, Ordnance Survey, Forestry Commission, 2007.

Development pressures continue to affect land use in some rural areas although, as would be expected, the proportion of land that is used for buildings is much higher in urban than rural areas (see Figure 4.4.2) More surprisingly, over 60% of land in the less sparse urban areas is not built on. Not surprising is the higher proportion of land in small towns and rural areas that is not built on. In urban areas a high proportion of this land can be attributed to gardens, though even here other greenspace takes up a larger area.

Figure 4.2.2a

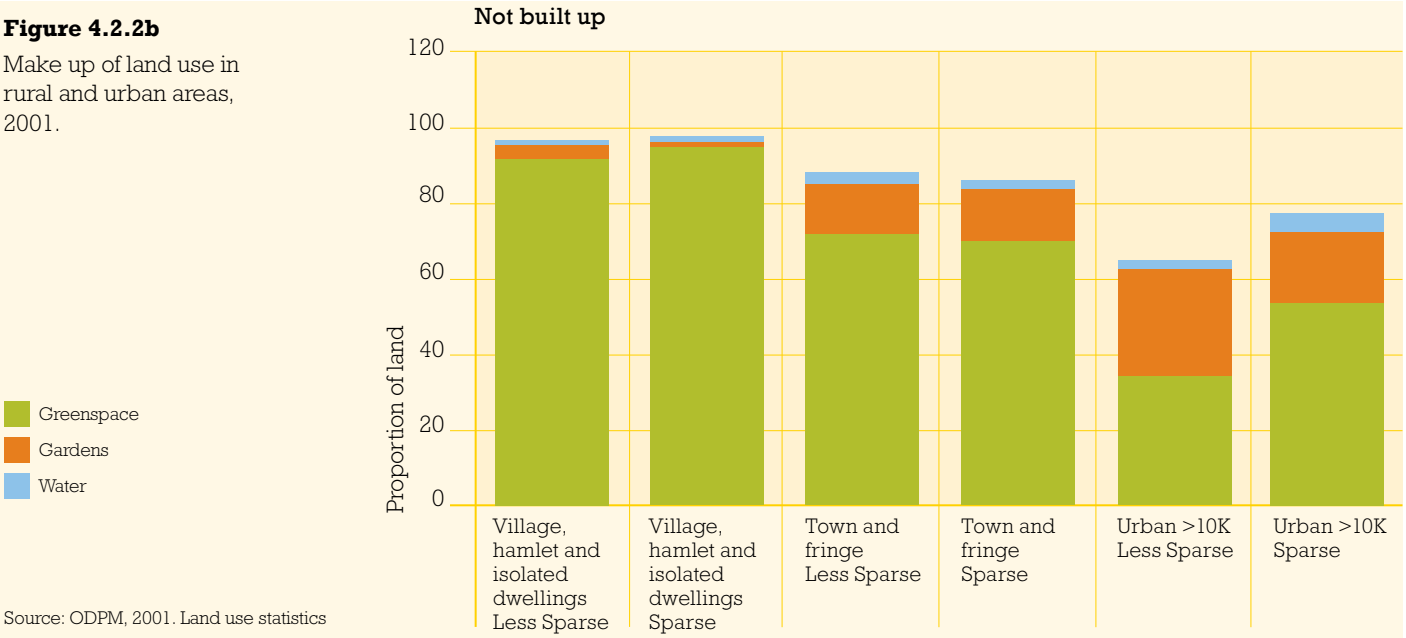
Make up of land use in rural and urban areas, 2001.



Source: ODPM, 2001. Land use statistics

Figure 4.2.2b

Make up of land use in rural and urban areas, 2001.

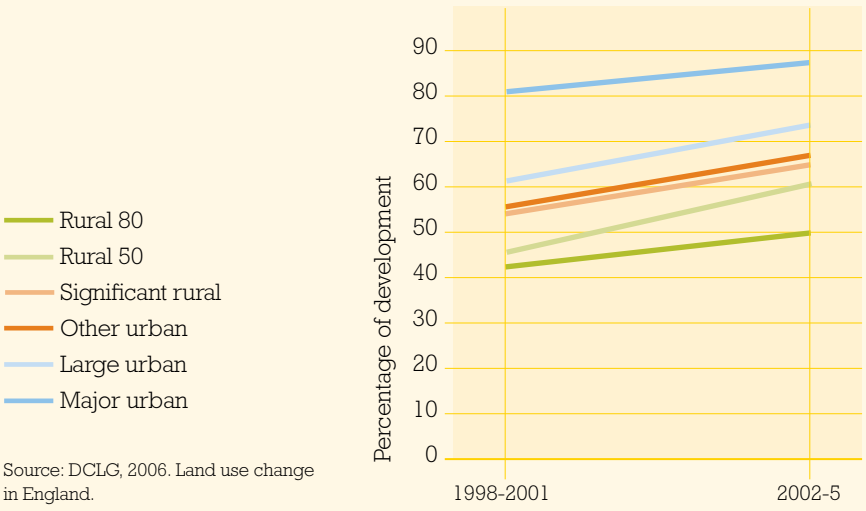


Source: ODPM, 2001. Land use statistics

Building development

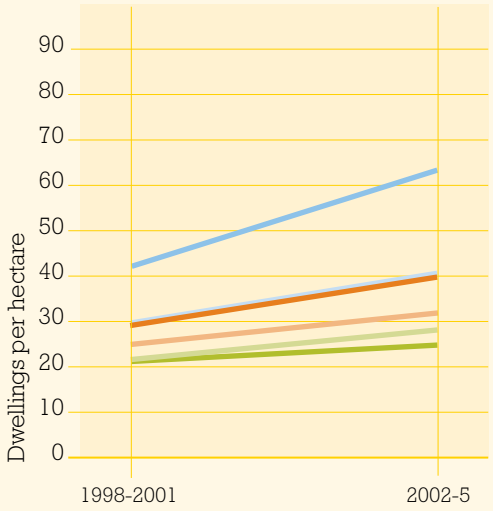
Figures 4.2.3 and 4.2.4 indicate the proportion of new development that is being built on previously developed land and the density of housing in rural and urban areas. All areas including rural areas show an increase in the proportion of new development on previously developed land in the period 2002-5 compared to the period 1998-2001. In addition, all areas indicate an increase in the density of housing in new developments over the same period. The change in rural areas is not as marked as in urban land but does indicate an upward trend.

Figure 4.2.3
Development on previously developed land, 1998-2001 and 2002-5



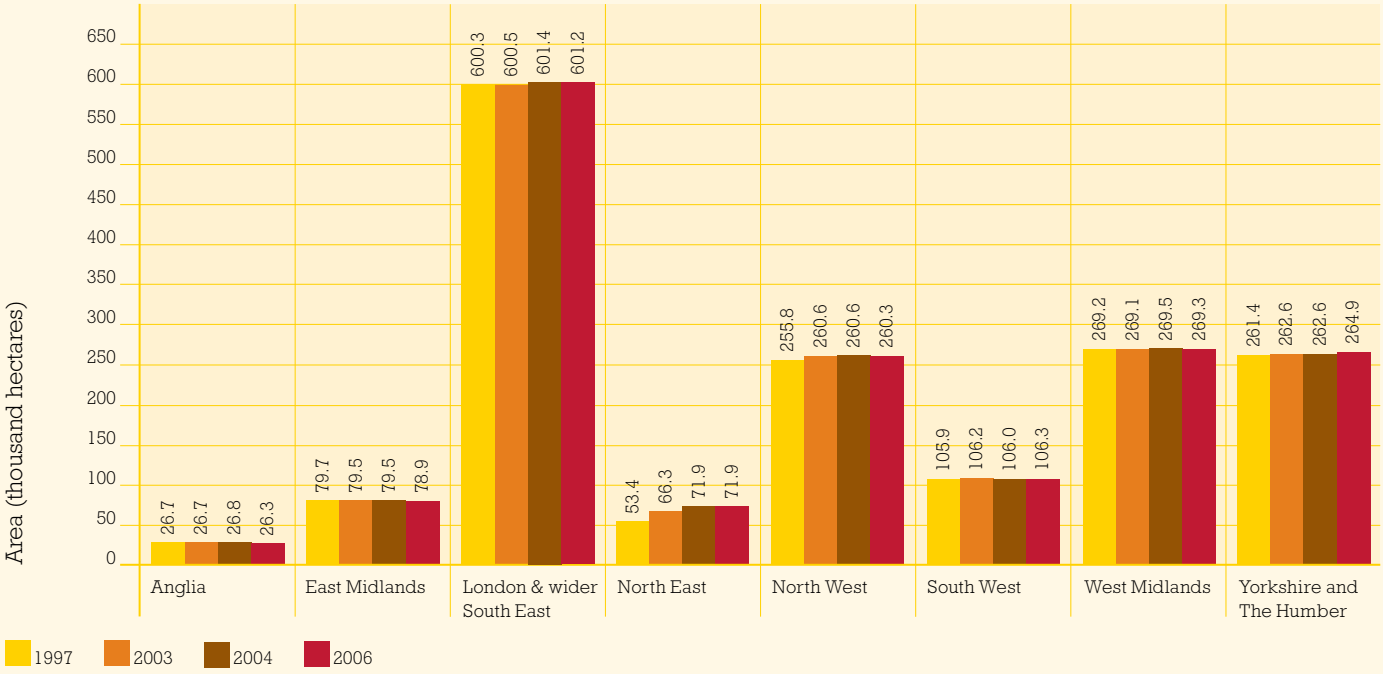
Source: DCLG, 2006. Land use change in England.

Figure 4.2.4
Density of new dwellings, 1998-2001 and 2002-5



Development pressures continue to affect the area of green belt land. The national picture shows that the total area of designated green belt land has increased by 900 hectares (ha) over the two-year period from 2004 to 2006. The largest single change in green belt occurred in the South East region with the creation of the New Forest National Park, re-designating 47,300 ha of green belt land as National Park (Figure 4.2.5). Elsewhere, only the South West and Yorkshire and The Humber regions showed an increase in green belt land while all other regions showed a slight decrease.

Figure 4.2.5
Area of designated Green Belt land by region[1], 1997, 2003, 2004 and 2006



[1] Information is not presented by the standard Government Office Regions. Green Belt may cover several regions, for example, the Green Belt for London straddles the London, East of England and South East regional boundaries.

Note:
(i) The New Forest National Park was created in March 2005 and redesignated 47,300 hectares of Green Belt. As a result, actual net change in designated Green Belt in London and the wider South East between 2004 and 2006 was a reduction of 46,434 hectares. As national park status provides the highest level of landscape protection our analysis has not shown this as a reduction in Green Belt.

Source: DCLG, 2006. Local planning authority Green Belt statistics.

Rural land is also protected through a variety of designations. Figure 4.2.6 illustrates the area of various land designations in England. The creation of the New Forest National Park has brought national park designation to the south of England for the first time suggesting that land designation can work even in the more densely populated and heavily used areas of the country. A total of 8.1% of England is now designated as National Park, and an additional 15.7% as Areas of Outstanding Natural Beauty. Other key forms of recognition and protection (not shown in Figure 4.2.6) are Special Areas of Conservation (SAC) and Special Protection Areas (SPA), which both identify areas of European ecological importance.

Figure 4.2.6
Designated land as a percentage of total land area, 2005

Notes:
(i) It is possible for an area to be part of more than one of these designations.
(ii) Area measurement figures are derived from the GIS data capture carried out by RDS Defra on behalf of the Countryside Agency in 2002. These figures may vary from those previously published by the Countryside Agency, and may be subject to further adjustments as a result of the checking and verifying of the boundary capture.

Source: Countryside Agency, 2005.

Designation	As % of England
Areas of Outstanding Natural Beauty	15.7
Environmentally Sensitive Areas	9.0
Sites of Special Scientific Interest	8.2
National Parks	8.1
Community Forests	3.9
Ramsar Sites	2.9
Proposed National Parks	1.3
Heritage Coasts	1.3
National Nature Reserves	0.7
World Heritage Sites	0.5

Agriculture and forestry

Agriculture continues to be very important in terms of the share of land use, and in affecting the appearance and character of the landscape in rural areas. The shift from grants for food production to grants for land stewardship will have major impacts on the way land is used, and thus on landscape character, although unlike infrastructure development these changes are often reversible. Farming is changing rapidly – a significant area of land is being bought by non-farming interests (for housing and development, but also 'agri-business') and organic farming continues to expand. Changes in policy may bring about rapid alterations in agricultural land use and two factors may have some longer term impacts for land management: incomes for farmers can be low (and fluctuating),and the average age of farmers (especially for small farms) is getting older.

In 2006, agriculture accounted for nearly three-quarters of England's land area. There are roughly equal areas of cropland and grassland although holdings with grassland tend to be smaller and more numerous, and the amount of cropping area has been declining while the hectarage of grassland has grown (Figure 4.2.7).

Figure 4.2.7
Farmland use, 2004-6

[1] Total crops excludes crops grown on Set–Aside Scheme land
[2] Since 2005 land voluntarily taken out of production is included in this category, not in the set–aside estimate so it is not appropriate to compare these figures with the 2004 figure
[3] For 2005 and 2006, this figure is sourced from the RPA payments data not the June survey and only includes compulsory set–aside

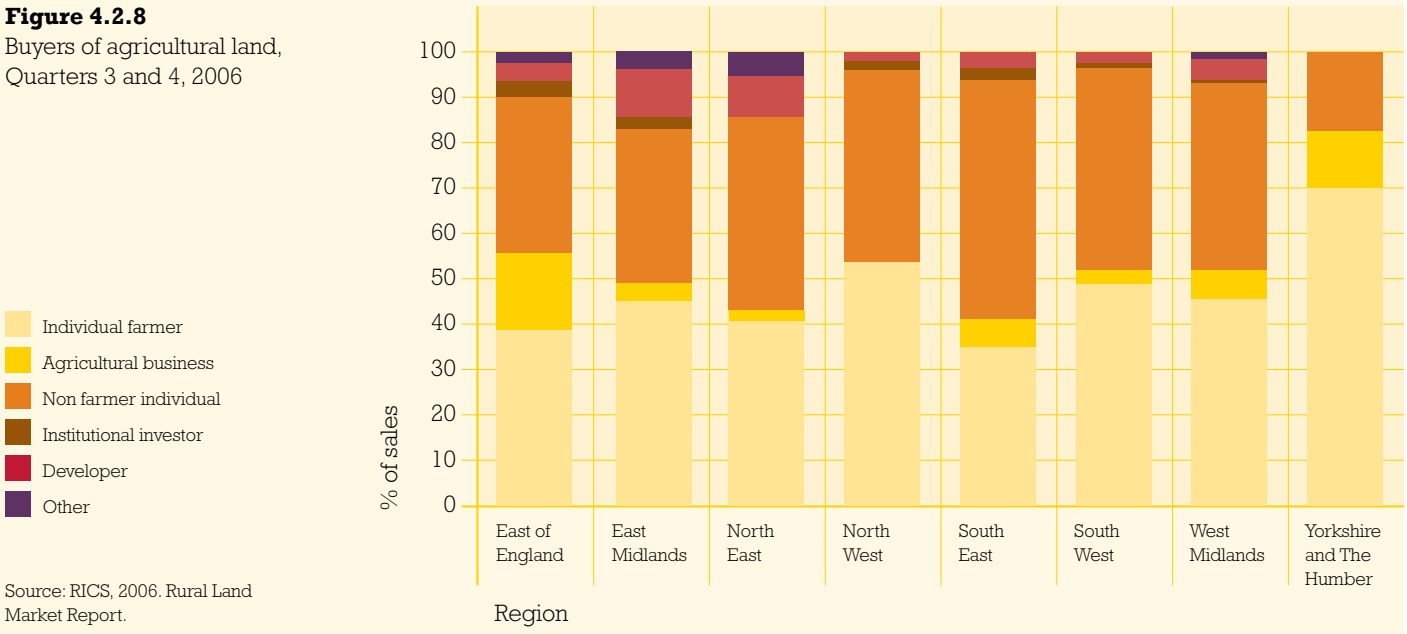
Source: Defra, 2004, 2005 and 2006. June Agricultural Surveys.

Crop Type	Hectares		
	2004	2005	2006
Total crops [1]	3,911,468	3,795,309	3,711,162
Total grassland	3,685,285	3,760,869	3,919,877
Sole right rough grazing	643,406	642,217	669,819
Total bare fallow [2]	19,931	162,984	206,830
Total set aside [3]	476,423	439,363	363,276
Total woodland	274,023	291,662	296,000
All other land	156,278	185,971	161,609
Total area	9,166,815	9,278,375	9,328,573

Changes in farmland

Demand to purchase farmland for both residential and non-residential use has been rising since 2004-5 after a period of decline that started in the late 1990s. Sales of farmland show a steady increase from 2004 to the present. Demand is driven by both non-farming 'lifestyle' buyers, and in the farming sector by increased commodity prices and farmers seeking to expand production. Data from the Royal Institution of Chartered Surveyors (Figure 4.2.8) for Great Britain indicate nearly half (47%) of all purchasers of farmland are existing farmers and 38% are non-farmers, although this proportion rises to 52% in the South East region and 44% in the South West. The trend is for a smaller number of larger farms, and for former agricultural buildings to be separated from farm land for residential use.

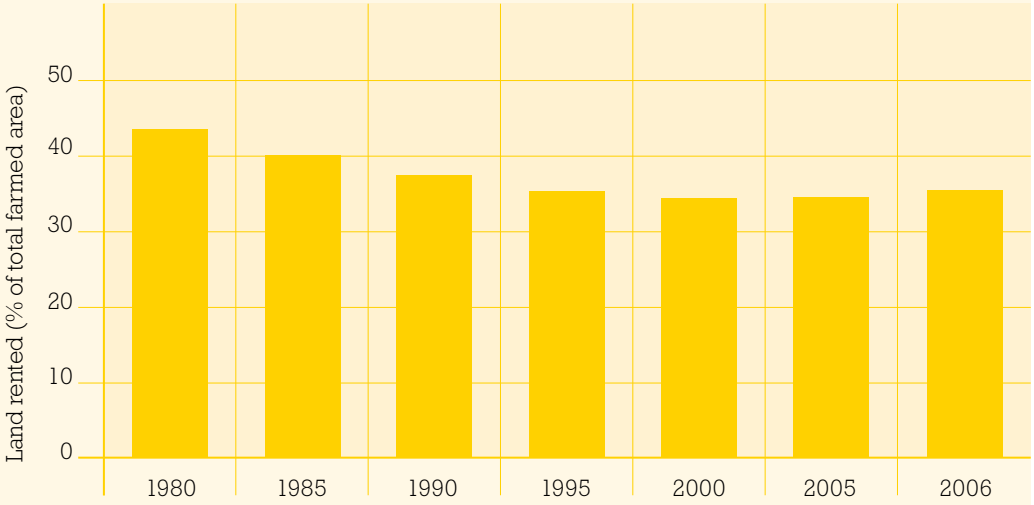
Figure 4.2.8
Buyers of agricultural land, Quarters 3 and 4, 2006



Source: RICS, 2006. Rural Land Market Report.

At the same time the proportion of total farmland that is tenanted remains roughly stable, with a small rise between 2005 and 2006, at about 35% of total farmland, following a decline between 1980 and 1995 (Figure 4.2.9).

Figure 4.2.9
Trends in the area of tenanted land, 1980-2006



Note:
(i) Data for 1985 projected from 1980 and 1990.

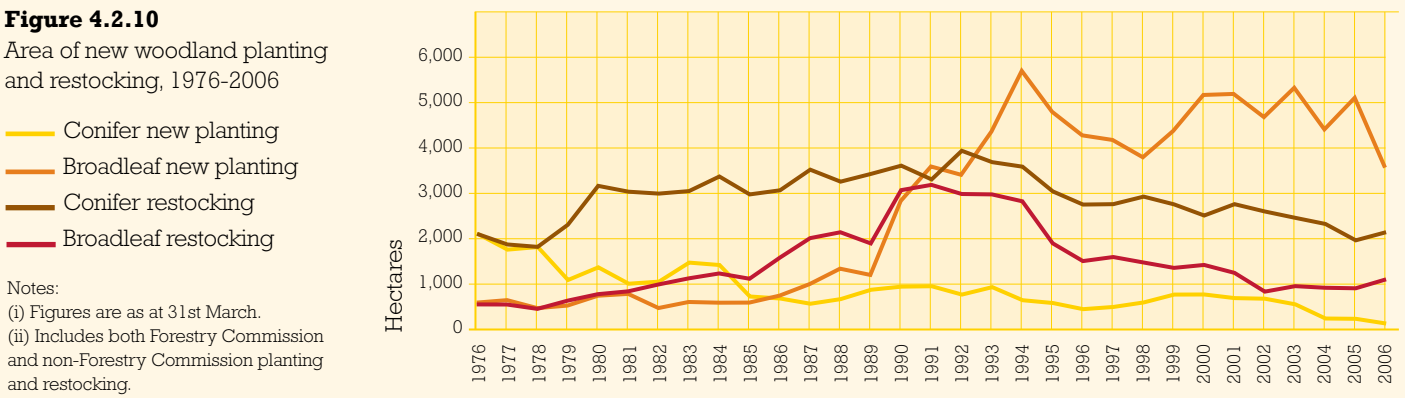
Source: Defra, 1980, 1990, 1995, 2000, 2005 and 2006.
June Agricultural Survey

Woodland and forestry

Woodland and forested areas of the UK have steadily increased since the 1940s and there are now 1.1 million ha of woodland (or 9% of all land). In England 754,000 ha (67%) is made up of broadleaved species (Forestry Commission, 2006). The vast majority of broadleaved woodland is in the private sector, while three quarters of the Forestry Commission estate is under conifers.

New planting since 2001 has declined across Great Britain. In England there has been a significant reduction in the annual area of Forestry Commission planting (66%), and in the private sector a 25% reduction in annual area planted over the period 2002-6. Re-stocking of areas is more stable and currently amounts to around 3,000 ha per annum. New planting on the Forestry Commission estate continues to emphasise coniferous species (1,903 ha compared to 658 ha of broadleaves). In the private sector, planting through grant schemes is heavily weighted towards broadleaved species (3,265 ha). Overall in England the area of broadleaved planting is nearly double that of conifers for the year ending March 2006 although the area planted varies considerably from year to year. Figure 4.2.10 may underestimate the total area of broadleaves as natural regeneration (as opposed to direct planting) is increasing in areas where woodland is not clear-felled.

Figure 4.2.10
Area of new woodland planting and restocking, 1976-2006



Notes:
(i) Figures are as at 31st March.
(ii) Includes both Forestry Commission and non-Forestry Commission planting and restocking.

Source: Forestry Commission, 2006.
Woodland area, planting and restocking.

4.2 **Key summary points: Land use**

- The majority of the land area continues to be farmed contributing to landscape character and management of rural areas but a range of external pressures continue to affect agriculture and land use in England.
- Non-agricultural purchasers of land support the growth in agricultural land values for both residential and non-residential purposes.
- A significant proportion of the land area receives some form of protection through designation. Recent designation of the New Forest as a National Park illustrates high levels of protection can be achieved, even in the crowded southern part of England.
- Housing density for new build is rising and more are being built on brown field sites.

See also (from 2005 and 2006 reports):

Land use

2005	Table 2.14	Specific institutional land holdings in England
2006	Table 36	Extent of protected landscape designations
2006	Figure 90	Location of protected landscape designations (map)
2005	Figure 2.8	Countryside Agency countryside and coastal designations (map)
2005	Table 2.16	areas of registered common land and open country

Agricultural land use

2006	Table 30	Agricultural land use in England 2005
2006	Figure 68	Proportions of land area registered for agricultural subsidy 2004 (map)
2006	Figure 69	Relative importance of grassland in agricultural land use (map)
2006	Figure 70	Relative annual changes in the area of agricultural crop types 2000-5
2006	Figure 71	Changes in the relative density of grazing livestock 1990 to 2004 (map)
2006	Figure 72	Changes in number of cropping farms
2006	Figure 73	Changes in number of livestock farms
2006	Figure 76	Trends in the area of tenanted land 1980 to 2005
2006	Figure 77	Trends in the sales and value of farm land 1995-2004

Forestry and woodland

2006	Figure 82	Density of woodland cover across England (map)
2006	Figure 83	Variation in woodland area across rural areas

4.3 The value of the land

Introduction

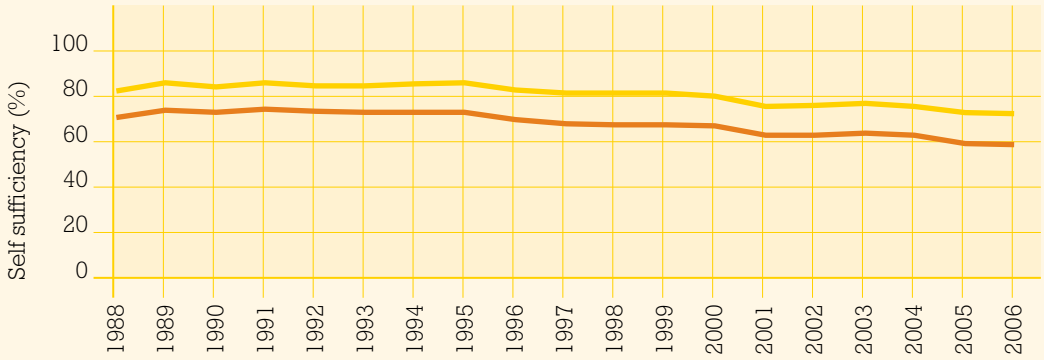
Rural areas are used for a wide range of purposes including: as a source of food, for waste disposal, energy generation, as a source of water supply, and for recreation. Some of these uses conflict and it is difficult to get a picture of the contribution of different uses of the land to the economy and quality of life in England. A major function of rural areas is the provision of what can be termed 'ecosystem services'. This relates to the maintenance of biodiversity and the functioning of high quality ecosystems on the land, in the soil, and in surface and ground waters, along with the effective operation of mechanisms such as flood alleviation (through wetlands and the absorption capacity of soils and vegetation), removal of air pollutants by vegetation, and carbon sequestration (e.g. in the woody material of trees and shrubs).

The situation is one of changing use of the countryside and recognition that it plays a multi-functional role in society, much broader than the production of food. A desire to conserve landscape character, protect biodiversity, engage in recreation and meet resource demands, creates a complex picture from which to understand the meaning of a sustainable countryside. Achieving management practices that ensure the continued viability of food production and ecosystem services while maintaining, or even enhancing biodiversity and landscape, defines the current rural policy arena.

Food production

UK self-sufficiency in food continues the decline started in 1995 currently standing at around 60% self-sufficiency in all food (Figure 4.3.1). This decline is likely to continue as central European agricultural producers become more efficient. Despite this, farming is still the major land use and food production remains the primary output of the land in rural areas. 162,000 farmers manage approximately 75% of the land in England and Wales. The primary function of farmers remains as food producers, although there is increasing interest in a wide range of crops for industrial uses and bio-fuels. At the margins, food production is declining as agricultural activities, such as hill sheep farming, become uneconomic due to changing policy and decreasing farm subsidies.

Figure 4.3.1
UK self sufficiency in food, 1988-2006



Source: Defra, 2007. Agriculture in the UK

Organic food production is increasing and the total area of organic land in England continues to expand slowly. Figure 4.3.2 shows a slight increase of just below 4% over the period 2005-6. The largest changes have been for permanent pasture which reveals a 6% increase on the previous year and cereals which has increased in area by 12%. At the same time the area of 'in-conversion' land has increased by 84% on the previous year (OASIS, 2007), reversing a decline that had taken place during the period 2003-5. The largest changes of in-conversion land occurred on temporary and permanent pasture, and on land under cereals (which more than doubled in area).

Figure 4.3.2
Organic land, 2003-6

Crop Type	Hectares			
	March 2003	January 2004	January 2005	January 2006
Cereals	19,507	28,578	27,241	30,769
Other crops	11,235	6,004	8,778	6,043
Fruit & nuts [1]	1,411	1,316	1,415	1,447
Vegetables including potatoes	7,245	9,227	9,879	10,254
Herbs & ornamentals [2]	136	134	219	607
Temporary pasture	44,347	60,993	63,142	64,711
Set aside	2,120	2,560	1,985	1,213
Permanent pasture [3]	92,177	105,801	112,156	118,833
Woodland	2,446	1,706	1,900	1,800
Non cropping	1,112	586	1,013	1,910
Other	0	2,803	1,628	452
Unknown	2,309	490	270	316
Total	**184,045**	**220,197**	**229,626**	**238,355**

[1] Nuts not included in March 03.
[2] Included nuts in March 03.
[3] Permanent pasture includes rough grazing.

Source: OASIS, 2007

The total area of organic and in-conversion land in England in 2006 was 291,578 ha, or 3.1% of the total agricultural area, an increase from 2.7% in 2003. The largest area of organic land remains in the South West region which has 39% of the total area of all the organic land in England.

The recent change in organic land area is largely by existing producers and growers (Figure 4.3.3). Numbers of producers and growers declined slightly (1.5%) across England over the year 2005-6. The only regions not showing a decline in number of producers and growers are the North East (with a 21% increase) and the South West (2.5% increase). During

Figure 4.3.3
Organic producers and growers, 2003-6

Number of businesses				
	March 2003	January 2004	January 2005	January 2006
East of England	248	258	259	253
East Midlands	220	218	237	221
North East	73	74	83	101
North West	171	169	176	168
South East (inc. London)	418	409	463	417
South West	1,026	1,020	1,123	1,152
West Midlands	330	325	337	335
Yorkshire and The Humber	136	134	149	138
England	**2,622**	**2,607**	**2,827**	**2,785**

Note:
(i) Producers and growers also includes counts of registered producers regardless of generating production.

Source: OASIS, 2007

the same period the number of head of livestock certified as organic or in-conversion has increased, in line with the increase in certified organic pasture, although exact numbers are difficult to estimate.

Food miles

Food has to be transported to reach its markets. The term 'food miles' covers a number of ways of measuring the amount of transport that is needed for distribution. An analysis of indicators related to food miles (Defra, 2006) suggests food is being transported longer distances. Some of the indicators suggest that between 1992 and 2004:

- Air vehicle kilometres tripled, but form a very small proportion of total vehicle kilometres.
- Car travel for food is also showing large increases as people travel by car for shopping (23% rise).
- Heavy Goods Vehicle (HGV) kms rose by 6%, though food tonne kms by HGV rose by 27% – larger and heavier HGVs and more efficient logistics probably account for the difference
- Van kms rose by 12% between 2003 and 2004 (a rapid rise in the only years for which data was available).
- Pollutants as a result of food transport (measured for PM10s, NOx and Sulphur dioxide) are falling, though CO_2 emissions are rising.

The loss of small farms near urban areas, centralisation of processing, and decreasing self-sufficiency all result in higher impacts from transport of food. So, although production through more environmentally friendly farming is increasing to meet demand, the environmental impacts from the transport of food are also rising. Care should be taken when interpreting environmental impacts through food miles as the concept does not provide the complete picture. Energy and other resource inputs (such as fertiliser and pesticides) also contribute to the carbon footprint of a particular food production system.

Non-food production

The area covered by 'industrial' crops providing, for example, fuel oils is also starting to grow although total areas remain small (2.2% of all farmland in 2005). As Figure 4.3.4 illustrates, of the estimated 208,949 ha in 2005 used for non-food crop production, just under half is devoted to oilseed rape for fuel oils and another quarter for oilseed rape for non fuel purposes. Provisional figures for 2006 indicate a near doubling of the area devoted to oilseed rape for energy in Great Britain to 187,000 ha (NNFCC, 2007). In the near future the area of Miscanthus (a tall grass) and short rotation coppice (using species such as poplar and willow) may increase with consequent landscape impacts. The Energy Crops Scheme and the latest round of the Bio-energy Capital Grants Scheme (deadline for applications in March 2007) will focus attention on biomass combined-heat-and-power projects and the demand for bio-fuels. Global drivers such as the price of fossil fuels and demand for grain and other products in Asian Markets (e.g. China) will also influence the rate of development.

Figure 4.3.4
Area devoted to main non–food crops grown in England, 2003-5

[1] Other crops (mainly for pharmaceuticals): poppy, linseed, barley, wheat, chamomile
[2] Industry crops (mainly for lubricants, oils, chemicals) linseed, crambe, high erucic acid rape (HEAR)
[3] Fibre crops (mainly for composites, building products) flax, hemp
[4] Energy crops (for biomass power and biofuels) short rotation coppice, miscanthus, oilseed rape

Note:
(i) Some figures may not add due to rounding.

Source: Defra, 2006. Creating value from renewable material.

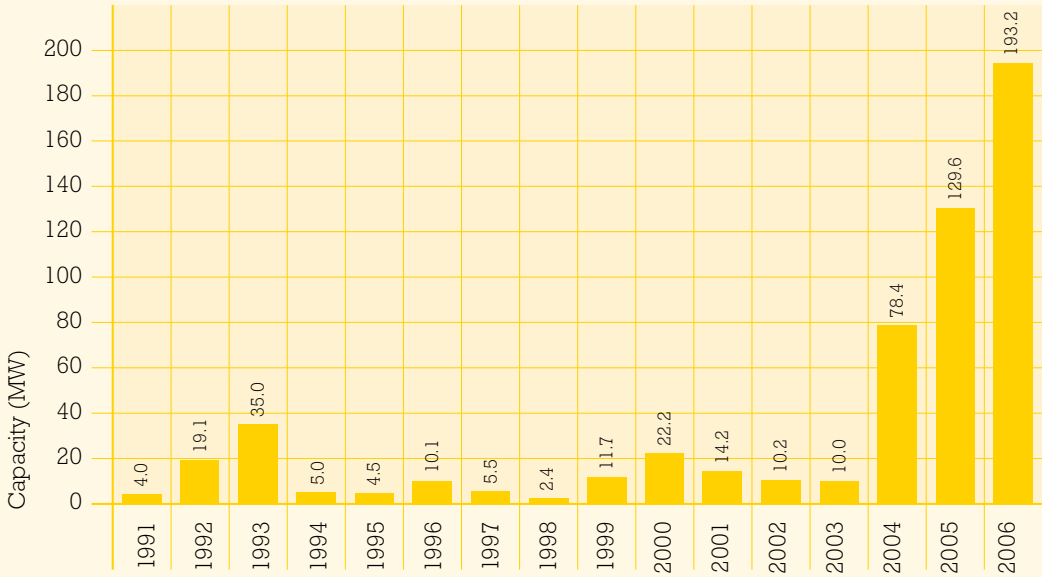
Crop Type	Hectares		
	2003	2004	2005
Oilseed rape (non-fuel)	57,997	33,541	53,401
Other [1]	4,662	3,794	6,578
Industry [2]	52,105	38,108	54,485
Fibre [3]	3,586	1,599	1,208
Energy [4]	714	32,729	93,277
of which:			
Miscanthus	0	52	52
Short rotation coppice	714	440	498
Oilseed rape (fuel oils)	-	32,237	92,727
Total	**119,064**	**109,771**	**208,949**

Energy production

Rural areas are also potentially a significant source for renewable forms of energy generation, other than biomass, particularly from onshore and offshore wind turbines and tidal power. Existing wind generating capacity is limited but growing under government funded programmes that support infrastructure development. The UK has been identified as the European country with highest potential for wind power electricity generation, much of which occurs in western parts of the country.

Existing wind generation capacity is 555 Megawatts (MW) or enough to power about 300,000 homes. Generating capacity has increased rapidly (Figure 4.3.5) from 2003 to the present, after a slow level of growth during the 1990s. Generating capacity continues to expand and currently 11 land-based wind farms are under construction (with a total of 177 MW), a further 36 (total of 459 MW) have received planning consent, and 78 (total of 1,286 MW) are being considered.

Figure 4.3.5
Annual increase in wind farm generation capacity, 1991-2006



Source: BWEA, 2007.
UK Wind Energy Database.

The number and size of wind farms is likely to increase due to the relatively low investment costs, and the UK government strategy to increase the proportion of electricity generated from renewable sources. On-shore wind farms are more likely to be located in the places with consistent winds such as coastal or upland areas in the south-west and northern regions of England.

Greater generating potential and future growth in wind generation is available from off-shore locations, particularly off the East coast of England where favourable conditions (low tidal range, shallow seas, consistent wind) exist. There are currently four operational wind farms at locations off the English coast: Northumberland, Walney Island, Kentish Flats, and Scroby Sands. A further three off-shore wind farms are under construction with a total installed capacity of 284 MW, eleven offshore wind farms have received planning permission, and a further ten, larger capacity farms, are under consideration (BWEA, 2007).

In 2003, the UK government released a second round of proposals to provide up to six Gigawatts (GW) of new off-shore generating capacity by 2010 (over ten times all current wind power production and enough to power 15% of all houses in the UK). Sites have been identified for development in three areas: the Thames Estuary, the Greater Wash, and the North West (Crown Estates). Proposed developments are at significantly larger scale than current developments. In England five projects have planning consent with a total installed capacity of 2,016 MW and larger developments of up to 1,000 MW in size are being explored. This growth is on a much larger scale than currently exists, but these off-shore wind farms will go a long way to meeting targets for renewable fuels without impacting on inland rural areas.

Development of wind farms and production of industrial and bio-fuel crops offer potential for farmers to diversify away from traditional food production. Wind generation and bio-mass production may provide stable and more lucrative sources of income for those farmers in areas with high wind potential, or close to centres of demand for bio-fuels (planning issues and transport costs may limit the area where energy production occurs). However, use of the land for energy production tends to conflict with other land uses such as recreation, as well as having potential impacts on landscape character and biodiversity.

Woodland and forestry

Timber production remains well below UK requirements and the reduction in softwood timber prices of recent years has reduced the economic value of forestry operations in England. Wider values of woodland and forestry have become more widely recognised. These include recreational, health, and biodiversity values, as well as potential for carbon sequestration, flood mitigation, landscape value, and land stabilisation.

Timber sales over the last three years of around 1.4 million cubic metres per annum, are small in comparison to quantities of timber imported. Forestry remains a significant employer in rural areas providing 6,166 jobs in direct forest activities in England and a further 8,573 jobs in non-forest related activities such as haulage and processing.

Woodland also provides a significant recreation resource. There are 242 Forestry Commission recreational sites in England listed on their website. A large proportion provide facilities for a wide range of activities including: walking (177 sites), cycling (108 sites), picnicking (115 sites) and horse riding (71 sites).

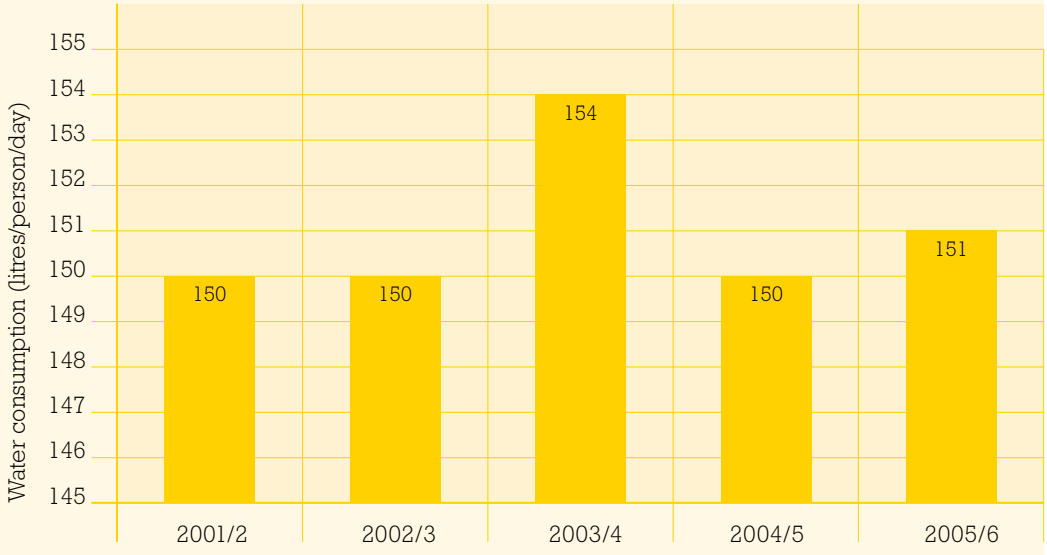
There is increasing interest in production of wood fuel from forested land, and in particular from under-managed woodlands, but little data on current production levels, which remain low. There has been a small amount of new planting for short rotation coppice through the Energy Crop Scheme over the period 2001-6 amounting to a total of 1,180 ha.

There is potential to increase the quantity of wood fuel through traditional forest practices such as coppicing and pollarding, with consequent beneficial effects on biodiversity (as more light penetrates to the forest floor). The Forestry Commission has recently established a target of an additional two million tonnes of wood fuel per year by 2020, which may increase current production levels. Overall, forest and woodland are unlikely to become significant sources of biomass for energy generation due to the small scale nature of operations and high transport costs.

Water

Rural areas are the major supply source for public drinking water, industrial and agricultural uses. Significant areas of land, particularly in upland areas, are managed to ensure provision of clean water supplies. Consumption of water by households in the UK has stabilised at an average 150 litres/person/day over recent years with some variation from 2001 to 2006 (Figure 4.3.6). There is no evidence of any significant difference between urban and rural areas or between regions. Water losses have also remained consistent over the period at around 3,600 Ml/day (or about 70 litres per person per day) from a combination of supply and distribution system losses (OFWAT, 2006).

Figure 4.3.6
Average household water consumption[1], 2001/2-2005/6



[1] Excludes underground supply pipe leakage.

Note:
(i) Averages are weighted by population of households.

Source: OFWAT, 2006. Security of supply, leakage and water efficiency 2005-6 report.

In some areas abstraction of water for agricultural purposes has increased significantly. Agricultural consumption of water has doubled over the period 1979 – present, mainly for irrigation of potatoes and vegetable production. Current abstraction levels for all irrigation are in the region of 347 Ml/day (or about 7 litres per person per day) and are anticipated to increase irrespective of any impacts of climate change, although there appears to be a trend away from spray irrigation to more efficient methods (such as trickle irrigation). The key driving force is pressure from large retailers for high volume crops of consistent quality. The largest number of spray irrigation abstraction licences can be found in the Anglian (37%) and Midlands (25%) regions, consistent with largest concentration of vegetable production in England (60% grown in Anglian and East Midland regions). Abstraction for irrigation purposes can vary enormously from year to year (by 20 to 25%) depending on weather conditions and demand factors, with potential consequences for river flows and biodiversity in dry periods. In 2004 the Environment Agency estimated that 14% of river length and 11% of water bodies are 'probably at risk' from water abstraction.

Recreation

To many people in urban areas the main use made of rural England is for leisure. Various studies show the scale of activity and contribution to the economy, but few can be compared. The English Leisure Visits Survey 2005 (English Leisure Visits Survey Consortium, 2006), the most comprehensive survey of countryside recreation, indicates that the majority of trips to the countryside are short and take place near home. Slightly over one third of visits are for walking (36%), while over one fifth of visits (23%) are for eating/drinking, entertainment, shopping or a drive. Relatively few visitors participate in sports (7%) while more engage in a hobby (11%). Visits tend to be spread evenly throughout the year though with slightly higher visitation levels in spring and summer than in winter. Just under half (45%) of all day visits are under two hours duration and 68% involve a round trip of less than 20 miles. This emphasises the importance of maintaining the quality of the wider countryside, and not just focusing on the designated and protected areas. Nearly half of all day visits will be to a local place. Over half (57%) of visitors spend under £5 and one quarter spend nothing.

Figure 4.3.7
Visits per year to countryside, coast or wood/ forest by ACORN category, 2006

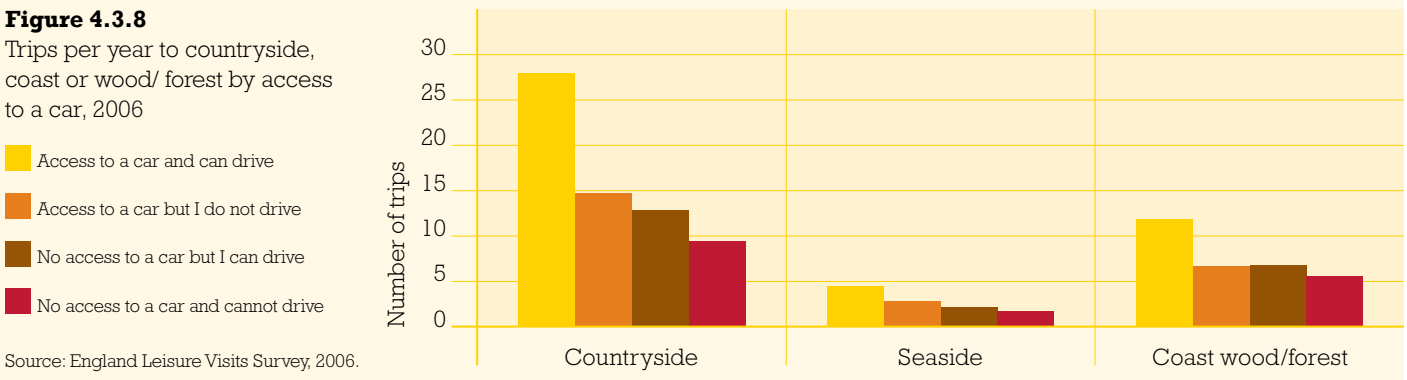
ACORN category and group	Countryside	Seaside/Coast	Wood/Forest
Affluent greys	56.7	7.8	20.4
Wealthy executives	35.8	2.1	15.7
Settled suburbia	30.6	5.7	12.4
Flourishing families	27.7	3.8	13.2
Secure families	23.5	2.9	11.6
Prudent pensioners	20.3	6.2	8.0
Starting out	18.0	2.3	8.1
Prosperous professionals	18.0	2.0	9.9
Blue collar roots	17.6	3.9	7.1
Struggling families	16.9	2.9	7.5
Post industrial families	14.2	3.9	8.4
Burdened singles	9.6	3.0	5.1
Aspiring singles	9.4	3.4	9.6
High rise hardship	8.0	2.9	3.5
Educated urbanites	6.5	1.5	3.1
Inner city adversity	3.0	0.8	1.0
Asian communities	2.5	0.7	1.0
Unclassified/unknown	21.6	3.8	9.1
Total	**22.2**	**3.6**	**9.8**

Source: England Leisure Visits Survey, 2006.

The survey also indicates some of the characteristics of those that use the countryside, and for what purposes. Figure 4.3.7 shows that there are large differences in frequency of visits for different social groups. The affluent and the older (those with the time and/or the money) tend to be most likely to visit, while those in very urban situations and ethnic minorities (as far as ACORN classifies people) are much less likely to. Ethnic minorities are under-represented among those making trips, 2%, compared to 10% of the population as a whole.

Most people drive to the countryside (58%), or walk (33%) and only 2% use public transport. As available leisure time increases, numbers of visits to the countryside also tend to increase adding to the environmental impacts of increased car use in rural areas. Access to a car is strongly related to frequency of visit as Figure 4.3.8 shows.

Figure 4.3.8
Trips per year to countryside, coast or wood/ forest by access to a car, 2006



Source: England Leisure Visits Survey, 2006.

Participation in active pursuits (e.g. hill walking, canoeing/kayaking, climbing) appears relatively stable. Some traditional recreational activities, such as angling, report a slight decline in numbers, although angling remains the largest participation activity with numbers estimated at around 4 million in England and Wales. In contrast, less than half a million people are estimated to participate in shooting game across the whole UK. Shooting has a wider impact in terms of land management and a recent study funded by the British Association for Shooting and Conservation (BASC)(PACEC, 2006) estimated that about 930,000 ha (or about 7%) of land in England is managed for shooting.

In some activities, such as horse riding, sailing and other water activities, participation is increasing. A British Equestrian Trade Association survey (2006) estimated that 4.4 million people (or 7% of the GB population) had ridden in the previous 12 months. Of these, 1.1 million are estimated to be 'regular riders'. A study (Arkenford Market Modelling and Research, 2006) for the Royal Yachting Association suggested that 7% of their sample had participated in some form of water activity during the year. If aggregated across Great Britain this would amount to approximately 3 million people.

There is more recent interest in 'extreme' sports (for example, surfing, mountain biking, downhill racing, windsurfing, whitewater rafting, canyoning, coastering) but total numbers remain small in comparison to the number of visitors to the countryside. Some activities have grown very quickly. The British Surfing Association estimates there are half a million 'regular' surfers in the UK, a 400% increase in five years, and 60 approved schools for teaching (compared to 20 only five years ago). Other activities have only a small and stable following, for example, geocaching has an estimated 5,000 participants, mountain boarding has 6,000, and caving has an estimated 20,000 regular participants.

Mintel (Mintel, 2006) carried out a recent survey of outdoor recreation participation among those aged 15 years or over. The survey found that around one third of respondents actually engaged in some form of outdoor activity, while two thirds did not. One third would never want to participate. Of those that actively participate, around 31% go either hiking, walking or fell walking, 12% engage in water sports, 9% go fishing, 9% engage in motor sports and 6% go horseriding.

Game

A significant activity in rural areas is game management, for both food and sport. Species vary across the regions dependent on physical characteristics of the land. Annual harvests of both wild and farmed birds have been stable for the past ten years. (Game Conservancy Trust, 2007) Almost 80% of the approximately 19 million game birds and wildfowl shot for sport in 2004 were pheasants, the vast majority of which entered the food chain. (PACEC, 2006) Game management for a range of species including partridge, pheasant, hare, and waterfowl, plays a key role in habitat creation and enhancement of biodiversity. Over 8 million ha of land are affected by game management, with the highest concentrations in the South West (2 million ha), the East of England (1.6 million ha) and North West (1.1 million ha) regions. Game management is a significant element in some local economies, providing 31,000 direct jobs in the UK, and contributing an estimated £1.1 million/year to the economy in England. The increasing interest in healthy diets and eating means that game is also starting to contribute to local niche food markets.

Waste generation and disposal

A significant proportion of urban waste is deposited in landfill sites in rural areas representing a flow of unwanted materials from urban into rural districts. There are large numbers of landfill sites in rural locations, particularly in 'less sparse rural villages and rural dispersed' areas (58% of the total number of licensed sites), compared to 29% in the less sparse urban areas (Environment Agency, 2006). This implies additional transport impacts on rural roads, along with environmental effects from landfills (exhaust emissions, noise, litter, odours, potential water pollution) in rural areas.

An associated problem is fly-tipping, in particular of household waste. Local Authorities reported over 4,000 fly-tipping incidents in 2005-6, and a further 122,000 incidents along footpaths and bridleways. (Environment Agency and National Farmers Union, 2006). As most fly-tipping occurs on private land these figure are likely to underestimate the problem.

One of the main sources of waste generated within rural areas is from agricultural activities, but until recently agricultural wastes were not controlled by government regulations and mostly disposed of on-farm. A recent survey has indicated significant quantities and types of agricultural waste ranging from used oils and tyres, to plastic fertiliser bags and empty pesticide containers. Total agricultural waste generated in England in 2003 amounted to 46.7 million tonnes. The largest waste type in terms of quantity are farmyard manures and slurries, which together comprise 92% of all agricultural wastes, but a large proportion of these are not true 'waste' materials and used on-farm to recycle nutrients back into the soil. Significant amounts of other waste materials are generated including silage effluent (654,515 tonnes), various forms of plastic including agrochemical plastics (2,400 tonnes), silage wrap (25,000 tonnes), and fertiliser and seed bags (13,000 tonnes).

A 2004 farm practices survey (Defra, 2004) identified typical disposal routes for a variety of farm wastes. Hydraulic and lubricating oils were recycled by 25% of holdings, tyres by 27% (and 23% re-using them) but only 8% of holdings indicated any level of recycling of plastic wrap. The impact of new regulations on agricultural waste introduced in 2006 have the potential to increase the level of recycling of a wide range of farm wastes such as plastic, tyres and used oils. Farmers, for the first time, will have a duty of care to ensure farm generated wastes are disposed of in an acceptable manner through licensed facilities. New collection and recycling arrangements are under consideration for specific waste streams such as plastic

4.3 **Key summary points:** **The value of the land**

- Changes in agricultural policy, low transport costs, expansion of the EU to take in more cost-efficient agricultural areas, and opening up of EU markets to cheaper sources of food production have the effect of reducing food production in England. Alternative land uses have become more significant, in particular use of the land for energy production.
- The potential for production of bio-fuels is high. Wind power has grown rapidly in recent years and will continue to expand. The most radical changes are likely to occur off-shore with the development of wind farms an order of magnitude larger than those seen on land.
- Current trends imply that the change in agriculture may have favourable impacts on game production and a wide range of recreational activities. Increased leisure time and incomes in the urban population will continue to create pressures on the countryside for provision of space to pursue a broad range of recreational activities.
- The government health agenda will also contribute to numbers visiting the countryside and engaging in outdoor activities requiring a high quality environment. Provision of a high quality environment while maintaining resource flows from the land is the focus of the next section.

See also (from 2005 and 2006 reports):

Agricultural use of land

2006	Figure 80	Changes in UK self-sufficiency in foodstuffs 1988 to 2005
2006	Figure 81	Changes in the area of land under agri-environmental scheme agreements, 1999 to 2005
2006	Table 32	Regional variation in area of land in agreement under Countryside Stewardship & Environmentally Sensative Area Schemes to 2005
2005	Table 5.1	Land receiving CSS higher tier payments

Farm incomes and workforce

2006	Figure 74	Changes in net farm income in England 1998 to 2005
2006	Figure 75	Distribution of size of net farm income 1999/2000 to 2004/5
2006	Figure 78	Changes in the farming workforce 1983-2005
2006	Figure 79	Social contact with farmers and others who work on the land
2006	Table 31	Number of employees in selected industrial sectors in England, 2004
2005	Figure 5.2	Age structure of farm holders
2005	Table 5.2	Labour force on agricultural holdings
2005	Figure 5.3	No of holder managers engaged in other gainful activities

Energy production

2006	Figure 88	Distribution of biomass crops 2004. (map)
2005	Figure 5.6	Location of wind farms (map)

Recreation

2006	Table 33	Extent of open access land in England, 2005
2006	Table 34	Registered land defined as open countryside and registered common land under CROW Act 2000
2006	Figure 85	Access to open countryside and registered common land (map)
2006	Figure 86	Availability of open access land within 20km
2005	Figure 5.5	Frequency of visits to the countryside 2002/3

Recycling/waste disposal

2006	Figure 89	% of household waste recycled and composted by Local Authorities 2004/05
2005	Figure 5.7	Distribution of fly tipping incidents 1999-2003 (map)

4.4 Environmental quality

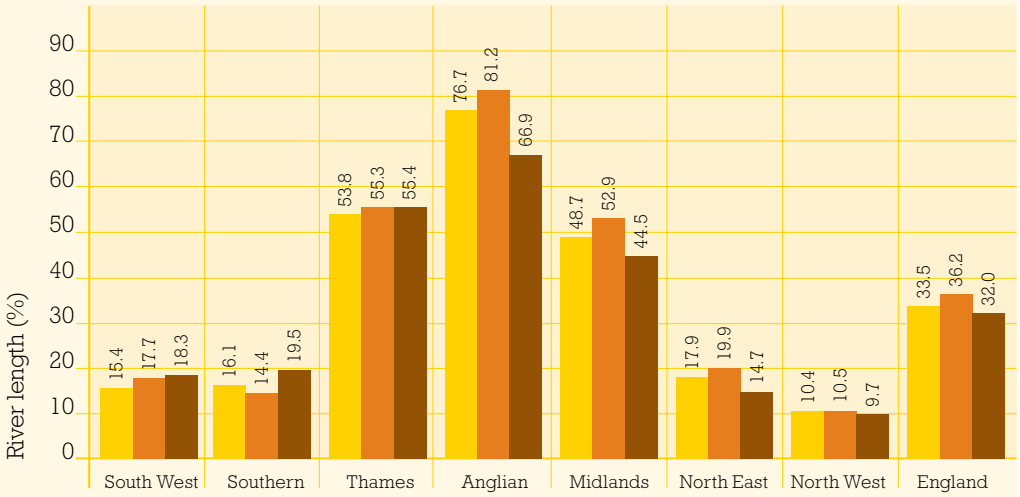
The quality of the environment is generally better in rural than in urban areas. Water quality is generally good in rural areas but in some regions with irrigated crop production, a small proportion of rivers and lakes may be at risk from high levels of water abstraction. Air pollution is generally lower in rural areas, but for those living near a major road transport corridor, some pollutants can be worse, and ozone is generally worse in rural areas. But the picture is not clear-cut and it is difficult to clearly delineate between urban and rural areas in terms of environmental quality, as the indicators used do not respect any boundaries. Emissions to air and water generated in urban locations spill over into rural areas, and economic interactions between urban areas contribute to rural pollution through transport and energy consumption.

Water quality

Water quality continues to improve in both rural and urban areas. A comparison of rivers in urban and rural areas over a two-year period reveals a slight improvement in the length of rivers in good condition in both rural and urban areas, but with a greater proportion of rivers in rural areas with higher quality, and fewer stretches graded 'poor' or 'bad' condition. Almost two-thirds of rivers in rural areas are in good condition compared to just over half in urban areas. The biological quality of rivers (based on surveys of invertebrates which live in or on river and canal beds) shows a steady improvement over the period 1990-2005 and the proportion of rivers showing 'good or fair' quality has risen to 95% of the total over the period (see SOCR 2006 Figure 94).

Chemical quality of rivers varies across the regions, even in rural areas where diffuse pollution from agriculture can have significant impacts. The effects of agricultural activity can be seen in Figure 4.4.1. The Anglian region, a largely rural region with intensive arable farming, has the greatest length of rivers with high nitrate concentrations. Nitrates contribute to eutrophication in estuaries and surface water bodies, and can pollute sources of groundwater used for public water supplies. Approximately 55% of England has been designated as Nitrate Vulnerable Zones where controls on applications of manure and fertilisers help reduce nitrate run-off to ground and surface waters. Stronger controls on nitrate run-off from agricultural practices will be required in the coming years to meet the demands of the Water Framework Directive.

Figure 4.4.1
Percentage of river length with average nitrate concentrations greater than 30 mg, 1995, 2000 and 2005



Note:
(i) The regions shown are those used by the Environment Agency.

Source: Environment Agency, 2006.

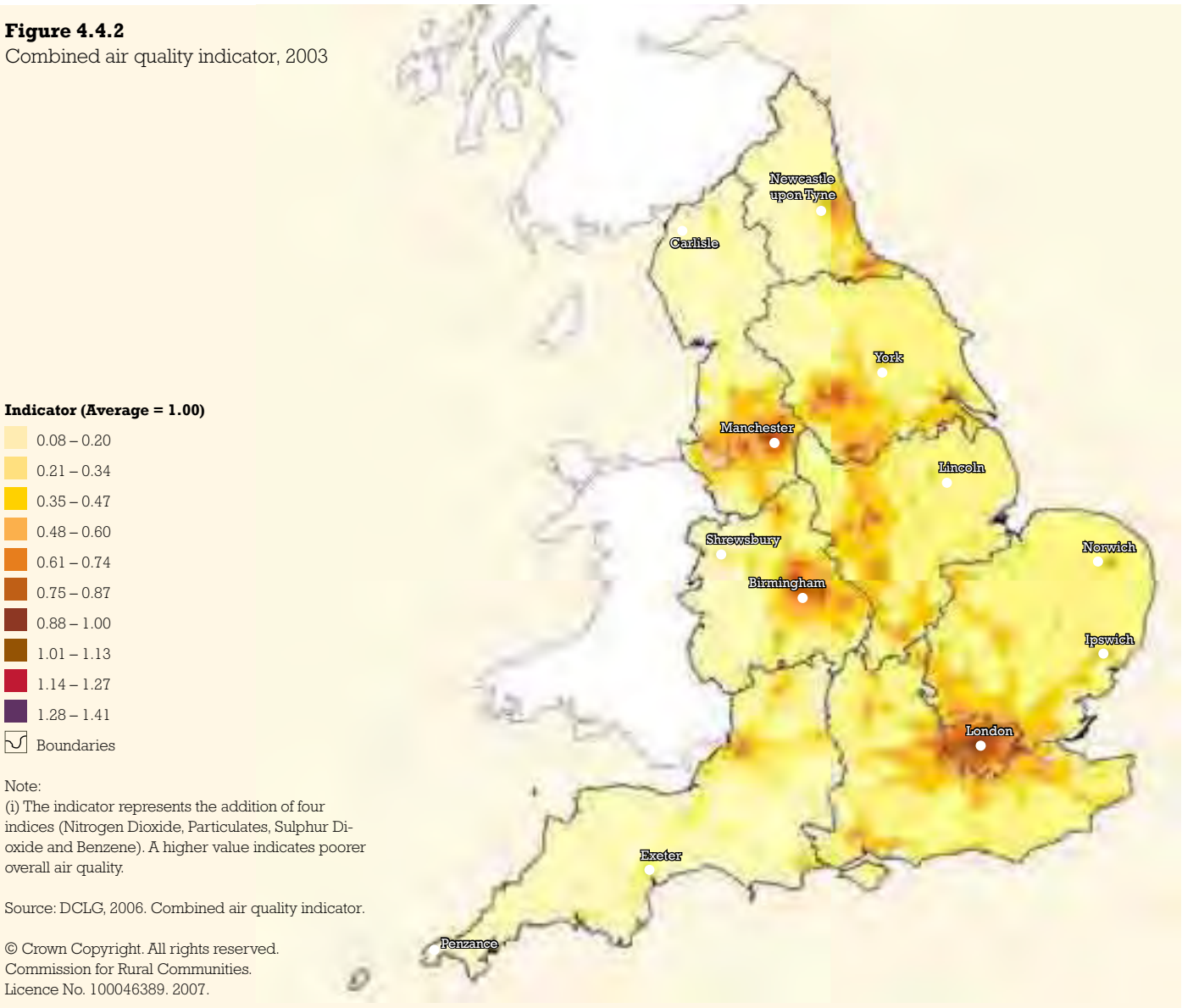
Biological quality in core industrialised regions continues to lag behind quality in more rural regions. Highest quality rivers are found in Southern (80% rivers of good quality in 2005) and South West (91% rivers of good quality in 2005) regions and lowest in the North West and Midland regions (56% and 57% good quality respectively) where there are higher levels of industrial activity.

Air quality

Air quality is generally higher in rural areas than in urban areas, except along motorway or other busy road corridors. The map in Figure 4.4.2 shows air quality is highest in the South West and North West regions, while areas of lowest quality tend to be in the large urban areas. The pattern of air quality is not surprising given the prevailing south westerly winds across England which provide the western part of the country with cleaner air, and the concentration of urban areas in the Midlands, South East and North East.

Rural areas contribute to air pollution through burning of fossil fuels (transport, residential heating, agricultural processing and small scale industrial uses). Transport emissions of Nitrous Oxides (NOx) and Nitrogen Dioxide (NO_2) show up clearly on the maps as major sources of pollution in rural areas, with high levels close to major motorway links.

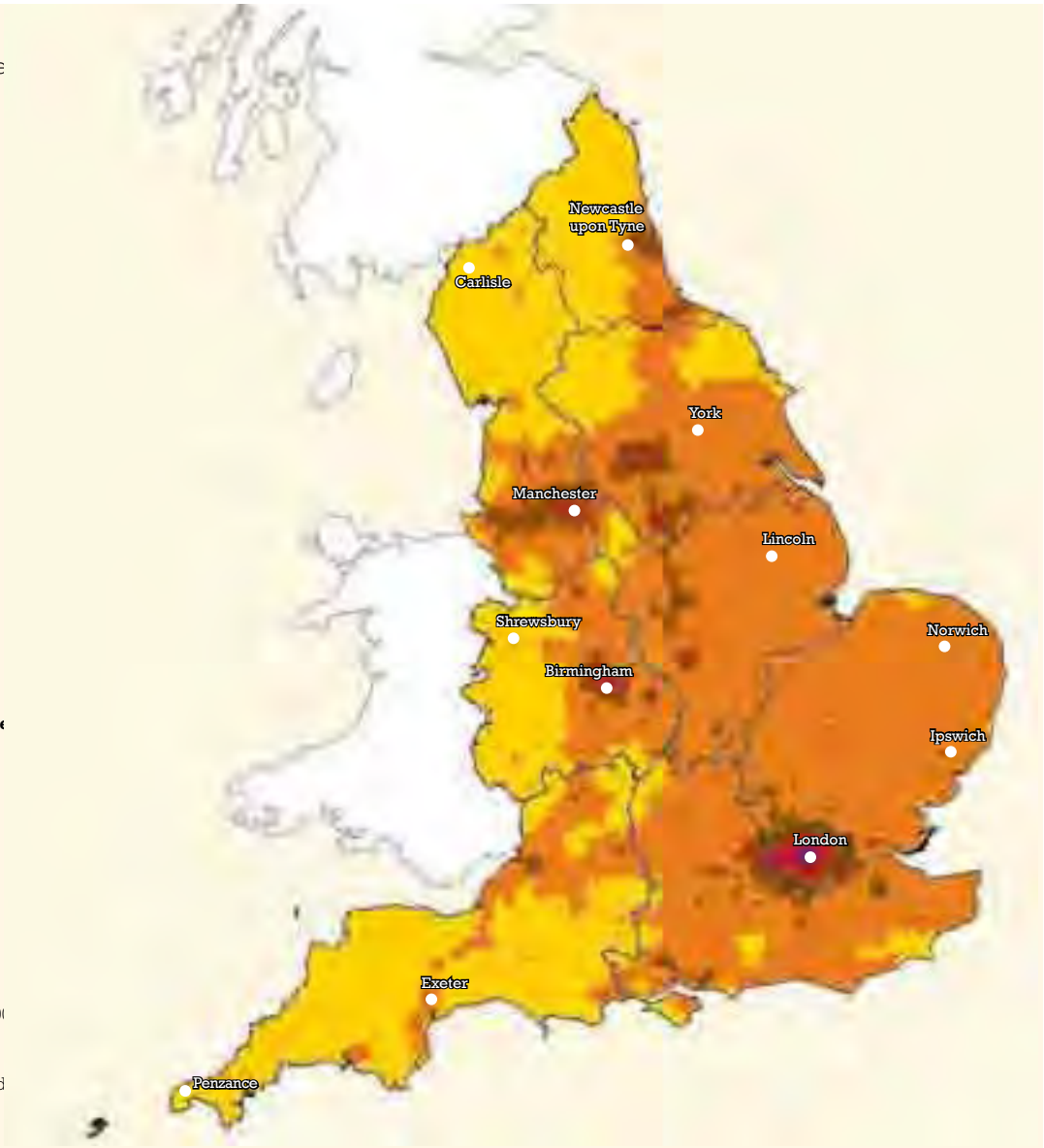
Figure 4.4.2
Combined air quality indicator, 2003



Note:
(i) The indicator represents the addition of four indices (Nitrogen Dioxide, Particulates, Sulphur Dioxide and Benzene). A higher value indicates poorer overall air quality.

Source: DCLG, 2006. Combined air quality indicator.

Figure 4.4.3a
Air quality for nitrogen dioxide
2005



Concentrations of Nitrogen Dioxide background locations (mg per m³)

- 0 – 10
- 10 – 20
- 20 – 30
- 30 – 40
- 40 – 60
- Boundaries

Source: Office for National Statistics, 20
Ambient Air Quality.

Figure 4.4.3a-c shows clearly how air quality varies for different pollutants. NO_2 relates to road transport, PM10 is more closely related to urban areas, while ozone which is produced by sunlight acting on other pollutants, is wind blown towards the east, and levels are actually lower in urban areas and along transport corridors.

Sulphur dioxide emissions related to burning of fossil fuels, are more widespread, indicating smaller differences in air quality between rural and urban areas for this pollutant. Ammonia emissions, mainly from agricultural sources and particularly decomposition of urea from livestock wastes (79% total emissions in UK), tend to be higher in rural areas with concentrations of livestock, for example, south-west and western areas of England.

Figure 4.4.3b
Air quality for particulate matter (PM_{10}), 2005

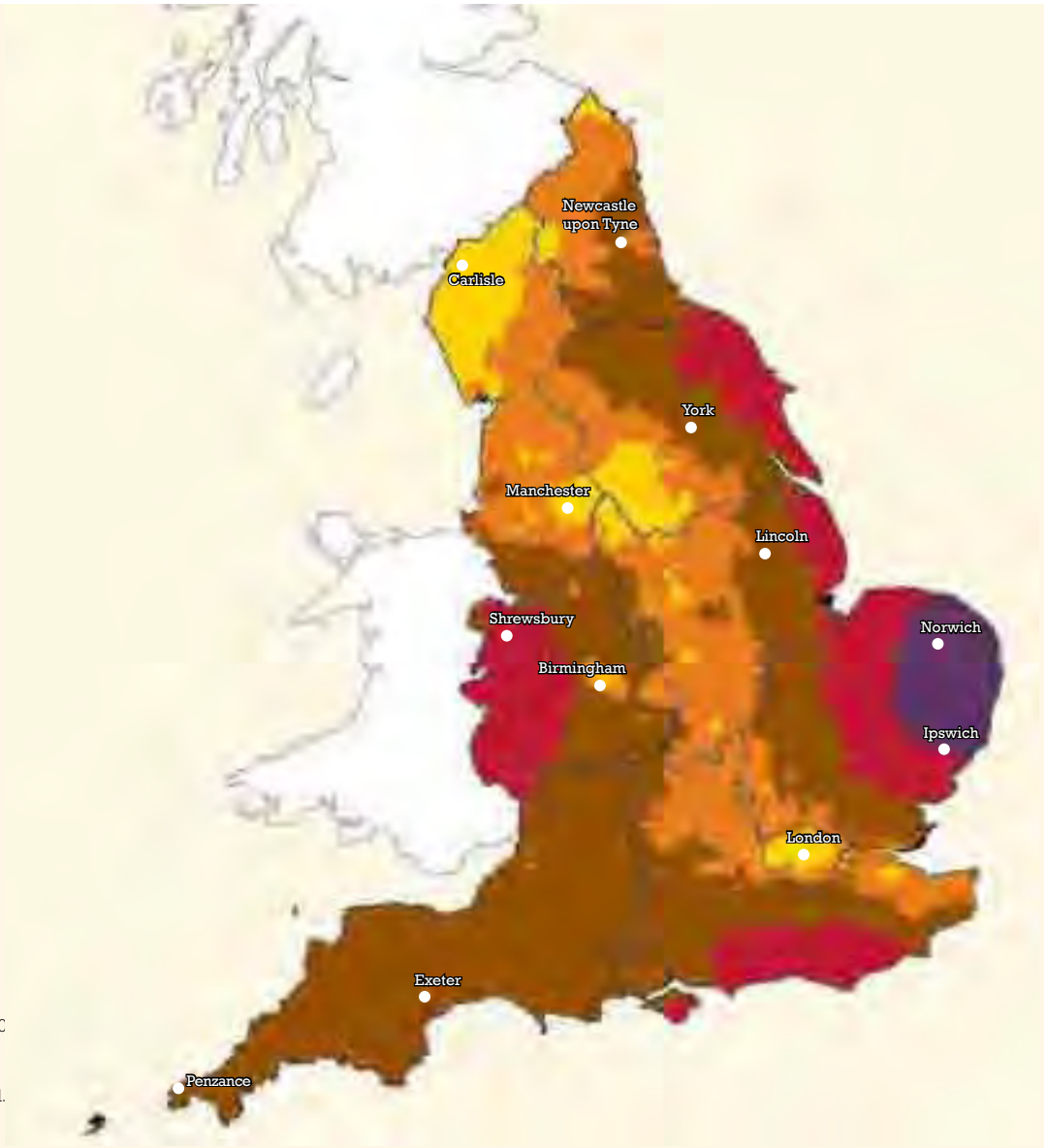
Concentrations of Particulate Matter in background locations (mg per m³)

- 0 – 15
- 15 – 20
- 20 – 25
- 25 – 30
- 30 – 35
- Boundaries

Note:
(i) Isles of Scilly are not shown as no data exists for them.

Source: Office for National Statistics, 2005. Ambient Air Quality.

Figure 4.4.3c
Air quality for ozone, 2005



Days per year where ozone level is greater than 100 mg per m³

- 0 – 10
- 10 – 15
- 15 – 25
- 25 – 40
- 40 – 60
- Boundaries

Source: Office for National Statistics, 200
Ambient Air Quality.

Soil quality

Soil is one of the fundamental natural resources performing essential functions in support of habitats, vegetation, influencing ecosystems and defining landscape. Soils contain huge numbers of species, perform vital functions including breakdown of chemical contaminants, retention of carbon, breakdown of organic matter, and nutrient cycling. Despite this there is much we do not know about the biology of soil, including the number of bacteria and invertebrates, or the role of bacteria in maintaining a healthy soil, or the role of soils in carbon storage and release.

One change has been the reduction in acidity and nitrogen loading on soils over the past two decades. A recent Environment Agency report on soils (Environment Agency, 2004) suggests a significant reduction in soil acidity for upland areas in England and Wales, brought about by reductions in coal fired electricity generation and the spread of agri-environment schemes. Recent survey data from Defra (Defra, 2004) also suggests the majority of farmers are aware of soil quality issues and take active steps to prevent soil erosion. Nearly 80% of those in the survey stated they do not spread manure or slurry at high risk times, and 65% take stock off the land to prevent field poaching. But erosion remains a problem on a small number of farms.

The management of farmland

Government programmes to minimise the environmental effects of agriculture are influencing agricultural management of the land. The evidence suggests it is starting to reverse the decline in ecological quality. The new Entry Level and Higher Level Environmental Stewardship Schemes and the Organic Entry Level Scheme (ELS, HLS and OELS) are replacing earlier programmes such as the Environmentally Sensitive Areas Scheme (ESA), and Countryside Stewardship Schemes (CSS), which have been running since the late 1980s. The new schemes require long-term agreements with farmers to manage the land in a more environmentally sensitive manner. Over 4 million ha of farmland was under some form of agreement in early 2007 (Figure 4.4.4), representing a huge increase compared to the previous year for land under ELS and OELS schemes.

The pattern of take-up illustrated in Figure 4.4.4 is partially driven by the prior existence of Environmentally Sensitive Area (ESA) and Countryside Stewardship (CS) scheme agreements in other parts of the country, which have yet to run their full course. ESA agreements were established in many of the less favoured upland areas in the western regions of the country.

The area of land under the ELS scheme shows a rapid rise from 2004 to the present. ELS agreements tend to be concentrated in the eastern part of England, where the focus is on arable production. HLS schemes show a concentration in the North East region, in connection to livestock production. OELS uptake is focused in the South West (45% of the total) and South East (14% of the total) regions. Figure 4.4.5 shows the proportion of land registered in different countryside character areas, which again shows lower take-up rates in many areas that had higher numbers of ESAs.

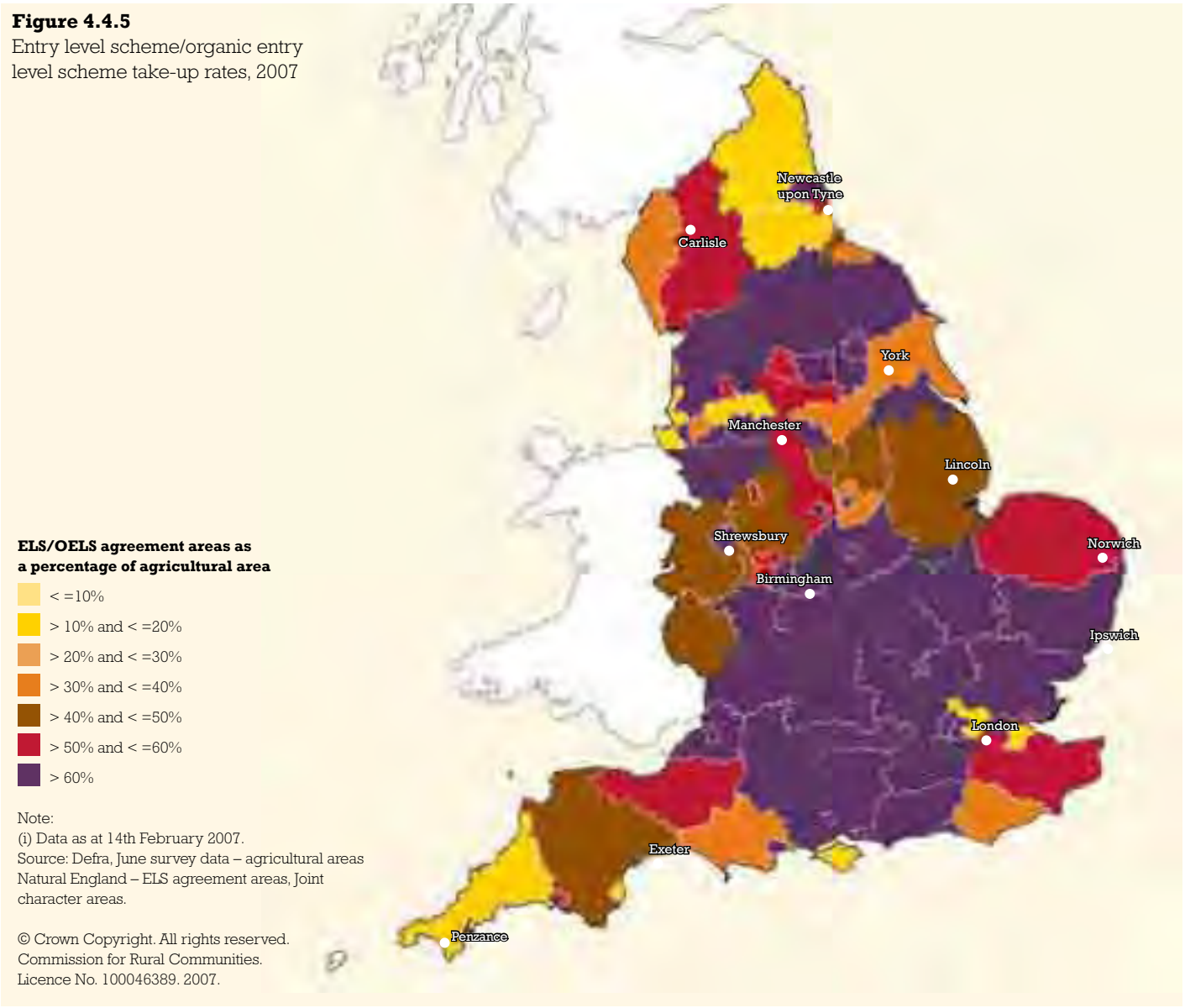
Figure 4.4.4
Area under ELS and OHLS agreements, 2007

Region	Hectares			
	ELS	OELS	HLS	OHLS
East of England	753,237	21,248	8,778	856
East Midlands	616,058	10,913	5,611	443
London	3,198	0	230	0
North East	250,075	11,592	18,169	1,461
North West	256,360	8,824	9,734	562
South East	456,409	28,071	12,186	1,874
South West	596,695	90,146	11,059	2,787
West Midlands	396,348	19,301	10,330	949
Yorkshire and The Humber	502,721	7,991	6,520	199
England	**3,831,101**	**198,085**	**82,617**	**9,131**

Notes:
(i) The OELS figure represents the total area entered into OELS in both OELS and OELS/HLS agreements.
(ii) The HLS/OHLS figures represent the area under HLS/OHLS options only.
(iii) Data as at 14th February 2007.

Source: Natural England, 2007

Figure 4.4.5
Entry level scheme/organic entry level scheme take-up rates, 2007



Note:
(i) Data as at 14th February 2007.
Source: Defra, June survey data – agricultural areas
Natural England – ELS agreement areas, Joint character areas.

Pesticide use has increased steadily since 2000 following a reduction during the late 1990s. This is of particular concern in view of the current lack of knowledge regarding the impact of pesticides on soil fauna. Several factors affect pesticide practices including the cropping mix, weather, and technological developments in strength and application of chemicals. For example, a warm wet growing season and increases in the winter wheat area in 2004 led to increases in applications to deal with insects and disease. Consumption levels now exceed those of the mid-1990s although Environment Agency monitoring suggests that the percentage of water samples containing more than 0.1ug/l of pesticides fell by 18% over the period 2001 to 2005.

Biodiversity

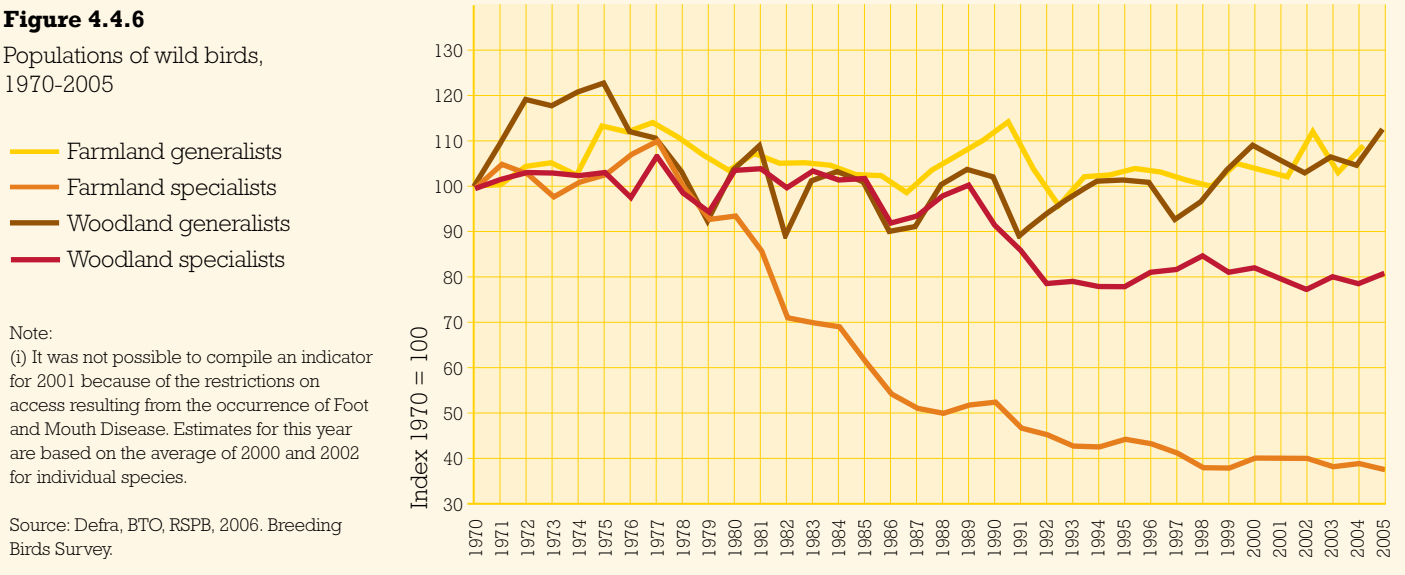
The quality of flora and fauna and biodiversity in the UK is improving although there are still a large number of concerns. For most species the situation is unclear due to lack of reliable survey data. Understandably the focus has been on the quality of habitat for key species. Assessment of 23 Biodiversity Action Plan species habitats during the period 2002-5 reveals improvements in five habitats and deterioration in five (four of which are in the agricultural sector). Defra has developed a set of fifty-one indicators to assess changes in the state of biodiversity in England.

The indicators, first used in 2003, summarise changes in agriculture, water, woodlands, towns and cities and coastal areas. They also take into account adaptation due to climate change and local biodiversity. A total of 41% of the indicators suggest positive trends towards meeting the objectives of the England Biodiversity Strategy. A further 29% of the indicators show no discernible trend or there is uncertainty over the change (due to insufficient data or difficulties of interpretation). Only one indicator, relating to coastal and marine priority species habitats, shows a clear negative trend.

Other indicators of biodiversity suggest that the quality of the natural environment is improving, resulting in a stabilisation of wildlife populations and in some cases an increase. Indicators of ecosystem quality include birds, insects and mammals. More information is available on bird populations than for any other species. Figure 4.4.6 shows the change in farm and woodland bird populations over the period 1970-2005. The decline in farm specialist species which started in the 1970s appears to have slowed and stabilised since the late 1990s, although there is not yet any evidence of population increases. The stabilisation of populations may be due to the agri-environment programmes implemented from the late 1980s onwards, and a move towards less intensive production.

A similar pattern emerges for woodland specialist bird species where the decline seems to have halted in the early part of the 1990s. There is less apparent change in farm and woodland generalist species. When looked at in total the population of all bird species (including coastal species) reveals a steady increase since 1993, although farmland bird species remain at much lower levels than in the 1970s.

Figure 4.4.6
Populations of wild birds, 1970-2005



Note:
(i) It was not possible to compile an indicator for 2001 because of the restrictions on access resulting from the occurrence of Foot and Mouth Disease. Estimates for this year are based on the average of 2000 and 2002 for individual species.

Source: Defra, BTO, RSPB, 2006. Breeding Birds Survey.

The situation for other fauna is less clear due to limited and incomplete survey data though that for butterflies and some other species is improving. Some data exist for otters, indicating increased numbers from the 1970 to the present day but the data is not continuous (Figure 4.4.7). In 1977-9 otters were found in only 6% of the river stretches surveyed in England, but by 2000-2 they were found in 36% of river stretches surveyed. This represents more than a 500% increase over the 27 year period. Increased otter populations are most likely due to improvements in river water quality resulting in improved food supplies, and the success of breeding and re-introduction programmes.

Figure 4.4.7
National otter surveys, 1977-9, 1984-6, 1991-4 and 2000-2. Great Britain

Country	Number of river stretches surveyed	Number of river stretches with otter presence				Percentage of river stretches with otter presence				Percentage increase in otter presence		
		1977-9	1984-6	1991-4	2000-2	1977-9	1984-6	1991-4	2000-2	1977-9 to 1984-6	1977-9 to 1991-4	1977-9 to 2000-2
England	2,940	170	284	687	1,066	6	10	23	36	67	304	527
Wales	1,008	207	393	529		21	39	52		90	156	
Scotland	2,650	1,511	1,717	2,211		57	65	83		14	46	
Great Britain	**6,598**	**1,888**	**2,394**	**3,427**		**29**	**36**	**52**		**27**	**82**	

Notes:
(i) The table covers only river stretches which were surveyed in all periods.
(ii) Note that data for 2000-2 are not yet available for Wales and Scotland and, therefore, Great Britain.

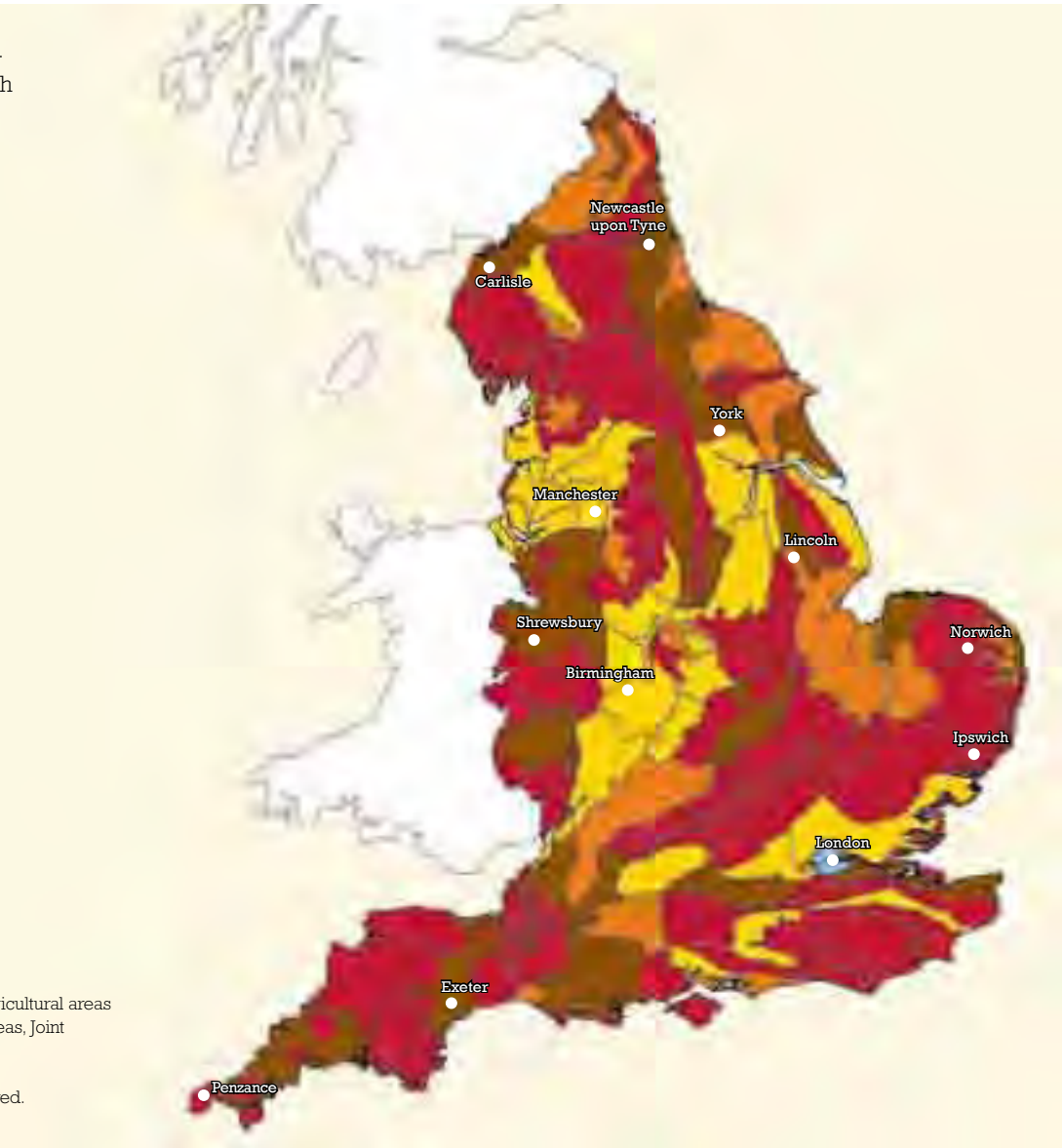
Source: Environment Agency, 2006. Former NCC and Vincent Wildlife Trust National Otter Surveys.

Countryside character and tranquillity

In 2004 we reported on Changes in Countryside Character and Countryside Quality for 1990-8. (SOCR 2004, p141). This year the 2nd assessment of change has been published for the period 1999-2003. Figure 4.4.8 illustrates the findings of this research (Natural England, 2007).

The most recent assessment has shown that between 1999 and 2003 existing landscape character is being maintained in 51% of England's landscapes, while in a further 10% existing character is being enhanced. However 20% of our landscapes are showing signs of neglect, given the loss of character suffered in the past, while in a further 19% new characteristics are emerging. These results suggest that, compared to the earlier assessment, there is evidence that the erosion of valued landscape character has been arrested in some places and has slowed in others. There is also evidence that in many key localities, the existing landscape character has been sustained or strengthened.

Figure 4.4.8
Countryside Quality Counts – Tracking change in the English landscape: 1999–2003



Note:
(i) Data as at 14th February 2007.

Source: Defra, June survey data – agricultural areas Natural England – ELS agreement areas, Joint character areas.

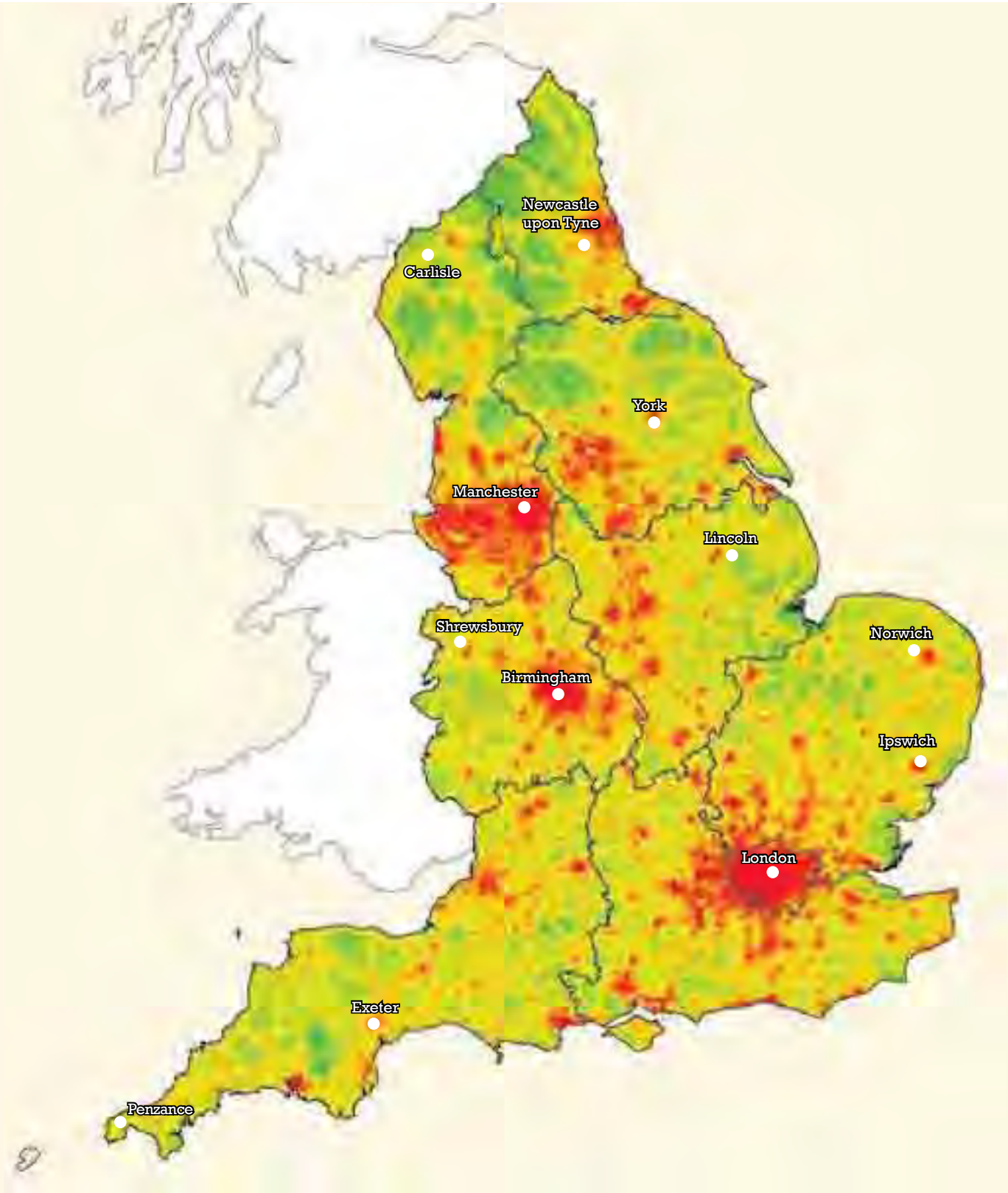


Figure 4.4.9
National Relative Tranquillity, 2006

Tranquility

Most tranquil

Least tranquil

Boundaries

Notes:
(i) The tranquillity map is made up of many layers of information based on what people say adds to and detracts from tranquillity, weighted according to how important those factors are and taking into account the country's topography. If you peel away the layer, you would see maps which show the positive or negative impact on tranquillity of:
a. a natural landscape, including woodland;
b. rivers, streams, lakes and the sea;
c. birds and other wildlife;
d. wide open spaces;
e. cars, motorbikes, trains and aircraft – and roads and railways;
f. light pollution;
g. towns, cities and villages;
h. large numbers of people; and
i. pylons, power lines, masts and wind turbines.
(ii) Each 500m by 500m square of England has been given a tranquillity score, based on 44 different factors which add to or detract from people's feelings of tranquillity.

Source: CPRE and The Countryside Agency, 2006.

One characteristic of the quality of rural areas is tranquillity. Tranquillity is subjective but is taken to mean that people can enjoy nature free from disturbance of man-made features and activities. Recent work by Campaign to Protect Rural England (CPRE) has attempted to create an indicator of tranquillity for each half kilometre square using 44 measures and taking into account factors such as topography, light pollution, transport noise, and existence of power lines and wind turbines (CPRE, 2006). The resulting map (Figure 4.4.9) indicates the range of tranquillity across England with dark green areas showing where tranquillity is most likely to be found. The map clearly illustrates the strong impact of the road transport network and urban areas, which influence the tranquillity of rural areas well beyond the immediate vicinity of roads and urban areas themselves.

Light pollution, one element used in the measure of tranquillity, shows a significant increase in recent years. Satellite measurements of the quantity of artificial light visible in each kilometre square show a marked increase in some regions of England. The result is higher energy consumption and fewer rural areas where the night sky is truly dark. There has been an estimated 24% increase in light pollution in England over the period 1993-2000. In some regions the change is more marked: in the East Midlands, for example, light pollution has increased by 30% over the period, while in the South-West the change has been relatively less - a 17% increase (CPRE, 2003).

Based on this type of measure it could be argued that the countryside is becoming more similar to urban areas. The evidence certainly suggests that in terms of light, noise, visual aspect and other factors used to measure 'tranquillity' there is a decreasing difference between rural and urban areas. The map in Figure 4.4.9 suggests there are very few truly 'tranquil' areas of countryside in England.

4.4 **Key summary points:** Environmental quality

- The extent of land area under some form of environmental stewardship has increased, but a range of problems currently exists including: soil erosion, soil compaction (causing increased run-off), nitrogen enrichment, nitrate losses from soil, and acidification. These problems are linked to increased emissions from transport, use of heavy machinery in agriculture, concentration of livestock wastes, and intensive use of chemical fertilisers.
- Evidence from biological indicators suggests that the situation has stabilised but at lower levels than several decades ago, and it may be some time before ecological improvements are clearly visible. Some measures suggest that where improvements have occurred, such as in river water quality, the more mobile species such as otters can make an effective recovery. It may take a lot longer and require active habitat restoration and reintroduction programmes to improve the situation for less mobile species such as reptiles and amphibians.
- Air quality reveals a complex picture with a definite west to east quality gradient visible for some pollutants, while others are strongly related to urban, industrial and transport emissions. Transport emissions are a major causal factor for poor air quality in rural areas.
- There is some evidence that the erosion of landscape character has been halted in some places, and has slowed in others.

See also (from 2005 and 2006 reports):

Water

2006	Figure 94	% of river and canal length of good or fair biological and chemical water quality
2006	Figure 95	Comparison of the chemical quality of rivers in rural and urban areas, 2004
2005	Table 5.6	River water quality December 2003
2005	Figure 5.13	River water quality December 2003 (map)

Air

2006	Figure 96	Days when air pollution was moderate or worse, 1993 to 2005.

Biodiversity

2005	Figure 5.8	Countryside Quality Counts headline indicator 1990-8 (map)
2006	Table 37	Changes in the condition of Sites of Special Scientific Interest, 2004 and 2005
2006	Figure 91	Condition of the main Biodiversity Action Plan habitats in SSSIs, 2005
2006	Figure 93	Regional variations in wild bird numbers 1994-2004
2005	Figure 5.15	Location of vehicle deer collisions (map)

4.5 Climate change

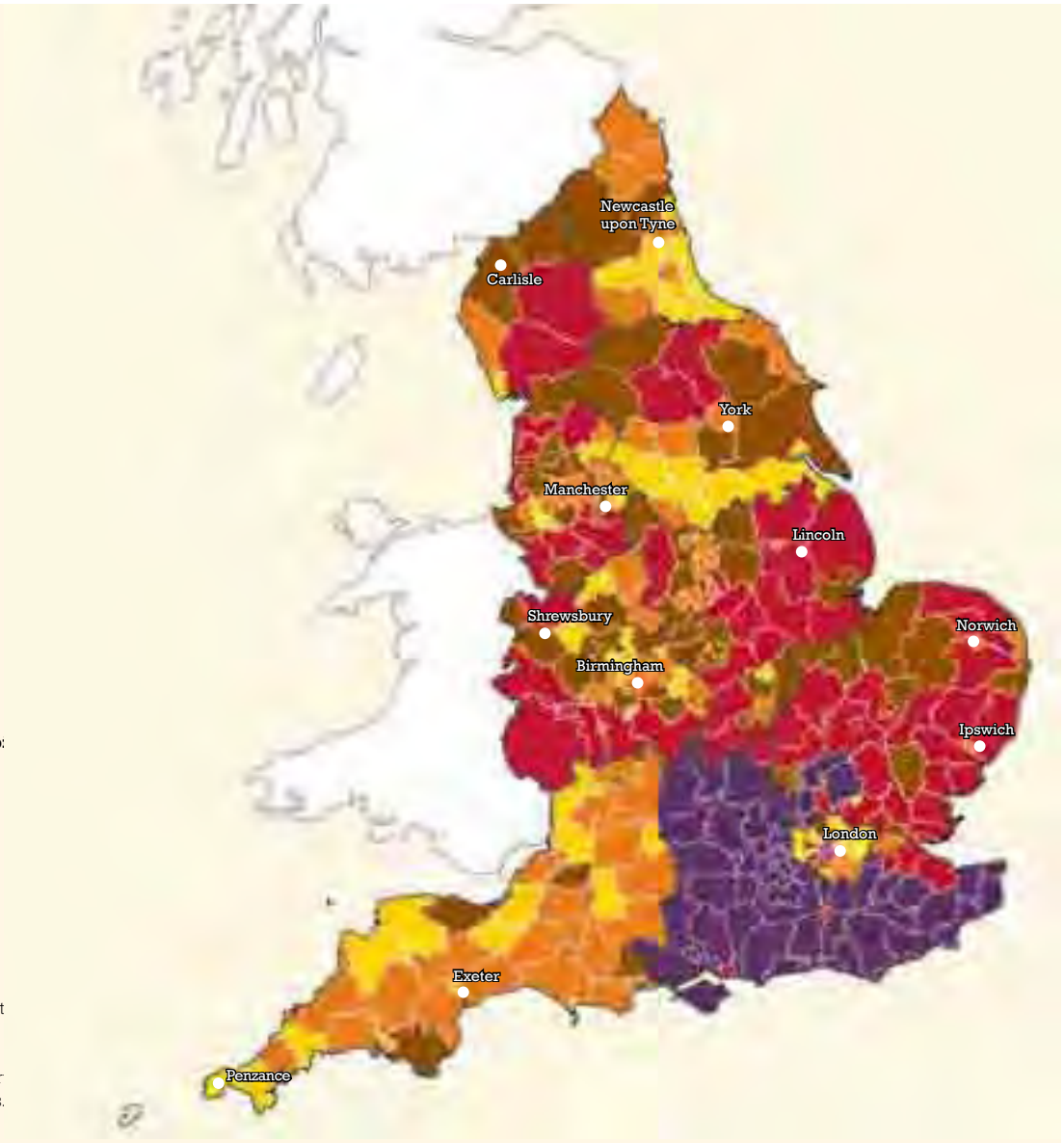
This section looks at what we know about rural people's contributions to climate change. The data is incomplete, though recent analyses are increasing our knowledge. Here we concentrate on calculations of people's carbon footprint and on the production of greenhouse gases from rural areas (whether directly from residents or not).

Carbon footprint of rural areas

Figure 4.5.1 illustrates the carbon footprint of rural and urban areas. The data are taken from a recent Stockholm Environmental Institute analysis for the CRC. They are created through measures of carbon emissions in the production and consumption of a range of items, for example:

- Food.
- Housing (which covers gas, electricity and fuel use in the home but also includes construction, rental and maintenance of dwellings).
- Transport (incorporates car use and maintenance, as well that of other private vehicles and public transport).
- Consumables (includes annual expenditure on 17 categories of household consumption).
- Private services (annual expenditure on 13 categories of service from insurance to financial advice to private education).
- Public services (the remainder of spending by government not addressed by the above themes. This includes public administration, health and education).

Figure 4.5.1
Carbon footprint, 2001

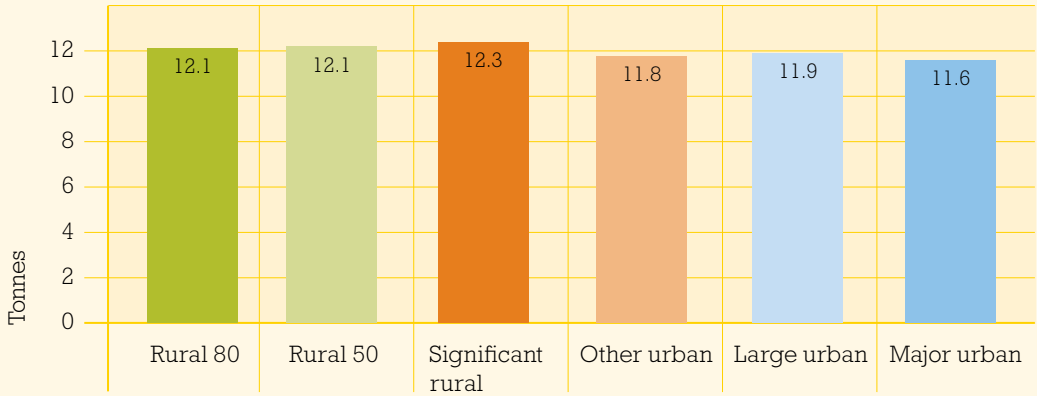


Source: Stockholm Environment Inst
REAP.VO.063.

Figure 4.5.1 shows the results of the analysis, and it is clear that most of the data used is from regional, rather than local evidence. The border between the South East and the South West implies that the carbon footprint reduces radically when one crosses the boundary. This is obviously not the case.

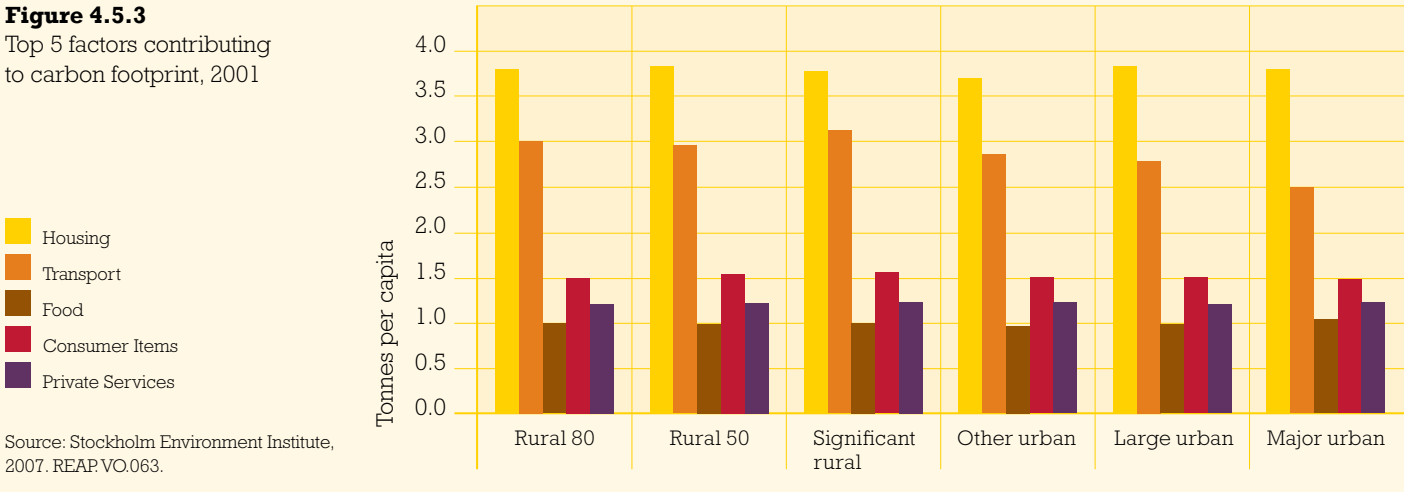
Categorising all areas by the Local Authority rural/urban definition shows that the per capita footprint appears slightly higher for rural areas (Figure 4.5.2) but the differences are not great. Figure 4.5.3 illustrates that in housing, food, consumer items and private services individuals in rural and urban areas are nearly identical. The main difference is in the transport footprint where rural areas tend to have a greater impact than urban areas. This may be caused by the lack of public transport, the need to drive further to access basic services and by commuting.

Figure 4.5.2
Carbon dioxide emissions per capita, 2001



Source: Stockholm Environment Institute, 2007. REAP.VO.063.

Figure 4.5.3
Top 5 factors contributing to carbon footprint, 2001



Source: Stockholm Environment Institute, 2007. REAP.VO.063.

Emissions from rural areas

It is clear, however, that the science of constructing carbon emission estimates is in development. Figure 4.5.4 show a different analysis.

This analysis indicates that transport emissions in the Rural 80 districts are more than double those of urban areas. However, high proportions of the emissions assigned to rural areas come from motorways and inter-urban traffic that is not of a rural origin.

Emissions from agricultural activity are also predictably higher in the more rural areas, but only represent a small proportion (0.6%) of total CO_2 emissions across England. More surprising are the total emissions from industrial sources in rural areas, which exceed those in the mixed urban-rural areas. In terms of industrial emissions per person, rural areas create significantly more than urban areas. Though a large proportion of this is from large fossil-fuel fired industrial units– power stations are more commonly sited in rural areas. Hence a proportion of the greenhouse gas emissions generated in rural areas, are as a result of national rather than local needs.

Figure 4.5.4
End user[1] CO_2 emissions, tonnes per 10,000 population, 2004

Area classification	Domestic	Industry	Agriculture	Transport	Total
Rural 80	28,052.0	37,112.5	2,239.4	40,735.5	108,139.5
Rural 50	27,812.2	56,925.2	1,136.8	35,527.2	121,401.5
Significant rural	27,213.1	33,943.7	725.5	34,862.3	96,744.7
Other urban	24,118.6	35,963.6	125.3	18,886.8	79,094.4
Large urban	24,505.3	45,304.0	140.7	18,960.9	88,910.9
Major urban	24,109.2	30,400.6	45.1	19,025.9	73,580.8
Rural	27,932.3	47,003.8	1,689.0	38,135.3	114,760.4
Mixed	25,632.8	34,975.2	419.0	26,704.1	87,731.2
Urban	24,226.0	34,793.4	73.3	19,006.8	78,099.5
England	25,473.8	37,713.4	545.7	25,563.7	89,296.5

[1]Analysis by 'end user' allocates emissions from power stations to those using the electricity generated.

Note:
(i) 2004 population figures are taken from ONS Mid-year Population Estimates.

Source: AEA Energy and Environment, 2006. Local and Regional CO_2 emissions estimates.

To a certain extent the countryside can act as a carbon sink. Both soils and woodland fix carbon, but the capacity to do so varies greatly (Forestry Commission, 2002). A study carried out for Defra (AEA Energy and Environment, 2006) mapped the extraction of carbon dioxide as a result of afforestation, and the addition due to activities such as the liming of soils. Converting land to forest or grassland makes the most contribution to carbon dioxide reduction. The study shows that in 2004, land use, land use change and forestry activities resulted in a net 0.8% removal of $C0_2$ emissions from the atmosphere.

Impacts of climate change on rural areas

Evidence suggests that the climate in England is becoming warmer (SOCR 2006 Figure 97). Warmer temperatures might mean an earlier spring and longer summers, with potential for increases in insect activity, and possibly introduction of new species into the British Isles. Many species of invertebrate (such as moths, butterflies and beetles) are sensitive to changes in climate. A range of factors including summer rainfall and average summer temperatures may affect changes in species populations.

Changes in climate might also alter the types of crops grown, and farming practices in some areas. For example, there are now nearly 400 vineyards in England and Wales, and some are even established in more northerly areas of England. For example, there is a small vineyard near Wrexham, growing grapes with the help of polytunnels, and one just inside the Leeds city boundary on a protected south facing slope. The potential effects of climate change on length of growing season, weather and in particular precipitation are less clear. The 20-year average monthly precipitation data for England suggest little change in the seasonal rainfall pattern since the late 18th century, but the difference in Summer and Winter rainfall patterns (SOCR 2006 Figure 98) shows a divergence towards higher

winter and lower summer rainfall since the 1970s. There is some evidence that spring is starting earlier. A 'Spring' index related to a range of biological events suggests that since 1999 spring events in England have occurred earlier than during the period 1901-47.

Warmer temperatures will increase demand on water resources, particularly abstraction for irrigation, and will probably increase urban water consumption. There is potential for over-abstraction from ground water sources with consequent impacts through reduced river flows and increased temperatures in surface water bodies leading to more rapid rates of eutrophication.

4.5 **Key summary points: Climate change**

- There is still a great deal of uncertainty about the potential impacts of climate change. Current evidence suggests warmer temperatures and an earlier start to spring and summer, and a wider fluctuation in weather patterns. This will have implications for biodiversity as well as for agricultural activity. More mobile species may be able to adapt to the pace of change but even these may need help through provision of migration corridors and large scale ecological landscape planning.
- Rural areas currently have a slightly greater carbon footprint per person than urban areas with some specific differences – for example housing and transport emissions.
- The land offers valuable potential for both CO_2 extraction and for the production of biofuels and windpower which could replace fuels with higher net emissions.

See also (from 2005 and 2006 reports):

Climate change

2006	Figure 97	Average annual temperature in the Central England triangle, 1700 to 2005
2006	Figure 98	Trends in summer-autumn/ winter-spring rainfall since 1935 (20 year moving average)
2005	Figure 5.14	Phrenological response to climate change - Ash and Oak in Surrey
2005	Table 5.7	Greenhouse gas emissions UK 1990-2002

4.6 Conclusions

The quality of the natural environment is steadily improving and is likely to continue in that direction as agri-environment schemes become more widespread, and agricultural practices more extensive. There is still uncertainty over the effects of the Single Payment Scheme on farmers and it may lead to more change and variability in farming practices. It may also result in a concentration of land into larger holdings, particularly given the age profiles of farmers and the current profitability of some forms of farming. Farmers are looking to alternative forms of activity and there is growing interest in production of bio-mass for conversion to energy, which may have significant localised landscape impacts.

Despite the favourable outlook for the environment there is still cause for concern. Agricultural chemical inputs remain high, causing problems with nitrous oxide emissions, and contributing to increased nitrate levels in surface and ground waters. Population levels for specialist species of bird and some mammals remain low, and agricultural activity continues to impact on habitat, and on soil and water quality.

Consumption of the resources in the countryside is increasing, putting pressure on a limited resource base. Demand for water, minerals, land for development, recreation, and space for energy generation and waste disposal are all increasing. Climate change may exacerbate the space requirements for energy generation and consumption of water.

The challenge for rural areas (as for urban) is to take action to reduce contributions to global warming emissions, and adopt mitigation strategies to ensure a high quality environment for the future. New residential and industrial development could be required to generate power, and to reduce their carbon footprint through more efficient buildings, and through use of waste-to-energy systems. Communities could explore the scope for co-operative energy production and integration of biodegradable waste management from agricultural and urban areas. Communities and governments could develop innovative strategies to manage the movement of people and delivery of services to reduce the transport contribution to global warming.

Sustainable communities require sustainability in environmental terms. This may point to a need to focus on environmental quality in the wider countryside and to supplement the concentration of effort on protecting small designated areas. The creation of migration corridors for flora and fauna might become essential if climate change results in significant changes to habitat. Consideration of the effects on rural areas of transport, energy generation and waste management require more attention, in order to maintain key values of rural areas, such as tranquillity. One factor that might create the conditions for such change is the UK's recent ratification of the Council of Europe's European Landscape Convention in March 2007. Although the UK currently complies with the terms of the Convention, it will provide a framework within which to examine the impact of policies and programmes from a range of government departments (for example, Defra, DCLG, DfES and DCMS). The aim of the Convention is to ensure that development and change takes place within the local landscape context and with input from local people into the decision-making processes.

5 Discussion: Sustainable rural communities

5.1 Key themes

Readers of the *State of the countryside 2007* will see a range of themes running through the report. There are three initial themes that we would like to highlight - change, equity, and rural/urban linkages.

i) Change:

Rural England continues to experience significant social, economic and environmental change. In some cases these changes mirror what is happening in urban areas, in others there are clearly distinct rural patterns. Key changes highlighted in this report include:

- The ongoing net inward migration to rural areas (largely from urban England).
- The ongoing demographic change which is producing a rural population that is older and that is ageing faster than the urban population.
- The increasing number of migrant workers in rural areas, who are not just working in agriculture but in a wide range of sectors such as tourism, manufacturing and public services.
- The continuing reduction in the number of physical service outlets – both private (e.g. petrol stations) and public. This in turn has reduced the overall levels of services availability and accessibility for rural people.
- The steady decline in the level of the UK's self-sufficiency in food and broader moves to land stewardship rather than food production.
- The change in land use – with notable increases in the proportion of land used for bio-fuels and for other sources of renewable energy production such as wind power.

ii) Equity:

Across a range of social and economic indicators, rural areas do very well – often demonstrating much better average outcomes in terms of health and wealth than are seen in urban England. However, within this, there remain key equity issues, including:

- The clear inequities in the housing market – essentially between those who can afford to acquire rural housing and those who cannot.
- The inequities in, and as a result of, transport. Car use is currently critical in rural areas for accessing services and to meet wider social needs. Hence those without access to cars are significantly disadvantaged as are many low income households who need a level of car ownership far in excess of that of their urban counterparts.
- Wider inequity between those in the rural 'mainstream' and those experiencing disadvantage for a range of reasons. The proportions of those in need can be lower in rural areas. However they remain harder to reach than is often the case in urban areas, as they tend to be highly geographically dispersed.

A critical over-arching equity issue is the difference in outcomes experienced between the less sparse (often central) rural areas and the sparsely populated (often peripheral) areas which experience worse performance over a range of indicators, for example household income and health.

iii) Rural /urban linkages:

This report focuses, correctly, on the specifics of life in rural England. However the analysis indicates, inescapably, the extent to which the conditions and changes in rural England are intrinsically linked to conditions and changes in urban England (and in the wider world). For example:

- Rural housing affordability is strongly affected by urban demand.
- Rural household incomes are influenced by the scale and nature of commuting to and from urban areas.
- The overall rural economy is highly integrated within the wider national and international economy with rural businesses tending to have much broader markets than their urban counterparts. Hence their economic viability is often dependent on external demand.

In summary, as this report outlines, rural England presents a complex picture of ongoing change, some key inequities and a high degree of linkage to urban areas.

5.2 Sustainable rural communities

Given this complex picture, it is challenging to produce an overall assessment of the extent to which rural England and rural communities are sustainable or, more importantly, about how they can become more sustainable.

Yet these are critical questions that need to be addressed – in particular within the context of the ongoing challenges faced by us all in responding to climate change. In simple numerical terms, rural England is a 'minor player' in that it comprises 19% of England's population, with England in turn containing less than 1% of the world's population (and producing around 2% of the world's carbon emissions). Nevertheless it is important both that rural England 'plays its part' in efforts to respond to climate change and that such efforts recognise its different characteristics (and opportunities).

This brings us back to sustainability – the extent to which we are able to keep things going into the future – which requires us to consider the full spectrum of social, economic and environmental issues. While the challenge of climate change concentrates the mind on the environmental dimension, social and economic coherence are also essential. Policies to ameliorate climate change need to conntribute to the development of communities that are sustainable in all these ways.

Social, economic and environmental sustainability
In one sense communities are sustainable until they are not sustainable – when what is being done cannot carry on indefinitely. Most definitions of sustainability also embed the concept that we should hand on to our children a world that is at least as liveable in as the one we have.

Social, economic and environmental sustainability all imply different geographic levels of wellbeing.

- A socially sustainable community is largely dependent on people at the local level interacting with each other in a way that maintains stability. This does not have to mean that everybody interacts with all others well, but that there is not serious conflict. Local factors are critical here.
- An economically sustainable community is more dependent on wider economic health, coupled with more local factors, which determine the local economy. Hence national, regional (and sub- regional) factors are key.
- An environmentally sustainable community is more dependent on global environmental wellbeing. Climate change cannot be halted by the action of individual communities alone – we will all be affected. But some aspects can be local – for example pollution.

A trading off or a holistic approach?
The above are simplifications but point to the need for action at all geographic levels and across the social, economic and environmental spheres, if we are to maintain and develop sustainable rural communities at a time when policies to tackle climate change are being considered.

In the past sustainability tended to be thought of in terms of making sacrifices in one sphere of life in order to sustain others – now it is increasingly realised that policy needs to tackle the major issues of climate change while enhancing economies and social aspects.

How do rural areas currently measure up?
In terms of a wide range of social, economic and environmental quality measures, rural England is doing well in comparison to many urban areas, although, as we have noted previously, there are a number of key equity issues.

In terms of the central challenge of reducing carbon emissions, our understanding of the contribution of local geographical areas continues to develop. The evidence we have analysed in this report indicates relatively small overall differences between rural and urban areas, in terms of their carbon emissions per head, with regional and relative affluence patterns being more significant. Nevertheless in specific sectors there are challenges for rural areas – for example because rural houses tend to be older than urban houses and are consequently often harder to heat efficiently and because rural settlement patterns (and service locations) also generate more demand for travel which is less easy to satisfy with public transport solutions.

5.3 Looking forward

As a result of the recognition of the challenges of climate change, a range of policies have been debated – primarily with the objective of mitigating climate change by reducing greenhouse gas emissions. These include:

- road pricing;
- increased energy efficiency in vehicles;
- increased energy efficiency in buildings;
- investment in renewable energy sources;
- re-investing in nuclear energy;
- increasing the 'carbon sink';
- land use planning; and
- lifestyle/behaviour change.

It is not the purpose of this report to provide a detailed assessment of the impacts of these potential policies – either individually or collectively. The key point to make is that, as the *State of the countryside* demonstrates, although there are now strong rural/urban commonalities and linkages, there remain some key differences in the social, economic and environmental characteristics of rural England. These different characteristics mean that the implementation of specific policies related to climate change will bring both valuable opportunities to rural England and will also bring challenges. Careful rural proofing of policy will be needed.

As an example, road pricing has recently been proposed as a tool to tackle climate change, rather than, or as well as congestion. Current suggestions imply higher pricing in urban areas and lower pricing in rural areas to cut congestion. But this could have an effect of encouraging further traffic growth in rural areas, and further migration to rural areas by people who would be likely to commute long distances, which could act against the climate change objectives.

At the heart of many of the opportunities lies the value and potential of the rural land - providing a carbon sink, a source of renewable fuels, as well as (more controversially) providing the current and potential location for nuclear power generation. Opportunities also lie in the strong social capital apparent in rural communities that provides the foundation for a locally based and owned response.

Some of the challenges, lie, as they do for the country as a whole, in behaviour change – for example around transport. Clearly in this area, as in others, there is a risk of negative outcomes (in particular for the most disadvantaged in rural communities) if policies adopted at national level do not recognise specific rural circumstances and needs. Many of these needs relate to the basic facts of geography – settlement size and distance to other settlements are some of the key factors that differentiate rural from urban society.

However, it would seem that we will not move forward successfully by treating rural England as a stand-alone entity. We know that urban England and rural England are already highly interconnected. Hence a broad way forward on sustainability ought to recognise this and to be clear on how rural and urban areas ought to connect in order to increase broader sustainability where (amongst other needs):

urban England needs rural England for:
- food;
- leisure;
- a carbon sink;
- energy production - bio fuels, wind power;

and rural England needs urban England for:
- jobs;
- goods; and
- services that cannot be provided at the local level.

These inter-linkages point to the need for holistic development of policy measures, both in terms of the linkage between economic, social and environmental sustainability, but also respecting the connections between urban and rural England.

Section	Figure	Type	Data	Source	Type of data	Boundary unit	Definition used
Introduction	1.1.1	Table	Populations of rural and urban England, 2001	Office for National Statistics, 2001. Census.	Census of the population of England.	Census Output Area	Census Output Area
	1.1.2	Map	Rural and urban definition, 2004	Office for National Statistics, 2004. Rural and Urban Definitions	Output area definition.	Census Output Area	Census Output Area
	1.1.3	Map	Classification of Local Authority District and Unitary Authorities, 2005	Defra, 2005. Classification of Local Authority District and Unitary Authorities.	Classification of Local Authority District and Unitary Authorities.	UA/LAD	UA/LAD
	1.1.4	Map	Sample map - Expected risk of obesity, 2006	Experian and Dr Foster, 2006. Risk of obesity index.	Modelled sample data.	UA/LAD	UA/LAD
Living in the countryside	2.2.1	Chart	Median age, 2001 and 2004	Office for National Statistics, 2001. Census and 2006, Mid-2004 Median Age.	Census of the population of England and experimental population estimates at MSOA.	MSOA	MSOA
	2.2.2	Chart	Age profile, 1985 and 2005	Office for National Statistics, 2006. Mid-year Population Estimates.	Annually produced estimates of population.	UA/LAD	UA/LAD
	2.2.3	Map	Median age, 2004	Office for National Statistics, 2006. Mid-2004 Median Age.	Experimental population estimates at MSOA.	MSOA	MSOA
	2.2.4	Chart	Within UK migration: rural net migration by region, 1997/8 to 2004/5	Office for National Statistics, 2006. Internal Migration Estimates.	Annually produced estimates of migration.	UA/LAD	UA/LAD
	2.2.5	Table	Within UK migration: top 10 LAD/UAs based on average net migration per 10,000 people, 1997/8 to 1999/2000 and 2002/3 to 2004/5	Office for National Statistics, 2006. Internal Migration Estimates and Mid-year Population Estimates.	Annually produced estimates of population and migration.	UA/LAD	UA/LAD
	2.3.1	Table	Distribution of service outlets, 2007	Commission for Rural Communities, 2007. Rural Services Series. Analysis by Defra RSU.	Analysis of point data showing service outlet location.	Postcode or Grid reference	Census Output Area
	2.3.2	Chart	Percentage change in number of service outlets, 2006-7	Commission for Rural Communities, 2007. Rural Services Series. Analysis by Defra RSU.	Analysis of point data showing service outlet location.	Postcode or Grid reference	Census Output Area
	2.3.3	Table	Availability of services, 2007 (% of households within specified distance)	Commission for Rural Communities, 2007. Rural Services Series. Analysis by Defra RSU.	Analysis of point data showing service outlet location.	Postcode or Grid reference	Census Output Area
	2.3.4	Table	Availability of services in rural areas, 2000 and 2005-7	Commission for Rural Communities, 2007. Rural Services Series. Analysis by Defra RSU.	Analysis of proximity of households to service outlets.	Postcode or Grid reference	Census Output Area
	2.3.5	Map	Areas lacking key financial services, 2007	Commission for Rural Communities, 2007. Rural Services Series. Analysis by Defra RSU.	Analysis of proximity of households to service outlets.	Census Output Area	N/A
	2.3.6	Chart	Composite accessibility, 2005 (highest values represent worst accessibility)	Department for Transport, 2007. National accessibility threshold indicators.	Modelled analysis of service accessibility based on travel time thresholds.	LSOA	LSOA
	2.3.7	Map	Composite accessibility, 2007	Department for Transport, 2007. National accessibility threshold indicators.	Modelled analysis of service accessibility based on travel time thresholds.	LSOA	LSOA
	2.3.8	Chart	Percentage of households within 13 minutes walk of a bus stop with a service at least once an hour, 2002-5	Department for Transport, 2007. National Travel Survey.	Weighted national survey data of private households.	Census Output Area	Census Output Area
	2.3.9	Chart	Household car ownership by income quintile, 2004/5	Department for Transport, 2007. National Travel Survey.	Weighted national survey data of private households.	Census Output Area	Census Output Area

Section	Figure	Type	Data	Source	Type of data	Boundary unit	Definition used
Living in the countryside	2.3.10	Chart	Method of travel to and from school, 2002/5	Department for Transport, 2007. National Travel Survey.	Weighted national survey data of private households.	Census Output Area	Census Output Area
	2.3.11	Chart	Proportion of services assigned to households by area type, 2006	Point Topic, 2007.	Modelled data from various sources, such as, Census, PAF, VOA, Point Topic Survey results (UK Plus)	LSOA	LSOA
	2.3.12	Chart	Downstream DSL bandwidth availability by area type, 2006	Point Topic, 2007.	Modelled data from various sources, such as, Census, PAF, VOA, Point Topic Survey results (UK Plus)	LSOA	LSOA
	2.4.1	Chart	Indexed housing completions, 1994/5 to1998/9 average and 1999/2000 to 2005/6	DCLG, 2006. House building: permanent dwellings started and completed by tenure and district.	National UA/LAD and NHBC reporting.	UA/LAD	UA/LAD
	2.4.2	Chart	Affordable home completions in settlements with a population of fewer than 3,000 people, 2000/1 to 2006/7	Housing Corporation, 2007. Rural housing strategy.	Research by Housing Corporation.	England	N/A
	2.4.3	Table	Average house prices and change in average house prices, 2000-6	Land Registry, 2006. Price Paid Dataset.	Analysis of an extract from dataset of prices paid for dwellings	Postcode	Census Output Area
	2.4.4	Chart	Change in average house prices by type, 2000-6, and average house prices by type, 2006	Land Registry, 2006. Price Paid Dataset.	Analysis of an extract from dataset of prices paid for dwellings	Postcode	Census Output Area
	2.4.5	Chart	Comparing housing affordability with lower quartile housing affordability, 2006	Land Registry, 2006. Price Paid Dataset and CACI Ltd, 2007. Paycheck.	Analysis of an extract from dataset of prices paid for dwellings and modelled income data	MSOA	MSOA
	2.4.6	Map	Lower quartile housing affordability, 2006	Land Registry, 2006. Price Paid Dataset and CACI Ltd, 2007. Paycheck.	Analysis of an extract from dataset of prices paid for dwellings and modelled income data	MSOA	MSOA
	2.4.7	Chart	Homeless and priority need households per 1,000 total households, 2002/3 to 2005/6	DCLG, 2006. Numbers accepted as being homeless and in priority need. DCLG, 2006. Mid-year household estimates.	National UA/LAD reporting.	UA/LAD	UA/LAD
	2.4.8	Chart	Homeless households in temporary accommodation per 1,000 households, 2002/3 to 2004/5	DCLG, 2006. Numbers accepted as being homeless and in priority need. and Mid-year household estimates.	National UA/LAD reporting.	UA/LAD	UA/LAD
	2.4.9	Chart	The percentage of households living in non- decent homes, 2001 and 2004	ODPM, 2001 and 2004. English House Condition Survey.	National UA/LAD reporting.	UA/LAD	UA/LAD
	2.4.10	Chart	Proportion of homes with solid walls and not on mains gas supply, 2006	Centre for Sustainable Energy, 2007.	Research by Centre for Sustainable Energy	Census Output Area	Census Output Area
	2.5.1	Chart	Consumption of fruit and vegetables, 2000-2	The Information Centre for health and social care, 2005. Synthetic estimates of Healthy Lifestyle Behaviour.	Modelled sample data.	Ward	Ward
	2.5.2	Chart	Health negative lifestyle behaviours, 2000-2	The Information Centre for health and social care, 2005. Synthetic estimates of Healthy Lifestyle Behaviour.	Modelled sample data.	Ward	Ward
	2.5.3	Map	Expected risk of obesity, 2006	Experian and Dr Foster, 2006. Risk of obesity index.	Modelled sample data.	UA/LAD	UA/LAD
	2.5.4	Map	Coronary heart disease mortality, 65 to 74 years, 2002/4	SEPHO, 2006. CHD Atlas.	National hospital episode reporting.	UA/LAD	UA/LAD

Section	Figure	Type	Data	Source	Type of data	Boundary unit	Definition used
Living in the countryside	2.5.5	Map	Participation in sports, 2005	Sport England, 2006. Active People Survey.	Voluntary survey of a sample of individuals.	UA/LAD	UA/LAD
	2.5.6	Table	Mental health Indicator, 1999-2003	DCLG, 2004. Indices of deprivation.	Indexed estimates of expected prevalence.	LSOA	LSOA
	2.5.7	Map	Mental health Indicator, 1999-2003	DCLG, 2004. Indices of deprivation.	Indexed estimates of expected prevalence.	LSOA	LSOA
	2.6.1	Chart	Pupils achieving 5 or more A* to C grades at Key Stage 4, 2003/4 and 2004/5.	DfES, 2007. National Curriculum Assessments at Key Stage 4.	Bespoke analysis for Commission for Rural Communities by DfES.	Postcode	Census Output Area
	2.6.2	Chart	Pupils achieving level 4 or above at Key Stage 2 by subject, 2003/4 and 2004/5	DfES, 2007. National Curriculum Assessments at Key Stage 2.	Bespoke analysis for Commission for Rural Communities by DfES.	Postcode	Census Output Area
	2.6.3	Chart	Number of full-time higher education applicants per 1,000 population by origin, 2005-6	HESA, 2006.	National sample based on student applications.	Postcode	UA/LAD
	2.6.4	Map	Number of full-time higher education applicants per 1,000 population by origin, 2005-6	HESA, 2006.	National sample based on student applications.	Postcode	UA/LAD
	2.7.1	Table	Number of hours per week that paid parish and town council clerks are contracted to work, 2006	Defra, 2007. Report by Institute of Geography and Earth Sciences, University of Wales, Aberystwyth.	Survey of parish and non-parish councils.	English parishes	N/A
	2.7.2	Table	Parish and Town council sources of income, 2005-6 (median income per council £)	Defra, 2007. Report by Institute of Geography and Earth Sciences, University of Wales, Aberystwyth.	Survey of parish and non-parish councils.	English parishes	N/A
	2.7.3	Map	Change in band D Council Tax, 1998/9 to 2006/7.	DCLG, 2006. Local Government Finance Agreement.	Database of Council Tax charges by band.	UA/LAD	UA/LAD
	2.7.4	Chart	Indicators of participation; civic consultation, 2005	DCLG, 2006. Citizenship Survey, 2005.	Bespoke analysis from a DCLG-commissioned survey.	Postcode	Census Output Area
	2.7.5	Map	Percentage change in recorded crime levels, 2003/4 to 2004/5	Home Office, 2006. Recorded Crime for Key Offences	Analysis of Recorded Crime for Key Offences data	UA/LAD	UA/LAD
	2.7.6	Chart	Citizens Advice Bureau issues, 2006	Citizens Advice, 2007.	Sample taken from Citizens Advice case records.	Postcode	Census Output Area
	2.7.7	Chart	FSA authorised Credit Unions, 2007	FSA, 2007.	FSA records of authorised Credit Unions.	Postcode	UA/LAD
Economic Well being	3.2.1	Table	Mean household income in England, 2004-7 (£)	CACI, 2007. Paycheck.	Modelled sample data interpolated to Census Output Area.	Census Output Area	Census Output Area
	3.2.2	Chart	Change in median household income, 2004-7.	CACI, 2007. Paycheck.	Modelled sample data interpolated to Census Output Area.	Census Output Area	Census Output Area
	3.2.3	Table	Top and bottom 5 regions by change in median household income, 2004-7 (£)	CACI, 2007. Paycheck.	Modelled sample data interpolated to Census Output Area.	Census Output Area	Census Output Area
	3.2.4	Table	Mean personal income from principal economic activities, 2004-5 (£)	HM Revenue and Customs, 2007. Survey of Personal Incomes.	National sample survey based on information held by Inland Revenue tax offices on persons who could be liable to UK tax.	UA/LAD	UA/LAD
	3.2.5	Map	Upper and lower quintile median household income (rural areas only), 2007	CACI, 2007. Paycheck.	Modelled sample data interpolated to Census Output Area.	Census Output Area	Census Output Area
	3.2.6	Chart	Proportion of average weekly household expenditure by rural and urban areas, 2005-6	Office for National Statistics, 2007. Family Spending Survey.	Voluntary sample survey of private households	Postcode	Census Output Area
	3.2.7	Table	Average weekly household expenditure, 2005-6 (£)	Office for National Statistics, 2007. Family Spending Survey.	Voluntary sample survey of private households	Postcode	Census Output Area

Section	Figure	Type	Data	Source	Type of data	Boundary unit	Definition used
Economic Well being	3.2.8	Chart	Proportion of tax paid on average personal income, 2004-5	HM Revenue and Customs, 2007. Survey of Personal Incomes.	National sample survey based on information held by Inland Revenue tax offices on persons who could be liable to UK tax.	UA/LAD	UA/LAD
	3.2.9	Table	Summary financial statement for average rural and urban households, 2005-6	Office for National Statistics, 2007. Family Spending Survey.	Voluntary sample survey of private households.	Postcode	Census Output Area
	3.2.10	Chart	Sources of household income, 2005-6	Office for National Statistics, 2007. Family Spending Survey.	Voluntary sample survey of private households.	Postcode	Census Output Area
	3.2.11	Table	Total income and tax, 2004-5 (£billion)	HM Revenue and Customs, 2007. Survey of Personal Incomes.	National sample survey based on information held by Inland Revenue tax offices on persons who could be liable to UK tax.	UA/LAD	UA/LAD
	3.2.12	Table	Total income from principal economic activities, 2004-5 (£billion)	HM Revenue and Customs, 2007. Survey of Personal Incomes.	National sample survey based on information held by Inland Revenue tax offices on persons who could be liable to UK tax.	UA/LAD	UA/LAD
	3.2.13	Map	Gross disposable household income per head, 2004 (£).	Office for National Statistics, 2007. Regional Household Income.	Analysis by Commission for Rual Communities, 2007.	NUTS 3	N/A
	3.2.14	Table	Equivalised average income components, 2005 (£ per week)	English Longitudinal Study of Ageing (ELSA) - Rural Labour Market Transitions analysed for CRC by RERC Birkbeck college, 2007.	Longitudinal study where sample was taken using all participants in ELSA Wave 1 who had indicated a willingness to be contacted again for Wave 2.	England	Census Output Area
	3.2.15	Chart	Labour market exits of older workers, 2002-3 to 2004-5.	English Longitudinal Study of Ageing (ELSA) - Rural Labour Market Transitions analysed for CRC by RERC Birkbeck college, 2007.	Longitudinal study where sample was taken using all participants in ELSA Wave 1 who had indicated a willingness to be contacted again for Wave 2.	England	Census Output Area
	3.3.1	Chart	People who live and work in the same local authority area, 2006	Office for National Statistics, 2007. Labour Force Data Service 2006.	Bespoke analysis for Commission for Rural Communities by Labour Force data service	England	Census Output Area
	3.3.2	Table	Top and bottom local authority areas by employment, 2005-6	Office for National Statistics, 2007. Local Area Labour Markets, 2005-6.	Analysis of Local Area Labour Markets data by Commission for Rual Communities, 2007	UA/LAD	UA/LAD
	3.3.3	Table	Proportion of local authority areas with over 80% employment, 2005-6	Office for National Statistics, 2007. Local Area Labour Markets 2005-6.	Analysis of Local Area Labour Markets data by Commission for Rual Communities, 2007	UA/LAD	UA/LAD
	3.3.4	Table	Working age households by combined economic activity status of households, 2006.	Office for National Statistics, 2007. Labour Force Data Service 2006.	Bespoke analysis for Commission for Rural Communities by Labour Force data service	England	Census Output Area
	3.3.5	Chart	Percentage change in the number of NINo registrations in respect of non-UK nationals, 2002/3 to 2005/6.	DWP, 2006. National Insurance Number Allocations to Overseas Nationals Entering the UK, 2002-3 to 2005-6	Data covers overseas nationals allocated a National Insurance number (NINo) on the National Insurance Recording System (NIRS).	UA/LAD	UA/LAD
	3.3.6	Chart	Household members and friends working in businesses, 2005	Small Business Service, 2007. Household Survey of Entrepreneurship, 2005	A survey conducted amongst a general household population in England, as opposed to a business population, as many entrepreneurs (and would-be entrepreneurs) are not listed in business directories	Postcode	Census Output Area

Section	Figure	Type	Data	Source	Type of data	Boundary unit	Definition used
Economic Well being	3.3.7	Chart	Activities of older residents exiting the labour market 2002-3 to 2004-5	English Longitudinal Study of Ageing (ELSA) - Rural Labour Market Transitions analysed for CRC by RERC Birkbeck college, 2007.	Longitudinal study where sample was taken using all participants in ELSA Wave 1 who had indicated a willingness to be contacted again for Wave 2.	England	Census Output Area
	3.4.1	Map	VAT registrations per 1,000 people of working age, 2005.	Small Business Service, 2006. VAT Registrations and De-registrations, 2005.	Analysis of VAT data by Commission for Rual Communities, 2007	UA/LAD	UA/LAD
	3.4.2	Map	Barclays Bank start-up rates per thousand people of working age, 2005.	Barclays Bank, 2007. Mainstream Business Start-up Rates.	Estimates are generated by combining actual Barclays data on start-ups with estimates of the bank's market share.	UA/LAD	UA/LAD
	3.4.3	Chart	Early stage entrepreneurial activity, 2005.	Harding, R, 2006. Stairways to Growth, Prowess and GEM UK.	Report is based on data collected by the GEM consortium and the GEM UK team.	UA/LAD	UA/LAD
	3.4.4	Chart	One-year survival rates of enterprises registering in 2004 and three-year survival rates for those registering in 2002, England and Wales.	Small Business Service, 2007. Survival Rates of VAT Registered Enterprises, 1995-2004.	This series is based on data taken from the Office for National Statistics' (ONS) Inter Departmental Business Register (IDBR) in May 2006.	UA/LAD	UA/LAD
	3.4.5	Map	Gross Value Added per head, 2004 (£)	Office for National Statistics, 2007. Regional Gross Value Added.	Analysis of GVA data by Commission for Rual Communities, 2007	NUTS 3	N/A
	3.4.6	Table	Highest and lowest percentage change in turnover per employee (£000's), 2003-5.	Office for National Statistics, 2006. Inter Departmental Business Register.	Taken from a statistical register comprising 2.1 million businesses, representing nearly 99% of economic activity.	Local unit	Census Output Area
	3.4.7	Map	Local authorities where the turnover per employee in the financial sector is greater than £1 million, 2005.	Office for National Statistics, 2006. Inter Departmental Business Register.	Taken from a statistical register comprising 2.1 million businesses, representing nearly 99% of economic activity.	Local unit	Census Output Area
	3.4.8	Chart	Locality of main customer base, 2007.	Commission for Rural Communities/ BMRB, 2007.	Bespoke survey	Respondent postcode	Census Output Area
	3.4.9	Table	Enterprise and local units for firms recorded in IDBR 2005 (firms registered for VAT and/or PAYE).	Office for National Statistics, 2006. Inter Departmental Business Register, 2006.	Taken from a statistical register comprising 2.1 million businesses, representing nearly 99% of economic activity.	Local unit	Census Output Area
	3.4.10	Table	Mean local units per enterprise, 2005.	Office for National Statistics, 2006. Inter Departmental Business Register, 2006.	Taken from a statistical register comprising 2.1 million businesses, representing nearly 99% of economic activity.	Local unit	Census Output Area
	3.4.11	Chart	Competitiveness Index flow diagram, 2006.	R. Huggins and J. Day, 2006. UK Competitiveness Index.	Analysis of Competitiveness Index by Commission for Rual Communities, 2007.	UA/LAD	UA/LAD
	3.4.12	Map	Competitiveness Index ranking, 2006.	R. Huggins and J. Day, 2006. UK Competitiveness Index.	Analysis of Competitiveness Index by Commission for Rual Communities, 2007.	UA/LAD	UA/LAD
	3.4.13	Chart	Competitiveness Index in rural areas, 2006.	R. Huggins and J. Day, 2006. UK Competitiveness Index.	Analysis of Competitiveness Index by Commission for Rual Communities, 2007.	UA/LAD	UA/LAD

Section	Figure	Type	Data	Source	Type of data	Boundary unit	Definition used
Land and Environment	4.2.1	Chart	Land use make up England, 2004	Defra, Ordnance Survey, Forestry Commisssion, 2007	Consultation document	UA/LAD	UA/LAD
	4.2.2a	Chart	Make up of land use in rural and urban areas, 2001 (Building and infrastructure)	ODPM, 2001. Land use statistics.	Experimental statistics showing the area of differenct land types.	Local unit	Census Output Area
	4.2.2b	Chart	Make up of land use in rural and urban areas, 2001 (Not built up)	ODPM, 2001. Land use statistics.	Experimental statistics showing the area of differenct land types.	Local unit	Census Output Area
	4.2.3	Chart	Development on previously developed land, 1998-2001 and 2002-5	DCLG, 2006. Land use change in England.	Analysis of Ordnance Survey data by ODPM for CLG.	UA/LAD	UA/LAD
	4.2.4	Chart	Density of new dwellings, 1998-2001 and 2002-5	DCLG, 2006. Land use change in England.	Analysis of Ordnance Survey data by ODPM for CLG.	UA/LAD	UA/LAD
	4.2.5	Chart	Area of designated green belt land by region 1997,2003,2004 and 2006	DCLG, 2006. Local planning authority green belt statistics.	Areas calculated from digitised boundaries.	Region	N/A
	4.2.6	Table	Designated land as a percentage of total land area, 2005	Countryside Agency, 2005.	Areas calculated from digitised boundaries.	England	N/A
	4.2.7	Table	Farmland use, 2004-6	Defra, 2004, 2005 and 2006. June Agriculture Surveys.	Survey data	England	N/A
	4.2.8	Chart	Buyers of agricultural land, quarters 3 and 4, 2006	RICS, 2006. Rural land market report.	Data compiled by RICS from data supplied from Chartered Surveyors that are members.	England	N/A
	4.2.9	Chart	Trends in the area of tenanted land, 1980-2006	Defra, 1980, 1990, 1995, 2005 and 2006. June Agricultural Survey.	Survey data	England	N/A
	4.2.10	Chart	Area of new woodland planting and re-stocking, 1976-2006	Forestry Commission, 2006. Woodland area, planting and restocking.	Taken from Forestry Commission and Woodland Grant Scheme administrative records.	England	N/A
	4.3.1	Chart	UK self sufficiency in food, 1988-2006	Defra, 2007. Agriculture in the UK.	A combination of agricultural survey data combined with the ABI data from ONS.	UK	N/A
	4.3.2	Table	Organic land, 2003-6	OASIS, 2007.	Combination of data from the various Organic Certification Bodies.	England	N/A
	4.3.3	Table	Organic producers and growers, 2003-6	OASIS, 2007.	Combination of data from the various Organic Certification Bodies.	England	N/A
	4.3.4	Table	Area devoted to main non-food crops grown in England, 2003-5	Defra, 2006. Creating Value from Renewable Materials.	Research by Defra	England	N/A
	4.3.5	Chart	Annual increase in wind farm generation capacity, 1991-2006	BWEA, 2007. UK Wind Energy Database.	Research by BWEA.	England	N/A
	4.3.6	Chart	Average household water consumption, 2001/2-2005/6	Ofwat, 2006. Security of supply, leakage and water efficiency 2005-6 report.	Research by Ofwat.	England	N/A
	4.3.7	Table	Visits per year to countryside, coast or wood/ forest by ACORN category, 2006	Natural England, 2006. England Leisure Visits Survey.	Survey data	England	Postcode
	4.3.8	Chart	Trips per year to countryside, coast or wood/ forest by access to a car, 2006	Natural England, 2006. England Leisure Visits Survey.	Survey data	England	Postcode
	4.4.1	Chart	Percentage of river length with average nitrate concentrations greater than 30 mg, 1995, 2000 and 2005	Environment Agency, 2006.	Research by Environment Agency.	Region	N/A

Section	Figure	Type	Data	Source	Type of data	Boundary unit	Definition used
Land and Environment	4.4.2	Map	Combined air quality indicator, 2003	DCLG, 2006. Combined air quality indicator.	Modelled estimates of individual indicators compared against maximum safe standards.	LSOA	LSOA
	4.4.3a	Map	Air quality for nitrogen dioxide (NO_2), 2005	Office for National Statistics, 2005. Ambient Air Quality.	Data provided by Defra, from emission recording sites across the UK.	MSOA	MSOA
	4.4.3b	Map	Air quality for particulate matter (PM10), 2005	Office for National Statistics, 2005. Ambient Air Quality.	Data provided by Defra, from emission recording sites across the UK.	MSOA	MSOA
	4.4.3c	Map	Air quality for ozone, 2005	Office for National Statistics, 2005. Ambient Air Quality.	Data provided by Defra, from emission recording sites across the UK.	MSOA	MSOA
	4.4.4	Table	Area under ELS and OHLS agreements 2007	Natural England, 2007.	Data taken from Genesis recording system.	England	N/A
	4.4.5	Map	Entry level scheme/organic entry level scheme take-up rates, 2007	Defra, June survey data - agricultural areas. Natural England - ELS agreement areas, Joint character areas.	Survey data and data recorded on Genesis system.	Joint Character Area	N/A
	4.4.6	Chart	Populations of wild birds, 1970-2005	Defra, BTO, RSPB, 2006. Breeding Birds Survey.	Taken from surveying by RSPB and BTO.	England	N/A
	4.4.7	Table	National otter surveys, 1977-9, 1984-6, 1991-4 and 2000-2, Great Britain	Environment Agency 2006. Former NCC and Vincent Wildlife Trust National Otter Surveys.	Taken from surveying by Environment Agency.	Great Britain	N/A
	4.4.8	Map	Changes in countryside character, 1999-2003	Natural England, Countryside Quality Counts, 2007.	Analysis of change within Countryside Character Areas.	England	N/A
	4.4.9	Map	National relative tranquillity, 2006	CPRE and The Countryside Agency, 2006.	Survey data.	England	N/A
	4.5.1	Map	Carbon footprint, 2001	Stockholm Environment Institute, 2007. REAP.VO.063.	Bespoke analysis for Commission for Rural Communities by Stockhom Environment Institute.	UA/LAD	UA/LAD
	4.5.2	Chart	Carbon dioxide emissions per capita, 2001	Stockholm Environment Institute, 2007. REAP.VO.063.	Bespoke analysis for Commission for Rural Communities by Stockhom Environment Institute	UA/LAD	UA/LAD
	4.5.3	Chart	Top 5 factors contributing to carbon footprint, 2001	Stockholm Environment Institute, 2007. REAP.VO.063.	Bespoke analysis for Commission for Rural Communities by Stockhom Environment Institute	UA/LAD	UA/LAD
	4.5.4	Table	End user CO_2 emissions, tonnes per 10,000 population, 2004	AEA Energy and Environment, 2006. Local and Regional CO2 emissions estimates.	Modelled averages extrapollated to UA/LADs.	UA/LAD	UA/LAD

Detailed information about the surveys referenced and used in the State of the Countryside Report 2007 can be found at either of the following locations:

1. The UK Data Archive (UKDA). This is an internationally renowned centre of expertise in data acquisition, preservation, dissemination and promotion. It is curator of the largest collection of digital data in the social sciences in the UK and houses a major collection of computerised historical material.

   http://www.data-archive.ac.uk/

2. The Question Bank: Applied social surveys online. The Question Bank is a store of complete UK social survey questions, questionnaires and response forms from large scale policy relevant UK studies. It details a description of each survey and where it can be located.

   http://qb.soc.surrey.ac.uk/

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Annex two – signposts

A great deal of data goes into making the State of the Countryside Report every year, and we are unable, for space reasons, to include everything we would like to. For those wishing to pursue rural statistics further, either at national or at regional levels, we recommend the following links an excellent place to start:

Department for Environment, Food and Rural Affairs
http://www.defra.gov.uk/

Office for National Statistics
http://www.statistics.gov.uk/

Regional Observatory – East Midlands
http://www.regionalobservatories.org.uk/east_midlands.html
Regional Observatory – East of England
http://www.regionalobservatories.org.uk/east.html
Regional Observatory – London
http://www.regionalobservatories.org.uk/london.html
Regional Observatory – North East
http://www.regionalobservatories.org.uk/north_east.html
Regional Observatory – North West
http://www.regionalobservatories.org.uk/north_west.html
Regional Observatory – South East
http://www.regionalobservatories.org.uk/south_east.html
Regional Observatory – Yorkshire and Humber
http://www.regionalobservatories.org.uk/yorkshire.html
Regional Observatory – South West
http://www.regionalobservatories.org.uk/south_west.html
Regional Observatory – West Midlands
http://www.regionalobservatories.org.uk/west_midlands.html

Government Office – East Midlands
http://www.gos.gov.uk/goem/
Government Office – East of England
http://www.gos.gov.uk/goeast/
Government Office – London
http://www.gos.gov.uk/gol/
Government Office – North East
http://www.gos.gov.uk/gone/
Government Office – North West
http://www.gos.gov.uk/gonw/
Government Office – South East
http://www.gos.gov.uk/gose/
Government Office – Yorkshire and Humber
http://www.gos.gov.uk/goyh/
Government Office – South West
http://www.gos.gov.uk/gosw/
Government Office –West Midlands
http://www.gos.gov.uk/gowm/

Countryside Quality Counts
http://www.cqc.org.uk/

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Annex three – references

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Annex four – your voice

We would welcome your feedback on the extent to which this report:

1. Helps to raise the broader profile of rural issues.
   a. Do you believe that it helps to bring rural concerns and needs to the fore – nationally, regionally and locally?

2. Leads to increased understanding about the realities of life in rural England.
   a. Does it present a fair and comprehensive picture?

3. Enables and informs a rich debate about the priorities of rural England.
   a. Does it effectively highlight key issues and choices?
   b. Does it challenge existing assumptions?

4. Increases the extent to which policymaking and delivery is informed by robust evidence.
   a. Does it provide an effective mechanism to influence the future direction of rural policy and delivery?

We are very keen to receive feedback on the topics addressed in this report. To be effective in its work the Commission for Rural Communities needs to complement government objectives with an understanding of what really matters to rural people and communities. Hence, we would welcome views from all levels – national, regional and local – on the objectives and measures that will help us provide the best possible overview of the state of the countryside in England.

All feedback should be sent to state.report@ruralcommuities.gov.uk

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