

Data Management and Analysis Group

Indices of Deprivation 2004

A London perspective

DMAG Briefing 2004/18
July 2004

Rachel Leeser

ISSN 1479-7879

DMAG Briefing 2004/18

July 2004

Indices of Deprivation 2004

A London perspective

For more information please contact:

Rachel Leeser

Data Management and Analysis Group
Greater London Authority
City Hall (5 East)
The Queen's Walk
London SE1 2AA

Tel: 020 7983 4699

Rachel.Leeser@london.gov.uk

Copyright © Greater London Authority, 2004

All data in this briefing are taken from the Office of the Deputy Prime Minister's Indices of Deprivation 2004 (revised) or the Indices of Deprivation 2000. The Super Output Area Boundaries used in this report are Crown copyright 2004. All Crown Copyright material has been reproduced with the permission of the Controller of Her Majesty's Stationery Office.

ISSN 1479-7879

Indices of Deprivation 2004

DMAG Briefing 2004/18

Contents

Introduction	2
The domains, the indicators and denominators	3
The combined index and the supplementary indices	6
The results	7
Index of Multiple Deprivation	9
Income deprivation domain	11
Employment deprivation domain	15
Health deprivation and disability domain	17
Education, skills and training deprivation domain	19
Barriers to housing and services domain	23
The living environment deprivation domain	27
Crime domain	31
Using the ID2004 at higher geographical levels	32
Access to further information	35

List of Maps

Map 1 Index of Multiple Deprivation 2004	8
Map 2 Index of Multiple Deprivation 2000	9
Map 3 Income Deprivation Domain 2004	10
Map 4 Income Deprivation Affecting Children Index 2004	12
Map 5 Income Deprivation Affecting Older People Index 2004	13
Map 6 Employment Deprivation Domain 2004	14
Map 7 Health Deprivation and Disability Domain 2004	16
Map 8 Education, Skills and Training Deprivation Domain 2004	18
Map 9 Skills Sub Domain 2004	20
Map 10 Children and Young People Sub Domain 2004	21
Map 11 Barriers to Housing and Services Domain 2004	22
Map 12 Wider Barriers Sub Domain 2004	24
Map 13 Geographical Barriers Sub Domain 2004	25
Map 14 The Living Environment Deprivation Domain 2004	26
Map 15 The Indoors Living Environment Sub Domain 2004	28
Map 16 The Outdoors Living Environment Sub Domain 2004	29
Map 17 Crime Domain 2004	30

Introduction

The Indices of Deprivation 2004 (ID2004)¹ consist of three separate but related indices: the Index of Multiple Deprivation 2004 (IMD2004); the Income Deprivation Affecting Children Index (IDACI) and the Income Deprivation Affecting Older People Index (IDAOPI). The first of these, the IMD2004, is complex and combines data on a range of topics into a single measure. The other two are supplementary indices and are concerned solely with people from the relevant groups in low income households.

The ID2004 update and replace the Indices of Deprivation 2000 (ID2000) as the Government's official measure of deprivation from the Neighbourhood Renewal Unit (NRU) in the Office of the Deputy Prime Minister (ODPM). The work to construct the indices was carried out by the Social Disadvantage Research Centre at the Department of Social Policy and Social Research at the University of Oxford.

The purpose of the indices is to identify areas of need, so each of the three indices is produced for small areas known as Super Output Areas - level 1 (SOAs). These are geographical areas of a consistent size and devised in a consistent way across the whole of England. Each area has a total population size of around 1,500 people. These areas are nested, as far as possible, within electoral wards. There are exceptions to this, such as in the City of London, where ward populations are so small that this is not possible. The SOAs are a new development and this is the first time they have been used. The ID2000 were produced for wards, which varied considerably in size across the country.

Summary measures of the small area data are produced for local authorities and counties and will also be produced for PCT areas. These and the small area indices are used by central government and other bodies to identify areas where disadvantage is concentrated, in order to build programmes or allocate resources appropriately.

The Index of Multiple Deprivation is based on the concept of measuring different dimensions of deprivation individually and then combining these to give an overall score. It is an area based measure, rather than an individual based measure, so it looks at the extent of each type of deprivation within the area and then combines these to give a figure taking into account the extent of each type of deprivation. It does this by using statistical techniques to combine information on economic and social issues to produce scores for small areas across the whole of England. These are then used to rank the areas according to their relative level of deprivation. This is true of both the 2004 version (IMD2004) and the previous version produced in 2000 (IMD2000).

Seven distinct dimensions or 'domains' of deprivation are included in the IMD2004, made up of 37 separate indicators. The domains are:

- Income deprivation
- Employment deprivation
- Health deprivation and disability
- Education, skills and training deprivation
- Barriers to housing and services

¹ Office of the Deputy Prime Minister, Indices of Deprivation 2004 (revised)

- Living environment deprivation
- Crime

These seven domains have been produced for each SOA, and are then combined to produce a single score for each SOA in the country. These are then ranked to compare the areas across England.

Two further indices are created which are subsets of the income deprivation domain. These are the Income Deprivation Affecting Children Index (IDACI) and the Income Deprivation Affecting Older People Index (IDAOPI). Essentially these give the proportion of the age group (under 16 and 60 and over respectively) in receipt of, or in a family in receipt of, certain means-tested benefits. These indices are also ranked across all SOAs in England.

This Briefing covers the construction of the indices, considering some of the individual indicators and denominators in detail, how these have evolved, how they are combined in each domain and how the domains are combined to give the overall index. It also covers the results for London and how these compare to the previous Indices of Deprivation (2000), along with discussion of the results and how the construction has affected these. Finally, the Briefing raises a number of issues that remain controversial.

The domains, the indicators and denominators

All the indicators need to meet criteria of relevance, robustness and availability, and nearly all of those included in the ID2004 are statistics relating to 2001. The sources are varied; some coming from the 2001 Census, some directly from administrative data and others modelled or calculated using administrative and other data. To improve reliability of indicators based on small numbers, a technique called shrinkage, which is more often applied to correct for sample error, is used. This has greater effect in local authorities where there are large differences between areas within them, such as many of the London boroughs, than on local authorities that are more heterogeneous.

Income deprivation domain

As in the IMD2000, the income deprivation domain of the IMD2004 is possibly the most straightforward in that it aims to give the proportion of people in an area who are living on low incomes. In practice, this is operationalised as the proportion of people who are dependent on means-tested benefits (including any dependents of claimants). One change from the 2000 measure is that prisoners, who are not eligible for such benefits, are excluded from the total population count. The benefits included in the count are Income Support, Income Based Job Seekers Allowance, Working Families Tax Credit and Disabled Person's Tax Credit, along with asylum seekers receiving support.

The welfare system changed between the production of the ID2000 (based on 1998 data) and the ID2004, with the introduction of tax credits. These are available, in reducing amounts, to quite high levels of family income (over £30,000 per annum). The

two tax credit measures are therefore limited to those in families where the income is below the level used for the Government's poverty targets. The availability of information on asylum seekers receiving subsistence only and accommodation support is another enhancement to the 2004 measure.

Although it is recognised that there are differential take-up rates for different benefits, and possibly differential rates between areas, it has not been possible to quantify such differences to take them into account for the ID2004.

Employment deprivation domain

The conceptual basis of this domain is, again, straightforward and, as in the IMD2000, is a simple proportion of people who are involuntarily out of work – including those unable to work due to incapacity of disability. This is measured by the number of people claiming the relevant benefits or participating in the various New Deal schemes.

The New Deal for Lone Parents is, however, a voluntary scheme, so the number of participants does not necessarily reflect the number of lone parents who are not working but would like to work. A significant change from the approach in the IMD2000 is the use of the total population aged 18 to state retirement age (excluding those in prison) as the denominator, rather than the economically active population plus those not counted as economically active but who are counted in the domain as out of work, eg those claiming Incapacity Benefit (IB). This has a particularly significant impact in areas where there are large numbers of economically inactive people, including students, people who have taken early retirement or people looking after the home and family, ie those people who might be described as voluntarily out of work, so that in these areas the employment deprivation rate appears lower than in areas where such characteristics are not prevalent.

Health deprivation and disability domain

This domain is more complex in construction than the income and employment domains, since it is not possible, or necessarily desirable, to simply give a proportion of the population with health problems or a disability. The domain takes into account a wide range of aspects, including premature death and mental health issues as well as measures of morbidity and disability. Factor analysis is used to combine the data, resulting in the greatest weight (just over 60 per cent) being given to the measure of comparative illness and disability, which is again a state benefit based measure. This domain is comparable in outline to a domain used in the IMD2000, but uses several new indicators, such as the measure of adults under 60 suffering from mood or anxiety disorders. This in turn is based on a combination of information from several sources, which, it is believed, are not completely accurate in measuring the extent of the 'true' rate of those suffering from mood or anxiety disorders. However, together they provide a picture of relative differences between areas.

Education, skills and training deprivation domain

This domain is also similar in concept to one used in the IMD2000, but differs in the detail of the indicators used and the way they are combined. In the 2004 index, equal weight is given to two separate sub-domains – one includes measures for children and young people, the other for working age adults. The first uses achievement and participation data at various educational stages, the second uses just one indicator of adults (aged 25-54) with no, or low, qualifications. A key improvement to this domain is the use of achievement data related directly to individuals' places of residence, rather than school level achievement data.

A change to the measurement of achievements, using average scores rather than the numbers achieving high or low scores, will have an impact, particularly for highly polarised areas, such as many parts of London, where the figures might be high on both the latter measures, but close to average on the new measure. The use of 'no or low qualifications' for adults rather than the use of 'no qualifications' as used in the IMD2000 and proposed for IMD2004 also has a significant impact for London compared to other regions. Again, this relates to the polarities existing within London. While London has high levels of people with no qualifications at all, it also has very high levels of people with degree level qualifications or above, and relatively few with some qualifications, but only at lower levels. The combination of no qualifications and low qualifications therefore has the effect of reducing the number of areas in London which rank as deprived on this measure relative to other parts of the country.

Other indicators were considered for inclusion in this domain, mainly around the area of fluency in English. In particular, a measure of English as an Additional Language, was considered, but this is not included as an indicator (as it was not in the IMD2000), since it is considered an indirect rather than direct measure of education deprivation.

Barriers to housing and services domain

This domain combines the access to services domain and part of the housing deprivation domain from the IMD2000. The sub-domain which covers barriers to housing (called the Wider Barriers sub domain) includes a measure of housing affordability, which is a significant development, although restricted to affordability of owner-occupation. One issue with this sub-domain is the use of the ODPM household estimates as a denominator for the homelessness indicator. These estimates are too high, particularly for London, thus giving a lower figure for the rate of homelessness. Both the homelessness and affordability indicators are calculated at local authority level and the indicator attributed to all constituent SOAs. Overcrowding is considered as a lack of access to living space and is the only indicator within this sub-domain that is available for small areas.

The geographical barriers measure road distance for all people, rather than crow-flies distance just for those people in low-income as used in the 2000 index. There was considerable debate about the relevance of measuring geographical access for all people and whether it should be considered as deprivation. However, while road

distance is clearly a more relevant measure, it was not possible to measure this just for those people on low incomes. The two sub domains are given equal weight in the overall domain. Proposed measures for access to childcare and GPs and indicators of access to transport and fuel poverty, along with other measures of access related to issues such as cultural or language barriers were not included.

The living environment deprivation domain

Housing issues are also incorporated into this domain, in terms of the standard of housing as the 'indoors' living environment sub-domain, while the new 'outdoors' living environment sub-domain incorporates measures of air quality and road accidents. Within each sub-domain, the indicators are given equal weight, but the indoors sub-domain is given twice the weight of the outdoors sub-domain, in line with the relative time spent indoors and outdoors. It is hoped that further indicators of issues relating to the outdoors living environment can be developed for future versions of the indices.

Crime domain

This is a totally new domain for the IMD2004 incorporating small area data on 33 types of recorded crime under four broad categories – burglary, theft, criminal damage and violence. There are concerns about under-reporting of crime and whether this varies geographically, but these concerns are less severe for these types of crime than for other categories such as shoplifting and drug use, which also may be less related to deprivation. All of the categories are measured for the location of the crime, rather than other possibilities such as the victim's area of residence. The denominator used to give a rate for theft, criminal damage and violence was a combination of residents and workers in an area, giving some indication of the number of people 'at risk' in an area. No measure of visitors was available. Burglary was given as a rate based on the number of dwellings in an area, although burglary from other buildings was included in the total count of burglaries. No measure of the impact of the crime could be incorporated, but the four categories of crime are combined with factor analysis, which means that the burglary measure is given less weight than the other categories. Fear of crime, although considered important, is not currently available for small areas and therefore could not be included.

The combined index and the supplementary indices

A series of statistical manipulations of the data were used both within the domains and when combining them to the IMD to take account of very small numbers, to transform and standardise them so that the values within each indicator or domain were on a consistent basis, for example so that large numbers always indicated higher levels of deprivation or so that each indicator or domain had a similar range of values. This is necessary for valid results to be produced without giving hidden bias to some indicators or domains over others.

The exponential transformation was used for several of the sub-domains and to transform the domain scores before summing the weighted scores to produce the overall IMD. This tends to exaggerate the scores in the most deprived areas and concentrate the values for the least deprived, thus giving the greatest emphasis to the areas of interest for an index of deprivation. The weights chosen for combining the domains to the overall IMD are shown in Table 1, with the income and employment domains given the greatest weight, while the barriers to housing and services, crime and living environment domains were given the least weight. The use of the exponential transformation means that a high level of deprivation on one domain cannot be fully cancelled out by a low level of deprivation on another, but it also means that an area which scores very highly on one domain can score highly overall, particularly when the weights given to the domains are taken into account. Thus an area scoring very highly on the income domain is likely to score highly overall, even when the scores on other domains are much lower. While this may be considered a valid approach, with low income or worklessness perhaps being seen as the driver of many other types of deprivation, it does question to what extent the measure is recording *multiple* deprivation.

Table 1 Domain weights used to calculate the overall Index of Multiple Deprivation 2004

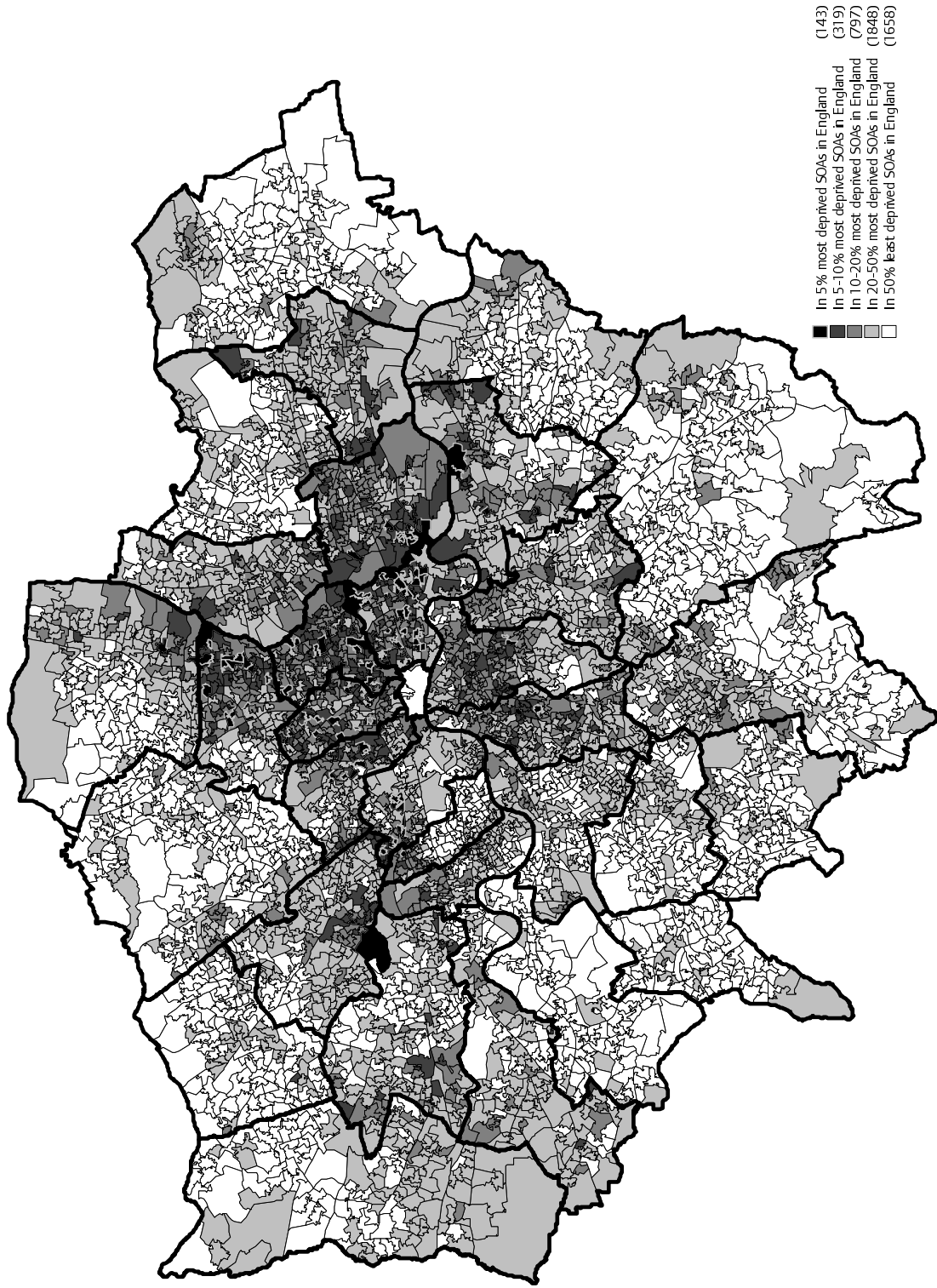
<u>Domain</u>	<u>Weight</u>
Income deprivation	22.5%
Employment deprivation	22.5%
Health deprivation and disability	13.5%
Education, skills and training deprivation	13.5%
(Skills sub domain)	6.75%
(Children and Young People sub domain)	6.75%
Barriers to housing and services	9.3%
(Wider Barriers sub domain)	4.7%
(Geographical Barriers sub domain)	4.7%
Crime	9.3%
Living Environment deprivation	9.3%
(Indoors sub domain)	6.2%
(Outdoors sub domain)	3.1%

The two supplementary indices relating to children and older people are simple proportions of the age group under consideration in low income households, as measured by those claiming state means-tested benefits. It is here, therefore that take-up rates may be a particular issue, since it is widely recognised that many older people in particular fail to claim benefits to which they are entitled.

The results

For each small area (SOA), ten main measures are produced: each of the seven domains; the combined IMD and the two supplementary indices. Additionally, the data is available for each of the sub-domains, giving a further six measures for each SOA. These are shown for London in map form over the following pages and the results are discussed briefly on the facing pages.

Map 1 Index of Multiple Deprivation 2004



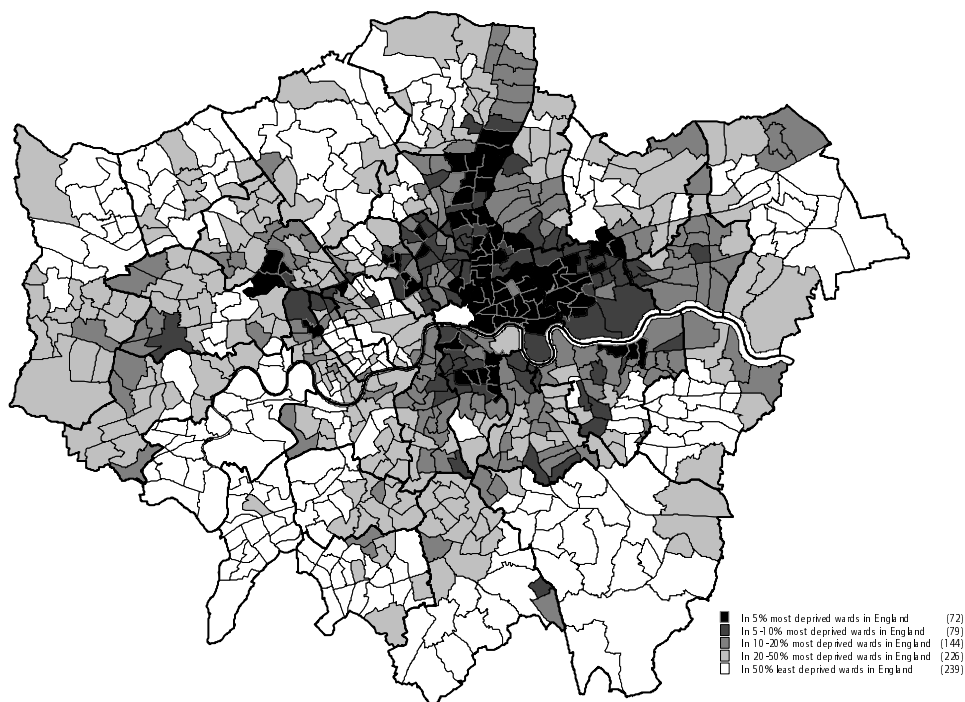
Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Index of Multiple Deprivation

According to the Index of Multiple Deprivation 2004, it is clear that the most deprived areas within London are concentrated in northern Inner London, from Newham to Camden and from Tower Hamlets north to Haringey. Other parts of Inner London also show areas with high levels of deprivation, in Lambeth, Southwark, Kensington & Chelsea and Westminster. There are also isolated pockets in some Outer London boroughs, such as Greenwich, Croydon, Brent and Enfield. Overall, however, London has fewer SOAs than expected in the most deprived category, with just three per cent falling into the five per cent most deprived areas in the country. There are higher than average levels of deprivation in the next categories, so that almost ten per cent of London is ranked in the ten per cent most deprived areas of the country and over 26 per cent of London in the most deprived 20 per cent of England. Nearly all of these areas are within Inner London, but Richmond upon Thames is the only borough with no SOAs at all amongst the 20 per cent most deprived in England.

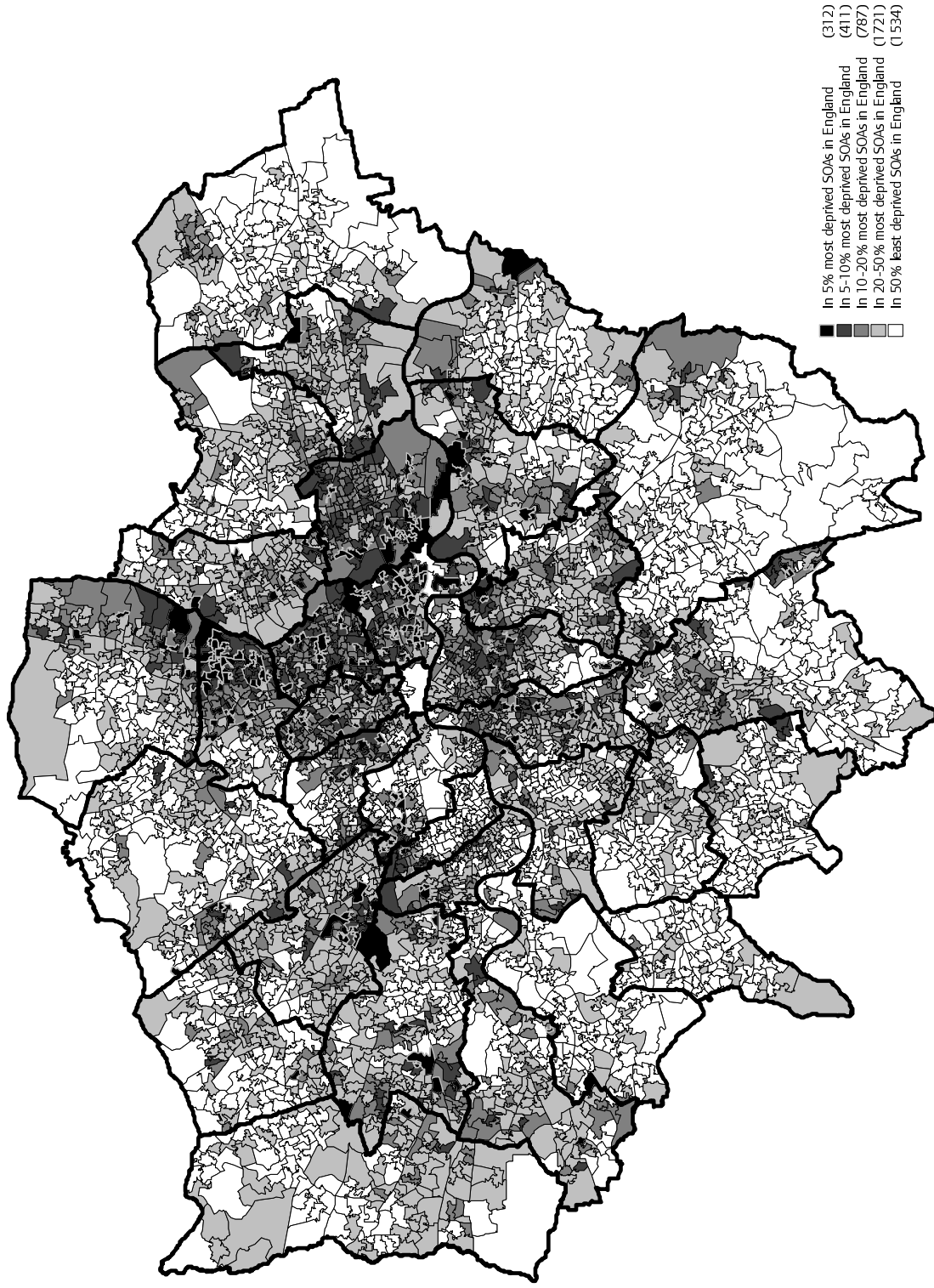
In the 2000 Index of Multiple Deprivation, the overall pattern was similar, with large parts of Inner London among the most deprived in the country according to this measure. One significant difference is that a greater proportion of London was ranked among the most deprived according to the 2000 index, with nearly 40 per cent of London wards ranked among the 20 per cent most deprived wards in England. The IMD2000 cannot be compared directly with the IMD2004, since the geographic basis is different, as well as the domains and indicators that go to create it, but it is clear from the map below that the general picture was the same, with the bulk of the most deprived wards in northern Inner London.

Map 2 Index of Multiple Deprivation 2000



Source: ODPM Indices of Deprivation 2000, OS Ward boundaries
The map is © Crown copyright. All rights reserved. (Greater London Authority) (LA100032379) (2004)

Map 3 Income Deprivation Domain 2004



Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Income deprivation domain

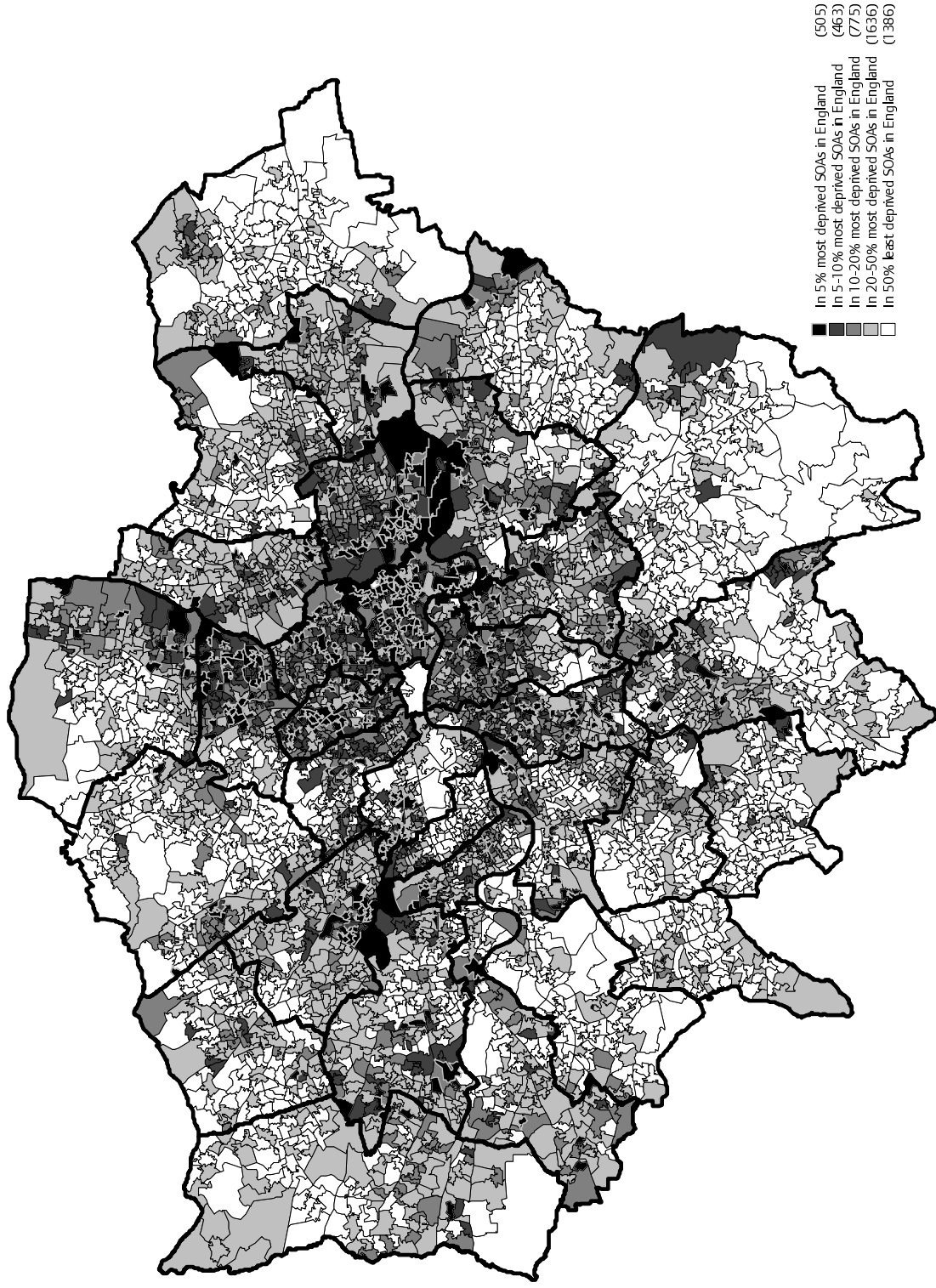
The Income deprivation domain shows a broadly similar distribution within London to the overall IMD, with high levels of income deprivation seen among large parts of Inner London, but more widespread pockets in Outer London. Altogether, nearly a third of London SOAs ranked among the 20 per cent most deprived in the country.

The distribution within London of SOA ranks according to the two supplementary indices, for Income Deprivation among Children and among Older People, are illustrated on the following pages, since they are effectively sub-domains of the Income Deprivation domain. Not surprisingly, they are broadly similar in the distribution of the most deprived areas to the entire income deprivation domain, but there are more SOAs among the most deprived in the country for both children and older people (over ten per cent of London SOAs are among the five per cent most deprived in England), suggesting that it is the working age adults who are less likely to be on low incomes in London than elsewhere. Over a third of London is among the 20 per cent of England SOAs for income deprivation among both children and older people.

The same pattern of high levels of this form of deprivation are seen concentrated mostly in the north Inner London boroughs, but with substantial parts of Lambeth, Southwark and Lewisham also among the most deprived in the country. There are some notable differences between these two supplementary indices, however. For example, a large block of SOAs in north Newham from Forest Gate to Plashet and Upton to Manor Park are among the worst five per cent in the country on the IDAOPI, but not IDACI, whereas the reverse is apparent for an area around Stonebridge/Harlesden/Willesden on the Brent border.

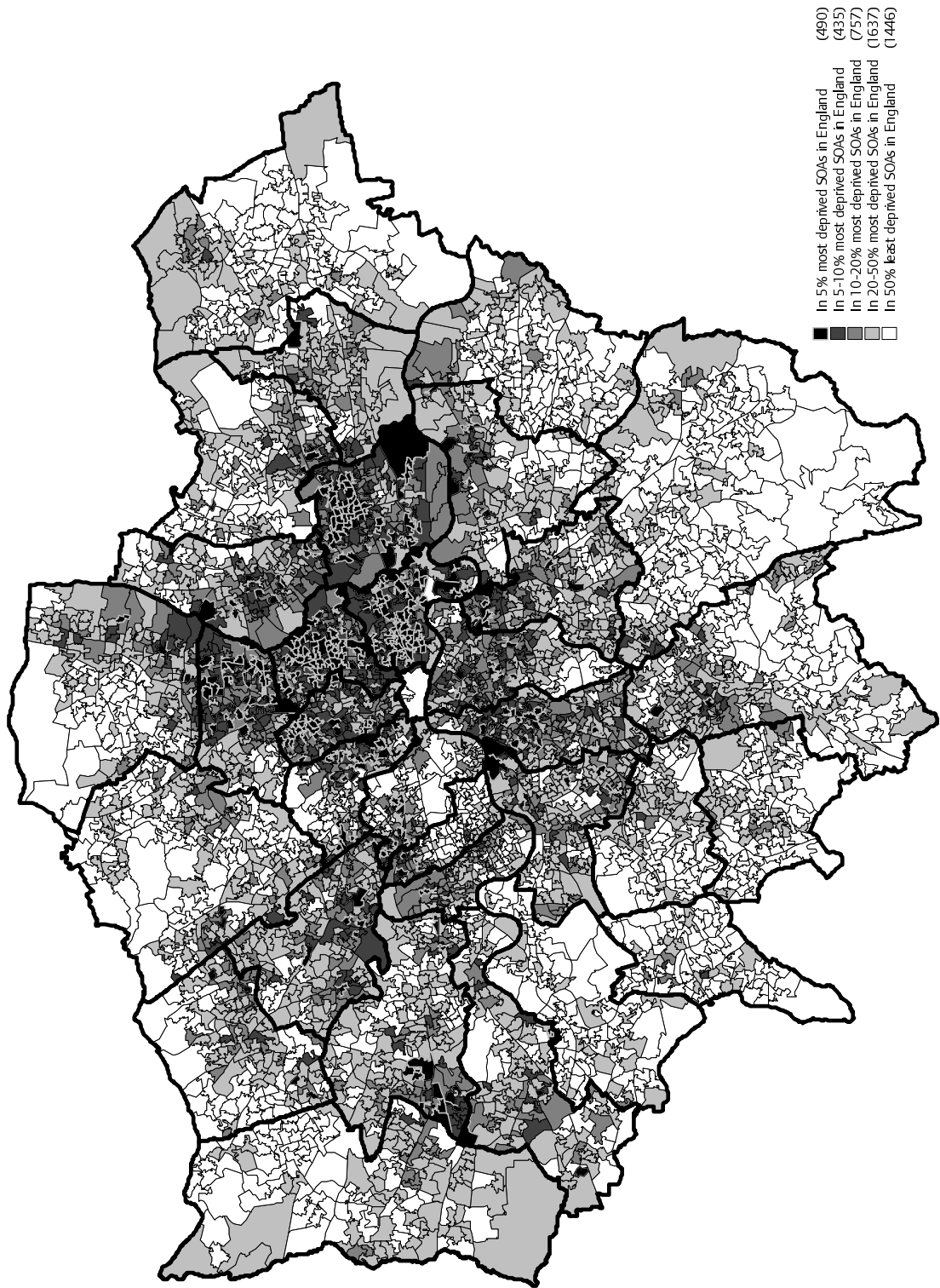
Parts of Westminster rank very highly on not only the income deprivation domain, but also on the IDACI. In fact the SOA ranked highest (most deprived) in England on the IDACI is in Westminster. This is, however, likely to be due, at least in part, to a low population count for Westminster. The Office for National Statistics have announced new population figures for several local authorities in England which they believe suffered from a low population count in the Census, which was not taken into account in constructing the ID2004. By far the largest difference was for Westminster since the difference for Manchester, which was larger in absolute terms, but smaller in percentage terms, was incorporated in the ID2004. While ONS have not issued any data to indicate which areas of the borough were most affected by the undercount, an analysis of the addresses used for the Census and compared with addresses from other sources shows that some of the areas which the ID2004 show as having the greatest deprivation are those with the largest undercount. While it is difficult to say how much difference this actually makes for an individual area, it is clear that not all of the deprivation found can be accounted for by this underestimate of the population.

Map 4 Income Deprivation Affecting Children Index 2004



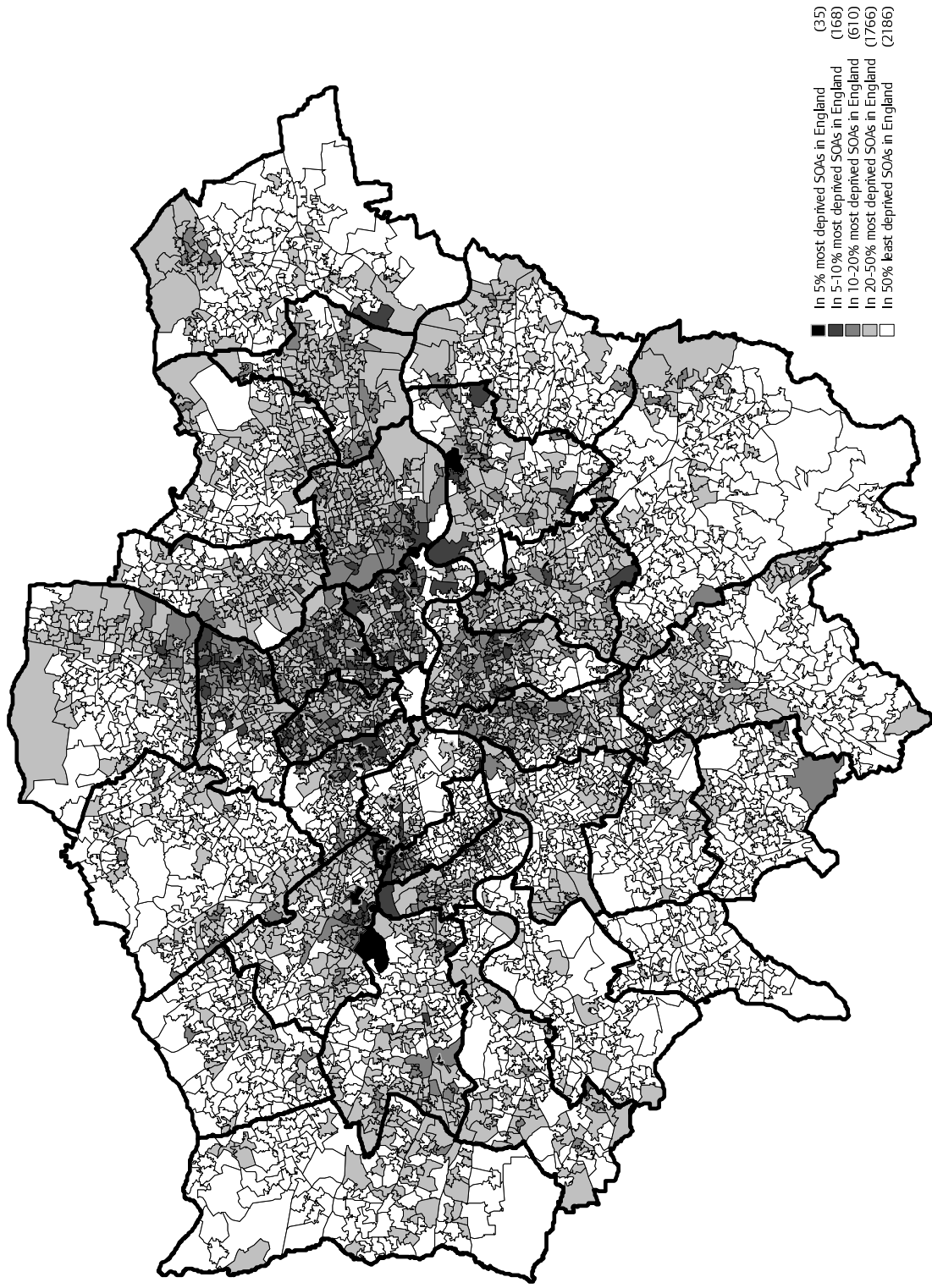
Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Map 5 Income Deprivation Affecting Older People Index 2004



Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Map 6 Employment Deprivation Domain 2004



Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

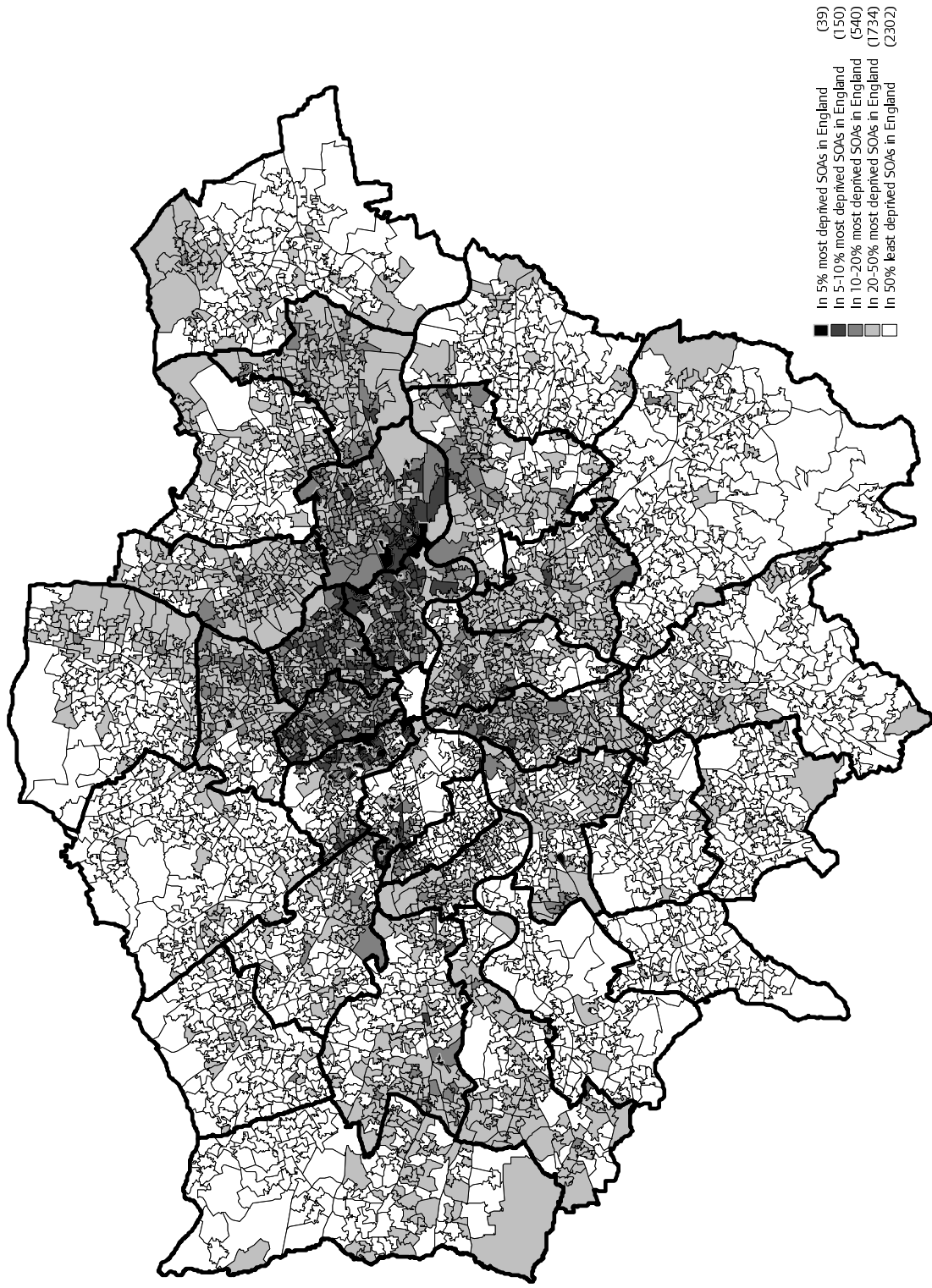
Employment deprivation domain

The employment deprivation domain shows a similar overall pattern in London to that of the income deprivation domain, in that the highest levels of deprivation are mainly in the northern Inner London boroughs, but overall in London there are far fewer SOAs ranked among the most deprived in England, with less than one per cent of London SOAs in the worst five per cent in England, and just 17 per cent in the worst 20 per cent in the country. Given that other measures of unemployment, such as ILO and claimant count show London as having higher levels than other regions suggest that this is related more to the other reasons for exclusion from the labour market, such as the numbers not working due to ill health and claiming Incapacity Benefit (IB) etc. In London, there are around 50 per cent more people claiming IB than claiming unemployment benefits, whereas in the North East region, for example the number of IB claimants is around 175 per cent more than the unemployment claimant count.

This may explain some of the reason for the relatively low employment deprivation rates in most parts of London. Another is, as noted earlier, the use of denominators which included other people of working age not in the labour force, while a higher proportion of Londoners are not working “voluntarily”. A particular issue is the figures for lone parents. Surveys² show that a very high proportion of lone parents in London would want to work if they could, but are prevented from doing so due to lack of child care or jobs with suitable hours. Relatively few lone parents take part in the New Deal scheme, for similar reasons, but London has relatively more lone parents than most parts of the country. All of these factors mean that the use of the total working age population as denominator in this domain serves to lower the employment deprivation rate.

² For example, London Household Survey 2002

Map 7 Health Deprivation and Disability Domain 2004

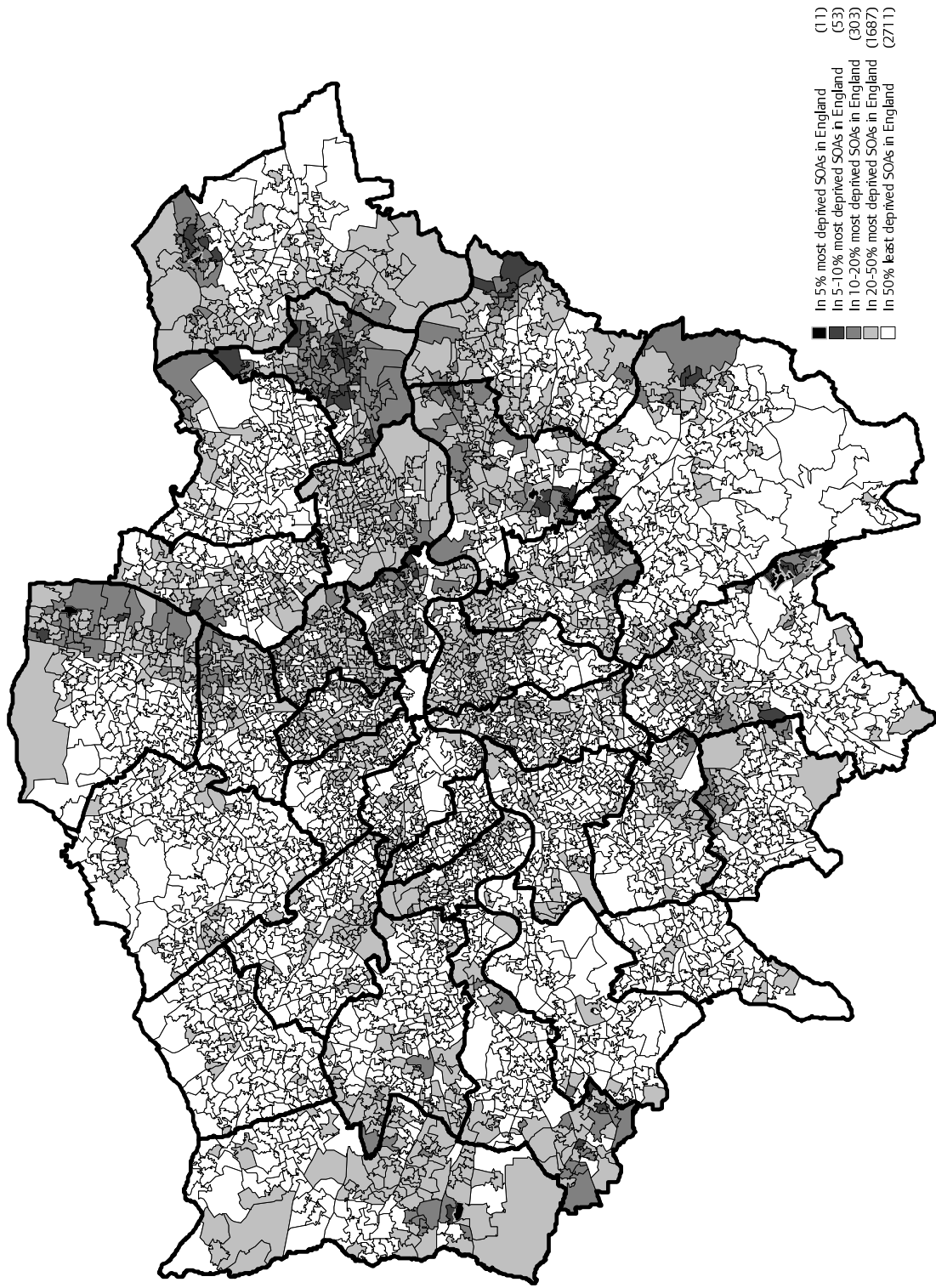


Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Health deprivation and disability domain

The health deprivation and disability domain shows similar levels of deprivation across London to those seen on the employment deprivation domain, with less than one per cent of SOAs among the worst five per cent in England, and just over 15 per cent in the worst 20 per cent in the country. This suggests that there are low levels of health problems or disability in London compared to other parts of the country. The map shows that people with health problems within London are largely concentrated in similar areas to those suffering from employment deprivation – this is understandable given that the number of people unable to work due to ill health and therefore collecting Incapacity Benefit makes a significant contribution to both domains. Few people in most of the Outer London boroughs have health problems or disability, although all the boroughs have at least some SOAs in the top 50 per cent in England. The clearest exceptions to this are Barking & Dagenham, Waltham Forest and Greenwich, where most SOAs have above average levels of health problems.

Map 8 Education, Skills and Training Deprivation Domain 2004



Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Education, skills and training deprivation domain

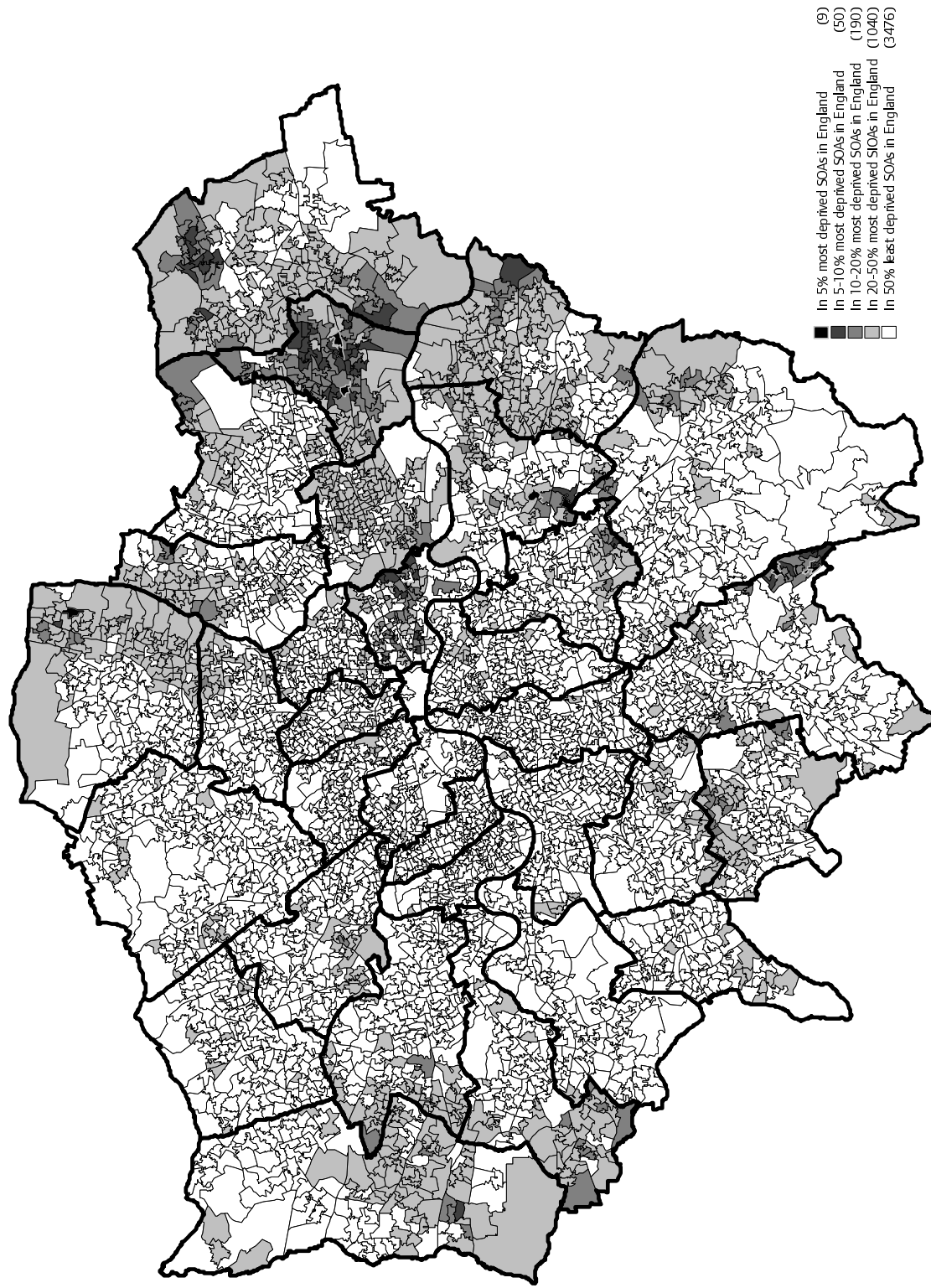
The map shows the relatively low levels of deprivation in this domain in London and that the pattern of distribution of the SOAs with the higher levels is different to that for the health deprivation and disability domain, with far fewer areas within Central London particularly, but more in some of the Outer London boroughs, most notably Havering, Enfield, Hounslow and Hillingdon, in addition to Barking & Dagenham and Greenwich. Overall, less than eight per cent of SOAs in London fall within the worst 20 per cent in England, with only just over one per cent of London SOAs among the country's worst ten per cent.

Looking at the two sub-domains that make up this domain, as mapped on the following pages, shows the clear differences in the relative deprivation levels for adults (the skills sub-domain) and children and young people. For adults, the number of SOAs showing high proportions of education deprivation is very low, with just a few parts of London showing significant proportions, for example parts of Tower Hamlets, New Addington in Croydon, but most notably a large proportion of Barking & Dagenham. Most boroughs, including the Inner London boroughs have very few SOAs even in the top 50 per cent in England.

There is a clear contrast between the skills sub domain and the children and young people sub domain, where higher proportions of London SOAs (18 per cent) are among the worst 20 per cent in England and there is a much stronger contrast between Inner and Outer London boroughs generally, with again the exceptions of Barking & Dagenham and Greenwich, particularly. However, some areas stand out as having relatively high levels on both sub domains, such as parts of Romford, Lower Edmonton and New Addington. One area of particular contrast is Hackney, where the skills sub-domain shows very low levels of deprivation, whereas the children and young people sub domain shows a large proportion of the borough among the worst twenty per cent in England and quite a large number of SOAs among the worst ten per cent. When these two sub domains are combined, however, only a few Hackney SOAs rank even among the country's worst 20 per cent.

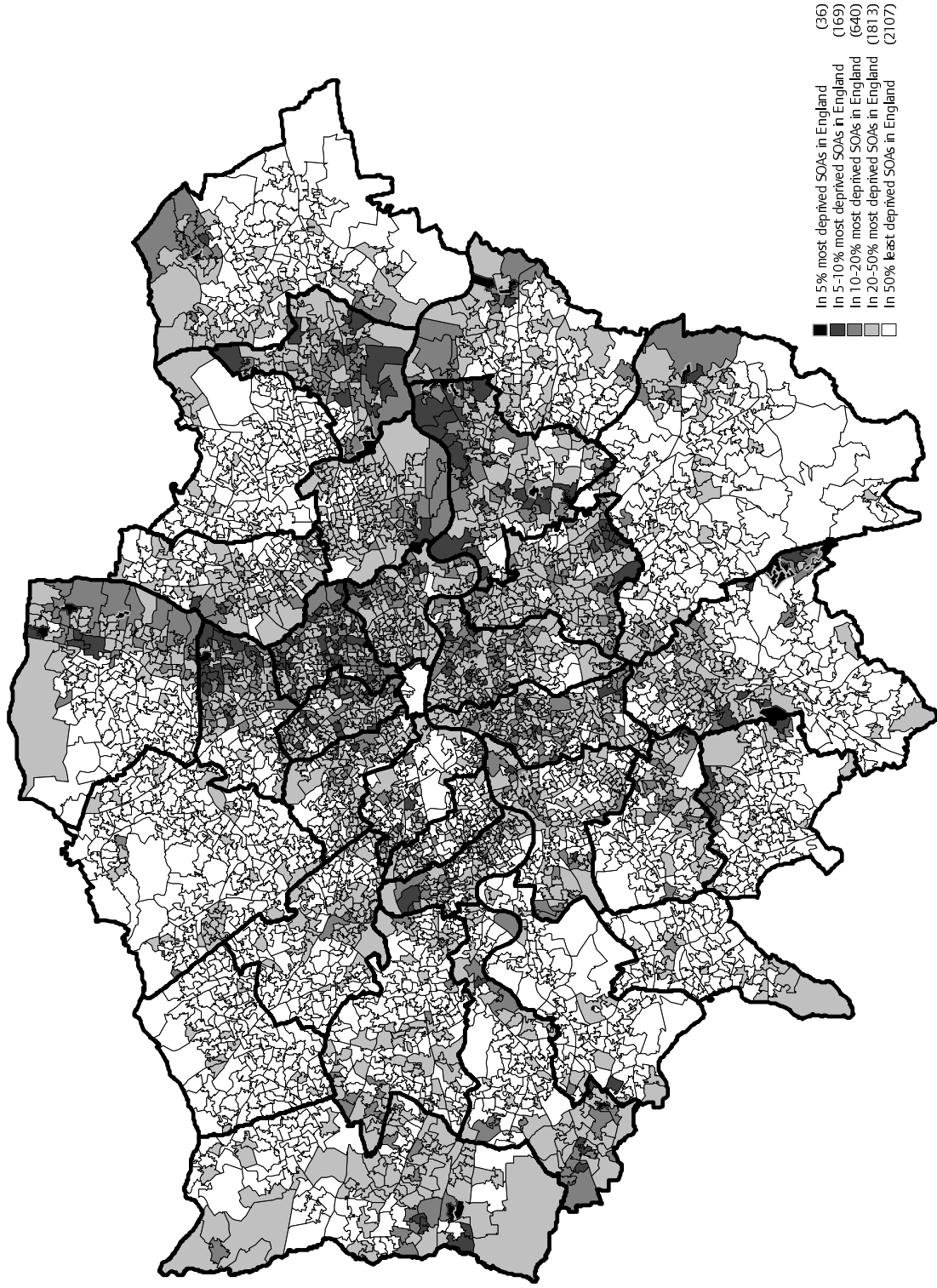
On this domain, London appears far less deprived than on the education domain of the IMD2000. Although it is not possible to make direct comparisons, due to both different geographical areas and different indicators, it is nonetheless apparent that the degree of relative deprivation on the 2004 measure is far lower within London, although it is impossible to say to what extent this is due to real changes and to what extent it is due to differences in the indicators.

Map 9 Skills Sub Domain 2004



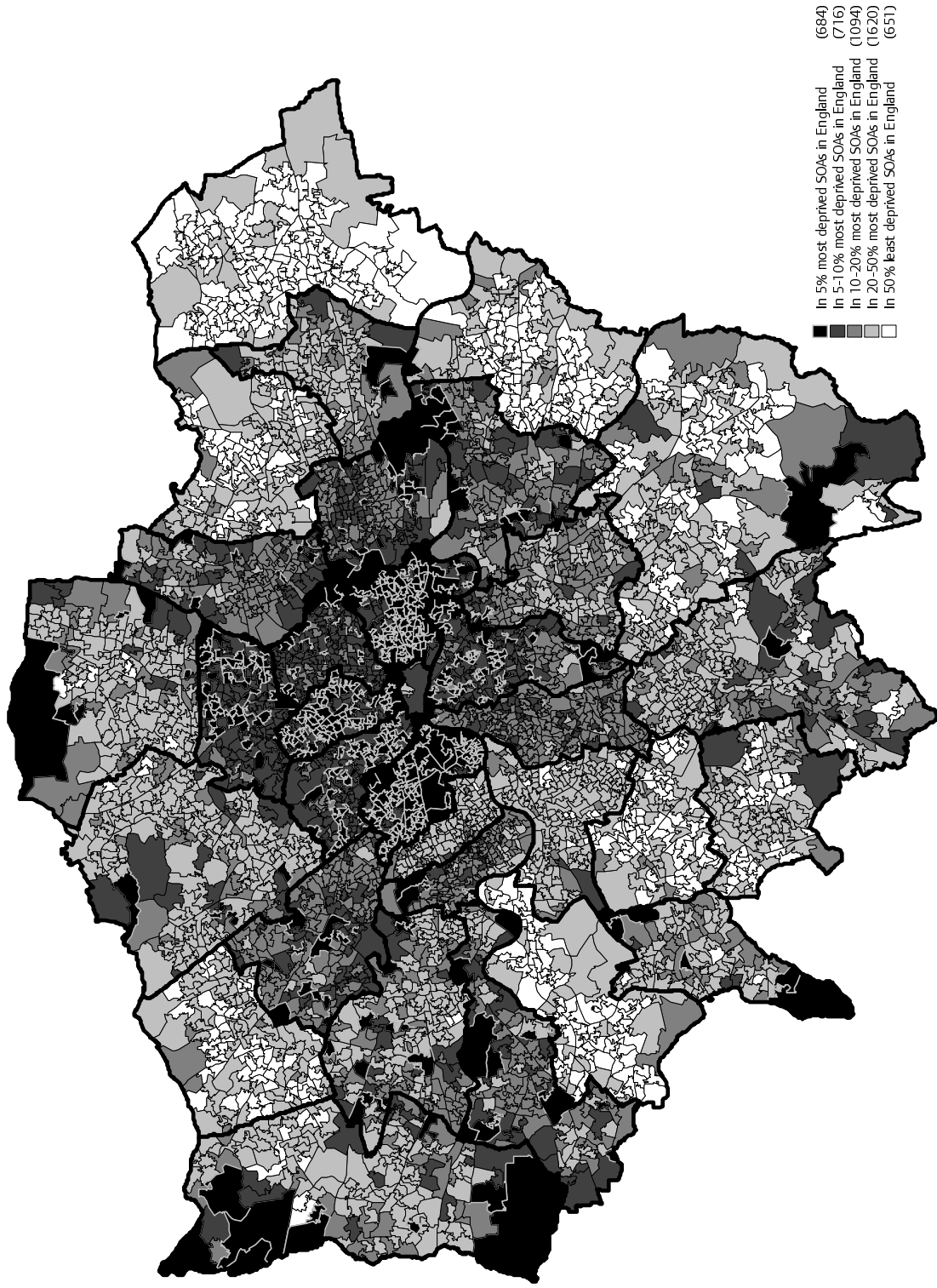
Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Map 10 Children and Young People Sub Domain 2004



Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Map 11 Barriers to Housing and Services Domain 2004



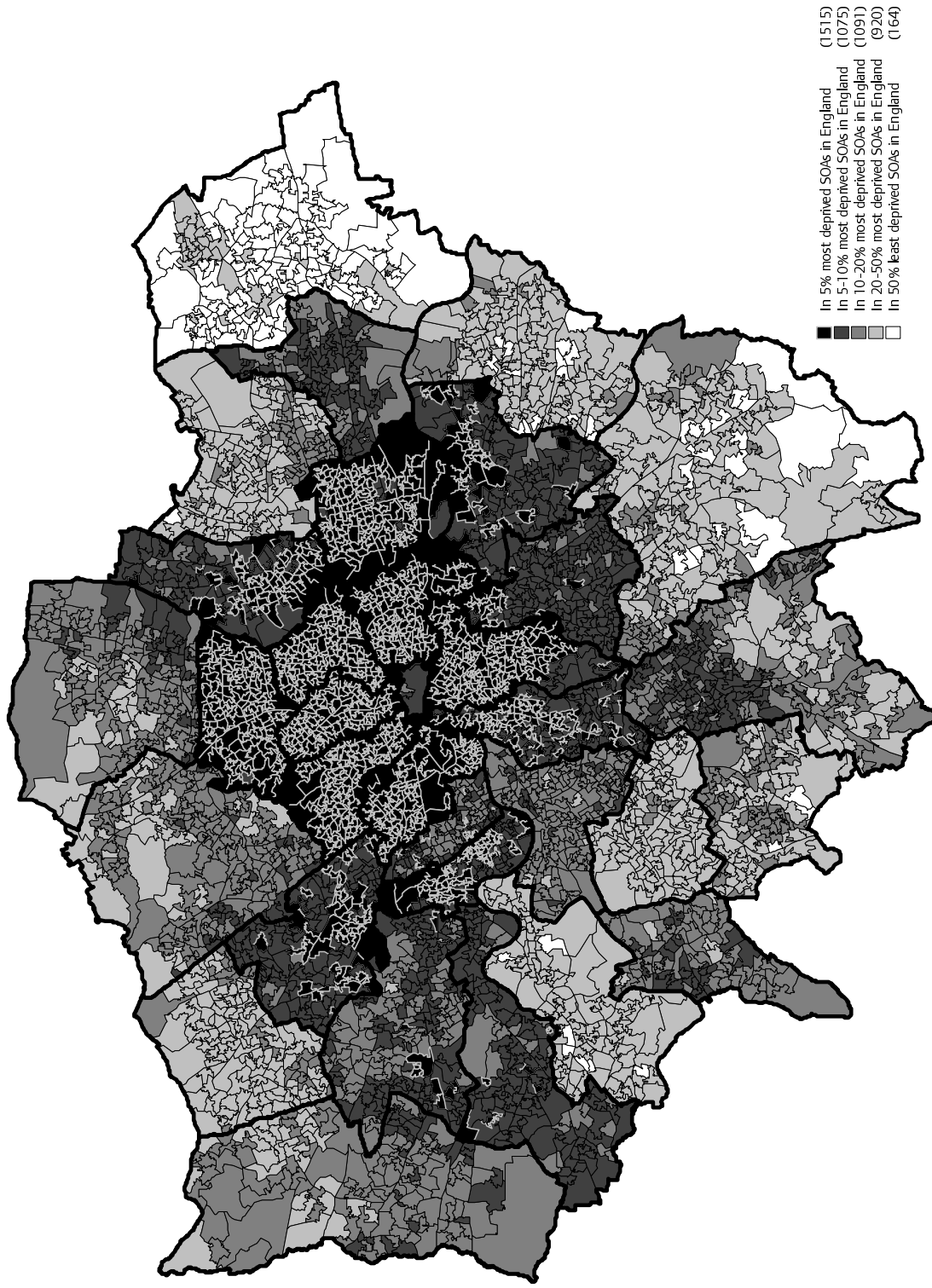
Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Barriers to housing and services domain

The barriers to housing and services domain map is in contrast to the education deprivation map, in that the majority of London SOAs fall within the 20 per cent most deprived SOAs in England. The only borough with no SOAs in the worst 20 per cent is Havering – indeed most boroughs include SOAs in the worst five per cent in England on this domain. One in seven of all London SOAs is in this group.

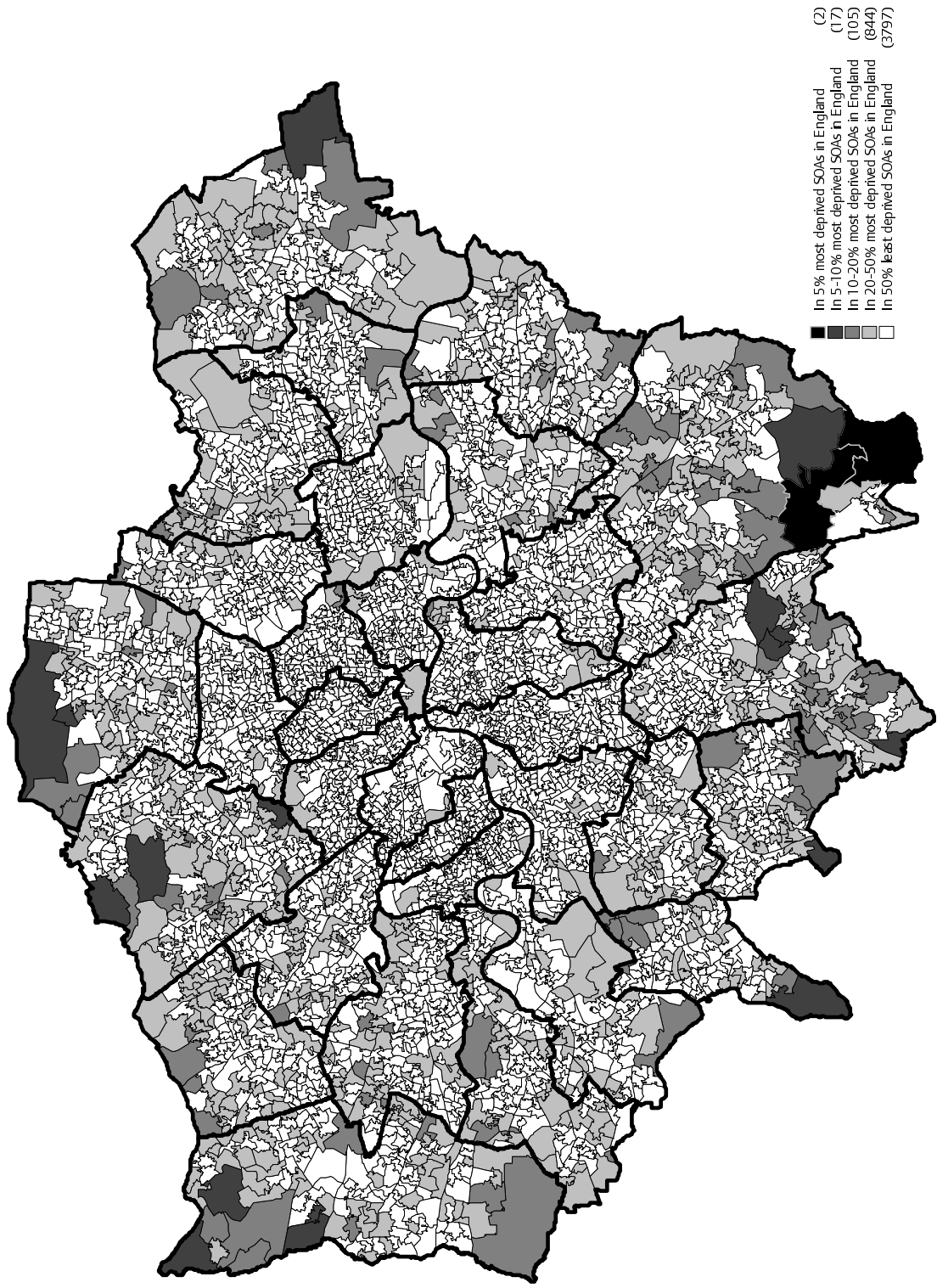
However, the two sub domains that make up this domain could hardly provide a more different picture. In terms of the wider barriers sub domain, which is made up of measures relating to access to housing, the London picture is very bleak, with more than three quarters of all London SOAs falling within the worst five per cent in the country. This includes the whole of Westminster, Camden, Islington, Hackney and Tower Hamlets, and the vast majority of Haringey, Newham and Lewisham, whereas no SOAs in Richmond upon Thames or Havering are among the worst 20 per cent. The pattern seen in Map 12, with little difference between SOAs within each borough, reflects the fact that two of the three indicators in this sub domain are borough level indicators, ascribed equally to all constituent SOAs. On the geographical barriers sub domain, less than three per cent of London SOAs fall within the worst 20 per cent in England, and just 20 per cent of London SOAs have scores in the worst 50 per cent in England. Nearly all the SOAs with the relatively high scores on this sub domain are on the edges of London. The large size of the SOAs in the most deprived categories on this sub domain is due to the low population density in these areas. Combining two such different measures into a single domain inevitably produces a compromise between the two, but even so, the use of the exponential transformation means that more than half of all London SOAs rank highly on this domain.

Map 12 Wider Barriers Sub Domain 2004



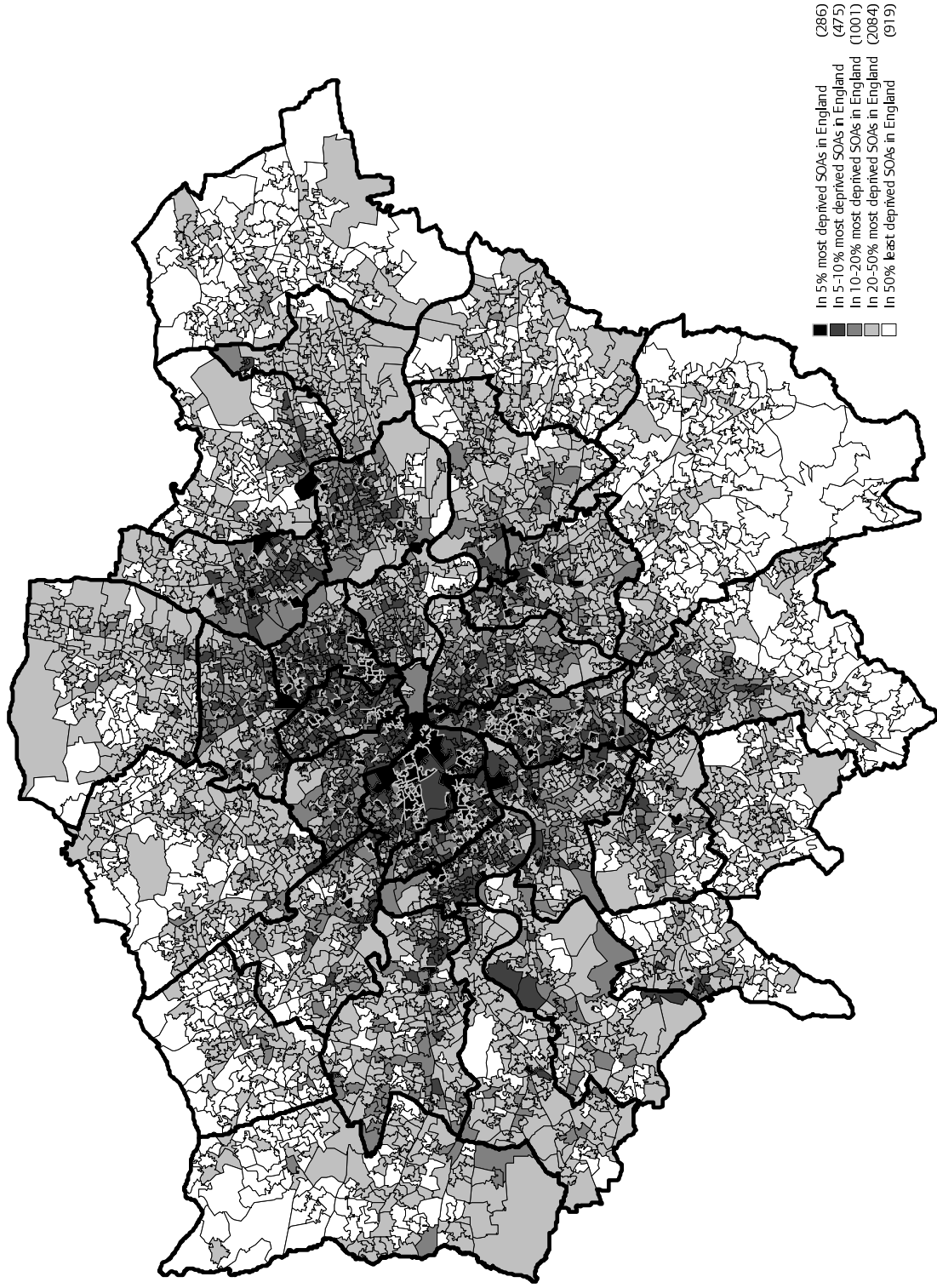
Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Map 13 Geographical Barriers Sub Domain 2004



Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Map 14 The Living Environment Deprivation Domain 2004



Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

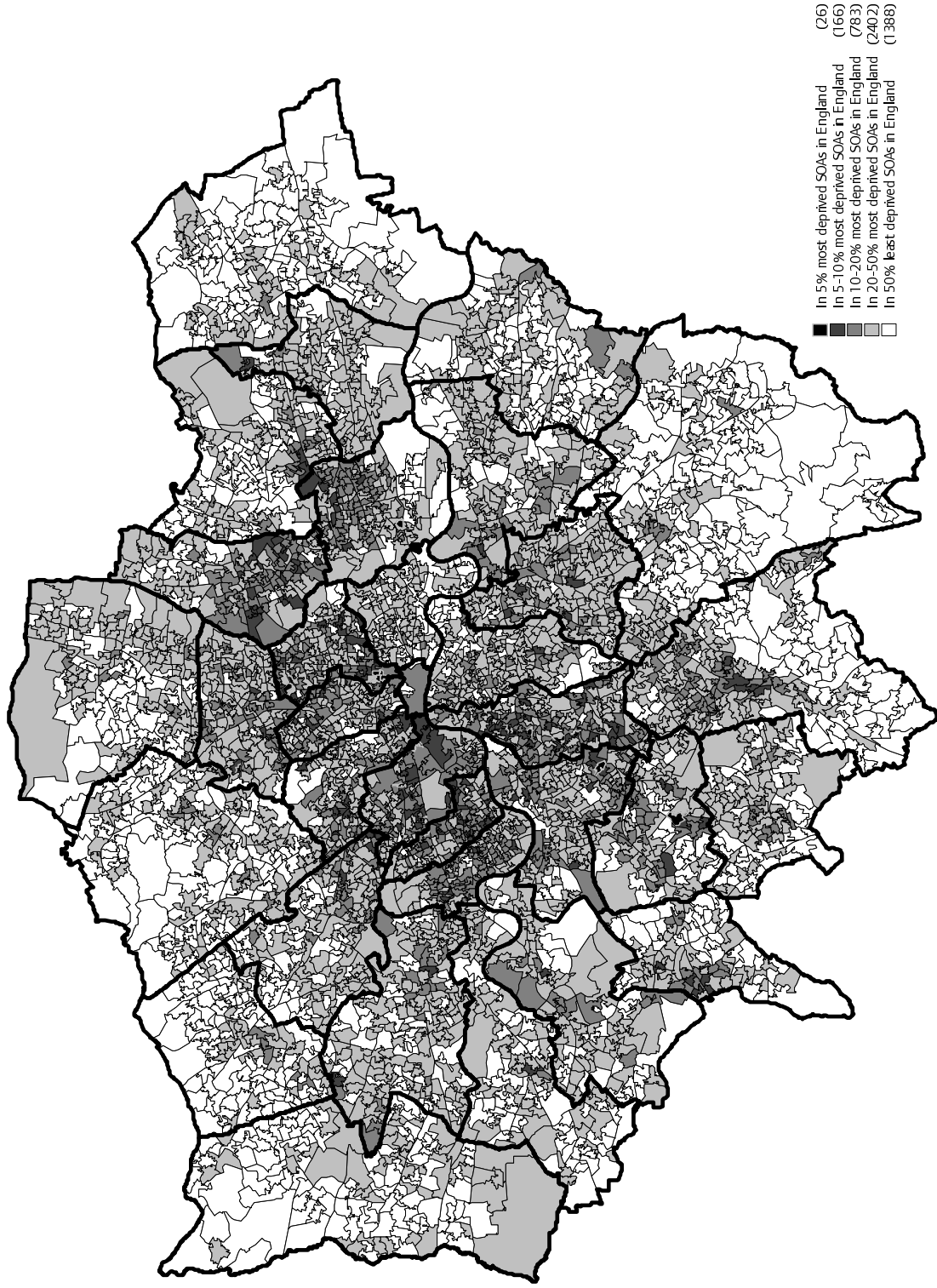
The living environment deprivation domain

The most deprived parts of London according to this domain are concentrated within Inner London, as with several of the other domains. However, the worst areas are north, west and south Inner London, whereas for most other domains, those to the north and east of the City are the most deprived. This shows that this domain is picking up different elements of deprivation to those shown in other domains. Altogether, 37 per cent of London SOAs rank among the 20 per cent most deprived in England on this measure.

The two sub domains mapped on the following pages, concerned with the indoors living environment (housing quality) and outdoors living environment again show some contrast, but not the negative correlation seen in the barriers to housing and services domain. In terms of the indoors living environment sub domain, SOAs in London are a little better than the national picture, with just over 20 per cent of London SOAs among the most deprived 20 per cent in England, but only four per cent among the country's most deprived 10 per cent. The pattern of distribution of the highest ranked SOAs within London is more even than for many of the other measures, with, for example, more SOAs in the top 10 per cent in England in the borough of Kingston upon Thames than in Tower Hamlets or Southwark.

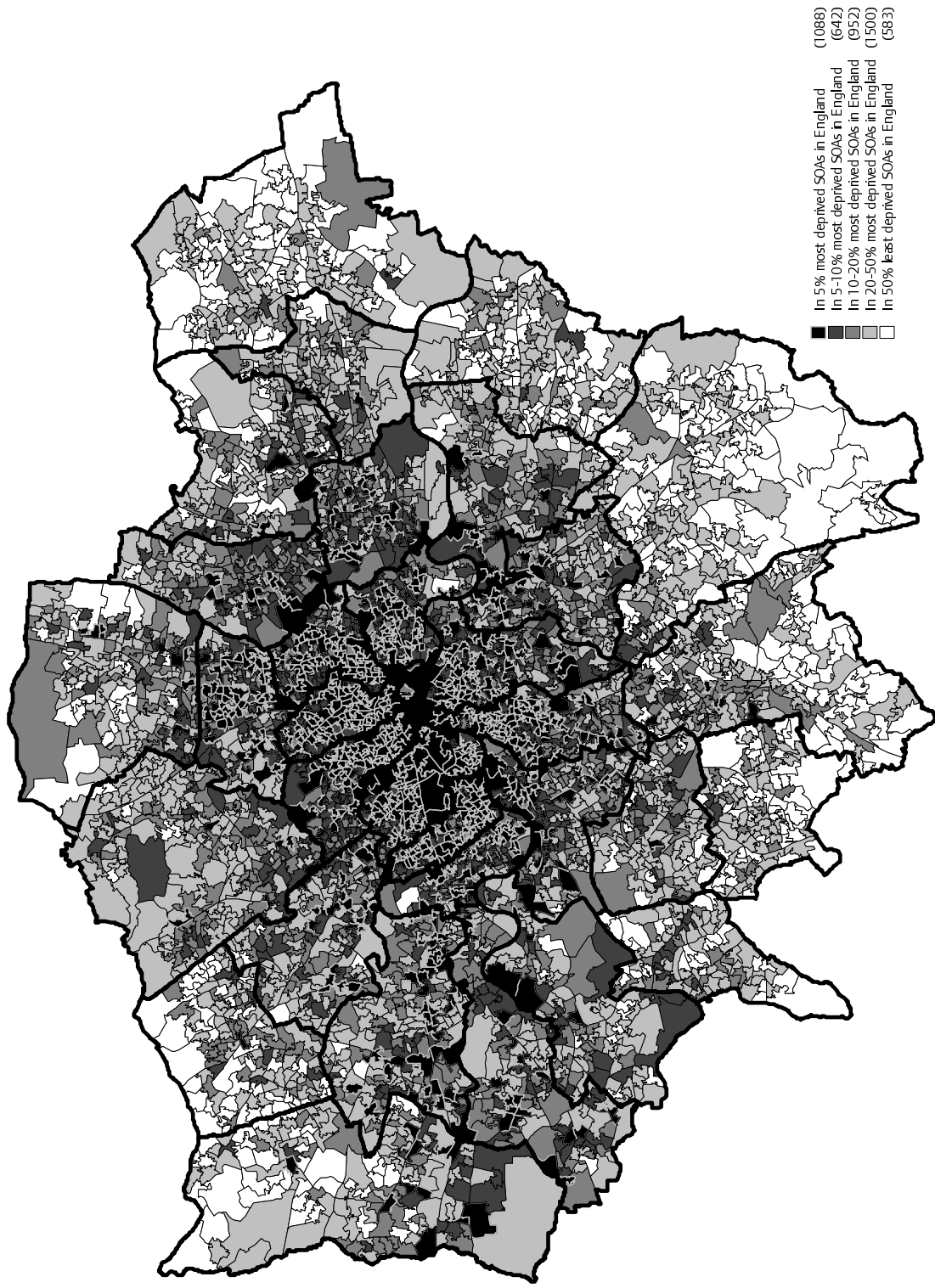
The outdoors living environment sub domain, on the other hand, shows more than half of London SOAs in the worst 20 per cent in England, including more than 20 per cent of London SOAs in the worst five per cent nationally. The map shows clearly that these are concentrated towards the centre of London, but there is some spread both to the north and to the west.

Map 15 The Indoors Living Environment Sub Domain 2004



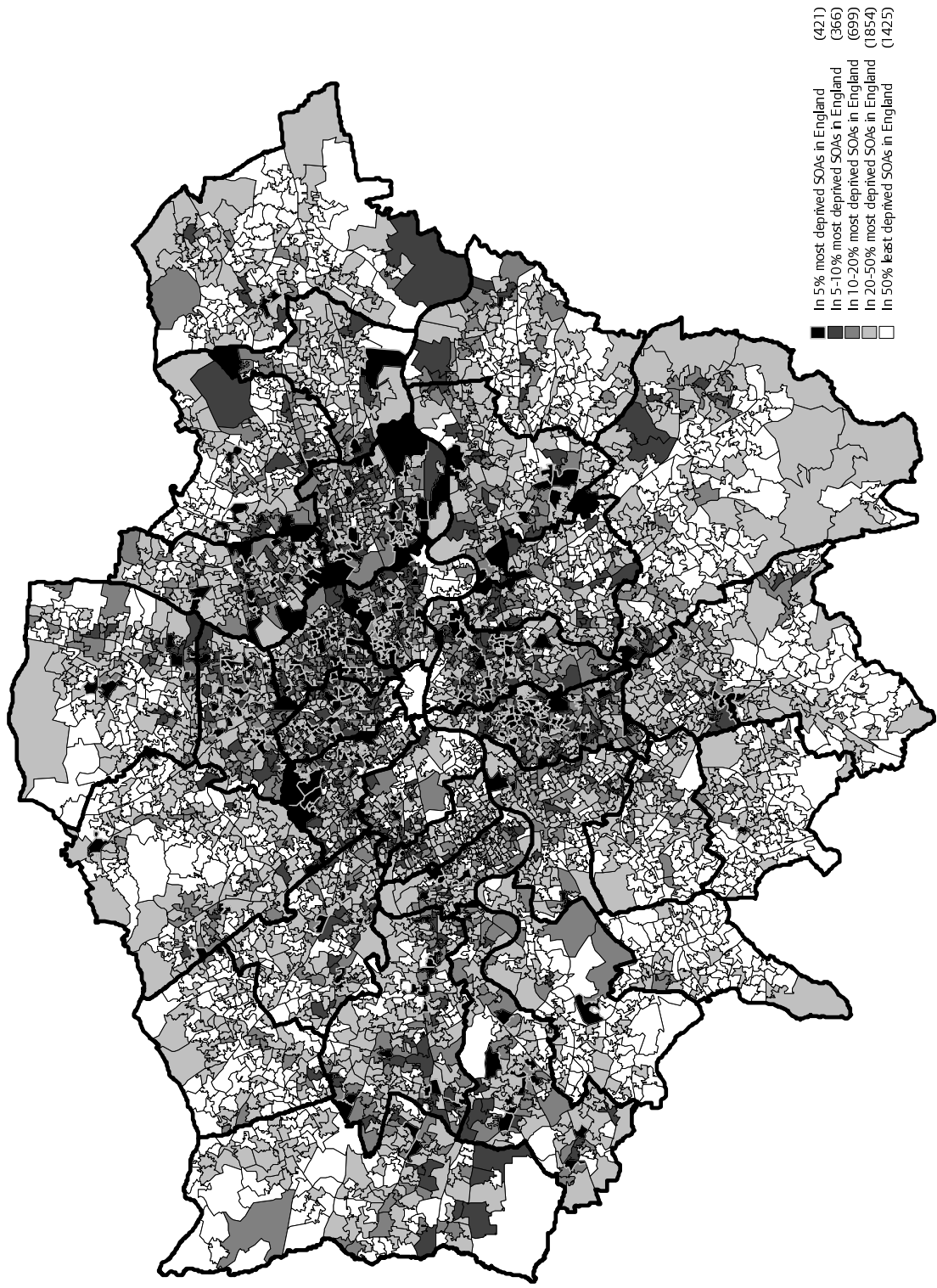
Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Map 16 The Outdoors Living Environment Sub Domain 2004



Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Map 17 Crime Domain 2004



Sources: ODPM Indices of Deprivation 2004 (revised), ONS Super Output Area Boundaries

Crime domain

The crime domain shows above average levels of deprivation among London SOAs, with a quite widely dispersed pattern. Only Kingston upon Thames, Merton and the City do not include at least one SOA among the worst five per cent in England on this measure. Altogether, over 30 per cent of London SOAs fall amongst the country's worst 20 per cent.

Using the ID2004 at higher geographical levels

The IMD is created for small areas because that is considered the best way to identify the areas of need. However, it is occasionally necessary to consider higher geographical levels for painting a picture of a wider area to make comparisons or for funding decisions. Most of these higher areas are fairly arbitrary in their geography and exist for administrative or political purposes. Summary measures of the IMD have been published for a selection of such areas, including local authority and county council areas and are due to be published for some health administrative areas. Six different measures have been created for local authorities, each focusing on different, but equally valid aspects of multiple deprivation in the district. Therefore no single measure is favoured over another and all should be taken into account. The six measures are:

- *Average of SOA Scores* describes the overall position of people in the district by taking the population weighted average of the scores for each SOA within the district.
- *Average of SOA Ranks* again summarises the district as a whole, taking into account the population weighted ranks of both the deprived and less deprived SOAs.
- *Extent* depicts how widespread high levels of deprivation are in a district by considering the proportion of the district's population living in the most deprived SOAs in England.
- *Concentration* identifies districts' 'hot spots' of deprivation by looking at the (population weighted) average rank of the most deprived SOAs containing ten per cent of the district's population.
- *The Income Scale* gives the **number** of people in the district who are income deprived.
- *The Employment Scale* gives the **number** of people in the district who are employment deprived.

For the published tables, local authorities are ranked according to each of these six measures. The population in each SOA is taken into account in calculating these scores, and following the same procedures it would also be possible to produce summary measures for other areas, but this should only be done where the SOA data cannot be used, since the lower level data provides not only more geographical detail in identifying which parts of an area are considered most deprived, but it also provides greater detail on the different aspects of deprivation, since the individual domain scores are unavailable for any other geography.

The two supplementary indices have not been published for higher geographical levels by ODPM, but estimates can be made at local authority level for comparative purposes using the population estimates produced as part of the creation of the indices themselves.

The London local authorities

Of the 33 London local authorities (the 32 boroughs and the City of London), 19 rank within the top 50 of the 354 local authorities in England on at least one of the summary measures of deprivation. These are:

- Barking & Dagenham,
- Barnet,
- Brent,
- Camden,
- Croydon,
- Ealing,
- Enfield,
- Greenwich,
- Hackney,
- Hammersmith & Fulham,
- Haringey,
- Islington,
- Lambeth,
- Lewisham,
- Newham,
- Southwark,
- Tower Hamlets,
- Waltham Forest,
- Westminster.

Of these only Barnet, Hammersmith & Fulham and Westminster were not ranked in the top 50 on the ID2000. Four boroughs rank within the top 50 on all six summary measures: Hackney, Haringey, Islington and Tower Hamlets. A further four boroughs rank in the top 50 on five summary measures: Camden, Lambeth, Newham and Southwark.

Five boroughs are within the top 50 only on the basis of the number of people affected by income deprivation and/or employment deprivation (the two scale measures): Barnet, Brent, Croydon, Ealing, Enfield. It is clear that a local authority with a large population is likely to be ranked higher on this basis than a small authority, so it is no surprise that the six largest authorities in England - Birmingham, Leeds, Sheffield, Bradford, Liverpool and Manchester occupy the top six places on both of the two scale measures. Newham and Tower Hamlets, which rank seventh and eighth on the income scale, have much smaller populations – Newham's population is less than 60 per cent of that of Manchester, while Tower Hamlets' population is less than half of Manchester's. Nor is it surprising that the large London authorities, such as Croydon and Barnet rank higher on these measures than the smaller authorities such as Hammersmith & Fulham and Barking & Dagenham, whose populations are around half the size.

Table 2 Borough ranks on summary measures of IMD2004

BOROUGH	Rank of Average Score	Rank of Average Rank	Rank of Extent	Rank of Concentration	Rank of Income Scale	Rank of Employment Scale
City of London	226	227	178	203	353	353
Barking & Dagenham	42	21	45	88	55	75
Barnet	193	198	175	174	47	63
Bexley	212	216	177	177	87	104
Brent	81	62	92	87	22	39
Bromley	238	252	185	178	74	77
Camden	19	15	21	55	43	47
Croydon	140	137	139	154	31	50
Ealing	99	94	105	122	27	42
Enfield	104	104	109	123	28	52
Greenwich	41	23	41	73	36	54
Hackney	5	1	1	47	9	26
Hammersmith & Fulham	65	42	79	115	67	73
Haringey	13	10	10	46	17	32
Harrow	232	233	226	226	78	105
Havering	214	217	196	194	86	86
Hillingdon	166	156	188	188	72	84
Hounslow	102	85	131	148	58	78
Islington	6	4	3	44	30	38
Kensington & Chelsea	116	121	107	120	96	99
Kingston upon Thames	266	265	261	269	173	199
Lambeth	23	13	22	82	15	21
Lewisham	57	38	77	138	23	37
Merton	220	222	215	213	99	121
Newham	11	6	6	60	7	24
Redbridge	163	150	183	182	57	71
Richmond upon Thames	301	300	281	285	165	181
Southwark	17	12	13	83	18	25
Sutton	236	246	202	202	113	144
Tower Hamlets	4	2	2	22	8	34
Waltham Forest	47	25	59	91	37	57
Wandsworth	128	114	155	166	51	60
Westminster	39	33	57	19	60	64

Shaded areas denote rank inside top 50.

Source: ODPM, *Indices of Deprivation 2004 (revised)*

Access to further information

The Indices of Deprivation 2004 were originally issued in April 2004. However, some errors were found in the calculations, so these were corrected and a revised version was published on 18 June 2004. This Briefing is based on that revised data.

Further information on both the detail of how the indices are constructed and some regional analysis can be found in the full report of the ID2004, The Indices of Deprivation 2004 (revised) published by ODPM, July 2004. This, together with a summary report and a technical note on population denominators can be found on the ODPM website at:

http://www.odpm.gov.uk/stellent/groups/odpm_control/documents/contentservertemplate/odpm_index.hcst?n=4610&l=3

The data for the whole of England and Wales can be downloaded from the ODPM website (address given above) in Excel format. At the time writing, the data is available in separate files covering:

- the domains and IMD for SOAs
- the IDACI and IDAOPI
- the sub domains
- the population denominators
- the LA level scores
- the County level scores

The range of data published is expected to increase, so that it is hoped that a range of the individual indicators and further summary scores will be made available.

In addition, boundary files and look-up tables relating to Super Output Areas (level 1 or lower level) can be found or ordered through the Office for National Statistics website at: <http://neighbourhood.statistics.gov.uk/SOALower.asp>

Copies of this Briefing and further information relating to the Indices of Deprivation 2004 and other deprivation indices can also be found on the Social Exclusion section of the GLA Extranet. This is a password protected site. To apply for access, a form to be completed and submitted on-line can be found at:

<https://extranet.london.gov.uk/enquiry-form.jsp>

Regular Briefings from the GLA Data Management and Analysis Group

Recent DMAG Briefings:

DMAG 2004/1	2003 Round Ward Population Projections	Georgia Hay
DMAG 2004/2	London's Workers Part 1: 2001 Census results	Eileen Howes
DMAG 2004/3	Borough Demographic Profiles	Georgia Hay
DMAG 2004/4	DMAG Annual Review 2003	Jackie Maguire/ Rob Lewis
DMAG 2004/5	2003 Round Demographic Projections	John Hollis
DMAG 2004/6	Londoners' Qualifications: Analysis of 2001 Census data	Gareth Piggott
DMAG 2004/7	The Parliamentary General Election, 2001	Michael Minors/ Dennis Grenham/ Jackie Maguire
DMAG 2004/8	Constituency Demographic Profiles	Georgia Hay
DMAG 2004/9	Measuring Unemployment	Lorna Spence
DMAG 2004/10	Measures of Income	Rachel Leeser/ Lorna Spence
DMAG 2004/11	2001 Census Profiles: The Irish in London	Eileen Howes
DMAG 2004/12	Health in London Age-standardised Rates	Gareth Piggott
DMAG 2004/13	Data Sources on Refugees and Asylum Seekers	Ed Klodawski
DMAG 2004/14	Census Information Note 2004-1	Eileen Howes
DMAG 2004/15	2001 Census: Local Authority Population Studies	John Hollis
DMAG 2004/16	2001 Census Profiles: Bangladeshi in London	Gareth Piggott
DMAG 2004/17	London Plan Sub-Regional Demographic Profiles	Georgia Hay

If you would like copies of previous briefings, please contact Jackie Maguire at the GLA, jackie.maguire@london.gov.uk

Contact details for the Data Management and Analysis Group are as follows:

Rob Lewis (020 7983 4652) is **Head of the Data Management and Analysis Group**. rob.lewis@london.gov.uk

Bill Armstrong (020 7983 4653) works in the **Census Team** with particular responsibilities for **commissioned tables, workplace data** and **mapping**. bill.armstrong@london.gov.uk

Baljit Bains (020 7983 4613) works in the **Demography Team** and is responsible for **ethnic demography**, including **ethnic group projections**. baljit.bains@london.gov.uk

Shen Cheng (020 7983 4889) works in the **Education Team** and is responsible for school roll projections. shen.cheng@london.gov.uk

Hywel Davies (020 7983 4696) is responsible for the **SASPAC** project and for the development of **GIS** work. hywel.davies@london.gov.uk

David Ewens (020 7983 4656) is responsible for **education research and data analysis** and school roll projections. david.ewens@london.gov.uk

Giorgio Finella (020 7983 4328) works in the **Census Team**. giorgio.finella@london.gov.uk

Dennis Grenham (020 7983 4532) works mostly on **statistical compendia, election statistics** and **special publications**. dennis.grenham@london.gov.uk

Georgia Hay (020 7983 4347) works in the **Demography Team** and is responsible for **ward level projections**, the **Demography Extranet** and **borough liaison**. georgia.hay@london.gov.uk

John Hollis (020 7983 4604) is responsible for the work of the **Demography Team** and the **Social Exclusion Team**, and particularly for **demographic modelling**. john.hollis@london.gov.uk

Eileen Howes (020 7983 4657) is responsible for the work of the **Census Team**. eileen.howes@london.gov.uk

Ed Klodawski (020 7983 4694) works in the **Demography Team**. His post is joint with the **London Health Observatory** and specialises in **ethnic** and **health** issues. edmund.klodawski@london.gov.uk

Rachel Leeser (020 7983 4699) works in the **Social Exclusion Team** with particular responsibilities for **indicators** and **income data**. rachel.leeser@london.gov.uk

Alan Lewis (020 7983 4348) is a member of the **SASPAC Team**. alan.lewis@london.gov.uk

Jackie Maguire (020 7983 4655) is responsible to the Group Head and co-ordinates the administrative and financial work of the Group. jackie.maguire@london.gov.uk

Michael Minors (020 7983 4654) is responsible for the work of the **General Statistics and Education Team**. michael.minors@london.gov.uk

Gareth Piggott (020 7983 4327) works in the **Census Team**. gareth.piggott@london.gov.uk

Lorna Spence (020 7983 4658) is a member of the **Social Exclusion Team**, with particular responsibilities for the **Labour Force Survey** and **benefits data**. lorna.spence@london.gov.uk

Please use the above descriptions in deciding whom to contact to assist you with your information needs.