findings

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Affordability differences by area for working households buying their homes – 2003 update

This study provides a range of analyses of the difficulties working households aged 20 to 39 face in accessing home ownership in every area of England at the end of 2003. It is based on local prices for two- and three-bedroom dwellings, and draws on a range of data sources. The new analyses, by Steve Wilcox at the University of York, demonstrate that affordability issues now affect the South West region and not just London and the South East; these analyses update the 2002 analysis.

- Access to home ownership is most problematic in London, where the ratio of average house price to household gross earned income is 4.69 to 1. Ratios exceed 5.0 to 1 in nine areas; in Westminster and Brent the ratio exceeds 6.0 to 1. Ratios are lower than 4.0 to 1 in five areas. All ratios should be considered in relation to the ratio of mortgage advance to household gross earned income, which rarely exceeds 3.5 to 1.

- Outside London, access to home ownership is most problematic in the South West region, where average house price to household gross earned income ratios are 4.66 to 1. Average ratios exceed 5 to 1 in 21 areas; the ratio exceeds 6 to 1 in West Somerset, Christchurch, North Cornwall, Torridge and East Devon, though samples in the first two are particularly small. Ratios are lower than 4 to 1 in five areas.

- Access to home ownership is nearly as problematic in the South East region, where average ratios are 4.61 to 1. They exceed 5 to 1 in 17 areas, including all of East Sussex. While it is only in Chichester that the ratio exceeds 6 to 1, ratios are lower than 4 to 1 in four areas.

- Average ratios exceed 5 to 1 in four areas in the East of England and in two northerly 'hotspots' (Derbyshire Dales and South Lakeland).

- Over the past year, affordability issues in the South West have worsened relative to London and the South East, due to greater house price rises. This reinforces the case for the Office of the Deputy Prime Minister (ODPM) to review its current plans to concentrate increased funding for affordable housing in London and the wider south east.

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Background

This analysis provides an update to one element of the affordability analyses published by the Foundation last year in the first 'Can work: can't buy' report.

It is based on house prices for two-/three-bedroom dwellings in each area in the fourth quarter of 2003, derived from the Survey of Mortgage Lenders. This data provides a consistent measure of house prices for a modest size family dwelling in every local authority area in England. (It is preferred to Land Registry house price data, as that is based on a variable size mix of dwellings in each area, and cannot therefore provide a standardised measure of the difficulty of accessing owner-occupation as between one area and another.)

The analysis is confined to working households with a representative aged between 20 and 39. The great majority of first-time home-buying households are drawn from this age group.

House price to household income ratios

High ratios of price to earned income generally make homes unaffordable for first-time buyers. This analysis is based on gross household earned incomes; not the incomes of individuals. This is because it is households that buy houses, and in the majority of cases this involves households with two working adults.

Table 1 shows that there are marked regional differences in the relationship between individual and household earned incomes; these are overlooked when ratios are constructed solely on levels of individual earnings.

Gross earned income data, at the *regional* level, is taken from the Expenditure and Food Survey (EFS). *Local* income data is only available for individuals, and for this analysis it has been derived from Inland Revenue Survey (IRS) data. It is combined with Labour Force Survey (LFS) data, showing the numbers of working households with single or multiple adult

Table 1: **Regional household earned incomes**

	North East	North West	Yorks and the Humber	East Midlands	West Midlands	East	London	South East	South West	England
Numbers of workers in working households (000's)										
One	116	297	244	185	226	261	431	359	176	2,295
Two (+)	153	379	303	290	322	398	552	535	292	3,224
All	269	676	546	475	547	659	984	893	469	5,519
Annual earnings at 2003 levels										
One	£17,376	£21,448	£20,364	£21,605	£20,976	£27,226	£34,971	£28,681	£26,221	£25,789
Two (+)	£36,049	£37,661	£35,813	£40,250	£38,099	£43,782	£62,405	£47,180	£36,145	£44,175
All	£28,226	£30,613	£28,956	£33,022	£30,888	£37,352	£50,505	£39,733	£32,444	£36,549
Ratio of earnings between multiple and single earner households	2.07	1.76	1.76	1.86	1.82	1.61	1.78	1.64	1.38	1.71

Table 2: **Regional house price to income ratios for working households aged 20-39, based on gross household earnings and mean house prices for two- and three-bedroom dwellings (Quarter 4, 2003)**

Region	Numbers of working households	Household earned income	Mean house prices	House price to income ratios
London	818,836	£50,504	£237,053	4.69
South West	482,554	£32,444	£151,147	4.66
South East	820,275	£39,734	£183,175	4.61
East of England	572,729	£37,353	£159,393	4.27
West Midlands	499,106	£30,889	£117,315	3.80
Yorkshire & Humber	511,539	£28,957	£99,642	3.44
East Midlands	412,391	£33,023	£113,036	3.42
North West	649,450	£30,613	£101,045	3.30
North East	235,590	£28,227	£89,976	3.19
ENGLAND	5,002,470	£36,549	£150,235	4.11

earners, in order to compute local household gross earnings figures consistent with the regional earnings figures taken direct from EFS. The earnings figures are all then uprated to 2003 levels. A detailed note on data sources and methodologies is set out in the on-line Appendices (www.jrf.org.uk/knowledge/findings/housing/024.asp).

The results

The average ratio of house price to household gross earned income ratio in England was 4.11 to 1, while regional average ratios range from 4.69 to 1 in London to 3.19 to 1 in the North East (see Table 2).

It is of particular note that house price to income ratios are now higher in the South West region than in the South East. The average ratio in the South West is 4.66 to 1, while in the South East it is 4.61 to 1. This is despite the average house price in the South East (£183,175) being 21.2% higher than those in the South West (£151,147). However, the average income of working households in the South East (£39,734) is 22.5% higher than those in the South West (£32,444).

The forty individual areas with the highest ratios are ranked in Table 3. In nine areas the ratios are over 6.0 to 1. Altogether, in fifty-four areas the ratio exceeds 5.0 to 1. The ratios for every local authority area in England are listed online in Appendix 1, by region, and in Map 1 (www.jrf.org.uk/knowledge/findings/housing/024.asp).

At first sight, these ratios may not appear to be exceptionally high, given the more relaxed attitudes of lenders to mortgage advance ratios in the context of interest rates that are at historically low levels. However, it should be borne in mind that these ratios are based on household earnings, not the earnings of one individual.

The results for the areas where the income, employment and house price figures are based on small samples must be treated with caution (see Table 3 here and Appendix 1 in the online version). This applies, in particular, to the three areas where the house price, employment and income figures are all based on small samples (Berwick-upon-Tweed, Teesdale and West Somerset).

Analysis of mortgage advances in 2002 shows

that it is only rarely that the ratio of mortgage advance to income exceeds 4.0 to 1 when advances are based on a single earned income. Ratios rarely exceed 3.5 to 1 when based on multiple earned incomes. In both cases, these levels of ratios only occurred for just over 10% of the advances to first-time buyers in the three most expensive regions in the country. They were even less likely to be found in other parts of the country.

Implications of the analysis

These findings contrast with the assertion in the ODPM's 2003 *'Sustainable Communities'* plan, that affordability issues are more acute in the South East region than the South West. There are three main reasons for these different results:

- The ODPM analysis was based on 2001 *house price data*, and did not take account of the more rapid rise in house prices in the South West in subsequent years.

- The ODPM analysis is derived from earnings data based on an individual's place of work. *Place of work* data fails to take account of the impact of the predominantly high earners who commute into London from parts of the greater south east. It thus *overstates* the average earned incomes of individuals residing in London, and at the same time *understates* the earned incomes of individuals living in those parts of the South East.

- The ODPM analysis is also based on the earned incomes of *individuals* rather than *households*, and thus fails to take into account the marked regional differences in the relationship between individual and household earnings (see Table 1).

The new 2003 analysis suggests that ODPM should review its previous policy decision to focus the growth in the provision of new affordable housing on London and the 'wider south east'.

The analysis also highlights the extent of affordability concerns in smaller rural districts, not just in parts of the south of England, but also in popular tourist and second home areas such as South Lakeland and Derbyshire Dales. This raises questions about the adequacy of government programmes to support the provision of affordable housing in rural areas.

Table 3: **House price to income ratios for working households aged 20-39, based on gross household earnings and mean house prices for two- and three-bedroom dwellings (Quarter 4, 2003)**

Local authority	Numbers of working households	Household earned income	Mean house prices	House price to income ratios
1. West Somerset (SW) *†‡	1,802	£24,165	£164,245	6.80
2. Christchurch (SW) †	1,983	£28,594	£191,945	6.71
3. North Cornwall (SW)	5,487	£25,161	£164,529	6.54
4. Torridge (SW) *	4,782	£24,142	£157,209	6.51
5. Westminster (Lon)	23,154	£67,387	£415,558	6.17
6. Chichester (SE)	8,616	£38,110	£233,324	6.12
7. Adur (SE)	5,303	£28,198	£172,312	6.11
8. East Devon (SW)	8,824	£30,013	£180,675	6.02
9. Brent (Lon)	20,768	£37,870	£227,851	6.02
10. Lewes (SE)	6,315	£30,776	£180,475	5.86
11. Purbeck (SW) *†	2,739	£30,134	£176,662	5.86
12. Eastbourne (SE)	7,536	£26,988	£157,711	5.84
13. Torbay UA (SW)	12,517	£25,140	£145,954	5.81
14. South Lakeland (NW)	10,042	£27,573	£159,641	5.79
15. Mole Valley (SE)	5,793	£43,140	£247,102	5.73
16. Bournemouth UA (SW)	21,218	£29,298	£166,733	5.69
17. Kerrier (SW)	6,203	£26,111	£148,362	5.68
18. Penwith (SW)	5,661	£28,769	£163,040	5.67
19. Carrick (SW)	8,093	£29,159	£164,983	5.66
20. Brighton and Hove UA (SE)	32,149	£34,221	£191,860	5.61
21. Arun (SE)	10,495	£32,081	£179,377	5.59
22. Cambridge (E)	12,252	£34,502	£191,396	5.55
23. West Devon (SW) *†	3,221	£30,903	£167,697	5.43
24. North Devon (SW)	6,877	£27,356	£148,390	5.42
25. Waltham Forest (Lon)	24,639	£34,756	£188,359	5.42
26. Southwark (Lon)	36,122	£42,431	£229,490	5.41
27. Oxford (SE)	12,759	£39,712	£214,275	5.40
28. South Hams (SW)	5,963	£32,239	£173,529	5.38
29. East Dorset (SW)	5,536	£37,978	£203,191	5.35
30. Ealing (Lon)	25,544	£45,681	£244,075	5.34
31. Hertsmere (E)	12,783	£44,559	£237,901	5.34
32. Newham (Lon)	28,394	£32,252	£170,967	5.30
33. Rother (SE)	7,926	£34,175	£181,155	5.30
34. Restormel (SW)	9,083	£27,318	£144,474	5.29
35. Islington (Lon)	25,414	£54,579	£288,114	5.28
36. Epping Forest (E)	11,403	£45,064	£236,421	5.25
37. Derbyshire Dales (E Mid) *	4,957	£32,365	£169,722	5.24
38. Weymouth and Portland (SW)	5,560	£29,449	£153,635	5.22
39. Salisbury (SW)	11,763	£32,574	£168,680	5.18
40. Wealden (SE)	10,243	£37,242	£192,679	5.17

Notes:
* House price data samples fewer than 50
† Households and employment data samples fewer than 30
‡ Income data samples fewer than 50

About the project

The analysis was undertaken by Professor Steve Wilcox of the Centre for Housing Policy, University of York. It draws on Survey of Mortgage Lenders house price data, and data from the Expenditure and Food Survey, Labour Force Survey and Inland Revenue Survey to compute local household incomes.

This analysis is the first step in a wider study, which will define and identify the scope of 'intermediate housing markets' in each local authority area in England.

How to get further information

Details of house price to gross household income ratios, by local authority, county and region and of the data sources and the methodology applied in the construction of the 2003 house price to income ratios are available in the on-line version of this *Findings* (www.jrf.org.uk/knowledge/findings/housing/024.asp).

The 2002 analysis is available at www.jrf.org.uk/knowledge/findings/housing/573.asp; the summary *Findings* links to the 2002 *Can work – can't buy* report which is available as a free pdf download.

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Appendices: Affordability differences by area for working households buying their homes – 2003 update

Appendix 1 House price to gross household income ratios, by local authority, county and region (alphabetical order of region)

Local authority	Numbers of working households	Household earned income	Mean house prices	House price to income ratios
East Midlands	412,391	£33,023	£113,036	3.42
Derbyshire				
Amber Valley	11,696	£31,189	£103,953	3.33
Bolsover	7,491	£30,908	£79,810	2.58
Chesterfield	4,652	£33,048	£95,968	2.90
Derby UA	27,418	£31,606	£104,106	3.29
Derbyshire Dales*	4,957	£32,365	£169,722	5.24
Erewash	13,985	£32,599	£109,247	3.35
High Peak	9,799	£31,099	£127,458	4.10
North East Derbyshire	10,745	£29,274	£102,909	3.52
South Derbyshire	8,079	£34,282	£121,536	3.55
Leicestershire				
Blaby	10,255	£31,990	£129,633	4.05
Charnwood	13,589	£35,316	£124,465	3.52
Harborough	7,208	£40,277	£144,640	3.59
Hinckley and Bosworth	9,352	£37,954	£119,932	3.16
Leicester UA	25,765	£27,264	£101,332	3.72
Melton †	4,022	£45,251	£125,375	2.77
North West Leicestershire	8,707	£39,634	£117,080	2.95
Oadby and Wigston	5,462	£32,895	£118,607	3.61
Rutland UA * †	3,357	£46,007	£137,745	2.99
Lincolnshire				
Boston	5,956	£26,064	£103,000	3.95
East Lindsey	10,085	£26,684	£121,425	4.55
Lincoln	10,622	£28,160	£103,184	3.66
North Kesteven	10,463	£33,423	£113,827	3.41
South Holland	6,419	£33,692	£115,714	3.43
South Kesteven	14,930	£35,661	£123,504	3.46
West Lindsey	7,203	£33,516	£99,714	2.98
Northamptonshire				
Corby	3,875	£34,013	£85,136	2.50
Daventry	5,945	£40,358	£149,651	3.71
East Northamptonshire	7,636	£44,381	£128,070	2.89
Kettering	8,455	£35,145	£114,561	3.26
Northampton	16,716	£35,462	£120,315	3.39
South Northamptonshire	6,100	£40,528	£152,046	3.75
Wellingborough	7,906	£36,297	£108,539	2.99
Nottinghamshire				
Ashfield	11,805	£29,184	£92,932	3.18
Bassetlaw	11,677	£28,476	£92,290	3.24
Broxtowe	10,218	£33,468	£120,095	3.59
Gedling	10,556	£35,132	£111,629	3.18
Mansfield	8,907	£25,858	£83,793	3.24
Newark and Sherwood	12,132	£36,715	£112,269	3.06
Nottingham UA	29,247	£27,713	£94,871	3.42
Rushcliffe	8,999	£44,245	£167,659	3.79

East of England	572,729	£37,353	£159,393	4.27
Bedfordshire				
Bedford	16,229	£34,772	£138,001	3.97
Luton UA	22,839	£32,781	£134,198	4.09
Mid Bedfordshire	16,815	£39,817	£161,922	4.07
South Bedfordshire	15,164	£38,022	£151,253	3.98
Cambridgeshire				
Cambridge	12,252	£34,502	£191,396	5.55
East Cambridgeshire	8,689	£33,604	£141,145	4.20
Fenland	8,693	£32,905	£114,260	3.47
Huntingdonshire	18,208	£41,912	£132,297	3.16
Peterborough UA	17,070	£31,031	£105,215	3.39
South Cambridgeshire	15,050	£49,616	£172,002	3.47
Essex				
Basildon	15,458	£39,566	£154,390	3.90
Braintree	13,312	£35,814	£151,856	4.24
Brentwood	4,734	£49,661	£218,608	4.40
Castle Point	8,332	£34,362	£174,137	5.07
Chelmsford	16,221	£44,873	£181,464	4.04
Colchester	17,173	£32,727	£140,692	4.30
Epping Forest	11,403	£45,064	£236,421	5.25
Harlow	8,076	£32,254	£143,354	4.44
Maldon	7,396	£36,863	£170,542	4.63
Rochford	6,233	£39,270	£170,588	4.34
Southend-on-Sea UA	17,351	£35,630	£155,191	4.36
Tendring	10,848	£29,717	£133,103	4.48
Thurrock UA	17,334	£33,833	£152,167	4.50
Uttlesford	6,135	£48,771	£212,935	4.37
Hertfordshire				
Broxbourne	8,246	£37,856	£187,032	4.94
Dacorum	16,153	£44,515	£208,190	4.68
East Hertfordshire	16,428	£46,143	£198,168	4.29
Hertsmere	12,783	£44,559	£237,901	5.34
North Hertfordshire	14,431	£41,153	£190,711	4.63
St. Albans	15,152	£56,504	£239,044	4.23
Stevenage	11,086	£34,212	£143,012	4.18
Three Rivers	8,368	£50,283	£232,118	4.62
Watford	12,178	£39,861	£185,659	4.66
Welwyn Hatfield	7,996	£43,027	£212,579	4.94
Norfolk				
Breckland	11,896	£27,342	£122,393	4.48
Broadland	11,561	£31,438	£142,062	4.52
Great Yarmouth	9,271	£24,921	£110,426	4.43
Kings Lynn and West Norfolk	11,099	£29,305	£115,065	3.93
North Norfolk	7,645	£30,837	£136,082	4.41
Norwich	13,834	£27,028	£117,751	4.36
South Norfolk	10,242	£35,428	£147,369	4.16
Suffolk				
Babergh	6,540	£30,717	£139,190	4.53
Forest Heath	8,052	£35,290	£130,001	3.68
Ipswich	11,479	£30,589	£120,612	3.94
Mid Suffolk	7,688	£36,530	£146,535	4.01
St. Edmundsbury	9,056	£31,279	£132,153	4.22
Suffolk Coastal	11,770	£40,869	£152,075	3.72
Waveney	8,760	£27,243	£114,202	4.19

London	818,836	£50,504	£237,053	4.69
Barking and Dagenham	16,871	£38,001	£150,615	3.96
Barnet	28,903	£52,317	£244,318	4.67
Bexley	18,082	£46,818	£179,988	3.84
Brent	20,768	£37,870	£227,851	6.02
Bromley	29,355	£50,192	£219,331	4.37
Camden	26,763	£68,052	£331,864	4.88
City of London	1,219	£154,818	£354,295	2.29
Croydon	39,205	£42,357	£191,860	4.53
Ealing	25,544	£45,681	£244,075	5.34
Enfield	27,499	£41,739	£209,957	5.03
Greenwich	23,597	£46,024	£183,398	3.98
Hackney	25,367	£38,977	£195,671	5.02
Hammersmith and Fulham	22,950	£62,093	£307,796	4.96
Haringey	19,573	£47,247	£208,917	4.42
Harrow	20,969	£51,185	£239,120	4.67
Havering	18,945	£44,326	£190,731	4.30
Hillingdon	21,131	£45,069	£217,479	4.83
Hounslow	20,822	£46,947	£234,438	4.99
Islington	25,414	£54,579	£288,114	5.28
Kensington and Chelsea	18,037	£120,209	£537,113	4.47
Kingston upon Thames	17,644	£51,425	£237,588	4.62
Lambeth	40,399	£44,839	£197,555	4.41
Lewisham	33,268	£37,701	£181,245	4.81
Merton	22,601	£56,334	£231,927	4.12
Newham	28,394	£32,252	£170,967	5.30
Redbridge	25,181	£45,824	£218,291	4.76
Richmond upon Thames	20,561	£74,923	£281,178	3.75
Southwark	36,122	£42,431	£229,490	5.41
Sutton	21,353	£47,377	£194,581	4.11
Tower Hamlets	30,644	£49,350	£240,234	4.87
Waltham Forest	24,639	£34,756	£188,359	5.42
Wandsworth	43,862	£67,425	£274,307	4.07
Westminster	23,154	£67,387	£415,558	6.17
North East	235,590	£28,227	£89,976	3.19
Cleveland				
Hartlepool UA	7,811	£25,919	£72,753	2.81
Middlesbrough UA	10,920	£24,540	£74,740	3.05
Redcar and Cleveland UA	12,149	£28,548	£85,957	3.01
Stockton-on-Tees UA	16,705	£27,918	£87,586	3.14
Durham				
Chester-le-Street	8,091	£31,728	£92,694	2.92
Darlington UA	8,704	£24,094	£91,452	3.80
Derwentside	8,439	£22,412	£72,136	3.22
Durham	7,430	£31,812	£87,089	2.74
Easington	7,838	£26,452	£74,111	2.80
Sedgefield	8,272	£29,735	£58,712	1.97
Teesdale * †‡	1,980	£29,109	£99,425	3.42
Wear Valley	6,123	£23,238	£78,595	3.38
Northumberland				
Alnwick * †	3,434	£23,199	£115,956	5.00
Berwick-upon-Tweed * †‡	1,929	£24,581	£76,759	3.12
Blyth Valley	8,545	£28,473	£83,912	2.95
Castle Morpeth * †	2,705	£29,365	£140,952	4.80
Tynedale	4,726	£33,722	£142,396	4.22
Wansbeck	5,129	£28,770	£66,521	2.31

Tyne and Wear				
Gateshead	17,927	£28,302	£93,836	3.32
Newcastle upon Tyne	25,405	£31,270	£113,725	3.64
North Tyneside	22,816	£30,699	£98,515	3.21
South Tyneside	13,407	£27,314	£85,491	3.13
Sunderland	25,105	£27,726	£85,051	3.07
North West	649,450	£30,613	£101,045	3.30
Cheshire				
Chester	9,122	£39,287	£138,709	3.53
Congleton	7,544	£39,876	£123,264	3.09
Crewe and Nantwich	11,720	£35,974	£105,104	2.92
Ellesmere Port and Neston	8,912	£35,407	£100,960	2.85
Halton UA	12,213	£30,018	£89,462	2.98
Macclesfield	15,697	£40,492	£151,884	3.75
Vale Royal	14,290	£34,869	£125,080	3.59
Warrington UA	14,148	£37,226	£115,593	3.11
Cumbria				
Allerdale	7,683	£27,648	£81,968	2.96
Barrow-in-Furness	8,027	£24,194	£64,806	2.68
Carlisle	11,607	£25,893	£86,659	3.35
Copeland	7,245	£35,013	£68,948	1.97
Eden *	4,136	£29,919	£122,679	4.10
South Lakeland	10,042	£27,573	£159,641	5.79
Greater Manchester				
Bolton	26,140	£31,096	£90,547	2.91
Bury	16,934	£31,420	£100,418	3.20
Manchester	40,778	£26,177	£104,207	3.98
Oldham	24,247	£29,473	£84,886	2.88
Rochdale	21,824	£26,872	£79,392	2.95
Salford	21,817	£29,046	£90,641	3.12
Stockport	20,912	£35,089	£125,327	3.57
Tameside	21,133	£29,772	£87,946	2.95
Trafford	21,698	£36,761	£148,973	4.05
Wigan	32,107	£29,803	£86,417	2.90
Lancashire				
Blackburn UA	13,639	£27,503	£71,424	2.60
Blackpool UA	15,818	£27,883	£88,913	3.19
Burnley	7,726	£25,478	£65,896	2.59
Chorley	9,142	£34,973	£106,948	3.06
Fylde	8,287	£34,313	£148,242	4.32
Hyndburn	8,483	£26,312	£74,971	2.85
Lancaster	14,689	£29,440	£111,546	3.79
Pendle	7,631	£26,643	£76,739	2.88
Preston	14,760	£25,481	£94,007	3.69
Ribble Valley	5,402	£38,902	£122,833	3.16
Rossendale	8,756	£31,424	£74,852	2.38
South Ribble	12,389	£32,806	£112,199	3.42
West Lancashire	9,270	£32,846	£102,052	3.11
Wyre	9,225	£29,066	£111,117	3.82
Merseyside				
Knowsley	10,518	£26,540	£86,754	3.27
Liverpool	35,098	£26,965	£88,359	3.28
Sefton	22,958	£30,725	£109,358	3.56
St. Helens	11,282	£31,529	£94,108	2.98
Wirral	34,401	£29,906	£100,302	3.35

South East	820,275	£39,734	£183,175	4.61
Berkshire				
Bracknell Forest UA	10,263	£42,097	£178,969	4.25
Reading UA	21,473	£39,023	£174,411	4.47
Slough UA	13,571	£36,245	£172,727	4.77
West Berkshire UA	15,009	£45,230	£198,057	4.38
Windsor and Maidenhead UA	10,559	£59,154	£244,180	4.13
Wokingham UA	14,316	£51,360	£207,240	4.04
Buckinghamshire				
Aylesbury Vale	18,052	£42,283	£177,661	4.20
Chiltern	6,648	£54,356	£264,425	4.86
Milton Keynes UA	27,411	£38,085	£146,155	3.84
South Buckinghamshire	6,294	£58,604	£261,920	4.47
Wycombe	17,213	£44,255	£200,817	4.54
East Sussex				
Brighton and Hove UA	32,149	£34,221	£191,860	5.61
Eastbourne	7,536	£26,988	£157,711	5.84
Hastings	6,865	£25,485	£129,189	5.07
Lewes	6,315	£30,776	£180,475	5.86
Rother	7,926	£34,175	£181,155	5.30
Wealden	10,243	£37,242	£192,679	5.17
Hampshire				
Basingstoke and Deane	21,033	£42,586	£183,839	4.32
East Hampshire	8,999	£44,195	£193,485	4.38
Eastleigh	14,685	£39,147	£173,746	4.44
Fareham	9,822	£38,633	£159,909	4.14
Gosport	9,646	£32,357	£134,240	4.15
Hart	10,155	£48,323	£215,338	4.46
Havant	10,622	£34,286	£159,774	4.66
New Forest	16,216	£37,883	£187,835	4.96
Portsmouth UA	23,067	£30,718	£141,080	4.59
Rushmoor	11,873	£38,676	£170,530	4.41
Southampton UA	28,974	£31,882	£151,140	4.74
Test Valley	12,662	£38,005	£174,969	4.60
Winchester	10,237	£45,137	£223,102	4.94
Isle of Wight UA	12,377	£27,355	£140,630	5.14
Kent				
Ashford	9,771	£38,160	£147,965	3.88
Canterbury	11,089	£32,706	£163,385	5.00
Dartford	9,095	£38,576	£159,072	4.12
Dover	11,096	£28,518	£127,198	4.46
Gravesham	8,084	£34,080	£156,845	4.60
Maidstone	16,743	£37,157	£166,053	4.47
Medway Towns UA	27,203	£33,325	£136,607	4.10
Sevenoaks	9,917	£51,157	£227,126	4.44
Shepway	8,254	£30,561	£144,287	4.72
Swale	13,279	£33,839	£147,417	4.36
Thanet	8,771	£27,245	£136,247	5.00
Tonbridge and Malling	11,053	£42,176	£178,325	4.23
Tunbridge Wells	12,200	£45,343	£200,417	4.42
Oxfordshire				
Cherwell	16,245	£36,341	£168,498	4.64
Oxford	12,759	£39,712	£214,275	5.40
South Oxfordshire	14,374	£46,689	£213,238	4.57

Vale of White Horse	11,582	£42,360	£192,246	4.54
West Oxfordshire	7,477	£37,716	£189,569	5.03
Surrey				
Elmbridge	9,423	£68,254	£254,469	3.73
Epsom and Ewell	6,982	£45,375	£233,212	5.14
Guildford	14,337	£48,096	£243,218	5.06
Mole Valley	5,793	£43,140	£247,102	5.73
Reigate and Banstead	13,393	£47,245	£224,304	4.75
Runnymede	4,482	£44,703	£220,645	4.94
Spelthorne	8,150	£43,646	£207,990	4.77
Surrey Heath	6,224	£51,321	£212,819	4.15
Tandridge	4,631	£60,304	£226,790	3.76
Waverley	10,773	£52,465	£239,340	4.56
Woking	8,385	£48,502	£213,773	4.41
West Sussex				
Adur	5,303	£28,198	£172,312	6.11
Arun	10,495	£32,081	£179,377	5.59
Chichester	8,616	£38,110	£233,324	6.12
Crawley	13,073	£35,753	£165,226	4.62
Horsham	13,098	£44,192	£209,005	4.73
Mid Sussex	14,012	£45,021	£206,301	4.58
Worthing	11,902	£33,585	£171,605	5.11
South West	482,554	£32,444	£151,147	4.66
Avon				
Bath and North East Somerset UA	17,401	£36,158	£184,631	5.11
Bristol UA	47,568	£31,314	£143,958	4.60
North Somerset UA	20,613	£36,034	£156,093	4.33
South Gloucestershire UA	26,272	£35,221	£146,831	4.17
Cornwall				
Caradon	5,086	£33,660	£128,683	3.82
Carrick	8,093	£29,159	£164,983	5.66
Kerrier	6,203	£26,111	£148,362	5.68
North Cornwall	5,487	£25,161	£164,529	6.54
Penwith	5,661	£28,769	£163,040	5.67
Restormel	9,083	£27,318	£144,474	5.29
Devon				
East Devon	8,824	£30,013	£180,675	6.02
Exeter	13,701	£29,491	£150,096	5.09
Mid Devon	5,193	£34,278	£151,871	4.43
North Devon	6,877	£27,356	£148,390	5.42
Plymouth UA	30,002	£29,638	£110,010	3.71
South Hams	5,963	£32,239	£173,529	5.38
Teignbridge	9,262	£29,847	£151,787	5.09
Torbay UA	12,517	£25,140	£145,954	5.81
Torridge *	4,782	£24,142	£157,209	6.51
West Devon * †	3,221	£30,903	£167,697	5.43
Dorset				
Bournemouth UA	21,218	£29,298	£166,733	5.69
Christchurch †	1,983	£28,594	£191,945	6.71
East Dorset	5,536	£37,978	£203,191	5.35
North Dorset	5,573	£32,668	£162,371	4.97
Poole UA	12,360	£34,786	£179,949	5.17
Purbeck * †	2,739	£30,134	£176,662	5.86
West Dorset	6,011	£32,645	£167,901	5.14

Weymouth and Portland	5,560	£29,449	£153,635	5.22
Gloucestershire				
Cheltenham	12,932	£35,948	£159,563	4.44
Cotswold	8,761	£38,586	£185,144	4.80
Forest of Dean	8,572	£29,469	£136,183	4.62
Gloucester	12,309	£31,855	£118,652	3.72
Stroud	10,745	£36,055	£150,240	4.17
Tewkesbury	6,200	£35,744	£149,602	4.19
Somerset				
Mendip	9,743	£32,209	£144,073	4.47
Sedgemoor	8,362	£30,992	£135,212	4.36
South Somerset	13,262	£32,942	£134,412	4.08
Taunton Deane	10,839	£29,113	£144,747	4.97
West Somerset * † ‡	1,802	£24,165	£164,245	6.80
Wiltshire				
Kennet	8,109	£39,061	£153,088	3.92
North Wiltshire	12,824	£41,232	£168,946	4.10
Salisbury	11,763	£32,574	£168,680	5.18
Swindon UA	22,100	£38,599	£131,436	3.41
West Wiltshire	11,442	£33,036	£138,036	4.18
West Midlands	499,106	£30,889	£117,315	3.80
Hereford and Worcestershire				
Bromsgrove	8,232	£39,909	£156,886	3.93
Herefordshire UA	14,199	£29,508	£144,115	4.88
Malvern Hills	5,302	£36,071	£164,864	4.57
Redditch	6,122	£32,059	£112,719	3.52
Worcester	12,567	£36,623	£134,252	3.67
Wychavon	12,105	£34,071	£169,381	4.97
Wyre Forest	9,381	£30,972	£120,100	3.88
Shropshire				
Bridgnorth	4,593	£35,955	£161,054	4.48
North Shropshire	6,085	£29,126	£127,859	4.39
Oswestry †	3,350	£24,979	£120,549	4.83
Shrewsbury and Atcham	12,549	£29,702	£139,727	4.70
South Shropshire * †	3,375	£30,139	£150,167	4.98
Telford and the Wrekin UA	20,405	£31,157	£101,493	3.26
Staffordshire				
Cannock Chase	11,698	£27,573	£113,925	4.13
East Staffordshire	10,752	£30,737	£109,212	3.55
Lichfield	8,714	£35,314	£146,474	4.15
Newcastle-under-Lyme	10,917	£28,910	£85,516	2.96
South Staffordshire	8,174	£29,977	£118,600	3.96
Stafford	13,095	£32,495	£113,178	3.48
Staffordshire Moorlands	6,832	£29,666	£110,484	3.72
Stoke-on-Trent UA	25,395	£24,539	£71,837	2.93
Tamworth	8,185	£30,061	£108,414	3.61
Warwickshire				
North Warwickshire	5,297	£32,012	£118,108	3.69
Nuneaton and Bedworth	10,888	£31,836	£101,336	3.18
Rugby	8,453	£38,109	£124,858	3.28
Stratford-on-Avon	7,322	£40,948	£186,242	4.55
Warwick	15,128	£37,221	£164,539	4.42

West Midlands				
Birmingham	83,931	£28,806	£116,937	4.06
Coventry	26,765	£30,719	£102,080	3.32
Dudley	28,432	£30,968	£110,064	3.55
Sandwell	27,738	£28,474	£94,100	3.30
Solihull	17,790	£38,591	£163,003	4.22
Walsall	22,786	£27,718	£91,168	3.29
Wolverhampton	22,549	£28,107	£88,604	3.15
Yorkshire and Humber	511,539	£28,957	£99,642	3.44
Humberside				
East Riding of Yorkshire UA	28,442	£30,263	£110,629	3.66
Kingston upon Hull UA	27,020	£25,746	£63,563	2.47
North East Lincolnshire UA	15,873	£23,203	£78,303	3.37
North Lincolnshire UA	15,757	£28,031	£90,652	3.23
North Yorkshire				
Craven *	3,945	£35,205	£140,673	4.00
Hambleton	8,290	£34,316	£154,719	4.51
Harrogate	15,951	£37,134	£164,002	4.42
Richmondshire	5,553	£31,372	£121,663	3.88
Ryedale *	4,082	£28,898	£141,788	4.91
Scarborough	7,309	£26,221	£111,617	4.26
Selby	6,690	£30,826	£123,818	4.02
York UA	18,956	£32,591	£142,269	4.37
South Yorkshire				
Barnsley	22,739	£26,643	£81,364	3.05
Doncaster	34,226	£27,593	£81,159	2.94
Rotherham	26,361	£26,024	£83,544	3.21
Sheffield	52,121	£27,091	£96,701	3.57
West Yorkshire				
Bradford	44,771	£28,918	£81,441	2.82
Calderdale	18,313	£30,596	£97,361	3.18
Kirklees	42,428	£29,666	£94,653	3.19
Leeds	80,060	£30,083	£111,082	3.69
Wakefield	32,652	£29,165	£97,328	3.34
ENGLAND	5,002,470	£36,549	£150,235	4.11

Notes:
* House price data samples fewer than 50
† Households and employment data samples fewer than 30
‡ Income data samples fewer than 50

Appendix 2 Data sources and methodology for the construction of the 2003 house price to income ratios

This note provides a brief outline to the data sources and the methodology applied in the construction of the 2003 house price to income ratios. The ratios are based on gross household earned incomes and the prices of two- and three-bedroom dwellings.

However, the results for the areas where the income, employment and house price figures are based on small samples must be treated with caution. This applies, in particular, to the three areas where the house price, employment and income figures are all based on small samples (Berwick-upon-Tweed, Teesdale and West Somerset) and in the areas with the lowest number of working households in the country (West Somerset, Christchurch, Teesdale and Berwick-upon-Tweed).

Two of these areas, West Somerset and Christchurch, were found to have the highest ratio of house price to household gross earned income in the country, so the figures should be treated with particular caution.

House prices

The house prices are lower quartile prices and mean average prices for two- and three-bedroom dwellings, taken from the Survey of Mortgage Lenders. The data, for the fourth quarter of 2003, has been weighted on the basis of an even mix of both sizes of dwelling in every local area. This provides a consistent measure of prices for modestly sized family dwellings. In most cases, the Survey of Mortgage Lenders provides a substantial sample at the local level. However, in a few cases, the sample for two- and three-bedroom dwellings fell below fifty. The areas concerned (with sample sizes in brackets) are: Teesdale (20), Berwick-upon-Tweed (27), South Shropshire (27), Ryedale (28), West Somerset (30), Castle Morpeth (31), Eden (31), Alnwick (34), Craven (37), Rutland (38), Purbeck (43), Torridge (45), West Devon (47) and Derbyshire Dales (48).

Incomes

The analyses use local income data for 2000/1 and 2001/02 from the Inland Revenue Survey (IRS). This covers the earned incomes of all individuals aged between 20 and 39 inclusive. This age range has been chosen because the great majority of first-time buyers fall within it. The 2000/01 figures were inflated by 5.2% to 2001/02 values to derive average local earned incomes from the combined years of data. The combined average figures were then inflated by 8.0% to 2003 values. In all but three areas, the IRS local data was based on a local sample of more than 50 cases for the two years combined. The three small samples were Teesdale (37), Berwick-upon-Tweed (43) and West Somerset (47).

Regional household incomes

Robust data on household incomes is not available at the local authority level. Regional data on gross household earned incomes, analysed by the numbers of adult workers in each household, has been obtained from the Expenditure and Food Survey (EFS) for households with representatives aged between 20 and 39. The data is based on three years of the survey, from 2000/01 to 2002/03, in order to ensure a robust regional sample. For the affordability analysis, this data has been uprated to 2003 levels (by 8.0%). The regional EFS gross household earned income figures provide control totals for the local level estimates of household incomes within each region.

Households and employment

With its enlarged sample size, the Labour Force Survey (LFS) can now provide data on the employment status of households at the local level. LFS data for 2001, 2002 and 2003 has been averaged to show the numbers of households in each local authority area, broken down into categories based on the numbers of people in each household in employment. The data shows the numbers of households with nil, one or two or more workers aged 20 to 39. However, even using three years' data, the samples for some areas are very small. The data for twelve areas are based on less than 30 cases: Christchurch (14), Berwick-upon-Tweed (16), West Somerset (18), Teesdale (19), Purbeck (24), Rutland (25), Castle Morpeth (25), South Shropshire (26), West Devon (27), Alnwick (27), Oswestry (28), Melton (29).

Local household incomes

Within each local authority area, it is assumed that the relationship between the earned incomes of one earner and multi-earner households corresponds with the regional relationship shown by the Expenditure and Food Survey (EFS) data. Factors are then applied to the local IRS data so that the regional sums of the computed local household earnings, based on the IRS and LFS data, are consistent with the regional EFS figures.

Map 1: **House price to gross household earned incomes (households aged 20 to 39).**

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