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Comparison of mid-2010 Population Estimates by Ethnic Group against the 2011 Census

Key findings

This paper provides a summary of the comparison of the mid-2010 Population Estimates by Ethnic Group (PEEGs), rolled-forward from 2001 Census, against the 2011 Census results, and explains reasons for some of the differences. The 2011 Census also estimated 476,000 more people than were estimated in the rolled forward estimates from 2001 Census. This should be borne in mind when making comparisons in this paper, as some of the differences will be due to the inter-censal population estimates, which underpin the PEEGs.

- At the England and Wales level, the distributions of the PEEGs estimates are broadly similar to those from the 2011 Census with the exception of the 'White British' group where the percentage of the PEEGs 'White British' population is higher than the 2011 Census estimates.
- The PEEGs estimates are proportionately lower than 2011 Census estimates for the 'Other White' and 'Other Asian' populations at the England and Wales level.
- At the regional level, the PEEGs methodology estimated the 'White British' population for London to be 58.7 % while the 2011 Census identified only 44.9 % of the total population as 'White British'.
- The PEEGs had higher percentages of the 'White British' population in almost all London boroughs and in local authority areas with a high proportion of the 'Non-White British' than the 2011 Census estimates.
- Estimates from the PEEGs methodology are comparable to those from the 2011 Census in local authority areas with a high proportion of the population who are 'White British'.

Introduction

The Population Estimates by Ethnic Group (PEEGs) are currently available for all local authorities (LADs) in England and Wales and by Regions for each year from 2001 to 2009. The PEEGs were first published by ONS in 2006 as experimental statistics.

Following the publication of the mid-2009 estimates in May 2011, differences between the PEEGs estimates and corresponding data sources such as the Annual Population Survey (APS)

were observed raising concerns about the quality of the estimates. Because of these issues, ONS made a decision to halt further publication of the PEEGs estimates until an evaluation of the robustness of the current PEEGs methodology and estimates was carried out. Therefore, although not published, the last estimates produced from the current PEEGs methodology were the mid-2010 estimates.

ONS published information on the website informing users of the forthcoming PEEGs evaluation plans: www.ons.gov.uk/ons/rel/peeg/population-estimates-by-ethnic-group--experimental-/current-estimates/new-component.pdf

The experimental status of the estimates indicates that the quality has not yet reached the standard required for National Statistics status. As such, each publication has been accompanied by supporting information noting these limitations and other potential sources of uncertainty. In particular, estimates for the later years, that is, those furthest away from the 2001 Census, should be treated with particular caution.

Current PEEGs Methodology

The current methodology for producing the PEEGs is based on the cohort component method, as used to produce the local authority mid-year estimates for the total population (MYEs). The mid-2010 PEEGs estimates used in this assessment are constrained to the revised mid-2010 MYEs. Figure 1 provides an overview of the PEEG methodology.

The cohort component method can be summarised as:

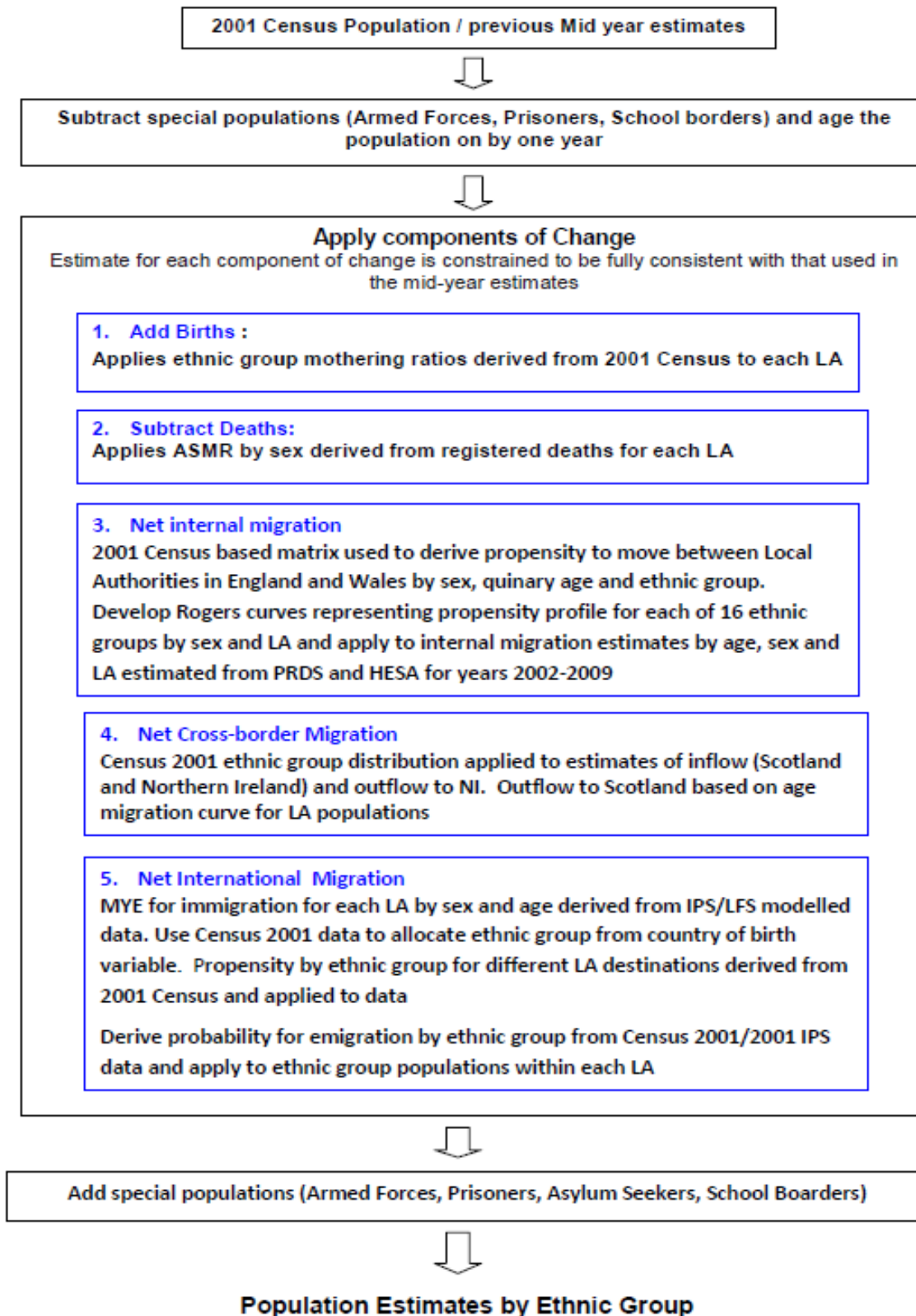
- take the previous mid-year resident population and age on by one year
- then estimate the population change between 1 July and 30 June by:
 - adding births occurring during the year
 - subtracting deaths occurring during the year
 - adjusting for migration to and from the area

In addition to the process summarised above, adjustments are also made for some special population groups that are not captured by the internal or international migration estimates: members of the armed forces and prisoners. These populations have specific age structures, which remain fairly constant over time. Therefore, these groups are not aged on with the rest of the population.

The mid-2001 base population is based on 2001 Census data rolled forward to mid-year.

Information about the methods for deriving the ethnic group composition for each component of change are provided in Figure 1, with more detailed information about the PEEGs methodology available at: www.ons.gov.uk/ons/guide-method/method-quality/specific/population-and-migration/pop-ests/population-estimates-by-ethnic-group/index.html

Figure 1: Current Method for calculating Population Estimates by Ethnic Group



The 2011 Census provides the first opportunity to benchmark the PEEGs estimates against an independent and comprehensive data source. Up until the publication of the 2011 Census estimates, it had been difficult to assess the reliability of the PEEGs estimates and the assumptions made within the estimation process. Potential sources of uncertainty are outlined below:

- The assumptions on appropriate proxies for ethnic group may be incorrect. In particular, the attribution of ethnic group to international migration flows. This is predicted on the assumption that the country of birth-ethnic group distribution recorded in the 2001 Census for existing residents; can be appropriately applied to flows of people with that country of birth or, with asylum-seekers, the associated nationality.

In addition, reliance on the 2001 Census data to identify differences in demographic rates between ethnic groups can be expected to become less adequate through the inter-censal period. More information about the methodology and assumptions are available from the PEEG methodology paper at: www.ons.gov.uk/ons/rel/peeg/population-estimates-by-ethnic-group--experimental-/current-estimates/population-estimates-by-ethnic-group-methodology-paper.pdf

- A combination of the changes made to the ethnic group classification and the re-positioning of the 'Chinese' category between 2001 and 2011 Censuses. In addition, the way individuals respond in general to the ethnicity question between censuses will have more impact on some ethnic groups than others.

2011 Census

A census has been carried out every ten years since 1801 (apart from 1941 due to the Second World War), with the most recent census carried out in March 2011. The 2011 Census had a household response rate of 95 per cent, with a person response rate of 94 per cent. This was similar to that achieved in the 2001 Census though the variability in response rate between local authorities was reduced in 2011.

The 2011 Census provided an accurate snapshot across a range of household characteristics in more detail and at a detailed geographical level, which is very useful for the analysis of population sub groups such as ethnicity. The 2011 Census provides more accurate estimates of the ethnic group population than any other data source and therefore forms a benchmark from which to develop rolled forward population estimates.

Ethnic Group Classifications

As previously noted, the PEEGs methodology is based on the 2001 Census classification, which used 16 ethnic categories, while the 2011 Census uses the new 18 ethnic group classification. The main differences between the classifications are the introduction of two new categories, ‘Gypsy or Irish Traveller’ and the ‘Arab’ ethnic groups, and the repositioning of ‘Chinese’ category from ‘Any Other Ethnic Group’ to the ‘Asian’ ethnic group. In addition to the issues related to the PEEGs methodology and assumptions, the differences in the ethnic group classifications are likely to have some impact on the results of comparisons between the PEEGs estimates and the 2011 Census estimates.

Before undertaking the comparisons, it was important to re-categorise the 16 and 18 ethnic groups into suitable and comparable groupings; for the purpose of this assessment these have been re-categorised as shown in Table 1.

Table 1: Re-categorised 2001 and 2011 Census Ethnic Group classifications

Broad Ethnic Groups (1)	2011 categories (2)	2001 Categories (3)	The six ethnic groups for comparison (4)	The 15 ethnic groups for comparison (5)
White	1. English/Welsh/Scottish /Northern Irish/British	1. White British	1. White British 2. Other White	1. White British
	2. Irish	2. White Irish		2. Other White
	3. Gypsy or Irish Traveller	3. Any other White background		
	4. Any other White background			
Mixed/multiple ethnic groups	1. White and Black Caribbean	1. White and Black Caribbean	3. Mixed	3. White and Black Caribbean
	2. White and Black African	2. White and Black African		4. White and black African
	3. White and Asian	3. White and Asian		5. White and Asian
	4. Any other Mixed/multiple ethnic background	4. Any other mixed background		6. Any other Mixed background
Asian/Asian British	1. Indian	1. Indian	4. Asian including the Chinese	7. Indian
	2. Pakistani	2. Pakistani		8. Pakistani
	3. Bangladeshi	3. Bangladeshi		9. Bangladeshi
	4. Chinese	4. Any other Asian background		10. Chinese
	5. Any other Asian background			11. Any other Asian background
Black/African/Caribbean/Black British	1. Black African	1. Black Caribbean	5. Black	12. Black African
	2. Black Caribbean	2. Black African		13. Black Caribbean
	3. Any other Black/African/Caribbean background	3. Any other Black background		14. Any other Black background (Black/African/Caribbean background)
Other ethnic group	1. Arab	1. Chinese	6. Any other ethnic group/including Arab	15. Any other ethnic group including Arab
	2. Any other ethnic group	2. Any other		

Comparing the Population Estimates by Ethnic Group with the 2011 Census estimates

For this assessment, the mid-2010 PEEGs estimates are used in the comparison against the 2011 Census estimates (these are the latest that are currently available). There are approximately nine months between the reference dates for the two sources, the mid 2010 PEEG refer to 30 June 2010 whilst the 2011 Census estimates refer to 27 March 2011.

The PEEGs estimates are constrained to the official mid-2010 revised estimates of the total population. Some of the differences in this comparison do not distinguish therefore, between those due to inaccuracies in the PEEGs methodology and those due to the discrepancies between the rolled-forward and census based estimates of the total population. The analysis to explain the differences between the 2011 Census estimates and the rolled-forward population estimates showed that the rolled forward population estimates on census day were 476,000 lower than were actually estimated from the enumeration of the 2011 Census.

Further information is available at: www.ons.gov.uk/ons/guide-method/census/2011/census-data/2011-census-data/2011-first-release/first-release--quality-assurance-and-methodology-papers/differences-between-2011-census-est-and-rolled-forward-pop-est.pdf

The comparison starts by analysing the re-categorised 15 ethnic groups followed by the broad (six) ethnic groups for England and Wales. This is then followed by analysis for Wales and regions within England, London boroughs and local authority geographical levels.

The comparison of the 15 ethnic groups at England and Wales geographical level shows similar distribution patterns between the mid-2010 PEEGs and the 2011 Census estimates. Table 2 shows that for England and Wales, almost all PEEGs ethnic groups are within the 95% Confidence Interval (CI) of the 2011 Census results¹, except for the 'White British' and the 'Other Asian' groups. The bigger difference seen in the 'Other Asian' group is likely to be due to the changes in the ethnic group classification between the 2001 and 2011 censuses. For instance, the inclusion of 'Chinese' group in the 'Asian' category is likely to influence certain ethnic groups such as the Japanese population who in 2011 Census might have recorded themselves as 'Other Asian' whereas, in 2001 Census, might have recorded themselves as 'Any Other Ethnic Group'.

This suggests that the current PEEGs methodology has the potential to produce comparable ethnic group estimates at the England and Wales level.

¹ The confidence intervals were created for the 10 ethnic groups used in the CCS processing. For the more detailed categories, the same relative CI widths have been used. However, due to possibility of variability between the more detailed categories, and the fact that they have fewer observations than the broad category, they may overstate the precision calculated for the broad category.

Table 2: Comparison of the Population by Ethnic Group for England and Wales

Ethnic Groups	Percentage of total population				
	2011 Census	Mid- 2010 PEEGs	Difference Census- PEEGs	95% CI Lower limit	95% CI Upper limit
White: British	80.5	82.9	-2.4	80.4	80.7
White: Other	5.4	4.6	0.8	5.3	5.6
White/Black Caribbean	0.8	0.6	0.2	-0.5	2.1
White/Black African	0.3	0.3	0.0	-1.0	1.6
White/Asian	0.6	0.6	0.0	-0.7	1.9
Other Mixed	0.5	0.5	0.0	-0.8	1.8
Indian	2.5	2.7	-0.2	1.7	3.3
Pakistani	2.0	1.9	0.1	0.9	3.1
Bangladeshi	0.8	0.7	0.1	-0.6	2.2
Chinese	0.7	0.9	-0.2	-0.7	2.1
Other Asian	1.5	0.7	0.8	0.1	2.9
African	1.8	1.5	0.3	0.6	3.0
Caribbean	1.1	1.1	0.0	-0.1	2.3
Other Black	0.5	0.2	0.3	-3.8	4.8
Any other ethnic group /Arab	1.0	0.8	0.2	-2.0	4.0

Table 3 shows the comparison using the broad ethnic group classification for England and Wales. This shows similar patterns as those observed in Table 2. This indicates that the PEEGs methodology produces estimates that are realistic for the broad ethnic groups at the England and Wales level. Table 3 shows the differences in the figures between the mid-2010 PEEGs and the 2011 Census. The overall difference of 847,000 is partly due to the reference period between the mid-2010 PEEGs and 2011 Census estimates and partly from the differences between the rolled forward estimates and the 2011 Census.

It should therefore be acknowledged that some of the variations are likely to be due to; the drift in the mid-year estimates; the self-determined responses to the ethnic group question that can change over time and differences in the reference periods, and therefore not merely the input data sources or PEEGs methodology.

Table 3: Comparing the Broad Ethnic groups for England and Wales

	Percentage of total population					
	<i>Estimates</i>		<i>Differences</i>	<i>Percentages</i>		<i>Percentage point difference</i>
	2011 Census	Mid-2010 PEEGs	Census - PEEGs	% 2011 Census	% mid-2010 PEEGs	% Census - PEEGs
White British	45,134,686	45,793,249	-658,563	80.5	82.9	-2.4
White Other	3,074,709	2,540,805	533,904	5.5	4.6	0.9
Mixed Ethnic Group	1,224,400	1,034,065	190,335	2.2	1.9	0.3
Asian/Asian British	4,213,531	3,812,176	401,355	7.5	6.9	0.6
Black/Black British	1,864,890	1,594,016	270,874	3.3	2.9	0.4
Other Ethnic Group	563,696	454,555	109,141	1.0	0.8	0.2
All Groups	56,075,912	55,228,865	847,047			

Note: Figures may not sum due to rounding.

Table 4 shows the differences in the estimates of the population who are ‘White British’, across regions within England and Wales. It shows that the largest difference is in the London region, with a percentage point difference of nearly 14 between the mid-2010 PEEGs and 2011 Census estimates.

In addition to the differences in population found by the 2011 Census, the 2011 Census will also count for accumulated errors in the internal migration at local authority level.

Table 4: Comparing ‘White British’ estimates and percentages for the English Regions and Wales

Percentage of total population							
	White British Estimates		Percentage PEEGs		Percentage 2011 Census		% point difference
	2010 PEEGs	2011 Census	White British	Non-White British	White British	Non-White British	White British
NORTH EAST	2,379,416	2,431,423	92.0	8.0	93.6	6.2	-1.6
NORTH WEST	6,120,886	6,141,069	88.2	11.8	87.1	12.9	1.1
YORKSHIRE AND THE HUMBER	4,536,671	4,531,137	86.5	13.5	85.8	14.3	0.7
EAST MIDLANDS	3,895,144	3,871,146	86.8	13.2	85.4	14.5	1.4
WEST MIDLANDS	4,490,263	4,434,333	81.9	18.1	79.2	20.9	2.7
EAST	4,900,326	4,986,170	84.9	15.1	85.3	14.9	-0.4
LONDON	4,656,127	3,669,284	58.6	41.4	44.9	55.0	13.7
SOUTH EAST	7,253,231	7,358,998	85.3	14.7	85.2	14.9	0.1
SOUTH WEST	4,756,706	4,855,676	90.6	9.4	91.8	8.2	-1.2
WALES	2,804,479	2,855,450	93.0	7.0	93.2	6.7	-0.2

Note: Figures may not sum due to rounding

Table A in the Appendix extends the comparison by considering estimates for the broad ethnic groups for Wales and regions within England. It shows that the percentage differences are similar across the regions apart from the London region, where the PEEGs estimates are substantially higher for the ‘White British’ group (and lower for the other ethnic groups) than the 2011 Census estimates.

This comparison shows that the PEEGs methodology over-allocates the ‘White British’ population in areas with comparatively low ‘White British’ concentration, particularly in London (as shown in Table A in the Appendix).

Table B in the Appendix extends the analysis by comparing the PEEGs with the 2011 Census estimates for London boroughs for the ‘White British’ group. It shows that the PEEGs methodology has higher percentages of the ‘White British’ population than the 2011 Census in virtually all boroughs. All the PEEGs percentages are outside the lower and upper CI limits, suggesting that the PEEGs methodology is not robust enough for use, particularly in areas with high concentration of non-‘White British’ population or local authority areas that have seen high levels of international migration.

Further investigation looked at how the distribution patterns in the estimates have changed from 2001 Census to 2011 Census and the mid-2010 PEEGs, is shown in Tables C and D in the Appendix.

Table C focuses on local authority areas that had 'White British' group percentages lower than 60 per cent in 2001 Census. Table C shows that while the 2011 Census reported a drop in the percentage of the 'White British', the PEEGs estimates show an increase in the 'White British' in most of these local authority areas. This suggests that the PEEGs methodology is failing to allocate the 'White British' population adequately, particularly in areas that have seen high levels of migration patterns (both internal and international) and ethnic mix that have occurred since EU Accession in May 2004. This is partly due to the heavily reliance on the 2001 Census distributions and some assumptions made in the PEEGs methodology, for example, applying the country of birth-ethnic group distribution from the 2001 Census to the flows of people with that country of birth.

Table D looks at local authority areas where 'White British' percentage was over 97 per cent in the 2001 Census. Table D shows a general percentage reduction in the 'White British' between the 2001 and 2011 censuses, with further reductions observed in the estimates from the PEEGs methodology. This is more evidence that overall the PEEGs methodology appears to slightly underestimate the proportion of 'White British' in areas with high 'White British' concentrations, while overestimating in areas with high levels of 'Non-'White British' population.

Additional comparisons looking at percentage differences between the mid-2010 PEEGs and 2011 Census estimates for the broad ethnic group by local authorities were also carried out. Table 5 shows the number of local authorities within each percentage difference range. Percentages in brackets are for the number of local authorities within the +/- 0.9 percentage ranges calculated as a percentage of the total number of the local authorities.

The table shows that the majority of the local authorities are within the +/- 0.9 percentage point difference ranges: 'White Other' group 251 (72.1%); 'Mixed' group 316 (90.8%); 'Black' group 269 (77.3%); 'Other Ethnic Group' 317 (91.1%). Conversely, the 'Asian' had 165 (47.7%) and the 'White British' group had only 62 (17.8%) local authorities falling within the +/- 0.9 percentage differences. This comparison appears to support the notion that the current PEEGs methodology is failing to allocate the 'White British' population appropriately, particularly in areas with high 'non-White British' concentration, and is thus not entirely suitable, in its current status, for use in the production of future PEEGs estimates.

Table 5: Number of local authorities within percentage point differences ranges by Broad Ethnic groups

	Number of local authorities within the grouped percentage point differences					
Percentage point differences ranges	White British	White Other	Mixed	Asian	Black	Other Ethnic Groups
Under 6%	0	17	0	13	6	1
-5.9 to -3%	51	15	3	16	11	5
-2.9 to -2%	59	12	5	15	12	2
1.9 to -1%	73	29	24	22	11	20
-0.9 to -0.1%	36	89	111	37	40	50
0.0 - 0.9%	26	162	205	128	229	267
1.0- 1.9%	23	24	0	98	37	3
2.0 - 2.9%	10	0	0	18	2	0
3.0 - 5.9%	22	0	0	1	0	0
6.0 - 10%	18	0	0	0	0	0
over 10%	30	0	0	0	0	0
Total	348	348	348	348	348	348

Conclusion

The publication of the 2011 Census results has provided the opportunity to compare and assess the suitability of the current PEEGs methodology and subsequent estimates. The comparisons have shown that the current PEEGs methodology has the potential to work well in areas with a high proportion of 'White British' population. The main disadvantage is that it overestimates the 'White British' population while underestimating the 'Non-White British' population. This is particularly evident in local authority areas with a low proportion of the 'White British' population.

Some of the differences observed in the comparison may be attributed to the assumptions made in the PEEGs methodology, which uses the 2001 Census distributions to sub-divide the population to ethnic groups. For example, the ethnic composition of international migration is estimated by combining up-to-date estimates of country of birth of migrants with 2001 Census estimates relating country of birth to ethnic group. The reliability of assumptions based on the 2001 Census will decrease over time particularly for later part of the inter-censal period.

Although the current PEEGs methodology performs well in many local authority areas and some ethnic groups, the methodology is complex and relies heavily on the most recent Census.

ONS plans to take forward further development work to improve the methods for deriving population estimates by ethnic group; specifically to investigate the potential to simplify the current PEEGs methodology and secondly to investigate alternative methodologies. The aim will be to implement a new method to update the 2011 Census based estimates, to incorporate appropriate up-to-date data sources and be capable of reacting to the changing characteristics of the resident population.

Next Steps:

- Investigate the possibility of an alternative PEEGs methodology and system for use post 2011 Census.
- Consider developing a modified methodology for areas with high concentration of the 'non-White British' population.
- Consult with our customers to share information and understand their requirements.

References:

Papers:

Assessment of Reliability of the Population Estimates by Ethnic Group, available at: www.ons.gov.uk/ons/rel/peeg/population-estimates-by-ethnic-group--experimental-/current-estimates/new-component.pdf

Brief information about the reliability of the Population Estimates by Ethnic Group, available at: www.ons.gov.uk/ons/rel/peeg/population-estimates-by-ethnic-group--experimental-/current-estimates/peegs-notes-on-reliability-of-estimates.pdf

Explaining the Difference between the 2011 Census Estimates and the Rolled-forward Population Estimates, available at: www.ons.gov.uk/ons/guide-method/census/2011/census-data/2011-census-data/2011-first-release/first-release--quality-assurance-and-methodology-papers/differences-between-2011-census-est-and-rolled-forward-pop-est.pdf

Data:

2011 Census: KS201EW Ethnic group, local authorities in England and Wales, available at: www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-286262

Published Population Estimates by Ethnic Group mid-2009, local authorities in England and Wales, available at: www.ons.gov.uk/ons/taxonomy/index.html?nscl=Population+Estimates+by+Ethnic+Group

Appendix:

Table A: Comparing broad ethnic groups for the English Regions and Wales

	Percentage of total population					
2011 Census	White British	Other White	Mixed ethnic group	Asian (plus Chinese)	Black	Other Ethnic Group
NORTH EAST	93.6	1.7	0.8	2.9	0.4	0.4
NORTH WEST	87.1	3.1	1.6	6.3	1.3	0.6
YORKSHIRE & THE HUMBER	85.8	3.1	1.6	7.3	1.5	0.8
EAST MIDLANDS	85.4	3.9	1.9	6.4	1.7	0.6
WEST MIDLANDS	79.2	3.6	2.4	10.8	3.2	0.9
EAST	85.3	5.6	2.0	4.8	2.0	0.5
LONDON	44.9	14.9	5.0	18.4	13.3	3.4
SOUTH EAST	85.2	5.5	2.0	5.2	1.6	0.6
SOUTH WEST	91.8	3.6	1.4	1.9	1.0	0.3
WALES	93.2	2.4	1.0	2.2	0.6	0.5
Current PEEGs	White British	Other White	Mixed ethnic group	Asian (plus Chinese)	Black	Other Ethnic Group
NORTH EAST	92.0	2.3	1.0	3.4	0.8	0.5
NORTH WEST	88.2	2.9	1.4	5.6	1.3	0.5
YORKSHIRE & THE HUMBER	86.5	2.9	1.5	7.1	1.5	0.6
EAST MIDLANDS	86.8	3.1	1.7	6.2	1.7	0.5
WEST MIDLANDS	81.9	3.2	2.0	9.6	2.6	0.7
EAST	84.9	4.9	1.8	5.3	2.3	0.7
LONDON	58.6	10.4	3.6	15.3	10.1	1.9
SOUTH EAST	85.3	5.1	1.8	5.0	2.0	0.8
SOUTH WEST	90.6	3.5	1.3	2.8	1.2	0.6
WALES	93.0	2.6	1.0	2.3	0.7	0.4
Current PEEGs - 2011 Census	White British	Other White	Mixed ethnic group	Asian (plus Chinese)	Black	Other Ethnic Group
NORTH EAST	-1.6	0.6	0.2	0.5	0.4	0.1
NORTH WEST	1.1	-0.2	-0.2	-0.7	0.0	-0.1
YORKSHIRE & THE HUMBER	0.7	-0.2	-0.1	-0.2	0.0	-0.2
EAST MIDLANDS	1.4	-0.8	-0.2	-0.2	0.0	-0.1
WEST MIDLANDS	2.7	-0.4	-0.4	-1.2	-0.6	-0.2
EAST	-0.4	-0.7	-0.2	0.5	0.3	0.2
LONDON	13.7	-4.5	-1.4	-3.1	-3.2	-1.5
SOUTH EAST	0.1	-0.4	-0.2	-0.2	0.4	0.2
SOUTH WEST	-1.2	-0.1	-0.1	0.9	0.2	0.3
WALES	-0.2	0.2	0.0	0.1	0.1	-0.1

Table B: Comparing ‘White British’ group for the London boroughs

	Percentage of total population				
	% 2011 Census	% Current PEEGs	Percentage difference	95% CI Lower limits	95% CI Upper limits
City of London	57.5	62.3	4.8	54.5	60.5
Barking and Dagenham	49.5	65.3	15.8	47.8	51.2
Barnet	45.5	57.9	12.4	44.0	47.0
Bexley	77.3	79.7	2.4	76.2	78.4
Brent	18.0	37.0	19.0	15.5	20.5
Bromley	77.4	78.8	1.4	76.0	78.8
Camden	44.0	55.3	11.3	40.5	47.5
Croydon	47.3	59.5	12.2	45.5	49.1
Ealing	30.4	48.8	18.4	28.3	32.5
Enfield	40.5	56.9	16.4	39.0	42.0
Greenwich	52.3	65.4	13.1	50.3	54.3
Hackney	36.2	51.7	15.5	34.2	38.2
Hammersmith and Fulham	44.9	62.6	17.7	41.5	48.3
Haringey	34.7	51.5	16.8	32.1	37.3
Harrow	30.9	47.3	16.4	29.7	32.1
Havering	83.3	82.9	-0.4	82.2	84.4
Hillingdon	52.2	63.9	11.7	50.9	53.5
Hounslow	37.9	53.3	15.4	36.2	39.7
Islington	47.7	60.4	12.7	44.9	50.5
Kensington and Chelsea	39.3	54.8	15.5	35.5	43.1
Kingston upon Thames	63.1	70.1	7.0	61.8	64.5
Lambeth	39.0	57.8	18.8	36.2	41.8
Lewisham	41.5	56.8	15.3	39.2	43.8
Merton	48.4	61.5	13.1	46.6	50.2
Newham	16.7	36.7	20.0	14.8	18.6
Redbridge	34.5	51.5	17.0	33.0	36.0
Richmond upon Thames	71.4	72.7	1.3	70.0	72.8
Southwark	39.7	55.6	15.9	37.6	41.8
Sutton	70.9	75.7	4.8	69.4	72.4
Tower Hamlets	31.2	48.0	16.8	29.0	33.4
Waltham Forest	36.0	52.2	16.2	33.6	38.4
Wandsworth	53.3	65.8	12.5	51.6	55.1
Westminster	35.2	52.4	17.2	32.2	38.2

Table C: Comparing 2001, 2011 Censuses and 2010 PEEGs estimates by LAD where 'White British' was under 60% in 2001 Census

Percentage of total population			
Area name	Percent 2001 Census	Percent 2011 Census	Percent 2010 PEEGs
Slough UA	58.3	34.5	55.3
Barnet	59.7	45.5	57.9
Brent	29.4	18.0	37.0
Camden	52.8	44.0	55.3
Ealing	44.9	30.4	48.8
Hackney	44.3	36.2	51.7
Hammersmith and Fulham	58.2	44.9	62.6
Haringey	45.5	34.7	51.5
Harrow	49.7	30.9	47.3
Hounslow	55.6	37.9	53.3
Islington	56.9	47.7	60.4
Kensington and Chelsea	50.1	39.3	54.8
Lambeth	50.0	39.0	57.8
Lewisham	56.9	41.5	56.8
Newham	33.6	16.7	36.7
Redbridge	57.2	34.5	51.5
Southwark	52.3	39.7	55.6
Tower Hamlets	43.1	31.2	48.0
Waltham Forest	55.5	36.0	52.2
Westminster	48.6	35.2	52.4

Table D: Comparing 2001, 2011 Censuses and 2010 PEEGs estimates by LAD where ‘White British’ was over 97% in 2001 Census

Percentage of total population

Area name	Percent 2001 Census	Percent 2011 Census	Percent 2010 PEEGs
Hartlepool UA	98.0	96.6	94.9
Redcar and Cleveland UA	97.8	97.6	94.5
East Riding of Yorkshire UA	97.5	96.1	92.9
North East Lincolnshire UA	97.5	95.4	94.1
Allerdale	98.4	97.6	96.0
Barrow-in-Furness	97.9	97.1	95.6
Copeland	98.3	97.3	96.1
Eden	98.5	97.0	95.4
South Lakeland	97.4	95.6	93.6
Amber Valley	97.8	96.5	94.0
Bolsover	98.2	96.3	95.1
Derbyshire Dales	97.5	96.8	93.8
North East Derbyshire	97.9	96.9	94.5
East Devon	97.4	96.2	93.2
Mid Devon	97.5	95.9	93.9
North Devon	97.5	95.9	93.1
Torridge	97.6	97.1	93.3
Forest of Dean	97.7	96.7	94.3
Wyre	97.6	96.8	92.9
North West Leicestershire	97.3	95.3	92.7
East Lindsey	97.6	96.6	93.7
West Lindsey	97.6	96.3	94.4
Broadland	97.3	95.9	93.2
North Norfolk	97.7	96.6	93.5
Hambleton	97.9	96.3	95.1
Ryedale	97.8	96.2	93.5
Scarborough	97.6	95.2	93.2
Selby	98.2	95.5	93.7
Sedgemoor	97.5	95.3	93.8
West Somerset	97.5	95.8	93.8
Cannock Chase	97.4	96.5	94.1
Staffordshire Moorlands	98.1	97.5	95.0
Waveney	97.3	95.8	92.8
Knowsley	97.3	96.1	95.0
Barnsley	98.1	96.1	94.8
Neath Port Talbot	97.6	96.9	95.1
Rhondda, Cynon, Taff	97.5	96.3	94.7
Caerphilly	97.9	97.3	95.7
Monmouthshire	97.2	96.1	94.1
Powys	97.5	96.1	94.5