

Update CIS2012-04

2011 Census Snapshot: Ethnic Diversity Indices

December 2012

On 11th December 2012 ONS released the first topic based results from the 2011 Census for England and Wales. This paper sets out analysis of the ethnic group variable and creates ethnic diversity indices for London local authorities that can assist in establishing the extent to which Greater London is one of the most diverse places in England and Wales. This snapshot updates DMAG Briefing 2005/12, *Ethnic Diversity Indices* an analysis of ethnic group data from the 2001 Census data. Although at this stage only data at local authority level has been released.

All data presented here can be viewed through a range of interactive maps and tools on the London Datastore at <http://data.london.gov.uk/census/data>

Key Findings

- The 2011 Census found that nearly 11 million residents in England and Wales are from an ethnic group other than White British comprising some 19.5 per cent of the total population.
- Greater London is home to 4.5 million non-White British residents; accounting for 41 per cent of the all non-White British residents in England and Wales. This is disproportionately higher as Londoners comprise 14.5 per cent of the national population.
- London local authorities are some of the highest ranked nationally in terms of proportions of ethnic minority populations as a percentage of the total population. For instance in both Newham and Brent over 80 per cent of the resident population is non-White British (83 per cent and 82 per cent respectively).
- Of the top 20 local authorities in national rankings of proportion of residents that are non-White British, all are London boroughs bar two, namely Slough and Luton.
- In national rankings of ethnic diversity indices 26 of the top 30 local authorities are London boroughs, with four outside London (Slough, Luton, Leicester and Birmingham).
- Although Greater London may not be the most diversity area in the country according to diversity index values, it comprises local authorities that are undoubtedly the most diverse.

Introduction

In this report ethnic group data has been used to create an ethnic diversity index to provide an enhanced measure of diversity characteristics that go beyond simple analysis of percentages and numbers.

Typically diversity indices account for

- 1) The number of different/distinct groups present in the population
- 2) The sizes of these distinct groups relative to each other

This analysis uses the Simpson's Diversity Index¹ to map ethnic diversity at local authority level for all 18 ethnic group categories for which data is available.

For any given calculation of diversity indices the maximum value would denote a totally diverse population ie an equally sized population within all ethnic group categories. As such the maximum value is always equal to the number of distinct categories. For the purposes of this analysis there are 18 distinct ethnic group categories giving a potential maximum value of 18, where all ethnic groups have equally sized populations. The minimum value cannot be lower than one. A diversity index score of one would denote a population which comprises entirely of one ethnic group.

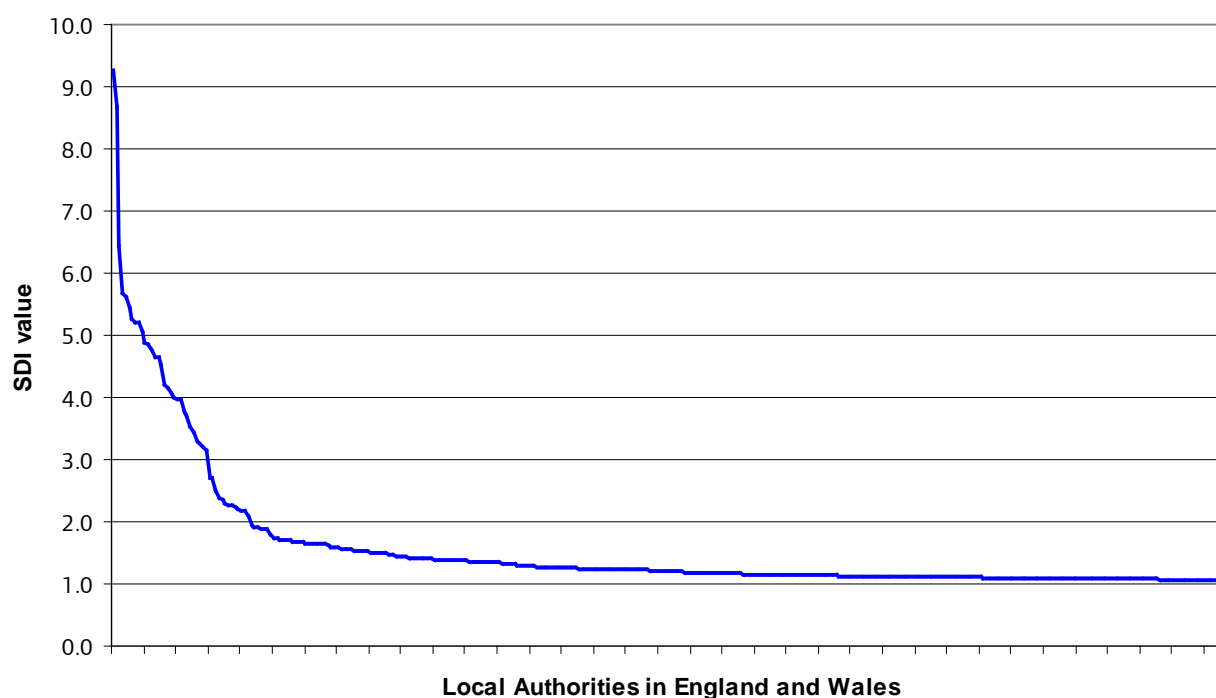
A ward level analysis of diversity indices will follow the release of ward level ethnic group data due on the 30th January 2013.

¹ For more details on the calculating the Simpson's Diversity Index see DMAG briefing 2005/12, Ethnic Diversity Indices

Results

Chart 1 shows the distribution of Simpson's Diversity Index values for all local authority districts in England and Wales. The bulk of local authorities having an index value of one or slightly higher. The most diverse local authorities, predominantly London local authorities, are small in number and hence there is clustering at the top end of the graph.

Chart 1: Distribution of Simpson's Diversity Index values, all local authorities in England and Wales.



Source: 2011 Census, Office for National Statistics

Greater London has a diversity index score of **4.26**, which is only slightly lower than Slough (5.21). On the basis of this comparison Greater London as an entity could not be considered the most diverse place in the country. Greater London is certainly more diverse than any other conurbation, however Slough could arguably claim to be the most diverse area. Greater London, without doubt, comprises some of the most diverse local authorities in the country.

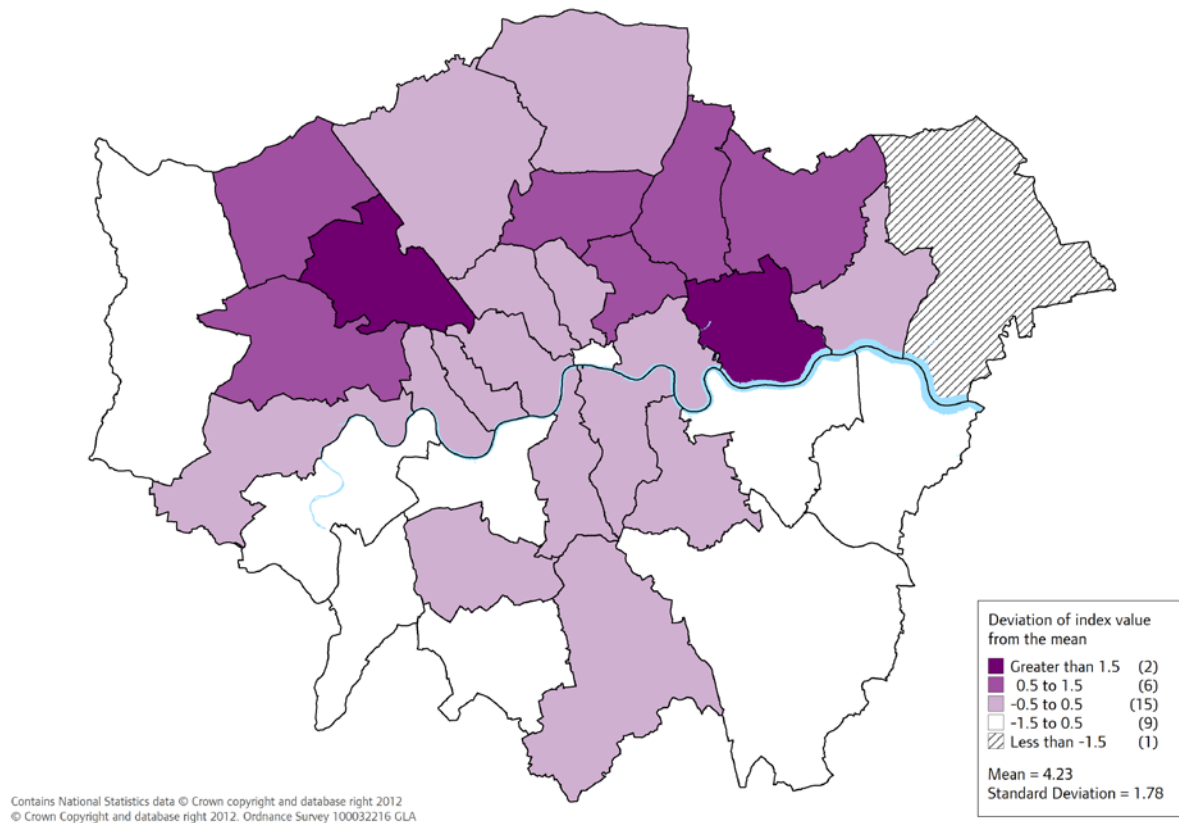
Tables 1 shows the highest ranking local authorities by Simpson's Diversity Index (SDI) score for each of the 50 most diverse local authorities in England and Wales. The table also includes a column showing the index score relative to the possible range (one to 18).

Thirty London local authorities feature in this ranking. The absent London local authorities are Bexley, (ranked 63rd) Bromley (ranked 64th) and Havering (ranked 91st).

Table 1: Top 50 Local Authority rankings for 18 ethnic groups

Rank	Local Authority	SDI Score	% of Range
1	Newham	9.27	54.5
2	Brent	8.68	51.1
3	Ealing	6.44	37.9
4	Redbridge	5.69	33.5
5	Waltham Forest	5.61	33.0
6	Hackney	5.44	32.0
7	Harrow	5.27	31.0
8	Slough UA	5.21	30.6
9	Haringey	5.19	30.6
10	Westminster	5.06	29.8
11	Lambeth	4.88	28.7
12	Hounslow	4.85	28.5
13	Southwark	4.77	28.0
14	Lewisham	4.65	27.3
15	Enfield	4.64	27.3
16	Tower Hamlets	4.53	26.7
17	Luton UA	4.21	24.7
18	Camden	4.14	24.3
19	Kensington & Chelsea	4.05	23.8
20	Barnet	4.01	23.6
21	Hammersmith & Fulham	3.98	23.4
22	Croydon	3.97	23.3
23	Islington	3.76	22.1
24	Merton	3.71	21.8
25	Barking & Dagenham	3.54	20.8
26	Leicester UA	3.45	20.3
27	Hillingdon	3.30	19.4
28	Greenwich	3.27	19.2
29	Birmingham	3.21	18.9
30	Wandsworth	3.15	18.5
31	Manchester	2.72	16.0
32	City Of London	2.69	15.8
33	Watford	2.50	14.7
34	Kingston Upon Thames	2.39	14.1
35	Oxford	2.35	13.8
36	Wolverhampton	2.28	13.4
37	Nottingham UA	2.27	13.4
38	Reading UA	2.27	13.3
39	Sandwell	2.22	13.1
40	Bradford	2.21	13.0
41	Coventry	2.18	12.8
42	Cambridge	2.17	12.7
43	Blackburn With Darwen UA	2.10	12.4
44	Sutton	1.95	11.5
45	Peterborough UA	1.92	11.3
46	Bedford UA	1.91	11.3
47	Richmond Upon Thames	1.90	11.2
48	Oadby & Wigston	1.88	11.1
49	Crawley	1.88	11.1
50	Milton Keynes UA	1.80	10.6

Source: 2011 Census, Office for National Statistics

Map 1: Simpson's Diversity Indices, 18 Ethnic Groups

Source: 2011 Census, Office for National Statistics

Map 1 shows diversity index values at local authority level for Greater London. The boroughs are grouped as follows:

- **Very high**
Index value is greater than the mean plus 1.5 standard deviations
- **High**
Index value is between the mean plus half and 1.5 standard deviations
- **Average**
Index value is the mean plus or minus half the standard deviation
- **Low**
Index value is between the mean and minus half and minus 1.5 standard deviations
- **Very Low**
Index value is less than the mean minus 1.5 standard deviations

The derivation of mean and standard deviation is only based on index values for London boroughs for the 18 ethnic group classification.

The map highlights the range in index values within London and particularly shows those boroughs that have particular high levels of diversity compared with boroughs that are less ethnically diverse.

London's most diverse boroughs are Newham and Brent. The least diverse boroughs are Havering and Bromley.