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OFFICE OF POPULATION CENSUSES AND SURVEYS

Grid references of centres of population Great Britain 1971

John Craig

Population Statistics Division, OPCS

Occasional Paper 1

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Grid references of centres of population, Great Britain, 1971

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INTRODUCTION

This booklet gives the national grid references of the centres of population of areas ranging in size from a local authority to the whole of Great Britain. These centres of population are averages derived from the location of all of the population of the area as enumerated in the 1971 Census. The average used is the arithmetic mean. Detailed definitions are given in the descriptions of the methods of calculation used. Possible uses of centres of population are:

- a. as a summary statistic (for example, changes over time in the location of the centre of population of an area provide a summary measure of the overall change in the direction of movement of the population)
- b. as a convenient way of calculating straight line distances (when it is satisfactory to use the same 'average' distances for all of the population of an area)
- c. as an aid to preparing maps and diagrams.

A centre of population as defined in this study is not necessarily in the most densely populated part of an area. For example in the case of an imaginary region consisting of two towns at opposite extremities the centre would fall in the sparsely populated middle of the region, and even for a town, the centre of population may fall outside the most densely populated areas. Accordingly for large areas - such as regions or countries - (a) above will be the main application of the results. For smaller areas, such as local authorities, (b) and (c) will probably be the more important.

Partly because of this difference in emphasis of the use of the results, and partly because of differences in data availability this booklet is in two distinct, though related, parts. Chapter 1 and Appendix Tables 1-3 refer to an analysis of the trends over time in the centres of population of Great Britain, the countries of Great Britain and the regions of England; this section is an updating, with methodological improvements of Chapter 3 of Population Density and Concentration in Great Britain 1931, 1951 and 1961.⁽¹⁾ Chapter 2 of this booklet and Appendix Table 4 give more detail for England and Wales for 1971. They extend the analysis in Chapter 1 by adding the grid references of centres of population down to local authority level (for both pre-1974 and post-1974 authorities). This analysis may also be regarded as a summary and extension of the 1971 Census Small Area Statistics (SAS) data.

No details of grid references for areas smaller than local authorities are given in this booklet. Requests for grid references, as given in the Census Small Area Statistics, for specified wards, parishes or enumeration districts, should be addressed to:

Customer Services, Office of Population Censuses and Surveys, Titchfield, Fareham, Hampshire. PO15 5RR.
Requests for any other information about the contents of this booklet should also be sent to this address.

1 NATIONAL AND REGIONAL TRENDS IN CENTRES OF POPULATION 1951-1971

1.1 Summary of work done

Calculations from Census data were made of

- arithmetic mean centres of population;
- the dispersion, or amount of 'scatter', of the population of an area (using two alternative measures);
- as (a) and (b) using measures related to physical size of an area instead of the population size;

The results are given for

Great Britain, England, Scotland and Wales;
regions of England (pre-1974);
conurbations (pre-1974).

The full results are given in the Appendix Tables. Details of the data and methods are set out in sections 1.4 - 1.6 and the results are discussed in section 1.7.

1.2 Relationship to previous work

This part of the study is an updating of parts of Population Density and Concentration in Great Britain 1931, 1951 and 1961 (1). A major difference is that the data used in this study give 100 per cent coverage and 1971 Census grid references are used whereas in the 1931-1961 study the data referred to a sample of wards (and parishes) and the grid references were more arbitrary. However, these methodological differences had little overall effect - as a comparison of the two sets of results show. Some complications regarding the areal units used in this study are described in section 1.5.

1.3 Significance of national and regional centres of population

Any change in the location of a centre of population for these larger areas indicates a general movement of population over time. That the 1971 arithmetic mean centre of population for Great Britain lies near the town of Swadlincote (6 km south east of Burton-upon-Trent) is little more than an interesting curiosity. What matters is whether or not it has moved since 1961, the size and direction of such a move and how the 1961-1971 movement compares with 1951-1961 and earlier movements. Answers to these questions are given later. Comparisons can also be made with the physical centre of a region or country which is the same point as the centre of a uniform population distribution.

1.4 Algebraic definitions

One definition of the centre of population of an area is the arithmetic mean of the grid references of each person within the area. In turn this requires the definition of which people belong to which area and a definition of the location of a person within the area. In this study both these subsidiary definitions were fixed by the Census procedures. Given these, starting from first principles a grid reference for each person is also required. In practice this is unnecessary as using grid references for small areal units (small relative to the area for which the calculation is being made) gives a good approximation. The formulae used in the calculations are set out below. The summations refer to the areal units - for example local authorities or wards and parishes - within the region or country; P is the population of the areal unit which has national grid references, in the Census, of (x, y) .

Arithmetic mean centres of population

$$\text{Easting } \bar{x} = \frac{\sum P(x)}{\sum P})$$

formula 1

$$\text{and Northing } \bar{y} = \frac{\sum P(y)}{\sum P})$$

As \bar{x} and \bar{y} are independent of the set of coordinate axes used no rotation, or other change of axes, was necessary.

Root mean square deviation

$$= \left(\frac{[\sum P\{(x-\bar{x})^2 + (y-\bar{y})^2\}]}{\sum P} \right)^{\frac{1}{2}}$$

formula 2

Mean deviation

$$= \frac{\sum P\{(x-\bar{x})^2 + (y-\bar{y})^2\}^{\frac{1}{2}}}{\sum P}$$

formula 3

Measures related to physical size of areas. These are calculated as for the population measures except that the population (P) is replaced by physical size (A) as given in the Census reports. These area-weighted calculations give the same results as those for a uniformly distributed population, since then the population of each area would be directly proportional to A .

1.5 Areal units used

In principle local authority data would be quite satisfactory to give good estimates for regions and countries using the formulae set out above. In practice, however, the grid references for local authorities that were available from the Census SAS records contained some deficiencies (see sections 2.4 and 2.6a) which would, if uncorrected, lead to some bias in the results. For this

reason in some parts of the calculations ward and parish data were used since their grid references are not subject to the same deficiency as local authorities. When wards and parishes were not used corrections were made to allow for the deficiencies. Details are:

Arithmetic mean centres of population. For 1961 and 1971 the ward and parish data were used. For 1951 local authority data were used and the results adjusted by applying a correction factor derived from a comparison of the 1961 results using the two sources. For 1931 and earlier years the results given in the previous 1931-1961 study have been corrected so as to be comparable with the more accurate results of this study.

Root mean square deviation, mean deviation. These were calculated from local authority data. No adjustments were made as the biases should, more or less, be self correcting.

Area weighted calculations. These were adjusted as for the 1971 population weighted measures described above.

1.6 Data extracted

It was possible to obtain the data needed from the 1971 Census. At the local authority level Table 2 of the 1971 Census County Reports (2) for England and Wales and for Scotland gives the enumerated population figures for 1951, 1961 and 1971. These are for the areas as constituted in 1971 so the three sets of figures are wholly comparable and boundary changes have been allowed for. The physical size of the area is given in Table 3 of the County Reports. The grid references for the local authorities used in this part of the study are those from the Census Small Area Statistics (SAS) records. These are shown as eight figure references so the last figure is a 100m reference.

Similar remarks apply to the availability of ward and parish data. For rural areas in Scotland the data used was not that for parishes but for county council electoral divisions. But for this size of unit population data for 1951 were not published. A detailed discussion of the derivation of the Census grid references for local authorities as well as for wards and parishes will be found in sections 2.4 - 2.6a.

Thus for each areal unit data were combined from three separate Census sources. It was uneconomic to do this by computer linkage so the Census SAS records were printed out to form a coding sheet; this gave the grid references and a 1971 population. The other populations and the hectares were added manually. The information was punched and checked; it then formed the data input for the calculations.

1.7 Comments on results

a) Arithmetic mean centres of population. For Great Britain, England, Scotland and Wales, calculations were made for 1971 in the 1931-1961 study using short cut methods. The present calculations give results that differ only marginally, so at this level of aggregation, there is little new to add. Figure 1 summarises the trends in an historical context. The commentary in the 1931-1961 study said of an equivalent diagram:

'For England the 1961-71 annual rate of movement is somewhat larger than that for 1951-61 or 1931-51 (though smaller than that for 1901-31); the movement from 1931 to 1971 has been predominantly to the south (and not south-easterly). For Scotland the direction of the movement has been persistently to the south but the 1961-1971 movement is very small and is the least since 1801. For Wales up to 1931 the direction of movement was to the south east but since then has been erratic and small. The trend for Great Britain can be regarded as a weighted average of those of the constituent countries; for example the due eastwardly movement between 1901 and 1931 is a combination of the comparatively large north-eastwardly movement for England and the smaller predominantly southwardly movements for Scotland and Wales.' (paragraph 3.66)

It is not a rewarding exercise to try and analyse the arithmetical calculation to say why the changes in the population centres have occurred in terms of changes in the population of individual areas. It is best accepted as simply an overall measure of change.

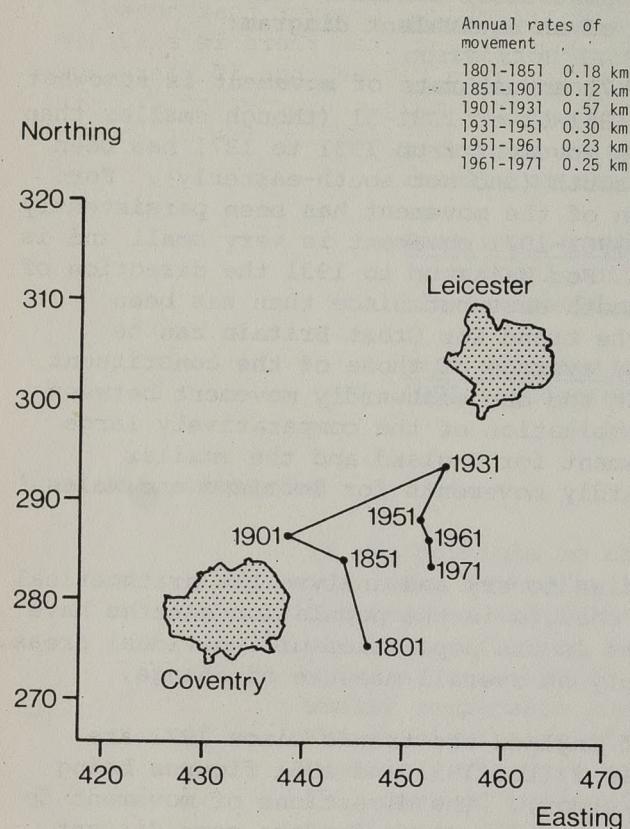
For the pre-1974 regions of England the trends since 1931 are summarised in Appendix Table 2 (the 1931 and 1951 figures being derived from the 1931-1961 study). The directions of movement do not show much uniformity - the centres for the more distant and rural regions of the South West and East Anglia both move towards London but elsewhere there is no general trend. It is of course possible for the trends within regions to differ (or be unchanged) and yet when the regions are combined for the national average to show a pronounced movement. For the latter reflects changes in the division of the population between regions as well as the distribution within the regions.

b) Comparison of arithmetic mean population centres with centres of a uniform distribution. The centre of a uniform population distribution is, as pointed out above, the same thing as the physical centre of an area and remains constant over time (boundary changes excepted). At a national level the broad picture is the same as in the 1931-61 study. Then, however, the measures were not calculated for the regions of England. They are now shown in Appendix Table 2.

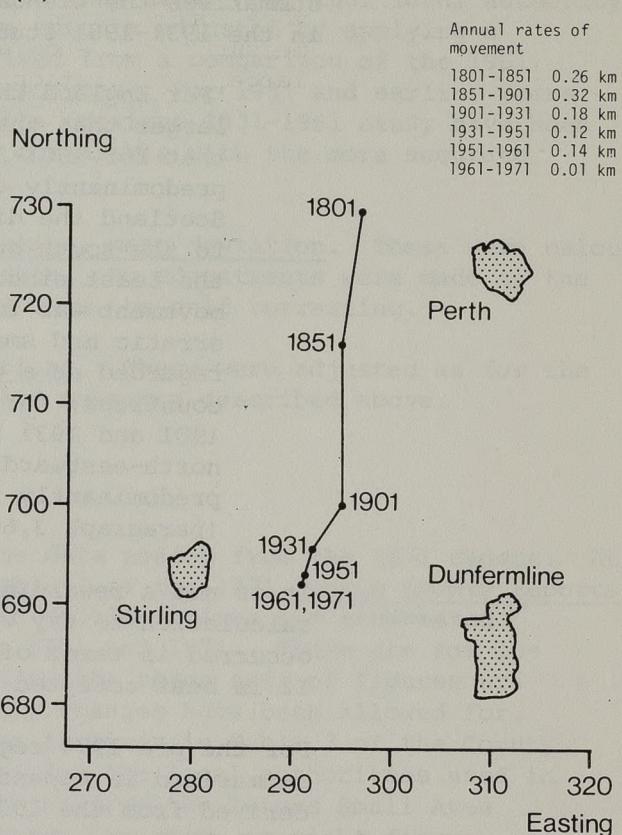
c) Measures of population dispersion. As well as the measures of average location two measures of population dispersion were calculated. Each is a measure of the average distance of the population of an area from a centre of population (for formal

Figure 1 Arithmetic mean centres of population

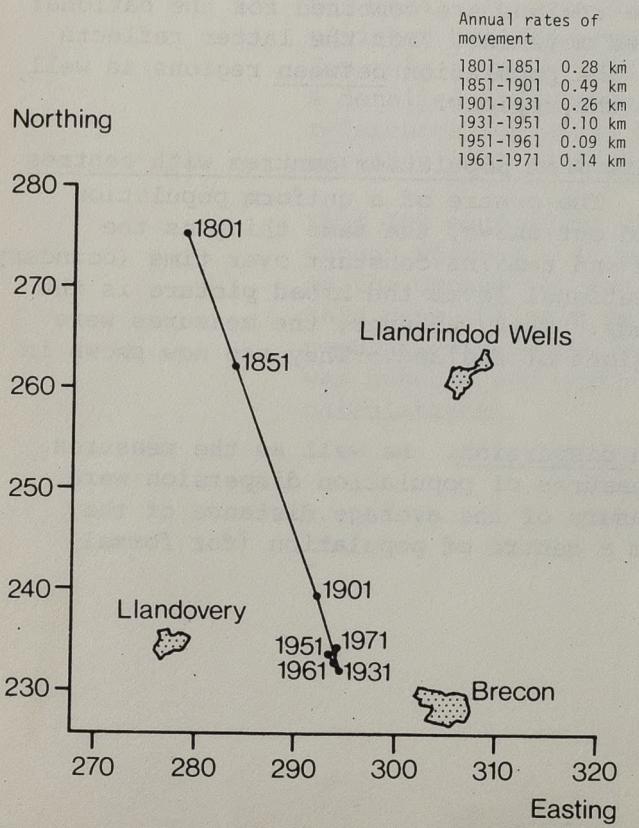
(a) England



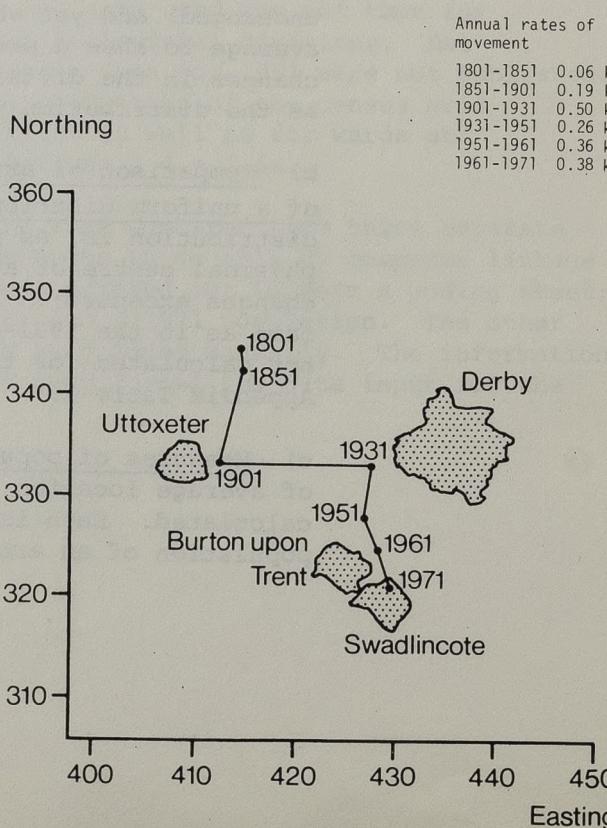
(c) Scotland



(b) Wales



(d) Great Britain



definitions see section 1.4). The results are given in Appendix Table 3 and though the absolute values differ - due to the different definitions used - the general patterns are similar. So for simplicity only one of the measures, the mean deviation, is discussed here. Figure 2 analyses the trend over time.

Among the regions of England, the South East and the North were becoming more dispersed and the South West and the East Midlands more concentrated. It must be remembered however that these measures will show a much stronger trend when there is a single large concentration of population in a region than if there are several of roughly equal size. It is this characteristic of the measures that probably accounts for the differing trends shown in Appendix Table 3. Whereas the years 1951-1961 saw a levelling off of the 1931-1951 trends, over the period 1961-1971 a tendency towards greater dispersion is evident from the diagram.

Comparisons between the absolute mean deviations of the population of areas partly reflect differences in the physical sizes of the areas. This is allowed for by expressing the absolute distances as a ratio of the measure calculated for a uniform population distribution (that is area weighted). The results are shown in Table 1. This is a more refined procedure than that followed in the 1931-1961 study; the standardising factors are constant so the trends over time are the same as those shown in Figure 2.

Table 1 Mean deviations, 1971

	Area weighted (km)	Population weighted (km)	Population weighted Area weighted x 100
England	159.0	138.6	87.2
North	57.6	38.4	66.6
Yorkshire/ Humberside	53.2	37.0	69.6
North West	39.0	28.0	71.8
East Midlands	43.4	35.4	81.6
West Midlands	44.2	26.4	59.8
East Anglia	43.8	48.2	110.0
South East	65.1	42.6	65.5
South West	79.1	77.4	97.8
Wales	67.1	69.0	102.7
Scotland	134.6	68.3	50.7
Great Britain	254.5	169.1	66.4

Figure 2 Population dispersion : mean deviation within regions of England, Wales, 1931-1971

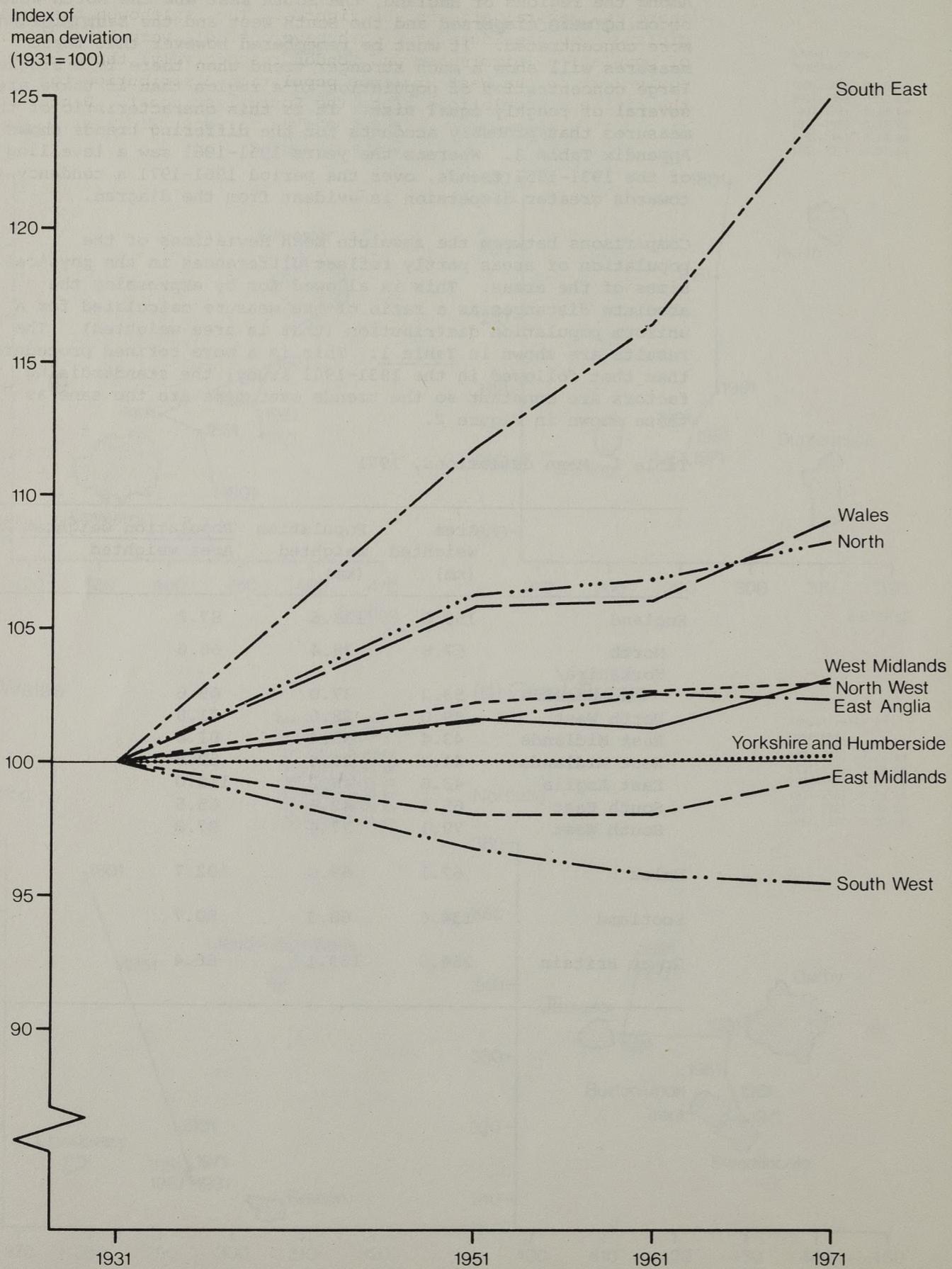


Table 1 shows that the more rural regions of England (East Anglia, South West) and Wales have the higher ratios. The figure for Scotland, however, is a reminder that if the populations is not spread out over the whole area the presence of rural land *per se* does not lead to a high ratio. And again - as mentioned above - whether there is a single concentration of population or whether there are several affects the figures. Thus, although the West Midlands and the South East both have a single very large centre of population (Birmingham and London respectively) there is no equivalent in the West Midlands population distribution to the sizeable populations along the South East coast. Hence the South East has a higher ratio than the West Midlands.

d) Analyses for new standard regions. The time series analyses in Appendix Tables 2 and 3 are given in terms of the old standard regions rather than the new - that is in terms of the regions as defined before the local government reorganisation on 1 April 1974. The reason for this is that details of the reorganisation were not finalised until after the processing of the 1971 Census had begun; the Census data could not then easily be reorganised to give new standard region analyses. However the detailed analyses for 1971 given in Appendix Table 4 do give the arithmetic mean centres of population for the new regions. Figure 3 shows that there are very close, if not coincident, with the same measure for the old standard regions. This suggests that the pattern for the old standard regions may be taken as the pattern for the new standard regions. This is in fact what would be expected because where boundary changes were made these usually involved the less densely populated areas. See Reorganisation of Local Government Areas - Correlation of new and old areas. (3)

Figure 3 Centres of population, new and old standard regions 1971



2 CENTRES OF POPULATION OF AREAS IN ENGLAND AND WALES, 1971

2.1 Summary of work done

The data given in this section are arithmetic mean centres of population for regions or smaller areal units. No measures of dispersion are included. The coverage is as follows:

- grid references and populations for
 - pre-1974 local authorities, counties, conurbations, conurbation centres and standard regions
 - post-1974 districts, counties and standard regions.
- 1971 Census Small Area Statistics centres of population for pre-1974 local authorities. These differ a little from the data shown as part of (a) for reasons to be described.

The main differences from Chapter 1 are therefore that the results refer to smaller areas; that they refer only to 1971; and that they are wholly derived from Census enumeration district data.

2.2 Grid references in the 1971 Census

The 1971 Census was the first in which grid references were included as part of the Census records. This was done so that Census statistics for grid squares could be produced. Full details of the procedures and of the plans for grid square statistics were given in Census Information Papers Nos 1 and 5 (4). A grid reference for each area was included in the Small Area Statistics which are available for enumeration districts, wards, parishes and local authorities. This study provides a listing of these grid references for local authorities, but although grid references for wards, parishes and enumeration districts are available, the publication of a complete listing does not seem justified and requests should be sent to OPCS (see page 1). Some readers requiring this type of information may find the Ordnance Survey Gazetteer an alternative source, though the grid references obtained from it will not usually coincide exactly with the Census references.

2.3 Algebraic definition

The argument and definition given in section 1.4 about the use of data for small areas to derive the centres of population for larger ones again applies. When working with local authorities, enumeration districts are relatively small areas which it is convenient to take as the unit for aggregation and so a population weighted mean of enumeration district data is obtained. A more approximate method of calculation is to take P as a constant in formula 1 (see page 3) in which case what is customarily referred to as an unweighted mean is obtained; this step simplifies the calculation and may be a reasonable approximation for enumeration districts because they are defined so as to give enumerators a roughly equal task; this limits the variations in

the size of population - especially within a local authority. Because the population of enumeration districts varies less than their physical size such an approximation will produce an answer nearer to the population centre than to the physical centre; it also enables the aggregations to be done before the population data become available.

2.4 Grid references of enumeration districts in the 1971 Census

Although grid references of enumeration districts are not listed in this publication they are the basic unit from which the grid references of the larger scale units are derived and so an explanation of the methods used must start with them. Generally in the Census the intention was to allocate a unique reference to each enumeration district and it was of secondary importance that this should be the centre of population of the enumeration district. So in practice, as a measure of the centre of population, the reference given was often fairly arbitrary and because the grid reference of the enumeration district was to act as an independent check on the grid references given for the households it could not be derived from the latter. A particular problem arises with 'shipping' enumeration districts. These are special enumeration districts which are used to enumerate the crew and passengers of ships. Because a ship has no fixed address the convention was adopted that all such enumeration districts were given the grid reference of a point in the North Sea (6000, 4000); this leads to complications when aggregating enumeration districts (see section 2.6a). Apart from this the enumeration district grid references are satisfactory as the basic (x, y).

2.5 Method of calculation

The main method used on this part of the study was population weighted aggregation of the Census enumeration district data excluding both population and grid reference data for shipping enumeration districts. Readers can make their own calculations of the centre of population of any area which can be defined in terms of those included in this report by taking the grid references given and weighting these by the populations shown in Census publications (for example the County Reports or the Age, Marital Condition and General Tables)⁽⁵⁾. However the results of the weighted aggregations for wards/parishes and local authorities may not agree with the unweighted grid references shown in the Census SAS statistics. This, in turn, leads to further possible differences if still greater aggregations (for example for counties or regions) are done. These complications are considered in the next section.

2.6 Comments on results

There is no comment by way of general interpretation. What follows is a comment on the consequences of the methodological problems.

a) Local authorities - difference from Census Small Area Statistics results. Appendix Table 4(b) shows that there are some differences in the centres of population obtained by applying the population weighted method from the unweighted centres of population shown in the Census Small Area Statistics. This subsection explains the reasons for this. For wards and parishes the Census method was to calculate the grid references from the enumeration district data using the unweighted method (see section 2.3) with the added step that, having obtained an unweighted mean, the grid reference assigned was that of the enumeration district nearest to this mean. This ensures that the grid reference of the ward lies at a point within the ward or parish and at a point at which there is some concentration of population; these are important common-sense requirements with certain shapes of area or with certain distributions of population. The assignment of a ward or parish grid reference to the nearest enumeration district causes the arithmetic mean formula to be an approximation to the grid reference finally allocated.

The same procedure was followed for local authorities but the starting point was the unweighted ward and parish grid references. Such unweighted and repositioned Census SAS grid references may of course differ from a population weighted calculation. In practice there was a further source of differences. This occurred because in making the unweighted Census SAS calculations for local authorities the shipping enumeration districts and wards - see section 2.4 - were included with their North Sea grid reference of (6000, 4000). This meant that the unweighted mean, for local authorities with shipping enumeration districts was that of the ward/parish nearest to the North Sea or even, in extreme cases, the point (6000, 4000) itself. This occurred when only two areas were being aggregated and has subsequently been amended. Of course only a minority of local authorities include shipping enumeration districts and they can be identified from the Census County reports; and at the ward and parish level shipping enumeration districts were kept separate. However as the population weighted calculations excluded shipping enumeration districts this study gives the user, for whom their inclusion in the Census SAS grid references is a serious deficiency, an alternative set of references.

Appendix Table 4(b) shows that for most local authorities the differences between the population weighted method and the unweighted method are small; but there are a few areas for which users may need to make a careful choice. The population weighted method is the more accurate as a calculation of the population centre, but, if Census Small Area Statistics data are already being used, this additional accuracy must be balanced against the practical inconvenience of replacing the SAS unweighted grid references.

Apart from the discrepancies caused by the shipping enumeration districts differences between the two methods are greatest for a local authority when size of the wards or parishes is strongly correlated with location and the population distribution is not

symmetrical. For example, these conditions are met in a rural district which is more densely populated at one extremity than the other; this commonly occurs when the rural district adjoins an urban area in one direction and a true rural area in the opposite direction. Thus Wharfedale RD in West Yorkshire adjoined the West Yorkshire conurbation to the south but had the Pennine moors to the north. Consequently, for the reasons outlined, this led to the population weighted centre being to the south of the unweighted centre (by 3 km). Since this rural district averaged some 10 km from its northern to southern boundaries this is a relatively large difference. And of course the Easting may be similarly affected; the differences in Eastings and Northings are not necessarily correlated. Wharfedale is by no means an extreme example though differences of more than 5 or 6 km are rare (again with the exception of areas affected by shipping enumeration districts). On the other hand for many rural districts the differences are small and invariably are so for urban areas because of their smaller physical size.

2.6

b) Regions and countries - effect of areal unit used in summation. Regional centres of population could be calculated by taking population weighted aggregations of either Census SAS enumeration district grid references, or of Census SAS ward/parish grid references, or of Census SAS local authority grid references. Had the population weighted method been used in deriving the Census SAS grid references all three data inputs would have given the same answer; but as explained in section 2.5 the unweighted method was used with various other refinements. Hence the three different sets of areal units may give differing results.

Comparative calculations were made for the regions and countries using all three levels of data input. But to avoid confusion the results quoted in the Appendix Tables are those derived from the population weighted enumeration district data. An examination of the unpublished figures shows that it makes very little difference whether wards/parishes or enumeration districts are used. This was so even for individual local authorities. But there is a marked difference between the results using local authority data and those using either enumeration district or ward and parish data. The next two paragraphs describe these findings.

The very close similarity between the results obtained from ward/parish and enumeration district data could not be assumed beforehand - it might be expected, for example, that the results would reflect the fact that wards and parishes are an intermediate unit between enumeration districts and local authorities. That this does not occur must be related to the distribution of population within wards and parishes. Either there is less variability in enumeration districts' population than there is in ward population within a local authority and/or there is less correlation between population size and location. Both of these possibilities seem plausible though neither has been actually tested.

The size of the discrepancies between the results obtained using the Census local authority grid references and those obtained by using either of the smaller units is shown in Table 2 for the pre-

April 1974 regions. It will be seen that the signs and sizes of the local authority discrepancies are as would be expected if the differences were mainly due to the errors introduced by shipping enumeration districts with their grid references of (6000, 4000). The figures in the last two columns were the adjustments applied in Chapter 1 to all the arithmetic mean centres of population.

Table 2 Differences in centres of population with different data inputs

Area	Summation of enumeration district data		Discrepancy * for			
			Ward/parish data		Local authority data	
	Easting	Northing	Easting	Northing	Easting	Northing
North	4232	5430	0	0	+14	-8
Yorkshire and Humberside	4476	4191	0	0	+5	+1
North West	3627	4025	0	-1	+10	+3
East Midlands	4613	3277	0	0	+2	0
West Midlands	4011	2935	0	0	0	0
East Anglia	5891	2339	0	0	-4	+5
South East	5226	1712	-1	0	0	+9
South West	3304	1328	+1	+1	+12	+10
England	4528	2836	0	0	+4	+4
Wales	2944	2340	0	0	+14	+3

* Ward/parish (or local authority) result less enumeration district result.

REFERENCES

- 1 Population Density and Concentration in Great Britain 1931, 1951 and 1961, Studies on Medical and Population Subjects No 30, HMSO 1975
- 2 1971 Census: County Reports, HMSO 1973 to 1975
- 3 Reorganisation of Local Government Areas - Correlation of new and old areas, HMSO 1975
- 4 Census Information Paper No 1: Geocoding in the 1971 Census and Census Information Paper No 5: Statistics for grid squares; both available from Customer Services, OPCS, Titchfield, Hampshire, PO15 5RR
- 5 1971 Census: Age, Marital Condition and General Tables, HMSO 1974.

Appendix Table 1 Arithmetic mean centres of population 1801-1971

Great Britain, England, Wales, Scotland							
	Location of centre of population						
	1801*	1851*	1901*	1931	1951	1961	1971
Great Britain							
Easting	4150	4150	4130	4281	4270	4286	4296
Northing	3455	3423	3330	3330	3279	3247	3210
England							
Easting	4466	4440	4386	4541	4517	4527	4528
Northing	2755	2841	2836	2936	2882	2861	2836
Wales							
Easting	2792	2839	2923	2946	2935	2940	2944
Northing	2754	2620	2392	2318	2335	2327	2340
Scotland							
Easting	2971	2950	2948	2920	2915	2912	2912
Northing	7292	7160	6999	6953	6930	6920	6920
Movement (average/decade)							
1801- 1851	1851- 1901	1901- 1931	1931- 1951	1951- 1961	1961- 1971		
Great Britain							
Distance(km)	0.6	1.9	5.0	2.6	3.6	3.8	
Direction	S	SSW	E	SSW	SSE	S	
England							
Distance(km)	1.8	1.2	5.7	3.0	2.3	2.5	
Direction	NNW	WNW	ENE	SSW	SSE	S	
Wales							
Distance(km)	2.8	4.9	2.6	1.0	0.9	1.4	
Direction	SSE	SSE	SSE	NW	SE	NNE	
Scotland							
Distance(km)	2.6	3.2	1.8	1.2	1.4	0.1	
Direction	S	S	SW	SSW	SSW	SW	

*Figures for these years were originally calculated from data for counties (see Population Density and Concentration in Great Britain 1931-1961). In this study they have been adjusted so as to be comparable with the new 1971 data.

Appendix Table 2 Arithmetic mean and physical arithmetic mean centres of population 1931 - 1971

Great Britain, England, Wales, Scotland, regions of England

	Location		Movement/Decade			
	Arithmetic mean centre		Physical arithmetic mean centre		Arithmetic mean centre	
	Easting	Northing	Easting	Northing	Distance (km)	Direction
Great Britain						
1931	4281	3330			2.6	SSW
1951	4270	3279	3665	4528	3.6	SSE
1961	4286	3247			3.8	S
1971	4296	3210				
England						
1931	4541	2936			3.0	SSW
1951	4517	2882	4368	2960	2.3	SSE
1961	4527	2861			2.5	S
1971	4528	2836				
Wales						
1931	2946	2318			1.0	NW
1951	2935	2335	2807	2719	0.9	SE
1961	2940	2327			1.4	NNE
1971	2944	2340				
Scotland						
1931	2920	6953			1.2	SSW
1951	2915	6930	2708	7663	1.4	SSW
1961	2912	6920			0.1	SW
1971	2912	6920				
Regions of England						
North						
1931	4230	5437			0.6	NW
1951	4221	5444	3979	5359	0.6	ESE
1961	4226	5441			1.2	SSE
1971	4232	5430				
Yorks/Humberside						
1931	4447	4196			1.0	ESE
1951	4466	4191	4643	4248	0.5	ESE
1961	4471	4190			0.5	ENE
1971	4476	4191				
North West						
1931	3641	4032			0.6	SW
1951	3633	4028	3633	4079	0.5	WSW
1961	3628	4026			0.1	SW
1971	3627	4025				

Appendix Table 2 - continued

	Location		Movement/Decade			
	Arithmetic mean centre		Physical arithmetic mean centre		Arithmetic mean centre	
	Easting	Northing	Easting	Northing	Distance (km)	Direction
East Midlands						
1931	4603	3275			0.9	NNE
1951	4609	3292	4735	3244	0.3	SSE
1961	4610	3289			1.2	SSE
1971	4613	3277				
West Midland						
1931	3999	2938			0.2	ENE
1951	4002	2939	3821	2865	0.8	ESE
1961	4009	2935			0.2	E
1971	4011	2935				
East Anglia						
1931	5936	2881			1.8	SW
1951	5914	2857	5851	2872	1.4	WSW
1961	5902	2850			1.6	SW
1971	5891	2839				
South East						
1931	5262	1716			1.0	W
1951	5241	1714	5147	1718	0.6	WNW
1961	5235	1715			1.1	WSW
1971	5226	1712				
South West						
1931	3236	1286			2.3	ENE
1951	3270	1310	3193	1236	2.6	NE
1961	3297	1325			0.8	ENE
1971	3304	1328				

Appendix Table 3 Measures of dispersion, 1931-1971

Great Britain, England, Wales, Scotland; regions of England

	Area weighted	kilometres			
		Population weighted			
		1931	1951	1961	1971
Root mean square					
Great Britain	280.7	200.8	199.1	197.8	196.5
England	176.0	154.7	153.5	152.7	152.3
Wales	72.5	73.7	76.4	76.7	78.2
Scotland	170.2	99.6	97.6	95.3	94.1
<i>Regions of England</i>					
North	62.9	45.6	47.7	47.8	48.1
Yorkshire and Humberside	58.5	42.2	42.2	42.1	42.2
North West	43.6	30.0	30.7	30.8	31.0
East Midlands	46.9	40.2	39.6	39.5	39.5
West Midlands	47.3	32.8	33.0	32.8	33.0
East Anglia	46.6	49.3	50.0	50.5	50.5
South East	70.1	46.8	49.9	51.0	53.2
South West	88.7	90.1	88.1	87.6	87.5
Mean deviation					
Great Britain	254.5	173.4	171.6	170.4	169.1
England	159.0	141.7	140.2	139.3	138.6
Wales	67.1	63.3	67.0	67.1	69.0
Scotland	134.6	72.2	70.3	68.8	68.3
<i>Regions of England</i>					
North	57.6	35.5	37.7	37.9	38.4
Yorkshire and Humberside	53.2	36.9	36.9	36.9	37.0
North West	39.0	27.2	27.8	27.9	28.0
East Midlands	43.4	35.6	34.9	34.9	35.4
West Midlands	44.2	25.6	26.0	25.9	26.4
East Anglia	43.8	47.1	47.8	48.3	48.2
South East	65.1	34.1	38.1	39.7	42.6
South West	79.1	81.1	78.4	77.6	77.4

Appendix Table 4(a) Arithmetic mean centres of population, 1971

England and Wales; old standard regions, subdivisions of regions, conurbations and conurbation centres.
(pre-April 1974 boundaries)

Area	Grid reference of centre of population		Area	Grid reference of centre of population	
	Easting	Northing		Easting	Northing
England	4528	2836	West Midlands	4011	2935
Regions			West Midlands Conurbation	4027	2899
Northern	4232	5430	West Midlands Conurbation Centre		
Tyneside Conurbation	4283	5656	Sub-divisions		
Tyneside Conurbation Centre	4247	5646	Central North	3966	3121
Sub-divisions			Central South	3986	2657
Industrial North East			Coventry Belt	4350	2793
- North	4287	5622	Conurbation	4027	2899
- South	4435	5240	North Staffordshire	3891	3472
Rural North East			Rural West Midlands	3492	2842
- North	4070	5940	East Anglia	5891	2839
- South	4568	4901	Sub-divisions		
Cumberland and Westmorland	3284	5282	East Anglia		
Yorkshire and Humberside	4476	4191	Sub-divisions		
West Yorkshire Conurbation			Greater London	6119	2508
West Yorkshire Conurbation Centre	4210	4292	Greater London Conurbation Centre	6257	3071
Sub-divisions			South East	5396	3050
North Humberside	5060	4309	Greater London	5467	2627
South Humberside	5100	4089	Outer Metropolitan Area		
Mid Yorkshire	4584	4531	Sub-divisions		
South Yorkshire	4374	3887	Outer Metropolitan Area		
South Lindsey	5214	3781	North West	4847	1837
Yorkshire Coalfield	4473	4082	- West	5166	2126
West Yorkshire	4192	4302	- North	5683	1932
North West	3627	4025	- East	5665	1614
Merseyside Conurbation	3356	3900	- South East	5282	1435
Merseyside Conurbation Centre	3353	3904	- South	4983	1579
SE Lancashire Conurbation	3842	3992	Outer South East		
SE Lancashire Conurbation Centre	3840	3983	Sub-divisions		
Sub-divisions			Outer South East		
South Cheshire and High Peak	3729	3688	Essex	5922	2221
South Lancashire	3587	3971	Kent	6143	1542
Manchester	3838	3992	Sussex Coast	5323	1067
Merseyside	3375	3928	Solent	4450	1100
Furness	3238	4734	Beds/Bucks	5000	2432
Fylde	3333	4368	Berks/Oxon	4483	2034
Lancaster	3470	4633	South West	3304	1328
Mid Lancashire	3544	4272	Sub-divisions		
North East Lancashire	3770	4306	Central	3665	1190
East Midlands	4613	3277	Southern	2746	714
Sub-divisions			Western	2076	748
Notts/Derby Coalfield and High Derbyshire	4495	3653	North Gloucestershire	3872	2152
Nottingham/Derby	4488	3387	Bristol-Severnside	3594	1714
Leicester	4549	3050	North Wiltshire	4054	1749
Eastern Lowlands	5045	3402	Wales	2944	2340
Northampton	4805	2682	Sub-divisions		
Industrial South Wales			Industrial South Wales		
- Central and Eastern Valleys			- Central and Eastern Valleys	3096	1985
- West South Wales			- West South Wales	2655	1978
- Coastal Belt			- Coastal Belt	3185	1831
North East Wales			North East Wales	3291	3595
- North Coast			- North Coast	2919	3798
- Remainder			- Remainder	2632	3588
Central Wales			Central Wales	3093	2747
South West Wales			South West Wales	2274	2284

Appendix Table 4(b) Arithmetic mean centres of population, 1971

Old counties and old local authorities (pre-April 1974 boundaries)

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*	
	Easting	Northing		Easting	Northing
Bedfordshire	5062(5061)	2337(2338)	Cambridgeshire and the Isle of Ely	5457(5452)	2692(2684)
County Borough Luton CB	5078(5080)	2229(2225)	MBS and UDs		
MBs and UDs			Cambridge MB	5460(5460)	2584(2580)
Amphill UD	5033(5034)	2375(2376)	Chatteris UD	5393(5393)	2855(2858)
Bedford MB	5055(5064)	2500(2498)	Ely UD	5544(5545)	2806(2802)
Biggleswade UD	5197(5195)	2444(2446)	March UD	5415(5411)	2968(2976)
Dunstable MB	5021(5014)	2217(2220)	Whittlesey UD	5276(5272)	2971(2971)
Kempston UD	5032(5032)	2474(2473)	Wisbech MB	5466(5462)	3099(3103)
Leighton-Linslade UD	4922(4920)	2254(2256)	Rural Districts		
Sandy UD	5171(5173)	2493(2493)	Chesterton RD	5432(5400)	2608(2600)
Rural Districts			Ely RD	5510(5481)	2816(2785)
Amphill RD	5028(5009)	2369(2353)	Newmarket RD	5610(5617)	2670(2612)
Bedford RD	5034(5020)	2526(2560)	North Witchford RD	5416(5412)	2912(2927)
Biggleswade RD	5180(5189)	2405(2405)	South Cambridgeshire RD	5430(5443)	2476(2464)
Luton RD	5025(5018)	2240(2242)	Wisbech RD	5437(5434)	3076(3109)
Berkshire	4694(4692)	1765(1766)	Cheshire	3637(3707)	3809(3804)
County Borough Reading CB	4707(4706)	1730(1737)	County Boroughs		
MBs and UDs			Birkenhead CB	3302(3331)	3877(3863)
Abingdon MB	4495(4499)	1974(1970)	Chester CB	3401(3408)	3668(3669)
Maidenhead MB	4879(4880)	1812(1815)	Stockport CB	3894(3898)	3906(3901)
Newbury MB	4470(4472)	1666(1662)	Wallasey CB	3295(3300)	3916(3915)
New Windsor MB	4953(4956)	1763(1760)	UDs and MBs		
Wallingford MB	4602(4603)	1896(1894)	Alderley Edge UD	3843(3846)	3785(3783)
Wantage UD	4400(4399)	1881(1880)	Alsager UD	3796(3800)	3555(3559)
Wokingham MB	4809(4812)	1686(1680)	Altringham MB	3776(3770)	3888(3888)
Rural Districts			Bebington MB	3337(3353)	3827(3798)
Abingdon RD	4483(4481)	1999(1989)	Bollington UD	3931(3935)	3774(3775)
Bradfield RD	4634(4626)	1712(1720)	Bowdon UD	3759(3760)	3864(3867)
Cookham RD	4873(4863)	1808(1783)	Bredbury and Romiley UD	3935(3941)	3912(3909)
Easthampstead RD	4866(4866)	1674(1682)	Cheadle and Gatley UD	3863(3871)	3867(3869)
Faringdon RD	4288(4286)	1927(1925)	Congleton MB	3861(3867)	3630(3630)
Hungerford RD	4350(4386)	1712(1671)	Crewe MB	3701(3702)	3558(3557)
Newbury RD	4495(4478)	1685(1684)	Dukinfield MB	3948(3939)	3974(3975)
Wallingford RD	4542(4558)	1890(1885)	Ellesmere Port MB	3389(3409)	3759(3755)
Wantage RD	4448(4425)	1865(1876)	Hale UD	3783(3791)	3865(3868)
Windsor RD	4949(4949)	1700(1673)	Hazel Grove and Bramhall UD	3907(3907)	3859(3864)
Wokingham RD	4770(4762)	1710(1726)	Hoylake UD	3230(3227)	3878(3869)
Buckinghamshire	4897(4894)	2004(2012)	Hyde MB	3956(3964)	3948(3948)
MBs and UDs			Knutsford UD	3755(3748)	3785(3783)
Aylesbury MB	4824(4833)	2136(2134)	Longendale UD	3992(3991)	3951(3955)
Beaconsfield UD	4936(4941)	1906(1914)	Lymm UD	3683(3673)	3873(3875)
Bletchley UD	4863(4871)	2337(2335)	Macclesfield MB	3911(3913)	3735(3731)
Buckingham MB	4695(4695)	2336(2338)	Marple UD	3958(3959)	3880(3880)
Chesham UD	4960(4960)	2023(2021)	Middlewich UD	3704(3702)	3656(3655)
Eton UD	4954(4969)	1783(1784)	Nantwich UD	3652(3642)	3522(3529)
High Wycombe MB	4865(4856)	1931(1932)	Neston UD	3299(3299)	3774(3769)
Marlow UD	4850(4850)	1869(1870)	Northwich UD	3660(3669)	3733(3737)
Newport Pagnell UD	4872(4874)	2435(2436)	Runcorn UD	3521(3563)	3821(3847)
Slough MB	4975(4973)	1803(1807)	Sale MB	3784(3786)	3915(3922)
Wolverton UD	4810(4814)	2407(2409)	Sandbach UD	3752(3750)	3607(3613)
Rural Districts			Stalybridge MB	3968(3960)	3988(3989)
Amersham RD	4960(4968)	1965(1997)	Wilmot UD	3846(3850)	3818(3822)
Aylesbury RD	4792(4747)	2117(2145)	Winsford UD	3648(3650)	3661(3656)
Buckingham RD	4686(4675)	2315(2338)	Wirral UD	3268(3269)	3829(3820)
Eton RD	4984(4989)	1827(1816)	Rural Districts		
Newport Pagnell RD	4877(4877)	2442(2448)	Bucklow RD	3733(3734)	3857(3821)
Wing RD	4913(4901)	2206(2218)	Chester RD	3417(3402)	3682(3685)
Winslow RD	4800(4790)	2288(2307)	Congleton RD	3793(3789)	3627(3623)
Wycombe RD	4853(4841)	1944(1961)	Disley RD	3979(3980)	3845(3847)
			Macclesfield RD	3906(3875)	3777(3738)
			Nantwich RD	3671(3639)	3526(3511)
			Northwich RD	3633(3658)	3720(3709)

Appendix Table 4(b) - continued

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*	
	Easting	Northing		Easting	Northing
Cornwall	1884(1897)	503 (502)	Heanor UD	4433(4429)	3472(3469)
MBS and UDs			Ilkeston MB	4465(4470)	3416(3419)
Bodmin MB	2064(2066)	667 (670)	Long Eaton UD	4483(4491)	3333(3330)
Bude-Stratton UD	2215(2226)	1064(1064)	Matlock UD	4293(4304)	3605(3602)
Camborne-Redruth UD	1676(1674)	412 (408)	New Mills UD	4003(4006)	3858(3856)
Falmouth MB	1801(1811)	326 (322)	Ripley UD	4390(4393)	3503(3503)
Helston MB	1653(1661)	269 (274)	Staveley UD	4430(4425)	3740(3738)
Launceston MB	2331(2323)	844 (847)	Swadlincote UD	4293(4304)	3199(3198)
Liskeard MB	2250(2248)	644 (643)	Whaley Bridge UD	4009(4009)	3813(3814)
Looe UD	2255(2255)	535 (534)	Wirksworth UD	4286(4277)	3541(3561)
Newquay UD	1817(1811)	616 (613)	Rural Districts		
Penryn MB	1781(1782)	345 (344)	Exeter CB	4190(4189)	3449 (3475)
Penzance MB	1468(1469)	299 (313)	Bakewell RD	4204(4202)	3728(3717)
St Austell with Fowey MB	2040(2115)	528 (523)	Belper RD	4362(4327)	3470 (3460)
St Ives MB	1518(1528)	396 (381)	Blackwell RD	4481(4470)	3632(3660)
St Just UD	1375(1373)	320 (314)	Chapel en le Frith RD	4075(4144)	3825(3843)
Saltash MB	2421(2420)	589 (590)	Chesterfield RD	4404(4401)	3702(3674)
Torpoint UD	2435(2433)	550 (550)	Clowne RD	4510(4492)	3755(3759)
Truro MB	1821(1830)	449 (451)	Repton RD	4282(4282)	3240(3255)
Rural Districts			South East Derbyshire RD	4431(4421)	3350(3349)
Camelford RD	2092(2097)	849 (843)	Devon	2739(2759)	799 (809)
Kerrier RD	1705(1684)	281 (253)	County Boroughs		
Launceston RD	2294(2268)	822 (836)	Exeter CB	2932(2960)	924 (943)
Liskeard RD	2232(2219)	622 (650)	Plymouth CB	2483(2534)	566 (568)
St Austell RD	1965(1956)	569 (544)	Torbay CB	2903(2917)	622 (663)
St Germans RD	2391(2403)	629 (613)	MBS and UDs		
Stratton RD	2229(2239)	1033(1028)	Truro RD	1799(1909)	450 (493)
Truro RD	1971(1992)	728 (720)	Ashburton UD	2757(2759)	701 (702)
Wadebridge and Padstow RD	1517(1454)	335 (318)	Barnstaple MB	2563(2566)	1331(1337)
West Penwith RD	904 (889)	115 (152)	Bideford MB	2452(2451)	1263(1264)
Scilly, Isles of RD			Buckfastleigh UD	2737(2739)	663 (661)
Cumberland	3224(3236)				

Appendix Table 4(b) - continued

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*	
	Easting	Northing		Easting	Northing
Dorset	3857(3863)	944 (958)	Essex	5755(5755)	2019(2034)
MBS and UDs			County Borough		
Blandford Forum MB	3888(3888)	1067(1067)	Southend-on-Sea CB	5871(5836)	1866(1887)
Bridport MB	3465(3465)	929 (924)	MBS and UDs		
Dorchester MB	3690(3692)	902 (906)	Basildon UD	5708(5705)	1907(1906)
Lyme Regis MB	3339(3339)	924 (923)	Benfleet UD	5787(5793)	1879(1889)
Poole MB	4030(4051)	926 (933)	Braintree and Bocking UD	5759(5756)	2234(2237)
Portland UD	3688(3688)	723 (720)	Brentwood UD	5604(5612)	1939(1930)
Shaftesbury MB	3865(3864)	1230(1229)	Brightlingsea UD	6086(6087)	2171(2171)
Sherborne UD	3636(3638)	1168(1167)	Burnham-on-Crouch UD	5951(5950)	1964(1962)
Swanage UD	4025(4026)	790 (787)	Canvey Island UD	5796(5804)	1834(1837)
Wareham MB	3921(3920)	879 (880)	Chelmsford MB	5705(5701)	2069(2063)
Weymouth and Melcombe Regis MB	3673(3694)	798 (827)	Chigwell UD	5431(5428)	1950(1959)
Wimborne Minster UD	4014(4014)	999 (998)	Claacton UD	6175(6181)	2156(2154)
Rural Districts			Colchester MB	5996(5996)	2246(2272)
Beaminster RD	3470(3483)	1020(1012)	Epping UD	5461(5462)	2021(2020)
Blandford RD	3877(3887)	1057(1056)	Frinton and Walton UD	6238(6238)	2210(2203)
Bridport RD	3454(3470)	927 (920)	Halstead UD	5812(5810)	2303(2303)
Dorchester RD	3678(3659)	906 (929)	Harlow UD	5454(5456)	2093(2088)
Shaftesbury RD	3824(3822)	1235(1211)	Harrow MB	6247(6259)	2313(2323)
Sherborne RD	3621(3629)	1131(1127)	Maldon MB	5852(5868)	2069(2081)
Sturminster RD	3776(3767)	1142(1110)	Rayleigh	5809(5802)	1909(1908)
Wareham and Purbeck RD	3913(3945)	885 (956)	Saffron Walden MB	5541(5541)	2381(2383)
Wimborne and Cranborne RD	4050(4017)	1022(1069)	Thurrock UD	5633(5662)	1804(1875)
Durham	4311(4319)	5473(5463)	Waltham Holy Cross UD	5392(5388)	2002(2002)
County Boroughs			West Mersea UD	6012(6012)	2129(2131)
Darlington CB	4289(4285)	5149(5153)	Witham UD	5817(5818)	2157(2159)
Gateshead CB	4257(4267)	5610(5593)	Wivenhoe UD	6038(6038)	2226(2224)
Rural Districts					
Braintree RD			MBS and UDs		
Chelmsford RD			Braintree RD	5786(5762)	2215(2209)
Dunmow RD			Chelmsford RD	5720(5721)	2039(2045)
Epping and Ongar RD			Dunmow RD	5603(5582)	2214(2213)
Halstead RD			Epping and Ongar RD	5507(5542)	2033(2039)
Halstead RD			Lexden and Winstree RD	5796(5812)	2351(2386)
Halstead RD			Maldon RD	5951(5954)	2235(2242)
Lexden and Winstree RD			Maldon RD	5902(5889)	2059(2116)
Maldon RD			Rochford RD	5864(5898)	1919(1943)
Rochford RD			Saffron Walden RD	5525(5520)	2314(2338)
Tendring RD			Tendring RD	6126(6119)	2249(2315)
Gloucestershire				3723(3744)	1925(1945)
County Boroughs					
Bristol CB			County Boroughs		
Gloucester CB			Bristol CB	3592(3631)	1735(1761)
Gloucester CB			Gloucester CB	3841(3855)	2172(2195)
MBS and UDs					
Charlton Kings UD			MBS and UDs		
Cheltenham MB			Charlton Kings UD	3964(3965)	2205(2203)
Cirencester UD			Cheltenham MB	3940(3941)	2223(2220)
Kingswood UD			Cirencester UD	4024(4022)	2018(2017)
Mangotsfield UD			Kingswood UD	3652(3648)	1738(1739)
Mangotsfield UD			Mangotsfield UD	3652(3654)	1765(1761)
Nailsworth UD			Nailsworth UD	3844(3843)	1997(1996)
Stroud UD			Stroud UD	3844(3851)	2051(2050)
Tewkesbury MB			Tewkesbury MB	3897(3895)	2327(2328)
Rural Districts					
Cheltenham RD			Rural Districts		
Cirencester RD			Cheltenham RD	3955(3957)	2259(2275)
Dursley RD			Cirencester RD	4079(4046)	2014(2022)
East Dean RD			Dursley RD	3755(3760)	1976(1983)
Gloucester RD			East Dean RD	3661(3693)	2150(2171)
Lydney RD			Gloucester RD	3838(3785)	2169(2180)
Newent RD			Lydney RD	3596(3591)	2003(2004)
North Cotswold RD			Newent RD	3732(3753)	2271(2268)
Northleach RD					
Sodbury RD			Northleach RD	4177(4177)	2299(2278)
Sodbury RD			Northleach RD	4100(4098)	2136(2155)
Stockton RD			Sodbury RD	3675(3719)	1803(1812)

* The figure in brackets is the unweighted centre of population. Section 2.3 describes how this figure differs from the others shown in this report. These bracketed figures are those shown on the Census Small Area Statistics data sets.

Appendix Table 4(b) - continued

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*	
	Easting	Northing		Easting	Northing
Rural Districts continued			Rural Districts continued		
Stroud RD			Stroud RD	3849(3842)	2043(2035)
Tetbury RD			Tetbury RD	3877(3862)	1938(1939)
Thornbury RD			Thornbury RD	3629(3697)	1879(2029)
Warmley RD			Warmley RD	3662(3668)	1730(1737)
West Dean RD			West Dean RD	3593(3576)	2102(2108)
Greater London			Greater London	5307(5310)	1802(1811)
City of London (includes Inner and Middle Temple)			City of London (includes Inner and Middle Temple)	5324(5328)	1813(1815)
London Boroughs			London Boroughs		
Barking LB			Barking LB	5478(5482)	1852(1885)
Barnet LB			Barnet LB	5245(5249)	1915(1904)
Bexley LB			Bexley LB	5482(5485)	1754(1790)
Brent LB			Brent LB	5209(5213)	1854(1854)
Bromley LB			Bromley LB	5415(5403)	1678(1665)
Camden LB			Camden LB	5279(5282)	1842(1838)
Croydon LB			Croydon LB	5332(5327)	1651(1651)
Ealing LB			Ealing LB	5160(5154)	1812(1814)
Enfield LB			Enfield LB	5330(5336)	1952(1949)
Greenwich LB			Greenwich LB	5426(5468)	1767(1795)
Hackney LB			Hackney LB	5340(5342)	1854(1854)
Hammersmith LB			Hammersmith LB	5237(5224)	1785(1813)
Haringey LB			Haringey LB	5314(5312)	1895(1894)
Harrow LB			Harrow LB	5150(5155)	1893(1888)
Havington LB			Havington LB	5530(5526)	1882(1892)
Hillingdon LB			Hillingdon LB	5086(5078)	1838(1838)
Hounslow LB			Hounslow LB	5142(5193)	1758(1782)
Islington LB			Islington LB	5311(5308)	1850(1847)
Kensington and Chelsea LB			Kensington and Chelsea LB	5256(5244)	1795(1818)
Kingston upon Thames LB			Kingston upon Thames LB	5194(5200)	1676(1707)
Lambeth LB			Lambeth LB	5307(5305)	1746(1754)
Lewisham LB			Lewisham LB	5374(5366)	1741(1781)
Merton LB			Merton LB	5258(5253)	1693(1694)
Newham LB			Newham LB	5411(5429)	1836(1856)
Redbridge LB			Redbridge LB	5437(5435)	1888(1894)
Richmond upon Thames LB			Richmond upon Thames LB	5170(5169)	1736(1741)
Southwark LB			Southwark LB	5335(5353)	1770(1795)
Sutton LB			Sutton LB	5265(5261)	1646(1648)
Tower Hamlets LB			Tower Hamlets LB	5360(5367)	1818(1837)
Waltham Forest LB			Waltham Forest LB	5379(5383)	1895(1894)
Wandsworth LB			Wandsworth LB	5264(5287)	1739(1767)
Westminster, City of LB			Westminster, City of LB	5273(5269)	1810(1811)
Hampshire			Hampshire	4507(4510)	1166(1188)
County Boroughs			County Boroughs		
Bournemouth CB			Bournemouth CB	4097(4091)	933 (939)
Portsmouth CB			Portsmouth CB	4653(4672)	1017(1056)
Southampton CB			Southampton CB	4427(4440)	1134(1155)
MBS and UDs			MBS and UDs		
Aldershot MB					

Appendix Table 4(b) - continued

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*	
	Easting	Northing		Easting	Northing
Huntingdon and Peterboro	5206(5199)	2874(2870)	Lancashire	3618(3629)	4093(4098)
MBs and UDs			County Boroughs		
Huntingdon and Godmanchester MB	5245(5238)	2723(2721)	Barrow-in-Furness CB	3201(3214)	4696(4689)
Old Fletton UD	5201(5202)	2967(2965)	Blackburn CB	3683(3683)	4279(4286)
Peterborough MB	5187(5187)	3005(2999)	Blackpool CB	3318(3317)	4362(4361)
Ramsey UD	5280(5277)	2860(2856)	Bolton CB	3712(3711)	4094(4098)
St Ives MB	5313(5312)	2721(2720)	Bootle CB	3348(3358)	3970(3984)
St Neots UD	5183(5186)	2598(2595)	Burnley CB	3838(3837)	4328(4332)
Rural Districts			Bury CB	3805(3807)	4105(4099)
Barnack RD	5062(5055)	3030(3019)	Liverpool CB	3385(3417)	3911(3925)
Huntingdon RD	5192(5148)	2761(2767)	Manchester CB	3851(3889)	3955(3973)
Norman Cross RD	5168(5151)	2934(2932)	Oldham CB	3930(3928)	4045(4038)
Peterborough RD	5171(5147)	3043(3020)	Preston CB	3541(3566)	4303(4317)
St Ives RD	5314(5309)	2746(2759)	Rochdale CB	3892(3896)	4129(4128)
St Neots RD	2646(5182)	5179(2643)	St Helens CB	3515(3509)	3949(3959)
Thorney RD	3041(5207)	5280(2977)	Salford CB	3813(3833)	3995(4009)
Kent	5878(5878)	1582(1589)	Southport CB	3341(3345)	4161(4165)
County Borough			Warrington CB	3611(3611)	3891(3894)
Canterbury CB	6149(6145)	1579(1569)	Wigan CB	3570(3565)	4054(4052)
MBs and UDs					
Ashford UD	6012(6006)	1425(1429)	Abram UD	3612(3607)	4016(4017)
Broadstairs and St Peter's UD	6388(6380)	1683(1682)	Accrington MB	3759(3763)	4285(4284)
Chatham MB	5761(5761)	1655(1678)	Adlington UD	3600(3604)	4133(4132)
Dartford MB	5538(5541)	1739(1735)	Ashton-in-Makerfield UD	3572(3576)	3999(4004)
Deal MB	6368(6366)	1518(1521)	Ashton-under-Lyne MB	3939(3940)	3997(3994)
Dover MB	6307(6303)	1420(1427)	Aspull UD	3610(3609)	4078(4083)
Faversham MB	6012(6010)	1613(1619)	Atherton UD	3673(3676)	4032(4030)
Folkestone MB	6218(6225)	1365(1368)	Audenshaw UD	3917(3920)	3973(3971)
Gillingham MB	5792(5782)	1669(1688)	Bacup MB	3864(3868)	4225(4225)
Gravesend MB	5656(5657)	1726(1740)	Barrowford UD	3856(3856)	4393(4394)
Herne Bay UD	6177(6174)	1675(1681)	Billinge-and Winstanley UD	3531(3537)	4014(3998)
Hythe MB	6160(6157)	1346(1347)	Blackrod UD	3616(3615)	4107(4107)
Lydd MB	6054(6047)	1208(1209)	Brierfield UD	3849(3850)	4363(4365)
Maidstone MB	5761(5764)	1549(1552)	Carnforth UD	3498(3497)	4702(4702)
Margate MB	6344(6345)	1700(1705)	Chadderton UD	3902(3902)	4046(4047)
New Romney MB	6073(6073)	1246(1248)	Chorley MB	3584(3591)	4173(4177)
Northfleet UD	5631(5635)	1725(1737)	Church UD	3746(3749)	4291(4291)
Queenborough in Sheppey MB	5936(5924)	1732(1747)	Clayton-le-Moors UD	3748(3748)	4310(4307)
Ramsgate MB	6373(6373)	1656(1667)	Colne MB	3742(3742)	4416(4414)
Rochester MB	5734(5737)	1680(1700)	Crompton UD	3890(3892)	4402(4399)
Royal Tunbridge Wells MB	5585(5583)	1397(1406)	Crosby MB	3934(3934)	4093(4097)
Sandwich MB	6329(6330)	1578(1580)	Dalton-in-Furness UD	3322(3322)	3990(3986)
Sevenoaks UD	5529(5528)	1554(1547)	Darwen MB	3228(3231)	4746(4743)
Sittingbourne and Milton UD	5906(5912)	1637(1636)	Denton UD	3693(3696)	4224(4223)
Southborough UD	5582(5578)	1421(1418)	Droylsden UD	3922(3926)	3949(3949)
Swanscombe UD	5600(5605)	1743(1744)	Eccles MB	3900(3897)	3986(3988)
Tenterden MB	5886(5884)	1340(1338)	Failsworth UD	3764(3764)	3986(3987)
Tonbridge UD	5593(5591)	1473(1473)	Farnworth MB	3897(3898)	4010(4007)
Whitstable UD	6116(6111)	1662(1656)	Fleetwood MB	3728(3731)	4058(4061)
Rural Districts			Fulwood UD	3325(3336)	4471(4481)
Bridge-Blean RD	6163(6178)	1573(1549)	Formby UD	3296(3300)	4072(4070)
Cranbrook RD	5770(5779)	1344(1363)	Golborne UD	3532(3538)	4322(4317)
Dartford RD	5553(5569)	1696(1692)	Grange UD	3628(3629)	3970(3976)
Dover RD	6304(6289)	1447(1446)	Great Harwood UD	3403(3403)	4774(4776)
East Ashford RD	6048(6047)	1431(1433)	Haslingden MB	3734(3735)	4322(4325)
Eastridge RD	6284(6301)	1564(1566)	Haydock UD	3786(3786)	4228(4228)
Elham RD	6163(6157)	1402(1413)	Heywood MB	3554(3552)	3969(3969)
Hollingbourn RD	5836(5841)	1523(1547)	Hindley UD	3850(3853)	4105(4105)
Maidstone RD	5754(5745)	1503(1511)	Hornwich UD	3624(3624)	4039(4042)
Malling RD	5681(5660)	1580(1583)	Irlam UD	3643(3638)	4111(4110)
Romney Marsh RD	6076(6025)	1286(1278)	Kirkby UD	3436(3437)	3912(3912)
Sevenoaks RD	5495(5482)	1535(1537)	Kirkham UD	3424(3426)	4320(4320)
Strood RD	5728(5755)	1704(1759)	Lancaster MB	3478(3477)	4614(4616)
Swale RD	5935(5951)	1622(1611)	Lees UD	3953(3954)	4049(4050)
Tenterden RD	5892(5949)	1335(1303)	Leigh MB	3657(3656)	4002(4005)
Tonbridge RD	5623(5642)	1437(1450)	Leyland UD	3537(3530)	4220(4225)
West Ashford RD	5961(5927)	1432(1442)	Litherland UD	3339(3342)	3979(3980)

* The figure in brackets is the unweighted centre of population. Section 2.3 describes how this figure differs from the others shown in this report. These bracketed figures are those shown on the Census Small Area Statistics data sets.

Appendix Table 4(b) - continued

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*	
	Easting	Northing		Easting	Northing
MBs and UDs continued			MBs and UDs continued		
Littleborough UD	3935(3939)	4164(4168)	Market Harborough UD	4733(4734)	2871(2877)
Little Lever UD	3755(3755)	4073(4074)	Melton Mowbray UD	4751(4755)	3192(3194)
Longridge UD	3604(3604)	4371(4369)	Oadby UD	4626(4620)	3004(3006)
Lytham, St Anne's MB	3338(3332)	4287(4281)	Shepshed UD	4477(4479)	3193(3192)
Middleton MB	3868(3868)	4061(4063)	Wigston UD	4599(4600)	2990(2993)
Milnrow UD	3929(3930)	4123(4125)	Rural Districts		
Morecambe and Heysham MB	3434(3455)	4633(4639)	Ashby de la Zouch RD	4363(4377)	3138(3127)
Mossley MB	3975(3973)	4022(4027)	Barrow upon Soar RD	4592(4604)	3124(3153)
Nelson MB	3863(3867)	4378(4376)	Billesdon RD	4676(4719)	3025(3029)
Newton-le-Willows UD	3579(3578)	3953(3958)	Blaby RD	4543(4519)	2996(2974)
Ormskirk UD	3426(3431)	4095(4105)	Castle Donington RD	4456(4473)	3257(3237)
Orrell UD	3536(3546)	4049(4051)	Lutterworth RD	4547(4572)	2870(2879)
Oswaldtwistle UD	3733(3736)	4274(4272)	Market Bosworth RD	4444(4427)	3057(3056)
Padham UD	3796(3797)	4336(4335)	Market Harborough RD	4701(4741)	2920(2925)
Poulton-le-Fylde UD	3344(3343)	4390(4391)	Melton and Belvoir RD	4752(4762)	3233(3243)
Preesall UD	3360(3366)	4480(4473)	Lincoln (Parts of Holland)	5312(5309)	3325(3320)
Prescot UD	3469(3469)	3922(3927)	MBs and UDs		
Prestwich MB	3818(3820)	4036(4039)	Boston MB	5326(5329)	3441(3453)
Radcliffe MB	3781(3782)	4077(4072)	Spalding UD	5246(5243)	3225(3224)
Rainford UD	3480(3480)	4010(4009)	Rural Districts		
Ramsbottom UD	3790(3799)	4164(4170)	Boston RD	5325(5316)	3426(3415)
Rawtenstall MB	3820(3819)	4232(4227)	Standish-with-Langtree UD	5397(5399)	3229(3183)
R					

Appendix Table 4(b) - continued

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*	
	Easting	Northing		Easting	Northing
<i>Rural Districts continued</i>					
Isle of Axholme RD	4788(4835)	4070(4059)	Northumberland	4234(4248)	5745(5738)
Louth RD	5348(5345)	3923(3885)	<i>County Boroughs</i>		
Spilsby RD	5443(5417)	3632(3654)	Newcastle upon Tyne CB	4245(4288)	5654(5638)
Welton RD	5006(5019)	3766(3792)	Tynemouth CB	4348(4353)	5690(5679)
Norfolk	6110(6109)	3115(3125)	<i>MBs and UD</i>		
<i>County Boroughs</i>			Alnwick UD	4186(4185)	6129(6130)
Great Yarmouth CB	6523(6528)	3059(3094)	Ambleside UD	4266(4268)	6043(6043)
Norwich CB	6222(6227)	3088(3093)	Ashington UD	4277(4271)	5873(5874)
<i>MBs and UD</i>			Bedlingtonshire UD	4265(4274)	5836(5828)
Cromer UD	6221(6226)	3416(3411)	Berwick-upon-Tweed MB	3994(4006)	6526(6514)
Diss UD	6120(6121)	2801(2800)	Blyth MB	4306(4318)	5808(5800)
Downham Market UD	5611(5609)	3032(3030)	Gosforth UD	4240(4247)	5683(5684)
East Dereham UD	5991(5990)	3127(3129)	Hexham UD	3933(3932)	5638(5635)
Hunstanton UD	5675(5675)	3411(3409)	Longbenton UD	4267(4271)	5705(5712)
King's Lynn MB	5628(5639)	3203(3206)	Morpeth MB	4198(4199)	5855(5854)
North Walsham UD	6283(6283)	3301(3302)	Newbiggin-by-the-Sea UD	4304(4307)	5876(5874)
Sheringham UD	6159(6161)	3429(3433)	Newburn UD	4182(4169)	5662(5662)
Swaffham UD	5819(5820)	3088(3087)	Prudhoe UD	4095(4090)	5625(5628)
Thetford MB	5866(5861)	2828(2826)	Seaton Valley UD	4291(4304)	5748(5752)
Wells-next-the-Sea UD	5916(5916)	3435(3432)	Wallsend MB	4307(4320)	5671(5666)
Wymondham UD	6111(6115)	3015(3021)	Whitley Bay MB	4346(4352)	5725(5724)
<i>Rural Districts</i>			<i>Rural Districts</i>		
Blofield and Flegg RD	6387(6403)	3113(3157)	Alnwick RD	4211(4201)	6106(6085)
Depwade RD	6187(6184)	2879(2884)	Belford RD	4176(4152)	6319(6303)
Docking RD	5739(5767)	3360(3368)	Bellingham RD	3832(3839)	5868(5833)
Downham RD	5662(5654)	3019(3037)	Castle Ward RD	4183(4160)	5712(5724)
Erpingham RD	6174(6175)	3381(3384)	Glendale RD	3975(3983)	6314(6285)
Forehoe and Henstead RD	6179(6178)	3051(3020)	Haltwhistle RD	3710(3713)	5633(5631)
Freebridge Lynn RD	5692(5702)	3201(3219)	Hexham RD	3977(3990)	5634(5645)
Loddon RD	6356(6361)	2966(2983)	Morpeth RD	4233(4225)	5925(5891)
Marshland RD	5526(5537)	3128(3127)	Norham and Islandshires RD	3970(3954)	6460(6464)
Mitford and Launditch RD	5980(5976)	3155(3178)	Rothbury RD	4045(4022)	6021(6013)
St Faith's and Aylsham RD	6212(6165)	3156(3184)	Nottinghamshire	4579(4582)	3501(3500)
Smallburgh RD	6341(6326)	3245(3259)	<i>County Borough</i>		
Swaffham RD	5833(5817)	3006(3003)	Nottingham CB	4556(4556)	3408(3416)
Walsingham RD	5952(5957)	3329(3326)	<i>MBs and UD</i>		
Wayland RD	5997(5998)	2934(2902)	Kirkby in Ashfield UD	4587(4589)	3451(3457)
Northamptonshire	4805(4807)	2682(2686)	Mansfield MB	4511(4515)	3367(3363)
<i>County Borough</i>			Carlton UD	4608(4610)	3420(3415)
Northampton CB	4756(4763)	2620(2623)	East Retford MB	4703(4710)	3808(3808)
<i>MBs and UD</i>			Eastwood UD	4469(4466)	3466(3465)
Brackley MB	4585(4587)	2374(2374)	Hucknall UD	4531(4539)	3488(3484)
Burton Latimer UD	4899(4898)	2748(2746)	Mansfield Woodhouse UD	4502(4509)	3556(3558)
Corby UD	4876(4883)	2888(2894)	Newark MB	4550(4545)	3632(3637)
Daventry MB	4572(4573)	2628(2626)	Sutton in Ashfield UD	4799(4801)	3533(3531)
Desborough UD	4802(4802)	2833(2836)	Warsop UD	4492(4486)	3593(3590)
Higham Ferrers MB	4959(4958)	1686(2683)	West Bridford UD	4568(4570)	3681(3680)
Irthlingborough UD	4947(4947)	2709(2708)	Worksop MB	4588(4584)	3369(3368)
Kettering MB	4874(4873)	2785(2789)		4587(4591)	3795(3790)
Oundle UD	5037(5037)	2885(2885)	<i>Rural Districts</i>		
Raunds UD	4993(4994)	2723(2726)	Basford RD	4532(4510)	3429(3418)
Rothwell UD	4815(4815)	2811(2811)	Bingham RD	4662(4698)	3366(3369)
Rushden UD	4955(4958)	2666(2664)	East Retford RD	4734(4732)	3834(3819)
Wellingborough UD	4890(4887)	2681(2684)	Newark RD	4816(4820)	3548(3588)
<i>Rural Districts</i>			Southwell RD	4653(4710)	3599(3584)
Brackley RD	4530(4552)	2412(2433)	Worksop RD	4605(4572)	3877(3841)
Brixworth RD	4736(4706)	2711(2738)			
Daventry RD	4581(4601)	2643(2638)			
Kettering RD	4860(4842)	2843(2829)			
Northampton RD	4757(4760)	2570(2577)			
Oundle and Thrapston RD	5003(5023)	2861(2861)			
Towcester RD	4713(4693)	2467(2481)			
Wellingborough RD	4884(4882)	2647(2647)			

* The figure in brackets is the unweighted centre of population. Section 2.3 describes how this figure differs from the others shown in this report. These bracketed figures are those shown on the Census Small Area Statistics data sets.

Appendix Table 4(b) - continued

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*	
	Easting	Northing		Easting	Northing
<i>Appendix Table 4(b) - continued</i>					
Oxfordshire	4518(4520)	2097(2102)	Taunton MB	3229(3224)	1250(1247)
<i>County Borough</i>			Watchet UD	3071(3072)	1429(1432)
Oxford CB	4530(4527)	2061(2056)	Wellington UD	3135(3136)	1206(1207)
<i>MBs and UD</i>			Wells MB	3548(3548)	1459(1457)
Banbury MB	4449(4445)	2404(2403)	Weston-super-Mare MB	3331(3327)	1610(1614)
Bicester UD	4580(4582)	2230(2230)	Yeovil MB	3555(3560)	1165(1162)
<i>Rural Districts</i>					
Axbridge RD	3407(3395)	1572(1552)			
Bathavon RD	3735(3718)	1632(1626)			
Bridgwater RD	3311(3341)	1381(1455)			
Chipping Norton MB	4311(4312)	2267(2270)			
Henley-on-Thames MB	4757(4758)	1822(1818)			
Thame UD	4708(4708)	2055(2056)			
Witney UD	4352(4351)	2099(2101)			
Woodstock MB	4445(4444)	2168(2169)			
<i>Rural Districts</i>					
Banbury RD	4434(4421)	2371(2383)			
Bullingdon RD	4603(4619)	2008(2007)			
Chipping Norton RD	4359(4349)	2211(2214)			
Henley RD	4687(4685)	1806(1841)			
Ploughley RD	4530(4561)	2186(2213)			
Witney RD	4341(4333)	2085(2086)			
Rutland	4898(4892)	3075(3074)			
<i>Urban District</i>			Staffordshire	3965(3966)	3145(3146)
Oakham UD	4857(4858)	3087(3086)	<i>County Boroughs</i>		
<i>Rural Districts</i>			Burton upon Trent CB	4249(4248)	3231(3229)
Ketton RD	5005(4999)	3079(3091)	Dudley CB	3920(3930)	2897(2901)
Oakham RD	4897(4882)	3111(3105)	Stoke-on-Trent CB	3891(3886)	3468(3471)
Uppingham RD	4881(4883)	3001(3002)	Walsall CB	3997(4003)	2993(2989)
Shropshire	3571(3565)	3113(3101)	West Bromwich	3998(3991)	2934(2935)
<i>MBs and UD</i>			Wolverhampton CB	3919(3916)	2989(2981)
Dawley UD	3689(3688)	3056(3046)	<i>MBs and UD</i>		
Newport UD</td					

Appendix Table 4(b) - continued

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*				
	Easting	Northing		Easting	Northing			
<i>MBS and UDs continued</i>								
Halesworth UD	6387(6384)	2774(2774)	Bexhill MB	5736(5741)	1082(1076)			
Leiston-cum-Sizewell UD	6446(6445)	2625(2625)	Burgess Hill UD	5313(5315)	1192(1196)			
Lowestoft MB	6535(6527)	2928(2936)	Cuckfield UD	5333(5332)	1243(1246)			
Saxmundham UD	6382(6381)	2634(2633)	East Grinstead UD	5392(5391)	1382(1376)			
Southwold MB	6507(6508)	2763(2764)	Hove MB	5283(5272)	1056(1070)			
Stowmarket UD	6046(6045)	2585(2586)	Lewes MB	5409(5409)	1103(1106)			
Woodbridge UD	6266(6264)	2491(2491)	Newhaven UD	5445(5444)	1014(1014)			
<i>Rural Districts</i>								
Blyth RD	6361(6362)	2662(2676)	Portslade-by-Sea UD	5254(5258)	1064(1065)			
Deben RD	6269(6279)	2472(2505)	Rye MB	5918(5920)	1205(1205)			
Gipping RD	6095(6087)	2550(2549)	Seaford UD	5488(5483)	995(989)			
Hartismere RD	6156(6156)	2723(2701)	<i>Rural Districts</i>					
Lothingland RD	6505(6480)	2935(2902)	Battle RD	5785(5781)	1202(1180)			
Samford RD	6137(6124)	2370(2448)	Chailey RD	5403(5406)	1092(1124)			
Wainford RD	6398(6370)	2850(2863)	Cuckfield RD	5311(5292)	1254(1227)			
<i>Suffolk, West</i>			Hailsham RD	5591(5589)	1099(1093)			
Bury St Edmunds MB	5823(5821)	2593(2589)	Uckfield RD	5510(5485)	1287(1247)			
<i>MBS and UDs</i>			<i>Sussex, West</i>					
Bury St Edmunds MB	5846(5845)	2645(2644)	MBS and UDs	5084(5086)	1129(1146)			
Hadleigh UD	6028(6029)	2426(2427)	Arundel MB	5011(5012)	1069(1067)			
Haverhill UD	5667(5671)	2454(2453)	Bognor Regis UD	4931(4931)	996(1001)			
Newmarket UD	5636(5635)	2639(2640)	Chichester MB	4861(4866)	1052(1056)			
Sudbury MB	5873(5871)	2417(2415)	Crawley UD	5270(5264)	1366(1368)			
<i>Rural Districts</i>			Horsham UD	5178(5170)	1311(1314)			
Clare RD	5735(5714)	2489(2506)	Littlehampton UD	5030(5028)	1025(1033)			
Cosford RD	5973(5982)	2471(2476)	Shoreham-by-Sea UD	5222(5235)	1055(1058)			
Melford RD	5889(5893)	2426(2448)	Southwick UD	5245(5247)	1058(1061)			
Mildenhall RD	5726(5735)	2779(2715)	Worthing MB	5134(5138)	1037(1037)			
Theawastre RD	5972(5976)	2649(2663)	<i>Rural Districts</i>					
Thingoe RD	5882(5860)	2680(2691)	Chandtonbury RD	5135(5125)	1148(1164)			
<i>Surrey</i>			Chichester RD	4867(4905)	1024(1130)			
Banstead UD	5248(5252)	1579(1588)	Horsham RD	5157(5182)	1286(1296)			
Caterham and Warlingham UD	5341(5343)	1567(1563)	Petworth RD	5004(4977)	1241(1215)			
Chertsey UD	5041(5047)	1645(1643)	Worthing RD	5124(5086)	1040(1056)			
Dorking UD	5169(5168)	1493(1491)	<i>Warwickshire</i>					
Egham UD	5007(5012)	1702(1712)	County Boroughs	4183(4184)	2827(2827)			
Epsom and Ewell MB	5210(5205)	1624(1620)	Birmingham CB	4078(4075)	2859(2862)			
Esher UD	5143(5136)	1650(1645)	Coventry CB	4336(4333)	2800(2793)			
Farnham UD	4841(4836)	1466(1465)	Solihull CB	4139(4139)	2800(2796)			
Frimley and Camberley UD	4884(4869)	1592(1592)	<i>MBS and UDs</i>					
Godalming MB	4971(4974)	1444(1437)	Bedworth UD	4355(4350)	2864(2868)			
Guildford MB	4995(4997)	1506(1500)	Kenilworth UD	4289(4290)	2719(2719)			
Haslemere UD	4890(4899)	1340(1332)	Nuneaton MB	4354(4353)	2916(2920)			
Leatherhead UD	5160(5148)	1566(1562)	Royal Leamington Spa MB	4321(4321)	2659(2664)			
Reigate MB	5272(5269)	1504(1502)	Rugby MB	4505(4506)	2745(2743)			
Staines UD	5057(5063)	1718(1714)	Stratford-upon-Avon MB	4200(4200)	2551(2558)			
Sunbury-on-Thames UD	5091(5083)	1691(1700)	Sutton Coldfield MB	4119(4121)	2961(2955)			
Walton and Weybridge UD	5099(5090)	1650(1651)	Warwick MB	4286(4283)	2652(2656)			
Woking UD	5009(5012)	1588(1587)	<i>Rural Districts</i>					
<i>Rural Districts</i>			Alcester RD	4089(4102)	2586(2584)			
Bagshot RD	4941(4947)	1623(1610)	Atherstone RD	4280(4281)	2986(2996)			
Dorking and Horley RD	5240(5206)	1440(1467)	Meriden RD	4190(4240)	2872(2880)			
Godstone RD	5370(5362)	1484(1486)	Rugby RD	4438(4452)	2764(2772)			
Guildford RD	4985(4974)	1515(1523)	Shipston on Stour RD	4273(4265)	2409(2398)			
Hambledon RD	4989(4963)	1404(1420)	Southam RD	4405(4420)	2584(2551)			
<i>Sussex, East</i>			Stratford-upon-Avon RD	4192(4178)	2603(2555)			
County Boroughs	5479(5474)	1113(1109)	Warwick RD	4296(4291)	2665(2669)			
Brighton CB	5324(5319)	1057(1056)	<i>Rural Districts</i>					
Eastbourne CB	5608(5610)	1003 (994)	Bexhill MB	5736(5741)	1082(1076)			
Hastings CB	5811(5815)	1105(1104)	Burgess Hill UD	5313(5315)	1192(1196)			
<i>MBS and UDs continued</i>			Cuckfield UD	5333(5332)	1243(1246)			
Halesworth UD	6387(6384)	2774(2774)	East Grinstead UD	5392(5391)	1382(1376)			
Leiston-cum-Sizewell UD	6446(6445)	2625(2625)	Hove MB	5283(5272)	1056(1070)			
Lowestoft MB	6535(6527)	2928(2936)	Lewes MB	5409(5409)	1103(1106)			
Saxmundham UD	6382(6381)	2634(2633)	Newhaven UD	5445(5444)	1014(1014)			
Southwold MB	6507(6508)	2763(2764)	Portslade-by-Sea UD	5254(5258)	1064(1065)			
Stowmarket UD	6046(6045)	2585(2586)	Rye MB	5918(5920)	1205(1205)			
Woodbridge UD	6266(6264)	2491(2491)	Seaford UD	5488(5483)	995 (989)			

* The figure in brackets is the unweighted centre of population. Section 2.3 describes how this figure differs from the others shown in this report. These bracketed figures are those shown on the Census Small Area Statistics data sets.

Appendix Table 4(b) - continued

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*	
	Easting	Northing		Easting	Northing
<i>Westmorland</i>					
	3523(3533)	4979(4991)	Rural District	Bromsgrove RD	4001(4004)
<i>MBS and UDs</i>					
Appleby MB	3684(3691)	5201(5199)	Droitwich RD	3879(3915)	
Kendal MB	3517(3519)	4924(4923)	Evesham RD	4059(4039)	
Lakes UD	3367(3375)	5060(5046)	Kidderminster RD	3828(3855)	
Windermere UD	3410(3411)	4978(4985)	Martley RD	3781(3762)	
<i>Rural Districts</i>					
North Westmorland RD	3649(3678)	5169(5182)	Pershore RD	3944(3956)	
South Westmorland RD	3512(3521)	4856(4891)	Tenbury RD	3636(3662)	
<i>Isle of Wight</i>					
	4530(4541)	884 (884)	County Borough	Kingston upon Hull CB	5093(5126)
<i>MBS and UDs</i>					
Cowes UD	4495(4504)	952 (953)	MBS and UDs	Beverley MB	5038(5040)
Newport MB	4500(4534)	894 (911)	Bridlington MB	5179(5183)	
Ryde MB	4594(4601)	917 (917)	Driffield UD	5024(5024)	
Sandown-Shanklin UD	4588(4588)	829 (835)	Filey UD	5113(5112)	
Ventnor UD	4558(4556)	779 (780)	Haltirmprice UD	5036(5032)	
<i>Rural District</i>					

Appendix Table 4(b) - continued

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*	
	Easting	Northing		Easting	Northing
<i>Rural Districts continued</i>					
Thirsk RD	4420(4428)	4806(4815)	Rothwell UD	4350(4349)	4280(4286)
Wath RD	4367(4372)	4747(4752)	Royston UD	4362(4364)	4114(4115)
Whitby RD	4821(4823)	5093(5097)	Saddleworth UD	3981(3987)	4057(4043)
<i>Yorkshire (West Riding)</i>		4311(4312)	4191(4192)	Selby UD	4612(4623)
County Boroughs			Shipley UD	4148(4146)	4371(4375)
Barnsley CB	4351(4351)	4070(4062)	Silsden UD	4042(4051)	4465(4467)
Bradford CB	4156(4151)	4328(4328)	Skipton UD	3990(3992)	4514(4514)
Dewsbury CB	4243(4237)	4209(4215)	Sowerby Bridge UD	4051(4051)	4238(4233)
Doncaster CB	4586(4577)	4027(4026)	Spennborough MB	4193(4189)	4253(4258)
Halifax CB	4080(4084)	4260(4253)	Stanley UD	4329(4332)	4235(4234)
Huddersfield CB	4141(4135)	4169(4173)	Stocksbridge UD	4273(4274)	3980(3979)
Leeds CB	4300(4304)	4348(4344)	Swinton UD	4455(4463)	3988(3994)
Rotherham CB	4424(4418)	3931(3932)	Tickhill UD	4592(4591)	3931(3933)
Sheffield CB	4358(4363)	3867(3872)	Todmorden MB	3933(3937)	4244(4244)
Wakefield CB	4327(4335)	4199(4204)	Wath upon Dearne UD	4432(4432)	4005(3999)
York CB	4595(4601)	4516(4516)	Wombwell UD	4394(4398)	4026(4025)
<i>Rural Districts</i>					
Bowland RD			Worsbrough UD	4353(4360)	4035(4040)
Doncaster RD	3750(3776)	4472(4465)			
Goole RD	4581(4555)	4033(4034)			
Hemsworth RD	4708(4765)	4225(4208)			
Hepton RD	4441(4462)	4118(4148)			
Kiveton Park RD	3983(3976)	4280(4286)			
Nidderdale RD	4513(4520)	3842(3843)			
Osgoldcross RD	4415(4395)	4582(4593)			
Penistone RD	4519(4519)	4240(4213)			
Ripon and Pateley Bridge RD	4272(4269)	4039(4019)			
Ripon	4237(4246)	4667(4684)			
Rotherham RD	4458(4448)	3909(3903)			
Sedbergh RD	3670(3686)	4912(4868)			
Selby RD	4605(4597)	4299(4290)			
Settle RD	3764(3820)	4663(4651)			
Skipton RD	3998(3974)	4499(4533)			
Tadcaster RD	4470(4484)	4382(4396)			
Thorne RD	4669(4653)	4118(4131)			
Wakefield RD	4335(4337)	4169(4156)			
Wetherby RD	4389(4406)	4460(4485)			
Wharfedale RD	4231(4193)	4452(4482)			
Wortley RD	4330(4349)	3944(3958)			
<i>Anglesey</i>					
	2403(2405)	3794(3798)			
<i>MBs and UDs</i>					
Adwick le Street UD	4536(4541)	4088(4084)	MBs and UDs		
Aireborough UD	4200(4203)	4412(4406)	Bangor MB	2577(2581)	3717(3718)
Baildon UD	4151(4149)	4391(4385)	Bethesda UD	2625(2625)	3670(3667)
Barnoldswick UD	3878(3881)	4469(4466)	Betws-y-Coed UD	2793(2793)	3566(3563)
Batley MB	4236(4237)	4246(4250)	Caernarvon MB	2485(2487)	3627(3626)
Bentley with Arksey UD	4562(4567)	4058(4066)	Conway MB	2787(2792)	3782(3786)
Bingley UD	4104(4093)	4383(4386)	Criccieth UD	2500(2500)	3382(3380)
Brighouse MB	4138(4139)	4235(4239)	Llandudno UD	2789(2793)	3817(3816)
Castleford MB	4437(4428)	4253(4253)	Llanfairfechan UD	2684(2683)	3748(3747)
Colne Valley UD	4082(4072)	4142(4142)	Penmaenmawr UD	2723(2718)	3766(3765)
Conisbrough UD	4507(4502)	3987(3986)	Porthmadog UD	2564(2562)	3388(3381)
Cudworth UD	4389(4388)	4087(4087)	Pwllheli MB	2375(2376)	3348(3352)
Darfield UD	4412(4414)	4045(4045)			
Darton UD	4318(4310)	4094(4096)			
Dearne UD	4456(4461)	4045(4041)			
Denby Dale UD	4235(4234)	4101(4106)			
Denholme UD	4068(4069)	4340(4339)			
Dodworth UD	4318(4317)	4050(4049)			
Earby UD	3906(3905)	4461(4463)			
Elland UD	4099(4105)	4206(4206)			
Featherstone UD	4421(4427)	4204(4209)			
Garforth UD	4409(4412)	4314(4301)			
Goole MB	4744(4753)	4238(4239)			
Harrogate MB	4309(4305)	4553(4556)			
Hebden Royd UD	4001(4010)	4265(4260)			
Heckmondwike UD	4218(4223)	4239(4239)			
Hemsworth UD	4422(4422)	4136(4131)			
Holmfirth UD	4144(4144)	4092(4084)			
Horbury UD	4295(4295)	4183(4185)			
Horsforth UD	4239(4239)	4380(4375)			
Hoyland Nether UD	4371(4373)	4005(4008)			
Ilkley UD	4141(4130)	4465(4476)			
Keighley MB	4054(4055)	4403(4402)			
Kirkburton UD	4193(4195)	4142(4130)			
Knaresborough UD	4351(4351)	4571(4571)			
Knottingley UD	4491(4490)	4234(4239)			
Maltby UD	4530(4533)	3921(3920)			
Meltham UD	4100(4102)	4108(4106)			
Mexborough UD	4475(4472)	4002(4001)			
Mirfield UD	4201(4202)	4205(4200)			
Morley MB	4265(4267)	4274(4276)			
Normanton UD	4384(4386)	4226(4225)			
Ossett MB	4280(4279)	4205(4206)			
Otley UD	4198(4201)	4457(4455)			
Penistone UD	4241(4246)	4032(4028)			
Pontefract MB	4459(4456)	4219(4216)			
Pudsey MB	4214(4216)	4340(4338)			
Queensbury and Shelf UD	4107(4105)	4294(4298)			
Rawmarsh UD	4438(4440)	3967(3962)			
Ripon MB	4310(4314)	4708(4706)			
Rippenden UD	4039(4040)	4195(4200)			

* The figure in brackets is the unweighted centre of population. Section 2.3 describes how this figure differs from the others shown in this report. These bracketed figures are those shown on the Census Small Area Statistics data sets.

Appendix Table 4(b) - continued

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*		Area	Grid reference of centre of population*	
	Easting	Northing		Easting	Northing		Easting	Northing
<i>Caernarvonshire</i>								
	2596(2594)	3637(3638)	<i>Flintshire</i>			<i>Flintshire</i>		
			MBs and UDs			MBs and UDs		
			Bangor MB	2577(2581)	3717(3718)	Buckley UD	3280(3278)	3639(3641)
			Bethesda UD	2625(2625)	3670(3667)	Connah's Quay UD	3290(3291)	3691(3692)
			Betws-y-Coed UD	2793(2793)	3566(3563)	Flint MB	3237(3238)	3732(3725)
			Caernarvon MB	2485(2487)	3627(3626)	Holywell UD	3188(3192)	3764(3762)
			Conway MB	2787(2792)	3782(3786)	Mold UD	3236(3234)	3638(3641)
			Criccieth UD	2500(2500)	3382(3380)	Prestatyn UD	3060(3063)	3824(3821)
			Llandudno UD	2789(2793)	3817(3816)	Rhyl UD	3014(3014)	3810(3811)
			Llanfairfechan UD	2684(2683)	3748(3747)			
			Penmaenmawr UD	2723(2718)				

Appendix Table 4(b) - continued

Area	Grid reference of centre of population*		Area	Grid reference of centre of population*	
	Easting	Northing		Easting	Northing
Monmouthshire	3275(3286)	1973(1975)	Radnorshire	3131(3147)	2630(2625)
County Borough			Urban Districts		
Newport CB	3317(3352)	1885(1886)	Knighton UD	3285(3297)	2721(2706)
MBS and UDs			Llandrindod Wells UD	3059(3060)	2612(2613)
Abercarn UD	3211(3207)	1970(1968)	Presteigne UD	3311(3316)	2641(2645)
Abergavenny MB	3297(3294)	2147(2151)	Rural Districts		
Abertillery UD	3216(3221)	2030(2032)	Colwyn RD	3062(3098)	2552(2546)
Bedwas and Machen UD	3181(3179)	1898(1888)	Knighton RD	3189(3214)	2719(2711)
Bedwelly UD	3161(3156)	1993(2000)	New Radnor RD	3215(3222)	2582(2587)
Blaenavon UD	3253(3253)	2089(2090)	Paincastle RD	3170(2433)	3155(2450)
Caerleon UD	3332(3337)	1912(1911)	Rhayader RD	3005(3039)	2665(2649)
Chepstow UD	3533(3530)	1929(1931)			
Cwmbran UD	3286(3280)	1951(1946)			
Ebbw Vale UD	3168(3163)	2096(2093)			
Monmouth MB	3508(3509)	2127(2129)			
Mynyddislwyn UD	3179(3176)	1954(1956)			
Nantyglo and Blaina UD	3198(3198)	2090(2090)			
Pontypool UD	3280(3279)	2013(2008)			
Rhymney UD	3118(3118)	2073(2068)			
Risca UD	3238(3237)	1908(1911)			
Tredegar UD	3140(3138)	2092(2096)			
Usk UD	3378(3380)	2009(2009)			
Rural Districts					
Abergavenny RD	3311(3343)	2146(2166)			
Chepstow RD	3477(3482)	1903(1942)			
Magor and St Mellons RD	3306(3349)	1873(1851)			
Monmouth RD	3458(3481)	2093(2112)			
Pontypool RD	3318(3348)	1974(1990)			
Montgomeryshire	3099(3099)	3013(3017)			
MBS and UDs					
Llanfyllin MB	3131(3125)	3194(3184)			
Llanidloes MB	2954(2953)	2844(2842)			
Machynlleth UD	2748(3743)	3008(3004)			
Montgomery MB	3225(3213)	2964(2959)			
Newton and Llanllwchaiarn UD	3107(3113)	2914(2917)			
Welshpool MB	3227(3083)	3083(3075)			
Rural Districts					
Forden RD	3231(3221)	3006(3013)			
Llanfyllin RD	3148(3160)	3158(3157)			
Machynlleth RD	2835(2834)	3021(3020)			
Newtown and Llanidloes RD	3038(3024)	2911(2938)			
Pembrokeshire	1988(1993)	2136(2144)			
MBS and UDs					
Fishguard and Goodwick UD	1952(1958)	2374(2369)			
Haverfordwest MB	1948(1950)	2155(2154)			
Milford Haven UD	1902(1912)	2061(2061)			
Narberth UD	2109(2108)	2146(2144)			
Neyland UD	1962(1961)	2053(2054)			
Pembroke MB	1973(1983)	2024(2015)			
Tenby MB	2128(2130)	2007(2006)			
Rural Districts					
Cemaes RD	2148(2159)	2389(2372)			
Haverfordwest RD	1912(1938)	2190(2225)			
Narberth RD	2115(2083)	2121(2156)			
Pembroke RD	2034(3014)	2006(2003)			

* The figure in brackets is the unweighted centre of population. Section 2.3 describes how this figure differs from the others shown in this report. These bracketed figures are those shown on the Census Small Area Statistics data sets.

Appendix Table 4(c) Arithmetic mean centres of population, 1971

Area	Grid reference of centre of population		Area	Grid reference of centre of population	
	Easting	Northing		Easting	Northing
England	4528	2836	Merseyside	3379	3935
Regions			Districts		
Northern Region	4164	5453	Knowsley	3434	3931
Yorkshire and Humberside	4465	4240	Liverpool	3385	3911
North West Region	3631	4017	St Helens	3522	3954
East Midlands Region	4627	3313	Sefton	3340	4041
West Midlands Region	4011	2935	Wirral	3297	3876
East Anglia	5891	2839	South Eastern Region	5245	1726
South Western Region	3361	1299	South Yorkshire	4422	3951
Wales	2944	2340	Districts		
Greater London	5307	1802	Barnsley	4366	4058
City of London and London Boroughs			Doncaster	4581	4043
City of London LB	5324	1813	Rotherham	4453	3925
Barking LB	5478	1852	Sheffield	4354	3975
Barnet LB	5245	1915	Tyne and Wear	4299	5628
Bexley LB	5482	1754	Districts		
Brent LB	5209	1854	Gateshead	4237	5608
Bromley LB	5415	1678	Newcastle upon Tyne	4234	5660
Camden LB	5279	1842	North Tyneside	4318	5696
Croydon LB	5332	1651	South Tyneside	4355	5642
Ealing LB	5160	1812	Sunderland	4366	5554
Enfield LB	5330	1952	West Midlands	4068	2886
Greenwich LB	5426	1767	Hackney LB	5340	1854
Hackney LB	5237	1785	Hammersmith LB	5237	1785
Haringey LB	5314	1895	Birmingham	4081	2866
Harrow LB	5150	1893	Coventry	4335	2800
Harvington LB	5530	1882	Dudley	3925	2876
Hillingdon LB	5086	1838	Sandwell	3997	2905
Hounslow LB	5142	1758	Solihull	4156	2827
Islington LB	5311	1850	Walsall	4014	2999
Kensington and Chelsea RB	5256	1795	Wolverhampton	3919	2989
Kingston upon Thames RB	5194	1676	West Yorkshire	4232	4289
Lambeth LB	5307	1746	Districts		
Lewisham LB	5374	1741	Bradford	4135	4354
Merton LB	5258	1693	Calderdale	4072	4247
Newham LB	5411	1836	Kirklees	4178	4186
Redbridge LB	5437	1888	Leeds	4296	4349
Richmond upon Thames LB	5170	1736	Southwark LB	5335	1770
Tower Hamlets LB	5360	1818	Wakefield	4389	4200
Waltham Forest LB	5379	1895	Non-Metropolitan Counties		
Wandsworth LB	5264	1739	Avon	3596	1716
Westminster, City of LB	5273	1810	Metropolitan Counties		
Bath			Greater Manchester	3815	4000
Bristol			Districts		
Kingswood			Bolton	3709	4088
Northavon			Bury	3801	4087
Wansdyke			Manchester	3851	3955
Woodspring			Oldham	3927	4049
			Rochdale	3884	4110
			Salford	3780	3999
			Stockport	3899	3890
			Tameside	3941	3974
			Trafford	3778	3921
			Wigan	3608	4033

Definitions of the new standard regions, in terms of the new counties and districts, will be found in Re-organisation of Local Government Areas - Correlation of new and old areas (Reference 3).

Appendix Table 4(c) - continued

Area	Grid reference of centre of population		Area	Grid reference of centre of population	
	Easting	Northing		Easting	Northing
Berkshire	4789	1737	Derby	4350	3527
Districts			Districts		
Bracknell	4866	1674	Amber Valley	4393	3491
Newbury	4526	1698	Bolsover	4487	3676
Reading	4707	1730	Chesterfield	4389	3724
Slough	4974	1805	Derby	4356	3353
Windsor and Maidenhead	4916	1779	Erewash	4463	3373
Wokingham	4778	1705	High Peak	4042	3844
Buckinghamshire	4879	2052	North East Derbyshire	4393	3708
Districts			South Derbyshire	4301	3231
Aylesbury Vale	4802	2173	West Derbyshire	4234	3600
Beaconsfield	4977	1852	Devon	2739	799
Chiltern	4960	1978	Districts		
Milton Keynes	4856	2386	East Devon	3102	903
Wycombe	4858	1933	Exeter	2932	924
Cambridgeshire	5357	2765	North Devon	2573	1353
Districts			Plymouth	2483	566
Cambridge	5460	2584	South Hams	2729	526
East Cambridgeshire	5565	2743	Teignbridge	2873	750
Fenland	5409	3011	Tiverton	2935	1091
Huntingdon	5234	2731	Torbay	2903	622
Peterborough	5181	3005	Torrige	2439	1193
South Cambridgeshire	5431	2554	West Devon	2532	822
Cheshire	3620	3742	Dorset	3945	941
Districts			Districts		
Chester	3419	3660	Bournemouth	4097	933
Congleton	3795	3617	Christchurch	4173	936
Crewe and Nantwich	3685	3542	North Dorset	3838	1141
Ellesmere Port	3370	3762	Poole	4030	926
Halton	3511	3845	Purbeck	3940	862
Macclesfield	3871	3776	West Dorset	3587	970
Vale Royal	3622	3716	Weymouth and Portland	3676	781
Warrington	3617	3891	Wimborne	4052	1021
Cleveland	4510	5217	Districts		
Hartlepool	4500	5318	Chester-le-Street	4266	5511
Langbaugh	4601	5203	Darlington	4290	5150
Middlesbrough	4501	5182	Derwentside	4152	5514
Stockton-on-Tees	4441	5201	Easington	4277	5420
Cornwall	1884	503	Sedgefield	4283	5297
Districts			Teesdale	4084	5213
Caradon	2333	607	Wear Valley	4169	5323
Carrick	1803	411	East Sussex	5501	1090
Kerrier	1681	353	Districts		
North Cornwall	2118	814	Brighton	5324	1057
Penwith	1489	332	Eastbourne	5608	1003
Restormel	1967	561	Hastings	5811	1105
Isles of Scilly	904	115	Hove	5277	1057
Cumbria	3277	5155	Lewes	5429	1061
Districts			Rother	5771	1147
Allerdale	3097	5338	Wealden	5550	1194
Barrow-in-Furness	3205	4704	Essex	5755	2019
Carlisle	3414	5563	Districts		
Copeland	3025	5099	Basildon	5708	1907
Eden	3572	5270	Braintree	5789	2245
South Lakeland	3432	4878	Brentwood	5605	1950
Definitions of the new standard regions, in terms of the new counties and districts, will be found in Re-organisation of Local Government Areas - Correlation of new and old areas (Reference 3).	Castles Point	5790	Chelmsford	5716	2056
Definitions of the new standard regions, in terms of the new counties and districts, will be found in Re-organisation of Local Government Areas - Correlation of new and old areas (Reference 3).	Colchester	5986	Colchester	5986	2238

Appendix Table 4(c) - continued

Area	Grid reference of centre of population		Area	Grid reference of centre of population	
	Easting	Northing		Easting	Northing
Essex continued			Essex continued		
Districts			Districts		
Epping Forest	5446	1992	Epping Forest	5446	1992
Harlow	5454	2093	Harlow	5454	2093
Maldon	5890	2052	Maldon	5890	2052
Rochford	5843	1915	Rochford	5843	1915
Southend-on-Sea	5871	1866	Southend-on-Sea	5871	1866
Tendring	6173	2214	Tendring	6173	2214
Thurrock	5633	1804	Thurrock	5633	1804
Uttlesford	5561	2283	Uttlesford	5561	2283
Humberside	5073	4254	Humberside	5073	4254
Districts			Districts		
Beverley	5023	4328	Beverley	5023	4328
Boothferry	4763	4207	Boothferry	4763	4207
Cleethorpes	5269	4087	Cleethorpes	5269	4087
Glanford	4973	4124	Glanford	4973	4124
Grimsby	5264	4084	Grimsby	5264	4084
Holderness	5231	4334	Holderness	5231	4334
Kingston upon Hull	5093	4305	Kingston upon Hull	5093	4305
North Wolds	5045	4600	North Wolds	5045	4600
Scunthorpe	4891	4098	Scunthorpe	4891	4098
Gloucestershire	3870	2151	Gloucestershire	3870	2151
Districts			Districts		
Cheltenham	3943	2220	Cheltenham	3943	2220
Cotswold	4080	2113	Cotswold	4080	2113
Forest of Dean	3641	2121	Forest of Dean	3641	2121
Gloucester	3841	2172	Gloucester	3841	2172
Stroud	3811	2032	Stroud	3811	2032
Tewkesbury	3919	2247	Tewkesbury	3919	2247
Hampshire	4562	1198	Hampshire	4562	1198
Districts			Districts		
Basingstoke	4598	1565	Basingstoke	4598	1565
Eastleigh	4463	1166	Eastleigh	4463	1166
Fareham	4560	1060	Fareham	4560	1060
Gosport	4593	1010	Gosport	4593	1010
Hart	4801	1557	Hart	4801	1557
Havant	4707	1072	Havant	4707	1072
New Forest	4305	1042	New Forest	4305	1042
East Hampshire	4749	1300	East Hampshire	4749	1300
Portsmouth	4653	1017	Portsmouth	4653	1017
Rushmoor	4866	1533	Rushmoor	4866	1533
Southampton	4427	1134	Southampton	4427	1134
Test Valley	4347	1360	Test Valley	4347	1360
Winchester	4517	1255	Winchester	4517	1255
Lancashire	3572	4328	Lancashire	3572	4328
Districts			Districts		
Blackburn	3685	4264	Blackburn	3685	4264
Blackpool	3318	4362	Blackpool	3318	4362
Burnley	3834	4329	Burnley	3834	4329
Chorley	3573	4177	Chorley	3573	4177
Leominster	3462	2595	Leominster	3462	2595
Malvern Hills	3766	2476	Malvern Hills	3766	2476
Redditch	4041	2663	Redditch	4041	2663
South Herefordshire	3516	2328	South Herefordshire	3516	2328
Worcester	3851	2554	Worcester	3851	2554
Wyche	3969	2512	Wyche	3969	2512
Wyre Forest	3820	2755	Wyre Forest	3820	2755
Hertfordshire	5197	2098	Hertfordshire	5197	2098
Districts			Districts		
Broxbourne	5360	2046	Broxbourne	5360	2046
Dacorum	5038	2077	Dacorum	5038	2077
East Hertfordshire	5388	2175	East Hertfordshire	5388	2175
Hertsmere	5191	1981	Hertsmere	5191	1981
North Hertfordshire	5223	2310	North Hertfordshire	5223	2310
St Albans	5151	2086	St Albans	5151	2086
Stevenage	5251	2242	Stevenage	5251	2242
Three Rivers	5081	1959	Three Rivers	5081	1959
Watford	5107	1978	Watford	5107	1978
Welwyn Hatfield	5241	2101	Welwyn Hatfield	5241	2101
Leicestershire	4576	3058	Leicestershire	4576	3058

Appendix Table 4(c) - continued

Area	Grid reference of centre of population		Area	Grid reference of centre of population	
	Easting	Northing		Easting	Northing
Lincolnshire	5128	3564	Oxfordshire	4505	2059
Districts			Districts		
Boston	5326	3434	Cherwell	4492	2297
East Lindsey	5388	3743	Oxford	4530	2061
Lincoln	4970	3709	Vale of White Horse	4440	1954
North Kesteven	5014	3587	South Oxfordshire	4630	1920
South Holland	5301	3231	West Oxfordshire	4348	2133
South Kesteven	4986	3263			
West Lindsey	4958	3872	Salop	3571	3113
Norfolk	6115	3114	Districts		
Breckland	5936	3009	Bridgnorth	3732	2972
Broadland	6244	3137	North Shropshire	3559	3327
Great Yarmouth	6513	3075	Oswestry	3300	3298
Norwich	6222	3088	Shrewsbury	3487	3118
North Norfolk	6169	3334	South Shropshire	3469	2822
South Norfolk	6201	2976	The Wrekin	3686	3113
West Norfolk	5645	3176			
Northamptonshire	4805	2682	Somerset	3388	1317
Districts			Districts		
Corby	4878	2889	Mendip	3622	1446
Daventry	4634	2663	Sedgemoor	3324	1418
East Northamptonshire	4978	2750	Taunton Deane	3207	1245
Kettering	4862	2790	West Somerset	3010	1416
Northampton	4756	2618	Yeovil	3501	1183
South Northamptonshire	4671	2475			
Wellingborough	4888	2670	Staffordshire	3966	3314
Northumberland	4172	5876	Districts		
District			Cannock Chase	4007	3129
Alnwick	4184	6086	East Staffordshire	4207	3257
Berwick-upon-Tweed	4019	6430	Lichfield	4103	3091
Blyth Valley	4298	5787	Newcastle-under-Lyme	3832	3480
Castle Morpeth	4193	5837	South Staffordshire	3907	3023
Tynedale	3948	5653	Stafford	3911	3266
Wansbeck	4276	5857	Staffordshire Moorlands	3966	3515
			Stoke-on-Trent	3891	3468
North Yorkshire	4514	4671	Tamworth	4215	3034
Districts			Suffolk	6133	2589
Craven	3921	4557	Babergh	5991	2414
Hambleton	4430	4895	Forest Heath	5696	2733
Harrogate	4320	4589	Ipswich	6165	2445
Richmondshire	4157	4984	Mid Suffolk	6084	2623
Ryedale	4697	4675	St Edmundsbury	5811	2602
Scarborough	4992	4926	Suffolk Coastal	6311	2500
Selby	4579	4364	Waveney	6496	2901
York	4595	4516			
Nottinghamshire	4579	3500	Surrey	5097	1571
Districts			Districts		
Ashfield	4502	3550	Elmbridge	5124	1650
Bassetlaw	4647	3822	Epsom and Ewell	5210	1624
Broxtowe	4501	3398	Guildford	4990	1511
Gedling	4600	3443	Mole Valley	5168	1522
Mansfield	4545	3625	Reigate and Banstead	5264	1522
Newark	4717	3574	Runnymede	5028	1668
Nottingham	4556	3408	Spelthorne	5071	1707
Rushcliffe	4615	3351	Surrey Heath	4902	1602
			Tandridge	5357	1521
			Waverley	4929	1421
			Woking	5009	1588

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Appendix Table 4(c) - continued

Area	Grid reference of centre of population		Area	Grid reference of centre of population		Area	Grid reference of centre of population	
	Easting	Northing		Easting	Northing		Easting	Northing
Warwickshire	4328	2752	Mid Glamorgan	3017	1929			
Districts			Districts					
North Warwickshire	4261	2957	Cynon Valley	3019	2005			
Nuneaton	4355	2896	Merthyr Tydfil	3061	2048			
Rugby	4486	2751	Ogwr	2881	1841			
Stratford-on-Avon	4227	2558	Rhondda	2989	1944			
Warwick	4303	2670	Rhymney Valley	3145	1947			
			Taff-Ely	3058	1870			
West Sussex	5126	1152	Powys	3067	2656			
Districts			Districts					
Adur	5208	1053	Brecknock	2999	2260			
Arun	4989	1018	Montgomery	3099	3013			
Chichester	4864	1102	Radnor	3131	2630			
Crawley	5270	1366						
Horsham	5156	1248	South Glamorgan	3157	1762			
Mid Sussex	5332	1263	Districts					
Worthing	5134	1037	Cardiff	3175	1784			
			Vale of Glamorgan	3108	1701			
Wiltshire	4054	1643	West Glamorgan	2686	1959			
Districts								
Kennet	4127	1600						
North Wiltshire	3953	1773						
Salisbury	4117	1328	Districts					
Thamesdown	4160	1856	Afan	2777	1914			
West Wiltshire	3867	1556	Lliw Valley	2658	2027			
			Neath	2770	1991			
Clwyd	3191	3637	Swansea	2636	1942			
Districts								
Alyn and Deeside	3306	3654						
Colwyn	2895	3765						
Delyn	3209	3714						
Glyndwr	3140	3521						
Rhuddlan	3033	3803						
Wrexham Maelor	3327	3497						
Dyfed	2343	2217						
Districts								
Carmarthen	2391	2216						
Ceredigion	2502	2647						
Dinefwr	2654	2190						
Llanelli	2507	2027						
Preseli	1950	2191						
South Pembrokeshire	2048	2048						
Gwent	3281	1976						
Districts								
Blaenau Gwent	3182	2082						
Islwyn	3199	1954						
Monmouth	3418	2036						
Newport	3317	1885						
Torfaen	3284	1989						
Gwynedd	2563	3626						
Districts								
Aberconwy	2776	3759						
Arfon	2544	3650						
Dwyfor	2396	3374						
Meirionnydd	2691	3260						
Ynys Mon	2403	3794						

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