

Older BME People and Financial Inclusion Report

The future ageing of the ethnic minority population of England and Wales



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Foreword

Two trends in contemporary Europe are the subject of widespread discussion - and often anxiety. First is the increasing diversity of our population, and second is the ageing of that population. Anxieties about diversity are frequently framed as a cultural threat to Europe's identity or way of life, while anxieties about an ageing population are more regularly framed in economic terms, or about the viability of Europe's economic model in an increasingly competitive world. Among the many developments overlooked by these impressionistic apprehensions is any sense that the older population is increasingly diverse - and is likely to become more so in the future. Outlining this future is the key aim of this report, commissioned by Runnymede and written by the Centre for Policy on Ageing.

This report, estimating the future older Black and minority ethnic population (BME), is part of a three-year Runnymede research programme on financial inclusion among older BME people. To understand the experiences, choices and aspirations of older BME people, we will conduct three long-term qualitative research projects, but before doing so, we must understand the conditions framing those experiences.

By indicating the extent of the future diversity of the older population, this report provides crucial background for this wider programme. It also contributes to policy debate on ageing generally. For example, while most BME people live in urban areas, many older people retire in rural or seaside areas where there are relatively few Black and minority ethnic people. For local authorities and indeed national agencies, the increased diversity and distribution of the future older population needs to be planned for today.

People's retirement decisions often also include considering moving abroad. As Runnymede outlines in a second report, many of the current older BME people in the UK were born abroad, and so may consider 'return' migration. While these first two desk-based reports provide crucial background, our future research will involve hundreds of interviews with ordinary BME older people and key experts. It will also include two 'deliberative assemblies' in which older people will be able to voice their own views and concerns, on retirement decision-making, grandparenting and asset-sharing across generations.

Returning to this report, estimating the future older Black and minority ethnic population provides an important background for thinking about policy, public life, and the economy of the United Kingdom in the next 40 years. Runnymede first considered estimates of the BME population in a 1971 report, and until the 1991 Census - when ethnicity was first included - we consistently argued in favour of collecting data on ethnicity. Since 1991, researchers and policymakers have been able to analyse data on ethnicity, not simply to count heads, but to provide a more differentiated picture of how different ethnic groups are faring in education, employment and health – and at a regional or even ward-based level. The 1991, 2001 and future 2011 Censuses are arguably the best datasets allowing for comparability over time for outcomes according to ethnicity, although the English Longitudinal Study of Ageing and Household Longitudinal Study offer more refined information in other areas.

Predicting the future is often a hazardous pursuit. This report, *The Future Ageing of the Ethnic Minority Population of England and Wales*, isn't actually a prediction of the future Black and minority ethnic population of the United Kingdom, but an indication – based on statistical analysis of current evidence and recent trends – of what that future population is likely to look like. Statistical modelling of the sort deployed in this report makes prognostication much more reliable, especially if we appreciate its methods, assumptions and limitations.

In particular, forecasting future populations are subject to a variety of social and economic changes, but also policy change. This is perhaps most significant in the context of immigration: we have assumed lower levels of immigration in future because we take politicians of all parties at their word that they will reduce net migration. Nonetheless, this policy direction may change in future, and so statisticians – or indeed any social commentary – must unavoidably make assumptions about future policy and social change. Assumptions may of course be criticised, but they are typically supported by assessing current trends and previous evidence, and of course the environment in which a particular estimate is produced.

Regarding immigration, assumptions must address immigration and emigration flows, as well as net migration over time, across different ethnic groups and among people born overseas and in the UK.

Our report discusses immigration and emigration separately, but our model uses net migration and applies age structures differently to a net inflow or net outflow. We have used ONS 2001–2007 average net migration for each ethnic group and scaled it to accommodate future reductions. It is perhaps worth noting that a recent report by researchers at the University of Leeds assumed a fairly high rate of emigration for some groups, including Black African and Chinese. This is an important issue, as perhaps half of all migrants leave the UK within five years of arrival, and we will soon be conducting interviews to determine if certain BME groups will indeed 'return home'.

Two additional assumptions explain our estimate that the future BME population will be 27% of the total UK population in 2051. First are the relative fertility rates for different ethnic groups. This area is somewhat sensitive, especially given the innumerate fears regarding the future of Europe (as 'Eurabia'). While we discuss the likelihood that fertility rates will converge in the future, our model maintains a proportionate fertility differential between ethnic groups, but reduces fertility in line with possible fertility patterns for the population as a whole.

The third and final assumption regards the way in which people self-identify in terms of ethnicity. In the 2001 Census, the number of ethnic categories increased from 9 to 16, and for 2011, new categories include 'Arab'. These changes are in part a response to changing populations, but also to changing identification. While at present there is a 'White Other' and 'White Irish' category in addition to the 'White British' category, this may change as large numbers of 'White Other' populations demand separate identification.

Conversely, some of the children of 'White Other' parents may rather identify as 'White British', thus deflating projections for that category. This is simply one example of ongoing processes of generational change, particularly among the children (and grandchildren) of migrants. No one questions whether Michael Portillo or David Miliband is 'White British', although their fathers were migrants from Europe; perhaps the children of Polish immigrants will similarly self-identify. People cannot of course simply fashion an identity, but there is likely to be a good deal of flux in the 'Black' category in the near and long-term future, and among the many and diverse 'Mixed' population. Our report therefore

assumes some 'ethnic switching' will take place. Though this is likely to have little effect on the *total* BME population, it does impact our estimates for *particular* ethnic groups.

Our research addresses policy on ageing, ethnicity and financial inclusion, and so this report highlights the age distribution within the future BME population. While this does not affect our statistical modelling, it does inform the way we've presented the data, namely in terms of age distribution for each ethnic group. This is of course not the only important social phenomenon related to a growing BME population. An additional development – contrary to fears that the UK is increasingly segregated – is the widening dispersement (or geographical 'integration') of the BME population across the country, a development the recent Leeds report explains and estimates for the future.

Statistical projections can be improved if the assumptions underpinning them have better evidence – including interview or survey data. Perhaps not coincidentally, Runnymede's future research addresses precisely this gap: we will interview people throughout the UK, inquiring into their retirement decision-making, including whether they might consider retiring abroad or in rural areas. This will then improve the reliability of assumptions about emigration.

The findings of this research will, of course, feed into policy as well as statistical models. By including ordinary older BME people in our research, we aim to raise awareness but also ensure that future planning decisions from local to national level better reflect the reality of older people's experiences and aspirations. The statistical findings of this report are insightful and impressive in their own right, but our report is driven by the particular policy focus of Runnymede's and the Centre for Policy on Ageing's ongoing research programme, namely ageing and financial inclusion among BME people.

Omar Khan

Runnymede Trust

Executive Summary

This study looks at likely changes in the age structures of the ethnic minority populations of England and Wales.

Ethnicity is a multi-faceted and changing concept loosely related to country of birth, ancestral country of birth, language spoken at home, skin colour, national or geographical origin, racial group and religion. Ethnicity is self-defined and may be differently ascribed to different generations in the same household.

This report uses the 16 ethnic group classifications used by the 2001 census but several of these, for example 'White Other', themselves encompass a broad range of dissimilar ethnicities.

We use two projection methods, in this report, to estimate the future ethnic minority population of England and Wales: (1) extrapolation to 2026 from Office for National Statistics (ONS) interim mid-year population estimates 2001–2007 by ethnic group (experimental statistics) and (2) Cohort Component Projections to 2051.

Using 2001 census data as a starting point and five year time periods, for each time period, Cohort Component projections use the model: population at end of period = population at start + births - deaths + net migration. Births, deaths and migration are related to the age and gender structure of each ethnic group as well as assumptions about fertility, mortality and migration patterns for that group.

Ethnic group population projection is further complicated by 'transgenerational ethnic transfer', i.e., the possibility that a child may not be placed in the same ethnic group as its mother.

Until recently, data on none of the three components, fertility, mortality and migration, was publically available broken down by ethnic group but recent research by groups of demographers working in the United Kingdom has provided some of the basic information on ethnic group fertility and mortality necessary to make informed projections of the numbers and age structure of individual ethnic groups going forward.

Our model uses

- a. Coleman–Dubuc estimates of ethnic group relative fertility scaled to match likely changes in overall population fertility
- Rees–Wohland GWM estimates of ethnic group mortality placed at an appropriate point on a trajectory of improving mortality
- c. ONS estimates of ethnic group relative migration for 2001–2007 scaled to reflect likely future changes in migration policy
- d. Estimates of the probabilities of ethnic switching derived from GLA DMAG published work drawing on the 2001 census.

Our model and assumptions were tested against ONS principal population estimates and the sum of our ethnic minority projections matched ONS total population projections to within 1% for every 5 year time point to 2051.

It should be noted that our results are for England and Wales which, in 2007 held 96% of the BME population of the UK but only 88.7% of the general population. UK percentage estimates of BME populations are therefore likely to be 8% lower.

Key findings are

- a. By 2051 the BME (including white ethnic minority groups) population of England and Wales will have reached 25 million making up 36% of the total.
- b. By 2051 the non-white population will be 20 million making up 29.7% of the total.
- c. The fastest growing ethnic group in terms of numbers will be 'Other White' followed by the Black African, Pakistani and Indian ethnic groups. The fastest growing in percentage terms will be the 'mixed' groups and 'Other' followed by the Chinese and Black African groups.
- d. The slowest growing will be 'Other Black' and 'Black Caribbean'. In percentage terms the White British population will hold steady but the White Irish will decline by over 50%.

- e. The White Irish and 'White Other' ethnic groups have ageing populations with a high proportion of children, born to mothers from these groups, being described as White British.
- f. The mixed ethnic groups are initially a very young population with, in 2016, over one half under the age of 15. By 2051, as these groups age this will reduce to less than one third.
- g. By 2051, in England and Wales, there will be 3.8 million Black and minority ethnic older people aged 65 and over and 2.8 million aged 70 and over.
- h. For the non-white ethnic groups alone, by 2051, in England and Wales, there will 2.7 million people aged 65 and over and 1.9 million aged 70 and over.
- i. Presently and in the near future, with the exception of the White Irish, most ethnic groups have younger populations than the majority White British population. This will gradually change and by 2051 the ethnic groups with the highest proportions of people, aged 50 and over will be the 'Other White', Chinese, 'Other Asian', White British, Indian, 'Other' and White Irish.

Projections should always be treated with caution. They are projections not predictions. They are based on assumptions about fertility, mortality, migration and transfer at birth to an ethnic group other than that of the mother. The further the projections are taken into the future the less likely it is that these assumptions will remain true and therefore the less reliable the projections themselves will become.

1. Background

This study, carried out by the Centre for Policy on Ageing, was commissioned by the Runnymede Trust as part of a programme, funded by the Nationwide Foundation, to promote the financial inclusion of Black and ethnic minority older people.

The study looks at the future size and structure of the ethnic minority population of England and Wales with particular emphasis on older people aged 50 and over. It uses, as its classification of ethnicity, the 16 ethnic groups chosen for the 2001 census.

Ethnicity is a 'multi-faceted and changing phenomenon' that may reflect a combination of a number of features including country of birth, nationality, language spoken at home, ancestral country of birth, skin colour, national or geographical origin, racial group and religion. (ONS, 2003)

An individual's ethnicity is a self assessed concept that may change over time and is not the same as country of birth or nationality. Country of birth may sometimes be used as a proxy for ethnicity for recent migrant groups but for second and subsequent generation descendants of migrants, country of birth will be a poor indicator of ethnicity.

Because ethnicity is self assessed, the ethnic composition of England and Wales will change, not only as a result of migration and natural change (births and deaths) but also as a result of changes in perceptions of ethnicity. White, Chinese and the South Asian groups are more consistent in their declarations of ethnicity as are people from all ethnic groups born in the UK. Consistency of declaration is lower among Black Caribbeans, Black Africans and people born abroad. (Platt, Simpson and Akinwale, 2005)

The classification of individual ethnicity will also change between generations. Even when both parents describe themselves as 'White Irish' they may describe a child born in England and Wales as 'White British'. In the 2001 census, only 53% of households with a White Irish 'head' were completely homogeneous (all members of the household were White Irish) but of the 97% of households with a White Irish 'head' that were broadly homogeneous (all members were white) 25% of the diversity was from cases where both parents described themselves as White Irish but described their children as White British. (ONS, 2006)

White: British, 87.32% ■ White: British, 87,32% ■ White: Irish, 1.23% ■ White: Other White, 2.64% ■ Mixed: White and Black Caribbean 0.46% Mixed: White and Black African. 0.15% ■ Mixed: White and Asian, 0.37% Asian or Asian British: Indian, 2.01% Asian or Asian British: Pakistani, 1,39% Asian or Asian British: Bangladeshi, 0.55% Asian or Asian British: Other Asian, 0.47% Black or Black British: Black Caribbean, 1.09% Black or Black British: Black African, 0.95% ■ Black or Black British: Other Black, 0.19% Chinese or Other Ethnic Group: Chinese, 0.45% ■ Chinese or Other Ethnic Group: Other, 0.43%

Chart 1. The ethnic minority population of England and Wales in 2001

Source: ONS, 2001 census

A child born to a 'White British' mother and 'Black Caribbean' father may be described as 'White British', 'Black Caribbean' or 'Mixed – White / Black Caribbean' but children are more likely to transfer into one of the mixed categories than into one of the non-mixed groups. The net result of this is that the mixed groups will have an added impetus of growth and will also have a much younger population age structure.

Even for first generation migrants, the relationship between ethnicity and country of birth can be loose. In the 2001 census, 72% of people born in Northern Ireland but living in Great Britain described themselves as White British with 26% describing themselves as White Irish. Conversely, 10% of those born in the Republic of Ireland but living in Great Britain described themselves as White British with 89% describing themselves as White Irish.

The population projections within this report use the 2001 Census as a starting point, so the classification of ethnicity used in this report will be that adopted for the 2001 Census. The phrase 'ethnic minority population of England and Wales' refers to everyone who is not a member of the 'White British' ethnic group and is synonymous with the term 'Black and Minority Ethnic (BME) population'. Non-white refers to people who are not members of the White British, White Irish or 'Other White' groups.

The 'Other White', 'Other Black', 'Other Asian' and 'Other' ethnic groupings each cover a diverse range of distinctive but less frequently occurring ethnicities that, while just as important as the main groups, cannot be disaggregated in these projections.

This study focuses solely on England and Wales. Census results for Scotland and Northern Ireland are reported separately and the ethnicity classifications adopted in Scotland and Northern Ireland are different from that adopted for England and Wales. (ONS, 2008) It should be noted however that, in 2007, almost all (96%) of United Kingdom residents that were born outside Europe were resident in England and Wales with just 4% resident in Scotland and Northern Ireland.

This report focuses on the older ethnic minority population of England and Wales but a 65 year old in 2051 will have been a 30 year old in 2016 and a 15 year old in 2001. It is only possible to project the older ethnic minority population as part of ethnic minority projections for the population as a whole.

Table 1. Estimated population resident in the United Kingdom, by country of birth, 2007

Country of Birth (thousands)							
Countries of the UK	United Kingdom	Non- United Kingdom	Republic of Ireland	European Union 13	European Union A8	European Union 26	Rest of the World
United Kingdom	53,791	6,342	420	832	589	1,969	4,373
England	44,524	5,862	356	754	514	1,745	4,118
Wales	2,813	129	11	25	16	54	75
Scotland	4,815	255	19	47	36	106	149
Northern Ireland	1,640	95	34	6	23	64	31
England and Wales as % of UK	88%	94%	87%	94%	90%	91%	96%

Source: Annual Population Survey (APS)/Labour Force Survey (LFS); ONS

Note: European Union A8 = Czech Republic, Estonia, Poland, Hungary, Latvia, Lithuania, Slovakia and Slovenia. European Union 13 = Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands,

Portugal, Spain and Sweden

European Union 26 = EU13, the Republic of Ireland, EU A8, Malta, Cyprus, Bulgaria and Romania.

2. Alternative projection methods

The three most common ways of generating population projections are cohort component projections, extrapolation and curve fitting and probabilistic projections.

2.1. Cohort component projections

Cohort component projections are the standard way of projecting population numbers.

Starting from a base year when the population numbers for all ages and for both sexes are fairly well known, for example following a census, population numbers at the end of a specific time period, for example one or five years, are calculated by taking the population numbers at the beginning of the time period, adding births, subtracting deaths and adding net inward migration. If there is a net outflow of migrants, net inward migration will be negative.

Births, deaths and migration are the components of the projection and a population cohort can be followed through into the future by repeating the process for future time intervals.

Estimates of the numbers of births and deaths in the population in each time period will be very much dependent on the age structure of the population and the levels of fertility and mortality for that particular population group. Because of gender differences, the numbers of men and women will have to be projected separately.

Assumptions about fertility, mortality and migration are key determinants of future cohort component projected population numbers and the assumptions made in this report are set out in detail in section 5.

This methodology gives a full future breakdown of the population by age and sex for each ethnic group and is the principal projection method used in this report (section 6).

2.2. Extrapolation and curve fitting

For populations that are developing in a steady way, without any major fluctuations, short and medium term projections can be made by extrapolation from existing data series.

The Office for National Statistics has published mid-year population estimates for ethnic minorities in England and Wales from 2001 to 2007 that fit this criterion.

Linear or non-linear regression techniques, depending on the nature of the data, can be used to fit the best mathematical curve to the existing data, but a simpler method to extrapolate a polynomial curve on a longish series, without specifying it mathematically, is to use differencing methods.

For equally spaced point on a straight line the first level differences will be constant and the second level differences will be zero. For equally spaced points on an exact quadratic curve the first level differences will be linear, the second level differences constant and the third level differences zero and so on for all higher order polynomial curves. If we carry out successive differencing of the data values until the differences approximate to zero, that will determine the order of the polynomial curve that more or less fits the data. We can then set the 'constant' level differences in future to the average of the constant level differences already obtained and reverse the differencing process to obtain future values of the series.

An exponential curve can be fitted by applying a logarithmic transformation to the data series before differencing and an exponential transformation to the generated future values.

The advantage of a projection by extrapolation is that neither a model of how the population will develop nor the component information necessary to fulfil that model are required.

In section 4 we will extrapolate the ONS 2001–2007 ethnic minority mid-year population estimates to 2026.

2.3. Probabilistic projections

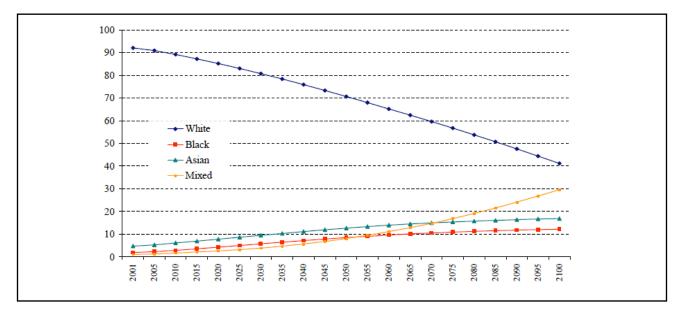
Probabilistic projections are projections using Monte-Carlo methods, repeatedly executing a model applying known probabilities to component input values to determine the likely outcomes of the model as a whole without having to explicitly determine the mathematics of the model. An error probability distribution is assigned to each of the key components of the population projection, such as total fertility, and

the model is repeated hundreds of time assigning values according to the likelihoods ascribed by the probability distributions.

This process not only generates average projection values but also assesses the degree of confidence in these estimates.

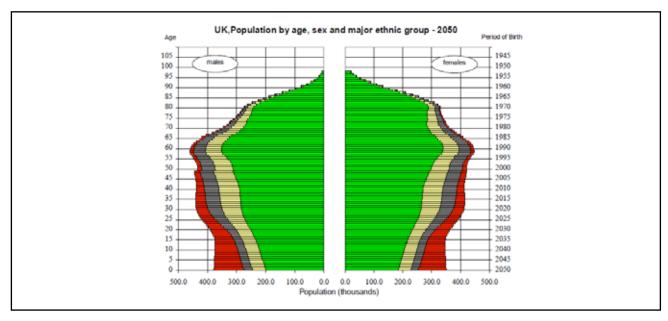
We do not use probabilistic methods in this study but Coleman, in 2007, reported the results of a probabilistic projection using 1,000 runs of a model with amalgamated ethnic groups, 95% bounds defined by Government Actuaries Department (GAD) variant projections, white and 'mixed' fertility converging to 1.85, non-European fertility converging to 2.0, mortality as in the GAD projections, zero net white immigration, non white net immigration of 147 thousand per year, 20% births to black / mixed groups increasing to 55% and 13% birth to Asian groups increasing to 25%. (Coleman, 2007)

Chart 2. Probabilistic projections of the UK – average outcome for major groups (%)



Source: Coleman, 2007

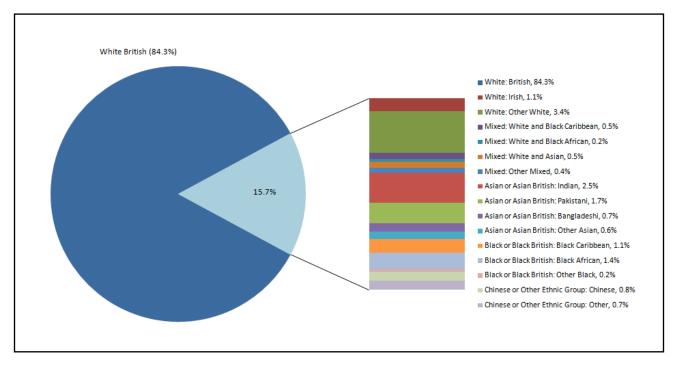
Chart 3. Probabilistic projections of the UK - population by age, sex and major group in 2050



Source: Coleman, 2007

3. The ethnic minority population of England and Wales in 2007

Chart 4. The ethnic minority population of England and Wales in 2007



Source: ONS mid-year population estimates, 2007

One of the key characteristics of the ethnic minority population of England and Wales is that it is not evenly distributed. In 2007 just 14% of the population of England and Wales lived in London but by way of contrast nearly 38% of the ethnic minority population of England and Wales lived in London and over a half (55%) lived in either London or one of the other major conurbations (metropolitan counties) of the West Midlands, Greater Manchester or West Yorkshire.

Individual ethnic groups tend to cluster in particular areas. Regional tables of country of birth for UK residents born overseas for 2007 show that while individuals born in India and Pakistan are more widely spread, those born in Bangladesh form a predominant group in just London and Wales and Jamaicans predominate in London and the West Midlands.

In 2007, nearly one quarter of all Bangladeshis resident in England and Wales (24%) lived in the two London Boroughs of Tower Hamlets and Newham and more than one half of the black ethnic minority population (Black Caribbean – 53%, Black African – 57%, Other Black – 53%) lived in London.

A 2010 study from the by the University of Leeds School of Geography has suggested that in future years, partly driven by economic factors, ethnic minorities will move out of the areas in which they are currently clustered and become more evenly spread across England and Wales. (Wohland, Rees, Norman, Boden and Jasinska, 2010)

Table 2. Countries of the United Kingdom and Government Office Regions of England, five most common countries of birth for people born outside the UK, 2007

United Kingdom Country	Estimate (thousands)
1. India	613
2. Republic of Ireland	420
3. Poland	405
4. Pakistan	377
5. Germany	266

London Country	Estimate (thousands)
1. India	227
2. Republic of Ireland	119
3. Bangladesh	111
4. Poland	105
5. Jamaica	92

North East Country	Estimate (thousands)
1. Germany	10
2. India	10
3. Poland	7
4. Pakistan	6
5. Republic of Ireland	6

South East Country	Estimate (thousands)
1. India	70
2. South Africa	51
3. Republic of Ireland	51
4. Germany	44
5. Poland	42

North West Country	Estimate (thousands)
1. Pakistan	51
2. Republic of Ireland	46
3. India	43
4. Poland	31
5. Germany	25

South West Country	Estimate (thousands)
1. Germany	27
2. Poland	21
3. Republic of Ireland	21
4. India	20
5. South Africa	18

Yorkshire and The Humber Country	Estimate (thousands)
1. Pakistan	72
2. India	33
3. Poland	32
4. Germany	22
5. Republic of Ireland	16

East Midlands Country	Estimate (thousands)
1. India	60
2. Poland	41
3. Republic of Ireland	20
4. Germany	19
5. Pakistan	15

West Midlands Country	Estimate (thousands)
1. India	79
2. Pakistan	74
3. Republic of Ireland	40
4. Poland	30
5. Jamaica	27

East Country	Estimate (thousands)
1. Poland	41
2. India	39
3. Republic of Ireland	37
4. United States of America	35
5. Germany	27

England Country	Estimate (thousands)
1. India	581
2. Pakistan	358
3. Republic of Ireland	356
4. Poland	351
5. Germany	232

Wales Country	Estimate (thousands)
1. Germany	12
2. Republic of Ireland	11
3. Poland	11
4. India	9
5. Bangladesh	5

Scotland Country	Estimate (thousands)
1. Poland	28
2. Germany	22
3. Republic of Ireland	19
4. India	18
5. United States of America	14

Northern Ireland Country	Estimate (thousands)
1. Republic of Ireland	34
2. Poland	15
3. India	6

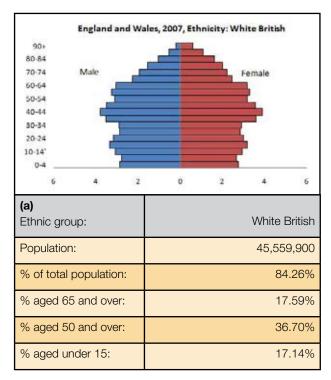
Source: Annual Population Survey (APS)/Labour Force Survey (LFS); ONS

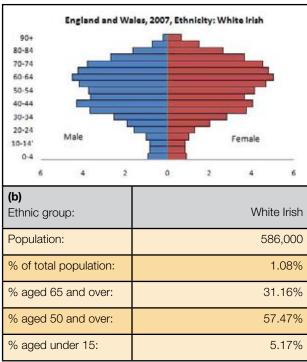
3.1. Age structure of the ethnic minority population in 2007

The size and age structure of individual ethnic groups varied considerably in 2007, as shown by the following summary tables and population pyramids. Each table shows the size of the ethnic group, what percentage that is of the population of England and Wales, and the percentage of each group that are aged 50 and over, 65 and over, or under 15. There is wide variation in the age structures of the ethnic minority populations with the percentage aged 65 and over ranging from two to thirty one percent. Those describing themselves as White Irish have an older population structure whereas the Bangladeshi population, for example, is much younger.

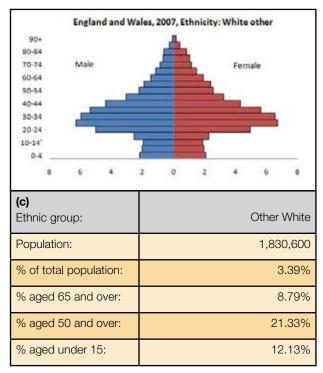
In the population pyramids, throughout this report, to make the diagrams more readable, only alternative bars have been labelled. For example the 60–64 and 70–74 age range bars are labelled but the intermediate 65–69 age range bar does not have a label.

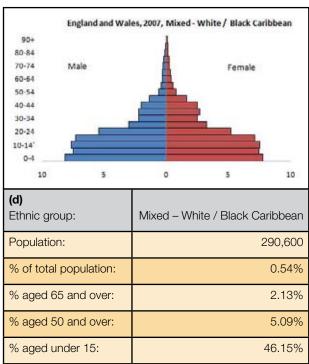
Chart 5. Age structure of ethnic minority groups, England and Wales, 2007



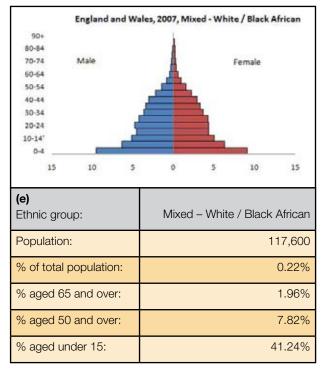


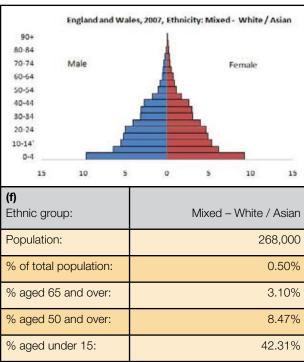
The very small numbers of children described as White Irish (5%) may be due, at least in part, to adults describing themselves as White Irish but their children, born in England and Wales, as White British. The White British and White Irish have ageing population structures and already, in 2007, well over one third of the White British population (37%) are aged 50 and over and nearly one third of the White Irish population (31%) are aged 65 and over.



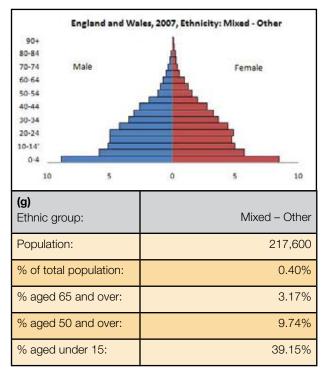


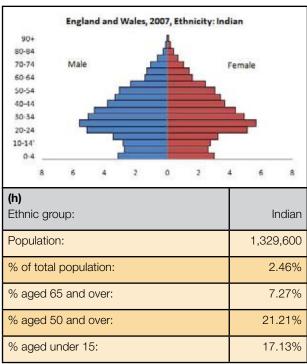
The relatively small number of young children in the 'Other White' group, despite a high proportion of child-bearing age, may reflect the influence of a transient population of economic migrants from the rest of Europe who have come to the UK to work but not to settle and have children or it may reflect ethnic transfer and the classification of the children of 'Other White' parents as 'White British'.



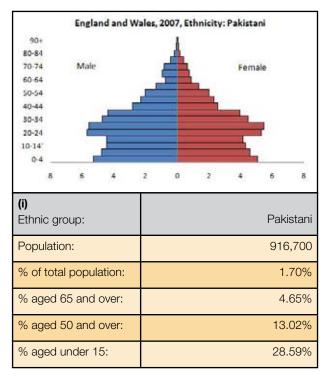


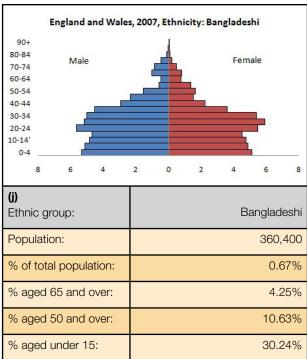
The mixed ethnic groups all have very few older people but higher proportions of children (39-46%) aged under 15, and particularly under the age of 5. This may reflect the fact that children are more likely to belong to a mixed ethnic group than their parents.



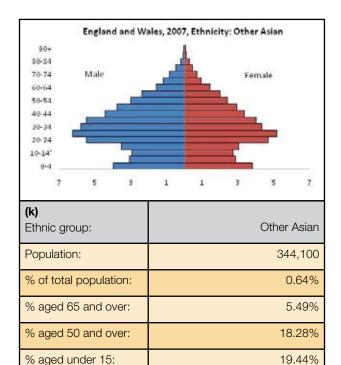


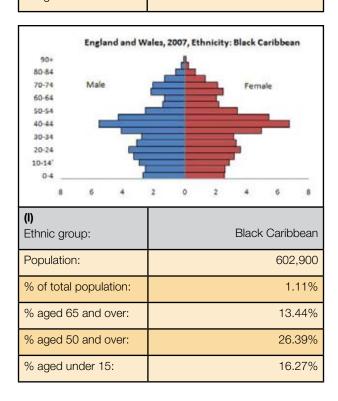
The longer established Indian ethnic minority population shows characteristics of an older population and lower fertility than all other Asian ethnic minority groups with 7% aged 65 and over, 21% aged 50 plus and 17% under the age of 15.



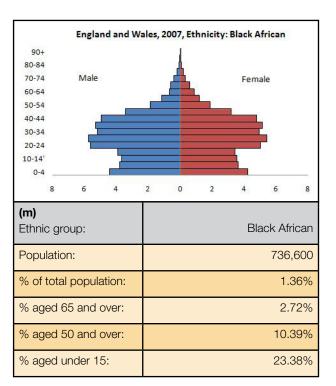


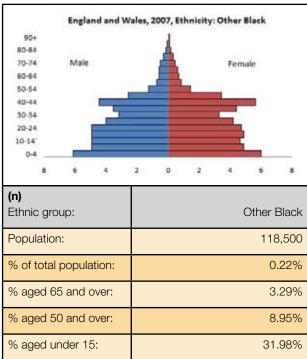
The Pakistani and Bangladeshi ethnic groups both show characteristics of high fertility with a relatively young age structure and around 30% of both populations being under the age of 15. The blip in the numbers of Bangladeshi men aged 55 to 64 may reflect the fact that these men would have been born during the period of the second world war and partition of the Indian sub-continent and would have been young men of fighting age at the time of the civil war that led to the creation of Bangladesh in 1971.



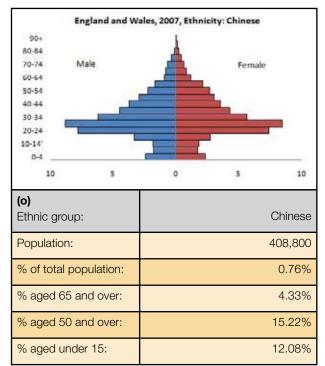


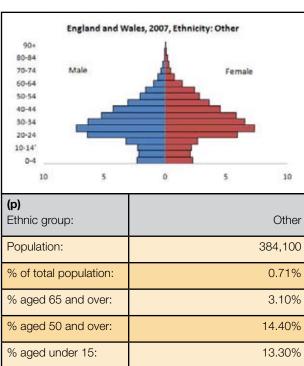
The 'Other Asian' ethnic group has a noticeable excess of males over females with 54.6% male to 45.4% female overall and 55.6% male to 44.4% female in the age range 15 to 64.





The Black African and 'Other Black' ethnic groups again show characteristics of high fertility and a relatively young age structure with only 2-3% aged 65 and over but with an increasing middle aged cohort with 9-10% aged 50 and over. Over one fifth (23%) of Black Africans and nearly one third (32%) of the 'Other Black' ethnic minority group were under the age of 15 in 2007.





In 2007 the Chinese and diverse 'Other' ethnic groups have similar population age structures with low numbers of children and young people (12-13% aged under 15) and also low numbers of older people (14-15% aged 50 and over, 3-4% aged 65 plus).

Ethnic minority groups are generally young populations with less than one fifth aged 50 and over and fewer than one in ten aged 65 and over. The exceptions are the White Irish with 57% aged 50 and over, White British with 37%, the Black Caribbeans with 26% and the 'White Other' and Indian ethnic minority groups each with 21% aged 50 and over. All other ethnic groups, in 2007, had less than 20% of their population aged 50 and over and less than 10% of their population aged 65 and over, although our projections will show how this situation is likely to change in the future.

4. Ethnic minority population projections by extrapolation to 2026

The UK Office for National Statistics has published mid-year population estimates, for the period 2001–2007, for all ethnic groups as defined in the 2001

census. In this section we will extrapolate these midyear population estimates to derive ethnic minority ethnic population projections to 2026.

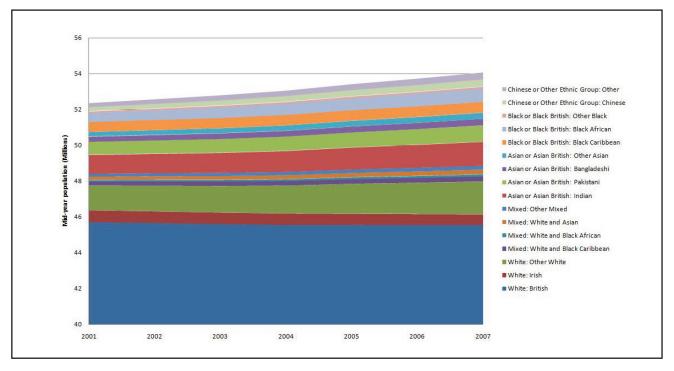
Table 3. Mid-year population estimates by ethnic group 2001-2007, England and Wales (Millions)

Ethnic group	2001	2002	2003	2004	2005	2006	2007
All Groups	52.360	52.572	52.797	53.057	53.419	53.729	54.072
White: British	45.719	45.668	45.610	45.570	45.567	45.557	45.560
White: Irish	0.647	0.637	0.628	0.619	0.608	0.597	0.586
White: Other White	1.380	1.435	1.489	1.558	1.670	1.749	1.831
Mixed: White and Black Caribbean	0.240	0.248	0.257	0.265	0.273	0.282	0.291
Mixed: White and Black African	0.081	0.086	0.092	0.098	0.104	0.111	0.118
Mixed: White and Asian	0.192	0.203	0.214	0.226	0.239	0.253	0.268
Mixed: Other Mixed	0.159	0.167	0.176	0.185	0.196	0.206	0.218
Asian or Asian British: Indian	1.054	1.083	1.119	1.167	1.227	1.277	1.330
Asian or Asian British: Pakistani	0.728	0.751	0.773	0.804	0.835	0.871	0.917
Asian or Asian British: Bangladeshi	0.287	0.297	0.308	0.319	0.330	0.345	0.360
Asian or Asian British: Other Asian	0.247	0.264	0.280	0.295	0.314	0.328	0.344
Black or Black British: Black Caribbean	0.572	0.577	0.584	0.589	0.593	0.598	0.603
Black or Black British: Black African	0.495	0.536	0.583	0.625	0.664	0.700	0.737
Black or Black British: Other Black	0.098	0.101	0.105	0.108	0.111	0.115	0.119
Chinese or Other Ethnic Group: Chinese	0.233	0.262	0.293	0.322	0.355	0.382	0.409
Chinese or Other Ethnic Group: Other	0.228	0.257	0.289	0.307	0.332	0.359	0.384

Source: ONS mid-year population estimates (table EE5)

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Chart 6. Mid-year population by ethnic group, England and Wales, 2001 - 2007



Source: ONS mid-year population estimates (table EE5)

Table 4. Percentage change in overall population size since 2001, by ethnic group, England and Wales.

	2002	2003	2004	2005	2006	2007
Chinese or Other Ethnic Group: Chinese	+12.13	+25.38	+38.11	+51.99	+63.82	+75.23
Chinese or Other Ethnic Group: Other	+13.01	+26.80	+34.89	+45.87	+57.64	+68.76
Black or Black British: Black African	+8.32	+17.80	+26.37	+34.11	+41.46	+48.84
Mixed: White and Black African	+6.57	+14.13	+21.56	+29.37	+37.30	+45.72
Mixed: White and Asian	+5.52	+11.50	+17.48	+24.56	+31.69	+39.44
Asian or Asian British: Other Asian	+6.55	+13.06	+19.33	+27.01	+32.51	+39.14
Mixed: Other Mixed	+5.23	+10.91	+16.83	+23.33	+30.01	+37.20
White: Other White	+4.02	+7.91	+12.91	+21.05	+26.77	+32.68
Asian or Asian British: Indian	+2.80	+6.14	+10.68	+16.42	+21.13	+26.16
Asian or Asian British: Pakistani	+3.05	+6.10	+10.43	+14.66	+19.62	+25.85
Asian or Asian British: Bangladeshi	+3.56	+7.28	+11.19	+15.13	+20.08	+25.62
Mixed: White and Black Caribbean	+3.33	+6.70	+10.19	+13.73	+17.26	+20.88
Black or Black British: Other Black	+2.85	+6.52	+9.89	+13.46	+16.92	+20.80
Black or Black British: Black Caribbean	+0.82	+1.97	+2.95	+3.65	+4.42	+5.33
White: British	-0.11	-0.24	-0.33	-0.33	-0.35	-0.35
White: Irish	-1.42	-2.83	-4.30	-5.91	-7.63	-9.36

Source: ONS mid-year population estimates (table EE5)

Table 5. Estimated actual population change by ethnic group since 2001, England and Wales

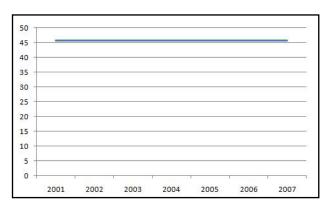
	2002	2003	2004	2005	2006	2007
White: Other White	55,500	109,100	178,100	290,400	369,300	450,900
Asian or Asian British: Indian	29,500	64,700	112,600	173,000	222,700	275,700
Black or Black British: Black African	41,200	88,100	130,500	168,800	205,200	241,700
Asian or Asian British: Pakistani	22,200	44,400	76,000	106,800	142,900	188,300
Chinese or Other Ethnic Group: Chinese	28,300	59,200	88,900	121,300	148,900	175,500
Chinese or Other Ethnic Group: Other	29,600	61,000	79,400	104,400	131,200	156,500
Asian or Asian British: Other Asian	16,200	32,300	47,800	66,800	80,400	96,800
Mixed: White and Asian	10,600	22,100	33,600	47,200	60,900	75,800
Asian or Asian British: Bangladeshi	10,200	20,900	32,100	43,400	57,600	73,500
Mixed: Other Mixed	8,300	17,300	26,700	37,000	47,600	59,000
Mixed: White and Black Caribbean	8,000	16,100	24,500	33,000	41,500	50,200
Mixed: White and Black African	5,300	11,400	17,400	23,700	30,100	36,900
Black or Black British: Black Caribbean	4,700	11,300	16,900	20,900	25,300	30,500
Black or Black British: Other Black	2,800	6,400	9,700	13,200	16,600	20,400
White: Irish	-9,200	-18,300	-27,800	-38,200	-49,300	-60,500
White: British	-51,000	-108,700	-148,900	-152,400	-162,000	-159,100

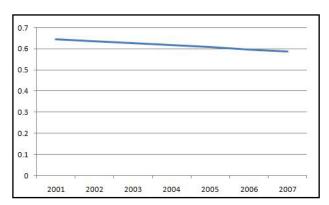
Source: ONS mid-year population estimates (table EE5)

For the period 2001 to 2007, the ethnic group that has grown most rapidly in proportion to its initial size is Chinese followed by Other, Black African and Mixed – White / Black African. The ethnic groups that are in decline are White British and White Irish.

The ethnic group that has grown most rapidly in terms of actual size, between 2001 and 2007 in England and Wales, is 'Other White' followed by Indian, Black African, Pakistani and Chinese. The groups that have declined in size are White Irish and White British.

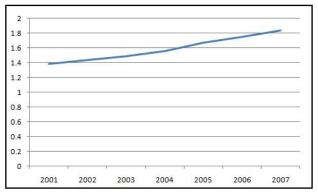
Chart 7. Mid-year population estimates by ethnic group, England and Wales





(a) White British

(b) White Irish





0.35

0.3

0.25

0.2

0.15

0.1

0.05

2001

2002

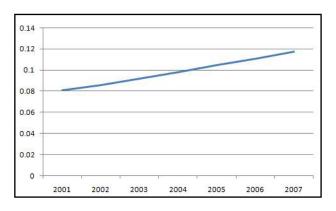
2003

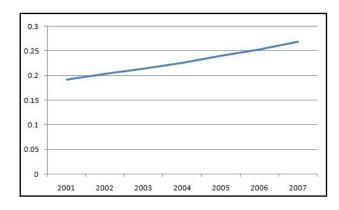
2004

2005

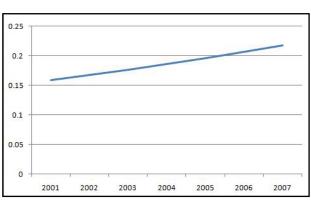
2006

2007



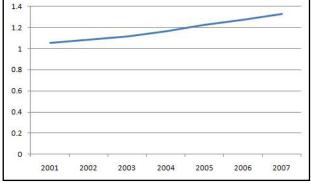


(e) Mixed - White/Black African

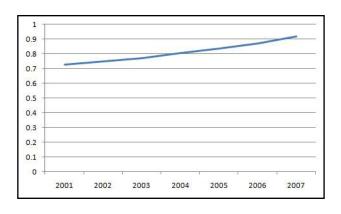




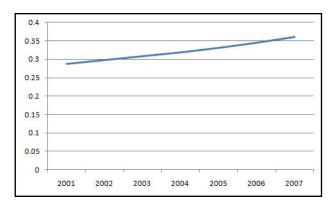
(f) Mixed - White/Asian



(g) Other mixed

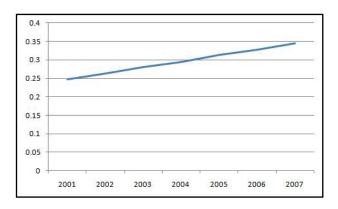


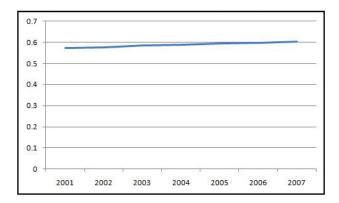
(h) Indian



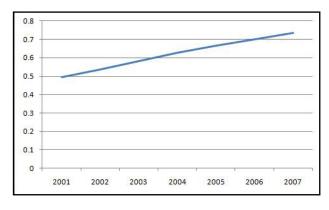
(i) Pakistani

(j) Bangladeshi

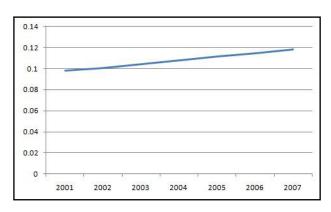




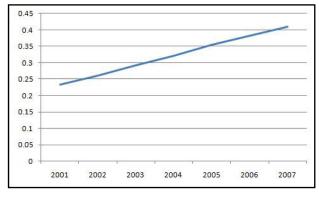
(k) Other Asian



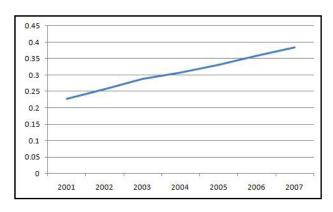
(I) Black Caribbean



(m) Black African



(n) Other Black



(o) Chinese

Plausible short-term ethnic minority population projections can be made by extrapolation from the individual 2001–2007 graphs above. Higher order polynomial curves can be fitted by repeated differencing. Quadratic curves were found to be a good fit for all but the White British and White Irish ethnic groups where, although a quadratic fitted the declining 2001–2007 numbers well enough, by the nature of quadratics the projected numbers reached a minimum then began to increase in an unlikely way. Exponential curves fitted following logarithmic transformation provided plausible projections for the White British and White Irish ethnic groups but projected more rapid growth for the other individual

(p) Other

ethnic groups so that the total population was well over ONS principal projections by 2026.

The projections that follow use exponential projection for the White Irish and White British ethnic groups with polynomial (quadratic) projections for the other groups. These projections fit the individual ethnic minority group data well and also fit well with ONS principal projections for the overall population. The total projected population of 57.5 million in 2016 is within 0.2% of the principal ONS projection of 57.6 million for that year and the total projected population of 62.9 million in 2026 is 2.1% above the equivalent ONS principal population estimates.

65 Other 60 Black-Other 55 Black African Black Caribbean Population (millions) Other Asian 50 ■ Bangladeshi ■ Pakistani 45 **■** Indian Mixed-Other Mixed-White/Asian 40 ■ Mixed-White/Black African ■ Mixed-White/Black Caribbean 35 ■ White other ■ White Irish ■ White British \$\$\forall \text{\$\phi_{\text{\text{\$\phi_{\text{\text{\$\phi_{\text{\$\phi_{\text{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\etin_{\text{\$\etin_{\text{\$\etin_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\etin_{\text{\$\phi_{\text{\$\phi_{\text{\$\phi_{\text{\$\etilitingleta}}\eta}\text{\$\phi_{\text{\$\etilitingleta}}\eta}\text{\$\phi_{\text{\$\phi_{\text{\$\etilitingleta}\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\text{\$\eta}\t

Chart 8. Ethnic minority population projections by extrapolations to 2026

The advantage of projection by extrapolation is that separate fertility, mortality and migration information is not required and the individual errors from fertility, mortality and migration assumptions may, to some extent, be cancelled out.

The disadvantage is that the projections above are not disaggregated by age and sex and, while reasonably reliable to 2015, are likely to be less so for later years.

Based on these projections, Black and minority ethnic groups who made up 12.7% of the population in 2001 and 15.7% in 2007 will make up 21.2% of the population of England and Wales in 2016 and 28.4% by 2026. Non-white ethnic groups who made up 8.8% of the population in 2001 and 11.3% in 2007 will make up 15.6% of the population of England and Wales in 2016 and 21% by 2026.

Table 6. Ethnic minority population projections by extrapolation to 2026

		2016		2026
Ethnic group	Population	% of total	Population	% of total
White British	45,322,288	78.8%	45,059,727	71.6%
White Irish	505,698	0.9%	429,312	0.7%
White Other	2,732,760	4.8%	4,228,260	6.7%
Mixed - White / Black Caribbean	374,420	0.7%	480,920	0.8%
Mixed – White / Black African	190,400	0.3%	299,900	0.5%
Mixed – White / Asian	435,780	0.8%	704,280	1.1%
Other mixed	343,960	0.6%	543,460	0.9%
Indian	1,964,600	3.4%	3,115,100	5.0%
Pakistani	1,529,620	2.7%	2,656,620	4.2%
Bangladeshi	549,020	1.0%	867,520	1.4%
Other Asian	515,220	0.9%	712,220	1.1%
Black Caribbean	658,900	1.1%	731,400	1.2%
Black African	1,039,580	1.8%	1,288,080	2.0%
Other Black	161,500	0.3%	228,500	0.4%
Chinese	630,680	1.1%	844,180	1.3%
Other	575,720	1.0%	706,220	1.1%

5. The elements of ethnic minority cohort component population projection

In section 6 we will give the results of a cohort component projection of ethnic minority numbers and population age structures to 2051. In this section we look at the components of that projection, fertility, mortality, migration and transfer between groups and the assumptions that feed into the projections.

5.1. Ethnic minority – fertility

The first key element to determine the future population size of ethnic minority groups in England and Wales is fertility.

Fertility, the propensity to bear children, varies over time and between ethnic groups. In recent years, women resident in England and Wales but born outside the UK have each had, on average, a greater number of children than those born within the UK.

Table 7. Estimated Total Fertility Rates^{1,2} for UK born and non-UK born women living in England and Wales, 2004 to 2008

Country of birth	2004	2005	2006	2007	2008
UK	1.68	1.69	1.76	1.79	1.84
Outside UK	2.50	2.48	2.43	2.54	2.51
All	1.79	1.80	1.87	1.92	1.96

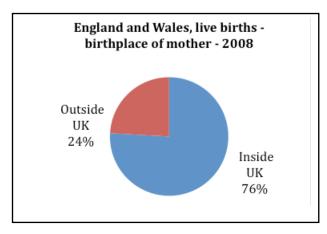
¹ The Total Fertility Rate (TFR) is the average number of live children that a group of women would bear if they experienced the age-specific fertility rates of the calendar year in question throughout their childbearing lifespan.

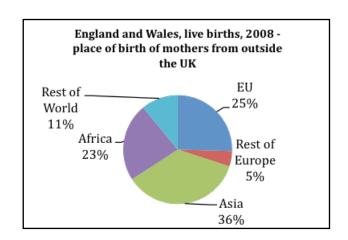
Source: ONS, Birth Registrations and Annual Population Survey

² These estimated Total Fertility Rates for UK and non-UK born women have been produced using estimated populations from the Annual Population Survey (APS) for the denominators and therefore differ slightly from published rates that use the midyear population estimate as the denominator.

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Chart 9. Birthplace of mother





Source: ONS

Table 8. Age specific fertility rates of ethnic groups, UK 1996-2006 - Coleman and Dubuc, 2010

	15-19	20-24	25-29	30-34	35-39	40-44	45-49	TFR
White British	0.024	0.070	0.097	0.096	0.046	0.010	0.001	1.718
White other	0.013	0.043	0.069	0.099	0.060	0.015	0.001	1.499
Mixed	0.028	0.078	0.076	0.093	0.055	0.015	0.000	1.731
Indian	0.003	0.053	0.117	0.104	0.043	0.008	0.000	1.643
Pakistani	0.022	0.144	0.185	0.139	0.067	0.017	0.002	2.877
Bangladeshi	0.035	0.207	0.188	0.131	0.067	0.025	0.005	3.288
Other Asian	0.012	0.064	0.100	0.123	0.059	0.019	0.001	1.888
Black Caribbean	0.034	0.088	0.083	0.088	0.060	0.022	0.003	1.891
Black African	0.018	0.077	0.141	0.134	0.080	0.028	0.006	2.419
Other Black	0.033	0.091	0.091	0.081	0.080	0.034	0.000	2.053
Chinese	0.005	0.015	0.053	0.110	0.065	0.012	0.000	1.305
Other	0.021	0.071	0.113	0.107	0.069	0.020	0.004	2.030
All Groups	0.022	0.068	0.099	0.098	0.047	0.010	0.001	1.719

Source: Labour Force Survey, Own-Child method - Coleman and Dubuc, 2010

Age specific fertility rates, the average number of children born to women of a particular age, cannot be determined directly, from currently published data, for individual ethnic groups in England and Wales.

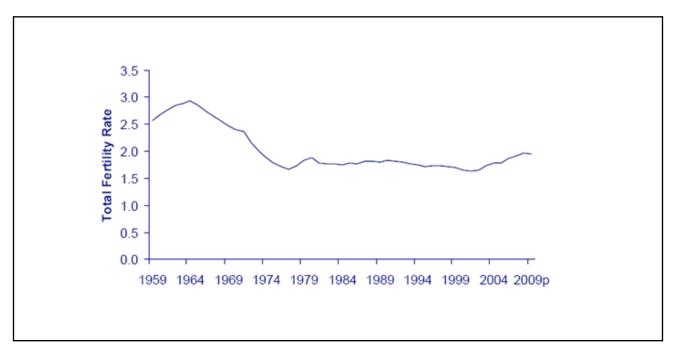
In January 2010, Coleman and Dubuc published age specific fertility rates (ASFRs) and the total fertility rate (TFR) for individual ethnic groups for the period 1996-2006, using data from the Labour Force Survey and an indirect process called the 'own child' method. The 'own child' methods uses household survey data and a 'matching' program developed at the East-West Center in Hawaii to link women to their likely offspring and thereby estimate age specific and total

fertility rates. (Coleman and Dubuc, 2010)

In the absence of positive net migration and to offset mortality, a total fertility rate (TFR) of at least 2.1 would be required to maintain existing population levels. Each woman would need to have, on average, a little over two children in her lifetime. The total fertility rates in the table above would imply a declining population for all but the Pakistani, Bangladeshi and Black African ethnic groups.

Fertility rates can however vary considerably over time and the period around 2001 marked a low point in fertility rates in England and Wales.

Chart 10. Total Fertility Rate (TFR) in England and Wales, 1959 - 2009

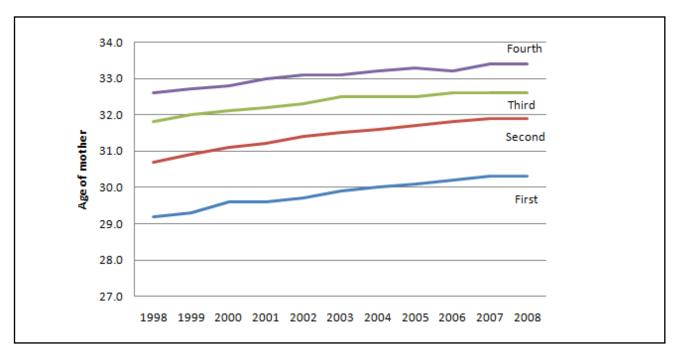


Source: ONS (2009 figures are provisional)

The total fertility rate for the whole population fell from a peak of 2.93 in 1964 to a low of 1.63 in 2001 before rising again to 1.97 in 2008.

Women are, on average, having their first child later in life which might imply, with the consequent shorter total period for all conceptions, that average family size may never recover to 1964 levels.

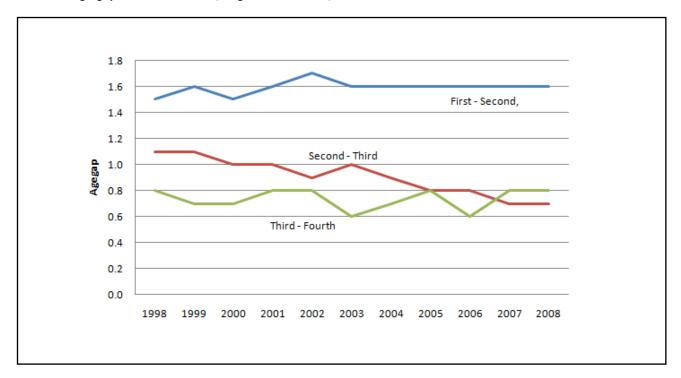
Chart 11. Age of mother at birth of child, England and Wales



Source: ONS

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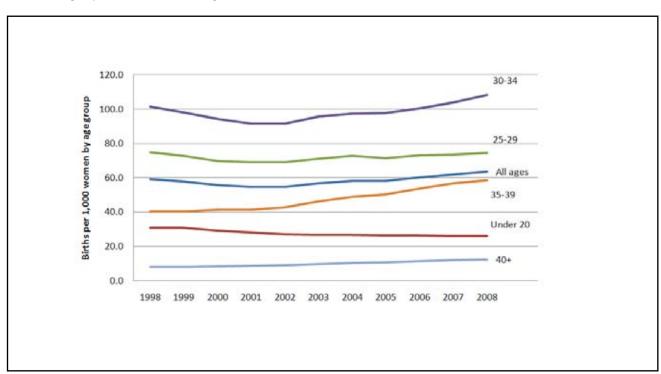
Chart 12. Age gap between children, England and Wales, 1998 - 2008



Source: ONS

The age gap between the second and third child is, however, falling and the fertility rate for the over 40s, while remaining the lowest, is rising faster than for any other age group.

Chart 13. Age specific birth rates, England and Wales, 1998 - 2008



Source: ONS

170 160 40+ 150 140 35-39 130 30-34 120 110 25-29 100 20-24 90 80 under 20 70 1998 2000 2001 2002 2003 2004 2005 2006 2007 2008

Chart 14. Index of age specific fertility rates, England and Wales, 1998=100

Source: ONS

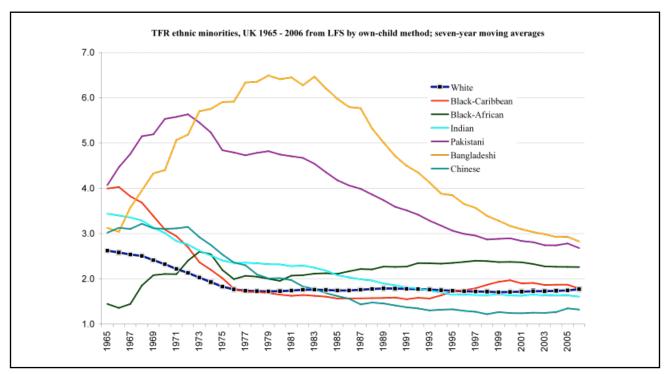
Deferring initial childbirth may cause a temporary drop in overall births and birth rates but may also eventually lead to a new stability, albeit at a lower overall birth rate than before. It is, however, difficult to predict at what level overall future fertility rates may stabilise.

It might also be assumed that, over time, ethnic minority groups will move closer to the fertility patterns of the majority population. (Coleman and Dubuc, 2008)

For the purposes of our population projection we will assume that ethnic minority groups will continue to maintain the fertility differentials described by Coleman and Dubuc in table 8, and that overall fertility for England and Wales will continue to rise, following current trends until about 2013, then level off before beginning to fall back.

Chart 15. TFR trends of UK ethnic minority populations 1965 – 2006

Data from Labour Force Survey by own-child method, 7-year moving averages. NB estimates before 1980 based on small numbers.



Source: Coleman and Dubuc, Ethnic change in the populations of the developed world. Barcelona, 2008

5.2. Ethnic minority – mortality

The second key element to determine the future population size of ethnic minority groups in England and Wales is current and future mortality rates.

As for fertility, mortality rates are not directly available for individual ethnic minority groups and so population projections for ethnic minorities have, in the past, commonly assumed that ethnic minority mortality is the same as for the majority population.

Recent work by Rees and Wohland has produced indirect estimates of life expectancy at birth for individual ethnic minority groups. Ethnic minority groups settle disproportionately in different parts of the country and because overall life expectancy also

varies by locality, best estimates of the contribution of each ethnic group to local life expectancies and from that the life expectancies of individual ethnic groups can be estimated. Rees and Wohland call this process the GWM or Geographically Weighted Method.

Rees and Wohland also produce alternative estimates of life expectancy at birth for individual ethnic minority groups by relating mortality to levels of self-reported ill health (limiting long-term illness) in the 2001 census. This Standardised Illness Ratio (SIR) method generally (in around two thirds of cases) produces slightly lower estimates than the GWM method above. (Rees and Wohland, 2008; Rees, Wohland and Norman, 2009)

Table 9. Life expectancy at birth by ethnic group, England, 2001, estimated by the GWM method

Ethnic Group	Males	Females
All	76.2	80.6
White British	76.2	80.6
White Irish	75.8	80.6
White other	76.3	80.9
Mixed – White / Black Caribbean	75.5	80.3
Mixed – White / Black African	75.4	80.4
Mixed – White / Asian	76.1	80.7
Other mixed	75.9	80.6
Indian	75.9	80.4
Pakistani	75.0	79.8
Bangladeshi	74.6	79.8
Other Asian	75.9	80.7
Black Caribbean	75.2	80.2
Black African	75.1	80.2
Other black	75.4	80.1
Chinese	75.7	80.5
Other	75.9	80.8

Source: Rees and Wohland, 2008

Chart 16. Period life expectancy at birth, England and Wales, 1981 - 2058

Source: ONS interim life tables

Notes: Based on historical mortality rates from 1981 to 2008 and assumed calendar year mortality rates from the 2008-based principal projections.

Period life expectancy at birth for a particular year is the length of time someone would, on average, expect to live if they were to experience, at each age, the current year's chance of dying at that age.

Life expectancy at any age will generally improve over time for both males and females.

The mortality element of ethnic minority cohort component population projections requires, for each ethnic group and for males and females separately, information on age specific survival rates, the proportion of people who survive from each age or age group to the next.

Usually, life expectancies and survival rates are provided by, or calculated from, life tables. Life tables for England and Wales were formerly published by the Government Actuary's Department (GAD) and are now published by the Office for National Statistics (ONS). Life tables are not published for individual ethnic groups.

Table 10. Interim life tables

eriod expe		gland & Wal	25							
ased on di	ctation of life ata for the yea	ars 2006-2008						Office for	National S	Statistics
Age	Age Males Female						emales			
x	m _x	q_x	l_x	d _x	e _x	m _x	q_{χ}	l _x	d _x	e _x
0	0.005386	0.005371	100000.0	537.1	77.68	0.004401	0.004391	100000.0	439.1	81.84
1	0.000396	0.000396	99462.9	39.3	77.10	0.000346	0.000346	99560.9	34.5	81.20
2	0.000233	0.000233	99423.5	23.2	76.13	0.000198	0.000198	99526.4	19.8	80.23
3	0.000167	0.000167	99400.3	16.6	75.15	0.000160	0.000160	99506.7	15.9	79.24
4	0.000137	0.000137	99383.8	13.6	74.16	0.000121	0.000121	99490.8	12.1	78.25
5	0.000133	0.000133	99370.2	13.3	73.17	0.000100	0.000100	99478.7	9.9	77.26
6	0.000106	0.000106	99356.9	10.6	72.18	0.000098	0.000098	99468.8	9.7	76.27
7	0.000100	0.000100	99346.3	10.0	71.19	0.000078	0.000078	99459.1	7.7	75.28
8	0.000126	0.000126	99336.4	12.6	70.20	0.000089	0.000089	99451.3	8.9	74.28
9	0.000120	0.000120	99323.8	12.0	69.21	0.000076	0.000076	99442.4	7.6	73.29
10	0.000102	0.000102	99311.9	10.1	68.22	0.000091	0.000091	99434.8	9.1	72.30
11	0.000115	0.000115	99301.8	11.4	67.22	0.000094	0.000094	99425.8	9.3	71.30
12	0.000117	0.000117	99290.4	11.6	66.23	0.000102	0.000102	99416.4	10.1	70.31
13	0.000159	0.000159	99278.8	15.8	65.24	0.000118	0.000118	99406.3	11.7	69.32
14	0.000177	0.000177	99263.0	17.5	64.25	0.000116	0.000116	99394.6	11.5	68.32
15	0.000231	0.000231	99245.5	22.9	63.26	0.000147	0.000147	99383.1	14.6	67.33
16	0.000337	0.000337	99222.6	33.4	62.27	0.000170	0.000170	99368.5	16.9	66.34
17	0.000492	0.000492	99189.2	48.8	61.29	0.000231	0.000231	99351.6	23.0	65.35
18	0.000546	0.000546	99140.3	54.2	60.32	0.000256	0.000256	99328.7	25.4	64.37
19	0.000595	0.000595	99086.2	59.0	59.36	0.000250	0.000250	99303.3	24.8	63.38
20	0.000660	0.000660	99027.2	65.3	58.39	0.000235	0.000235	99278.4	23.3	62.40
21	0.000624	0.000624	98961.9	61.7	57.43	0.000258	0.000258	99255.1	25.6	61.41
22	0.000661	0.000661	98900.1	65.3	56.47	0.000249	_0.000249	99229.5	24.7	60.43
23	0.000662	-	98834.8		55.50	0.000243	20243	992	24.1	
$\overline{}$	1.000675		28769.4		5454	0.000			07.0	

In the longer term, the health and mortality patterns of ethnic minority groups might be expected to converge with those of the majority population. In the short and medium term, life expectancies are different, but the life expectancies published by Rees and Wohland could have arisen from many alternative life tables and age specific survival rates.

It might however be assumed that gender specific life tables for individual ethnic groups will change over time in much the same way as those for the whole population but that ethnic groups, with differing life expectancies, are joining in at different points on the life table trajectory.

In the long term this may be less true as ethnic minority health and mortality patterns catch up with those of the majority. Experiencing a generally healthier and wealthier environment may cause some ethnic groups with worse mortality to traverse the life table trajectory at a faster rate than the majority population but social and lifestyle factors that affect health and mortality, for example the high smoking rate among Bangladeshi men, may help to maintain the differential.

From ONS published life expectancies for England only (to match the Rees and Wohland life expectancies), for projections starting from 2001, the life table trajectory starting years for each ethnic group are shown in Table 11.

The Office for National Statistics has published tables of period life expectancies for the population of England and Wales for all ages from 0 to 95 and all years from 1981 to 2058. These are based on historical mortality rates from 1981 to 2008 and assumed calendar year mortality rates from the 2008-based principal projections. From these tables, life table values can be reverse engineered and five year survival rates calculated.

Using the processes and starting points outlined above, these tables provide a trajectory of life table values and age specific survival rates for individual ethnic groups to feed into ethnic minority population projections.

Table 11. Life table trajectory start years

Ethnic Group	Male	Female
White British	2002	2001
White Irish	2001	2001
White other	2003	2003
Mixed – White / Black Caribbean	2000	2000
Mixed – White / Black African	1999	2000
Mixed – White / Asian	2002	2003
Other mixed	2001	2001
Indian	2001	2000
Pakistani	1998	1998
Bangladeshi	1996	1998
Other Asian	2001	2003
Black Caribbean	1999	1999
Black African	1998	1999
Other black	1999	1999
Chinese	2000	2000
Other	2001	2003

5.3. Ethnic minority – migration

The third element of ethnic minority cohort component population projections is migration.

As for fertility and mortality, migration information is not usually published directly for individual ethnic groups. In addition, migration patterns are much more erratic and less predictable than fertility or mortality patterns and may be changed significantly by changes in government policy.

Migration to and from other countries of the European Union is unrestricted but inward migration from the rest of the world has, since 2008, been subject to a points-based system and is likely, in future to be also subject to caps. It is the coalition government's declared intention to reduce non-EU net immigration to the levels experienced in the 1990s. (Migration Advisory Committee, June 2010)

For the UK as a whole, since 2004 there has been rapid and substantial variation in migration to and from the new accession states of the European Union varying from a net inflow of over 80,000 in

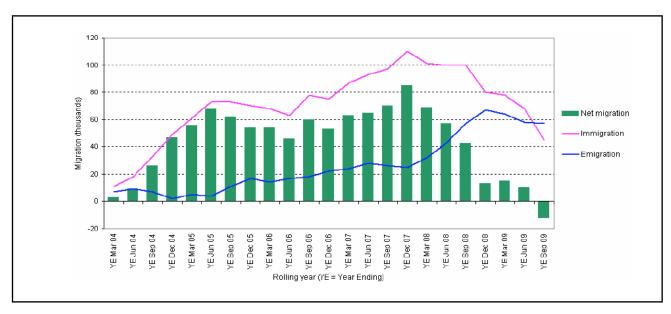
the twelve months to December 2007 to a net outflow in the twelve months to September 2009 (see chart 17).

The main source of migration information is the International Passenger Survey, a random sample of around 1 in 400 people entering or leaving at UK ports. (Boden and Rees, 2008)

A long term migrant is one who stays at their destination (the UK or abroad) for one year or longer. IPS respondents are asked their 'intended length of stay' and the Office for National Statistics generate estimates of Long Term International Migration (LTIM) from the IPS data after adjusting for migration from Northern Ireland and the Irish Republic, asylum seekers, visitors who stay for less than one year when originally intending to stay longer and visitors who stay for longer than one year when originally declaring their intention to stay for less. The IPS data is subject to sampling error.

Asylum seekers currently form only a small proportion of long-term inward migrants, making up 6% or less in every year from 2004 to 2008 (see chart 19).

Chart 17. International Passenger Survey long-term international migration estimates for European Union A8 citizens, UK, 2004-2009

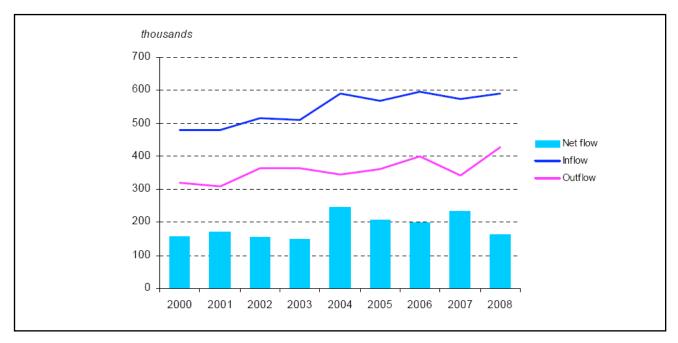


Source: ONS Migration Statistics Quarterly Report, May 2010

Note: European Union A8 = Czech Republic, Estonia, Poland, Hungary, Latvia, Lithuania, Slovakia and Slovenia.

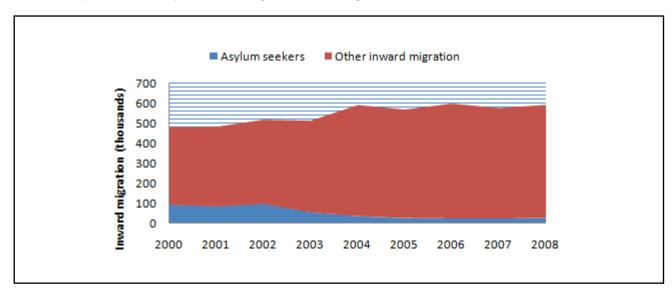
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Chart 18. Long-Term International Migration estimates, 2000 - 2008



Source: ONS et al, Migration Statistics 2008, Annual Report, 2009

Chart 19. Asylum seekers as part of total long-term inward migration, 2000 - 2008



Source: ONS et al, Migration Statistics 2008, Annual Report, 2009

An alternative source of migration data is National Insurance number allocations to adult overseas nationals published by the Department for Work and Pensions (chart 20).

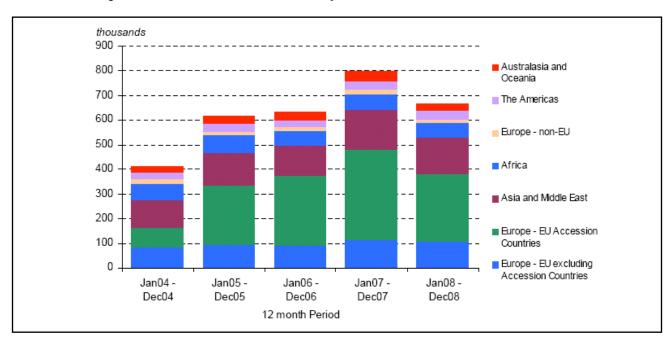
Because it does not distinguish between visitors and migrants NINo data is not used in official migration estimates but it does give an indication of the origins of people wishing to work in the UK.

The levels of unauthorised (Illegal) migration are, by their very nature, very difficult to estimate and predict. A 2005 Home Office report estimated that there were somewhere between 310,000 and 570,000 illegal immigrants resident in the UK in 2001. The central estimate of 230,000 was 0.7% of the UK population, compared with 2.5% for the USA in year 2000. (Woodbridge, 2005)

A 2009 report commissioned by the Mayor of London estimated 618,000 'irregular residents' in the UK in 2007 with 442,000 (70%) living in London. (Gordon, Scanlon, Travers and Whitehead, 2009)

In its commentary to accompany the mid-year population estimates by ethnic group from 2001 to 2007, the Office for National Statistics has published estimates of the components of population change, by ethnic group, from 2001 to 2007. (ONS, 2009)

Chart 20. NINo registrations to adult overseas nationals by world area



Source: DWP, National Insurance number allocation to overseas nationals from ONS, *Migration Statistics 2008 Annual Report*, 2009. Note: EU Accession countries = Czech Republic, Estonia, Poland, Hungary, Latvia, Lithuania, Slovakia, Slovenia, Bulgaria, Romania, Cyprus and Malta

Table 12. Components of change, England, 2001 - 2007

(Thousands)				
	Total growth	Natural growth	Net Migration	Average percentage annual growth rate: mid 2001 – 2007
All people	1,642	689	934	0.5
White British	-190	181	-380	-0.1
White Irish	-58	-38	-22	-1.6
White Other	434	30	399	4.8
Mixed - White and Black Caribbean	49	52	-3	3.2
Mixed - White and Black African	36	24	13	6.5
Mixed – White and Asian	74	54	20	5.7
Mixed – other	58	40	17	5.4
Indian	270	63	207	3.9
Pakistani	186	96	89	3.9
Bangladeshi	72	39	33	3.9
Other Asian	95	24	71	5.7
Black Caribbean	30	17	12	0.9
Black African	240	65	174	6.8
Black other	20	15	4	3.2
Chinese	173	14	159	9.9
Other	154	14	140	9.2

Source: ONS, Population estimates by ethnic group, 2001-2007, commentary, 2009

Table 12 provides estimates of net migration for each ethnic group for the period 2001 to 2007, from which, using the gender breakdown for migrants from the 2001 census, average five year net migration estimates for both males and females can be made.

Re-migration, the return or onward migration of non-British nationals, is an increasingly important phenomenon. Between 1975 and 2007 at least 61,000 immigrants left the UK each year with a rapid rise to a peak of 194,000 in 2006. Since 1975 around one half of all immigrants have re-migrated. (Finch, Latorre, Pollard and Rutter [IPPR], 2009) Return migration in older age may also become an increasingly important phenomenon among some ethnic minority groups in the future. Return-migration and other forms of remigration are incorporated in the net migration figures used in our projections.

In a period of restricted inward migration, net migration for each ethnic group may be made up of two components, an inflow which has a fixed maximum value and an outflow that is proportionate to the resident population. Where there is a net outflow, and a falling population, as in the case of the White Irish, the falling population cannot maintain the same absolute overall level of net outward migration and emigration will fall as the population size falls.

We might assume that, in the case of ethnic groups with net inward migration, given likely future government restrictions and averaging over five year periods, future migration patterns will not differ significantly from those from 2001 to 2007. We might further assume that the net outflow experienced by the White British, White Irish and Mixed – White / Black Caribbean populations will remain at the

Table 13. Five year average net migration

	All	Males	Females
All	778,333	386,875	391,458
White British	-316,667 (0.69%)	-157,401 (0.71%)	-159,266 (0.68%)
White Irish	-18,333 (2.84%)	-9,113 (2.97%)	-9,221 (2.71%)
White Other	332,500	165,271	167,229
Mixed – White and Black Caribbean	-2,500 (1.04%)	-1,243 (1.05%)	1,257 (1.03%)
Mixed – White and Black African	10,833	5,385	5,449
Mixed – White and Asian	16,667	8,284	8,382
Mixed – other	14,167	7,042	7,125
Indian	172,500	85,742	86,758
Pakistani	74,167	36,865	37,302
Bangladeshi	27,500	13,669	13,831
Other Asian	59,167	29,409	29,758
Black Caribbean	10,000	4,971	5,029
Black African	145,000	72,073	72,927
Black other	3,333	1,657	1,676
Chinese	132,500	65,860	66,640
Other	116,667	57,990	58,677

proportions, for each group, that were experienced between 2001 and 2007.

The projections in this report assume that migration remains at 2001–2007 levels until 2011 then falls by an average of 30%. It is the coalition government's declared intention to reduce non-EU migration to the levels experienced in the 1990s. In the concluding section of this report we will note the overall effect on our projections of reduced levels of net migration.

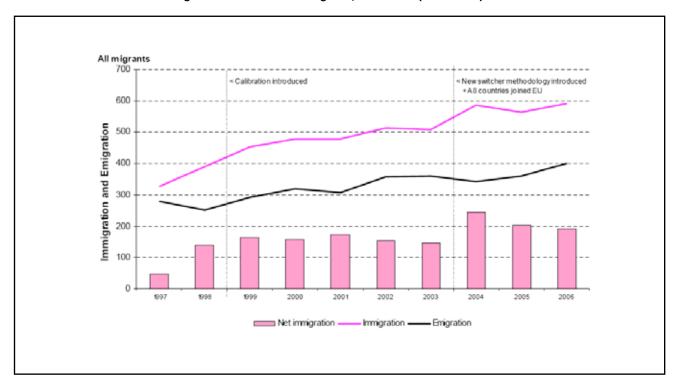
The age distribution of inward migrants to England and Wales in 2001 is available from Census data. Although this distribution has changed over time, with increased number of migrants in the younger age groups since 2001, the 2001 data still offers a reasonable and detailed estimate of the age structure of the inward migrant population.

The age distribution of outward migrants is different from that of inward migrants and cannot be obtained from census data. The Office for National Statistics has published smoothed estimates of inward and outward migration by broad age group from 1997 to 2006 (charts 22 and 23). From this data and the census based detailed age distribution of individual ethnic groups, estimates of the age distribution of net migrant outflows can be made for any ethnic group.

Given these assumptions on migration, we have the final component for an ethnic minority cohort component population projection.

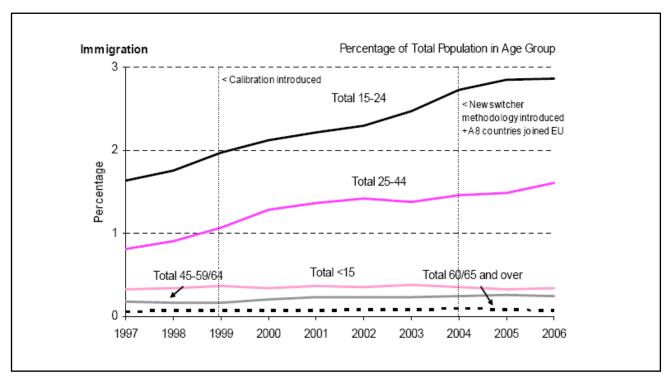
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Chart 21. Total international migration to the United Kingdom, 1997-2006 (thousands)



Source: ONS, International Migration, 2008

Chart 22. Smoothed Total International Migration estimates by broad age group as a percentage of the total UK population (for each age group) – Immigration



Source: ONS, International Migration, 2008

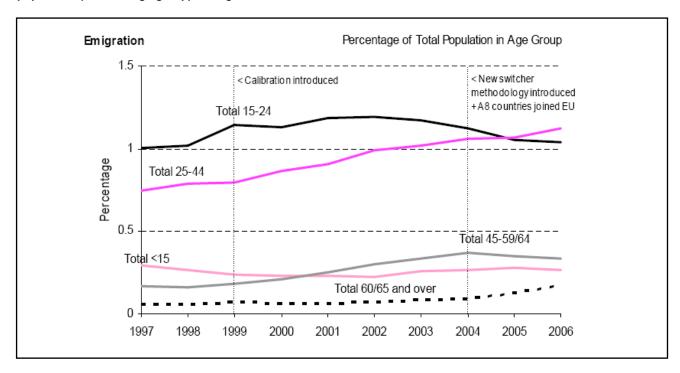


Chart 23. Smoothed Total International Migration estimates by broad age group as a percentage of the total UK population (for each age group) – Emigration

Source: ONS, International Migration, 2008

5.4. Transgenerational ethnic transfer

As discussed earlier, for White Irish parents, even when both parents are White Irish, a proportion of children born in England and Wales will be described as White British. In other cases, where the parents are from two different ethnic groups, a child may be described as being from either of the parents' ethnic groups. A child born to a White British mother and Black Caribbean father may be described by the parents or may describe himself or herself as White British, Black Caribbean or Mixed – White / Black Caribbean.

The Greater London Authority Data management and Analysis group commissioned a special table from the 2001 census (CO200) to show the relationship between the ethnicity of mother and child within London.

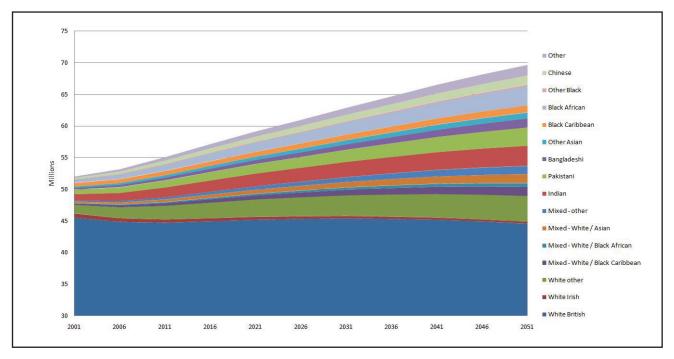
From their published results (Bains, Hollis and Clark, 2005) we can derive a table of probabilities that a child born to a mother from a particular ethnic group will be ascribed to that ethnic group or to any other. (See appendix Table A1)

Table A1 also shows that, ignoring the relative sizes of the donor group (the ethnic group of the mother), individuals have the greatest propensity to be retained by or transfer to, or be transferred to, the White British ethnic group, followed, at some distance, by the Black African, Black Caribbean, 'Mixed Other' and Mixed – White / Black Caribbean ethnic groups.

For projection purposes we do not need to know the ethnicity of the male partner.

6. Ethnic minority cohort component population projections to 2051

Chart 24. Ethnic minority population projections to 2051, England and Wales



Note: The left axis starts at 30 million to visibly display the ethnic minority groups and therefore does not show the White British majority group proportionately.

6.1. Overview

Starting from a base of the 2001 census, the following ethnic minority population projections for England and Wales rely on the assumptions about fertility, mortality and migration outlined in section 5. These are reasonable assumptions, particularly in the short term, but any projections should be treated with increasing caution the further they project into the future.

Non-white ethnic minority groups, who made up 8.7% of the population of England and Wales in 2001, are projected to make up 16.3% of the population by 2016, 20.1% by 2026 and 29.7% by 2051. The non-white population of England and Wales is projected to increase from 4.5 million in 2001 to 9.3 million in 2016, 12.3 million in 2026 and 20.7 million by 2051.

The projected ethnic minority population numbers in the tables and summary charts that follow have not been rounded. They are the best estimates available from the model used and assumptions made. It should not be construed from these tables and charts, however, that future projections of this type can be accurate to the nearest 5, 10, 100 or even 1,000 persons.

By 2051 the largest ethnic minority group in England and Wales will be the diverse 'Other White' group making up 5.9% of the total population, followed by the Indian and Black African groups, with 4.5% and 4.4% respectively and the Pakistani ethnic minority group with 4.2%

Chart 25. White and non-white ethnic groups as a percentage of the population, England and Wales

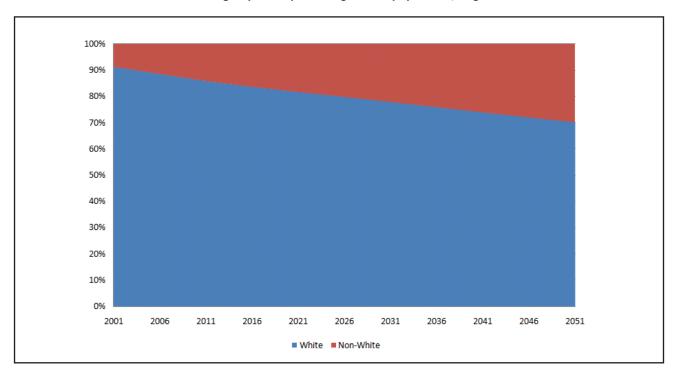


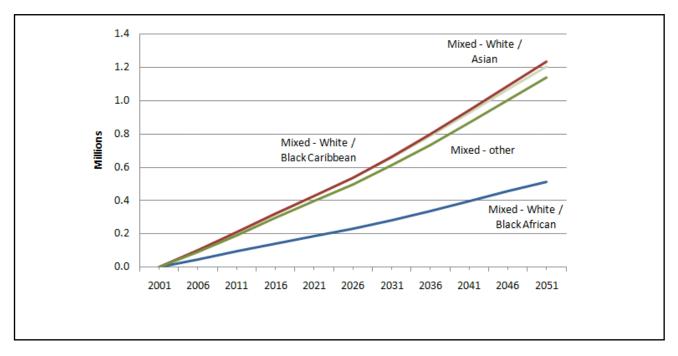
Table 14. Ethnic minority population projections to 2051

		2016		2026		2051
Ethnic group	Population	% of total	Population	% of total	Population	% of total
White British	44,916,749	78.57%	45,300,442	74.27%	44,530,820	63.92%
White Irish	503,503	0.88%	432,873	0.71%	318,774	0.46%
White Other	2,448,220	4.28%	2,998,347	4.92%	4,096,065	5.88%
Mixed - White / Black Caribbean	555,381	0.97%	773,642	1.27%	1,443,214	2.07%
Mixed – White / Black African	219,529	0.38%	311,324	0.51%	593,982	0.85%
Mixed - White / Asian	508,806	0.89%	725,221	1.19%	1,425,272	2.05%
Other mixed	450,885	0.79%	653,349	1.07%	1,296,740	1.86%
Indian	1,789,111	3.13%	2,199,270	3.61%	3,156,140	4.53%
Pakistani	1,309,696	2.29%	1,701,099	2.79%	2,905,375	4.17%
Bangladeshi	561,296	0.98%	756,559	1.24%	1,455,375	2.09%
Other Asian	477,642	0.84%	623,593	1.02%	954,263	1.37%
Black Caribbean	706,575	1.24%	796,168	1.31%	1,099,487	1.58%
Black African	1,220,923	2.14%	1,682,274	2.76%	3,052,358	4.38%
Other Black	143,157	0.25%	174,683	0.29%	260,789	0.37%
Chinese	662,350	1.16%	900,015	1.48%	1,412,255	2.03%
Other	692,759	1.21%	961,728	1.58%	1,666,654	2.39%

3.0 2.5 Other White 2.0 Other 1.5 1.0 Chinese 0.5 0.0 White Irish -0.5 White British -1.0 -1.5 2006 2011 2016 2021 2026 2031 2036 2041 2046

Chart 26. Projected population change from 2001, White, Chinese and Other ethnic groups





Over the period of the projection, from 2001 to 2051, the most rapidly growing group in terms of population numbers is 'Other White' followed by the Black African, Pakistani and Indian ethnic groups.

The groups with least growth are the White British and White Irish. The White British and White Irish are the only ethnic groups to experience an overall projected decline in numbers over the period of the projection.

The mixed ethnic groups are projected to experience strong growth rates with a 6 to 8–fold increase over the period but, because of their low starting numbers, the increase in numbers will be moderate, the largest being the Mixed – White / Asian group and 'Mixed – White / Black Caribbean' groups with a projected increase of 1.2 million. The graphs for these groups in Chart 27 are nearly coincident throughout and therefore appear as one line.

Chart 28. Population change - Asian ethnic groups

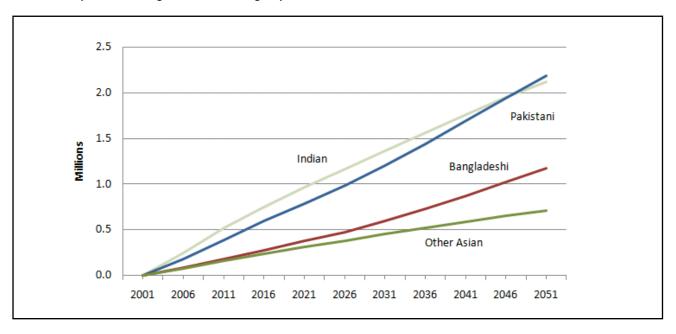
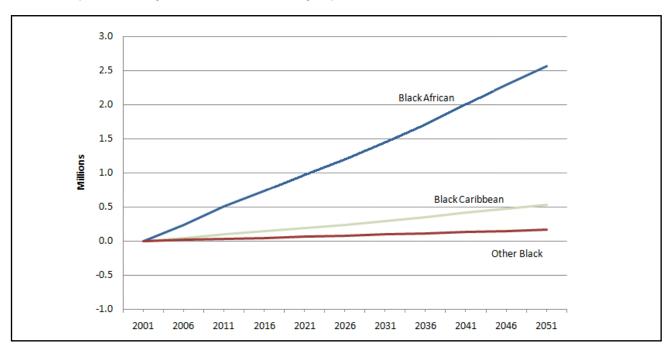


Chart 29. Population change from 2001, Black ethnic groups



The Bangladeshi ethnic groups is projected to experience a moderately high growth rate between 2001 and 2051 with a 5-fold increase, the Other Asian and Pakistani groups will experience lower growth rates with 4-fold increases in numbers while the Indian ethnic group will have a lower growth rate, experiencing a three-fold increase over the period. However, because of its larger starting base the Indian ethnic minority group will experience an increase in numbers of 2.1 million, comparable in size to the increase in the Pakistani ethnic group of 2.2 million.

The black ethnic groups are projected to experience very different growth patterns over the period with the Black Caribbean and Other Black groups increasing two to three-fold but the Black African group increasing more than six-fold, an increase in numbers of 2.6 million.

The most rapidly increasing groups, relative to their initial size, are the diverse 'Other' and 'Mixed-Other' groups followed by the Mixed- White / Black African, Mixed – White / Asian, Chinese, Black African, Mixed – White / Black Caribbean, Bangladeshi, Pakistani, 'Other Asian', 'White Other' and Indian ethnic groups.

The diverse 'Other 'and 'Mixed Other' ethnic groups together with the Mixed – White / Black African and Mixed – White / Asian groups are projected to increase seven to eightfold in the fifty years from 2001 to 2051.

In the fifty years to 2051 the number of Chinese, Black Africans and Mixed – White / Caribbean

residents of England and Wales is set to increase six-fold, the number of Bangladeshis five-fold and the Pakistani and Other Asian groups will experience a four-fold increase. The Indian ethnic minority group will increase three-fold.

The ethnic groups with the slowest growth rates are the Indian, 'Other Black', Black Caribbean, White British and White Irish. By the end of the period the White Irish group is projected to fall to less than one half of its initial size. It may well be that, as a result of smaller numbers and ethnic group switching, the White Irish may not continue as an ethnic group with predictable numbers and, for projection purposes, should be merged with the White British ethnic group.

Chart 30. Population growth - ethnic groups with high growth rates

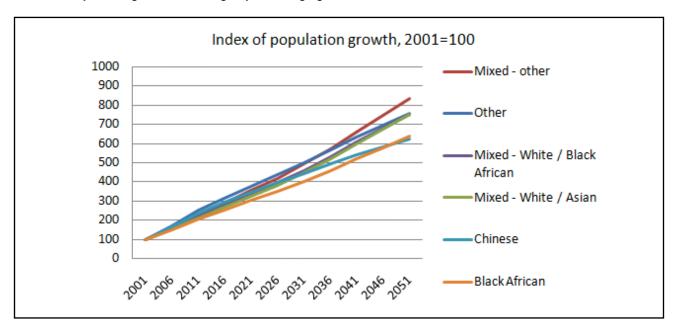


Chart 31. Population growth - ethnic groups with medium growth rates

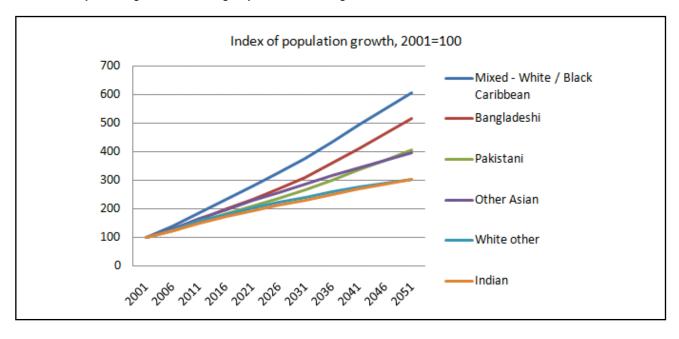
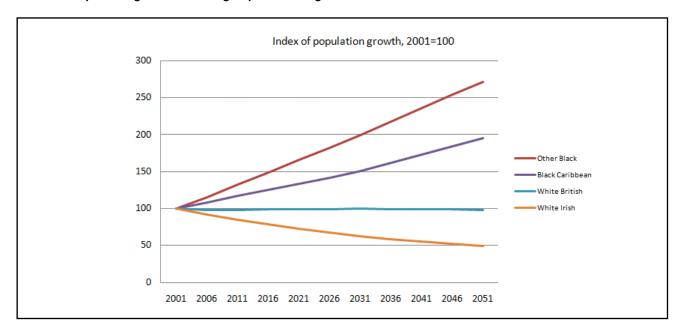


Chart 32. Population growth - ethnic groups with low growth rates



6.2. The ethnic minority population in 2016

By 2016 the ethnic minority population of England and Wales, including white minority groups, is projected to increase to 12.1 million making up 21% of the overall population. The non-white ethnic minority population, at a little over 9 million, will be 16% of the total population.

The largest ethnic minority group in 2016 will be 'Other White' at 2.5 million (4.5%) followed by Indian 1.8 million (3.2%) and Pakistani at 1.3 million (2.3%).

The ethnic minority population of England and Wales in 2016 has, in general, a younger population structure than the majority White British group. This is particularly notable for the mixed ethnic groups with a median age in the range 11–13 compared with a median age for the White British population of 40. The main exceptions to this pattern are the White Irish with a median age of 54, 'Other White' with a median age of 39 and the Chinese, Black Caribbean, Indian and Other Asian groups with median ages around 35.

Chart 33. The ethnic minority population in 2016

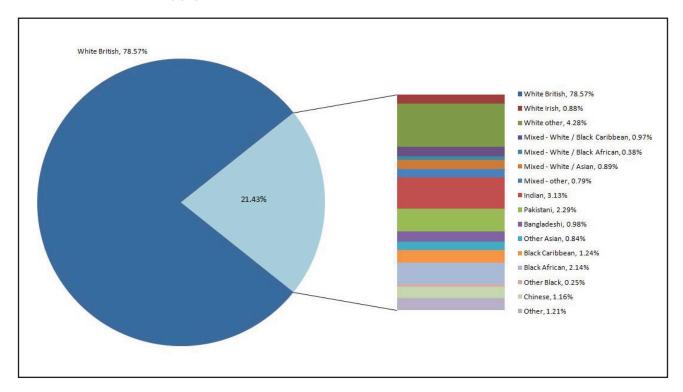
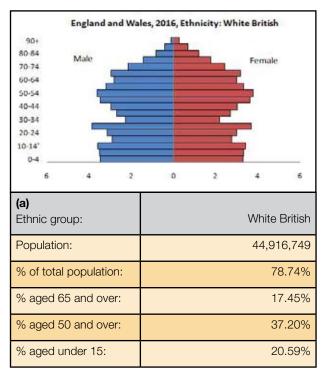
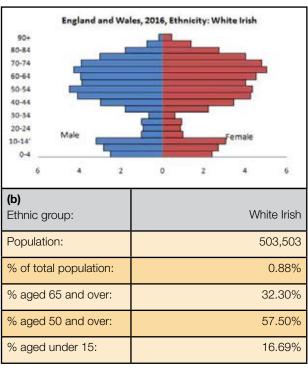
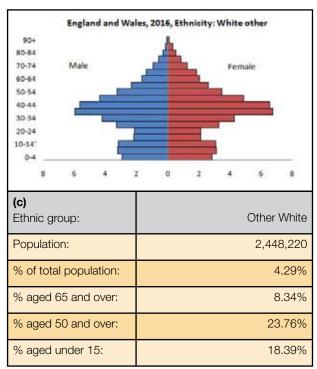


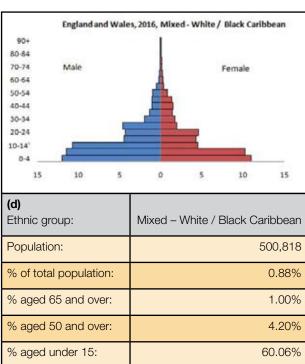
Chart 34. Age structure of ethnic minority groups, England and Wales, 2016

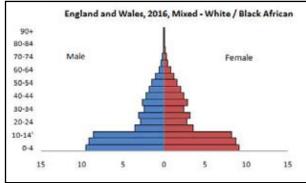




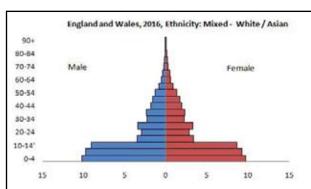
The majority White British population will continue to progressively age with 17% of the population over the age of 65 and 37% over the age of 50. The unusual shape for the White Irish population pyramid may reflect ethnic switching with many younger people transferring to the White British ethnic group. By 2016 nearly one third of the White Irish population will be aged 65 and over and nearly six out of ten will be aged 50 and over. The White British population will however continue to have a strong younger component with 20% under the age of 15 compared with 17% in 2007.





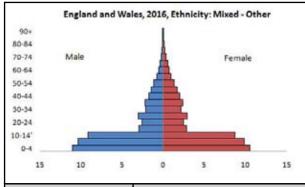


(e) Ethnic group:	Mixed – White / Black African
Population:	219,529
% of total population:	0.38%
% aged 65 and over:	1.87%
% aged 50 and over:	8.68%
% aged under 15:	53.41%

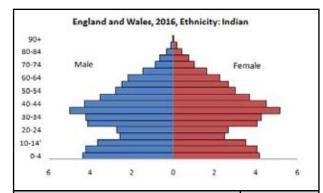


(f) Ethnic group:	Mixed – White / Asian
Population:	508,806
% of total population:	0.89%
% aged 65 and over:	2.19%
% aged 50 and over:	7.66%
% aged under 15:	56.69%

In 2016, the mixed ethnic groups will exhibit a very young population structure with, in every case, a majority under the age of 15 and less than three percent aged 65 and over.

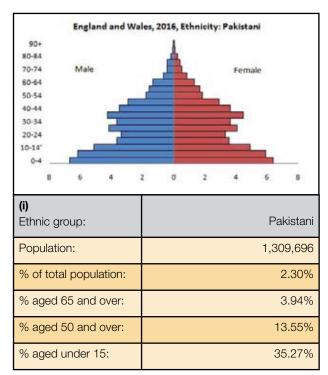


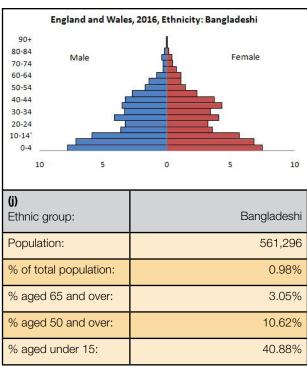
(g) Ethnic group:	Mixed – Other
Population:	450,885
% of total population:	0.79%
% aged 65 and over:	2.25%
% aged 50 and over:	7.75%
% aged under 15:	59.62%



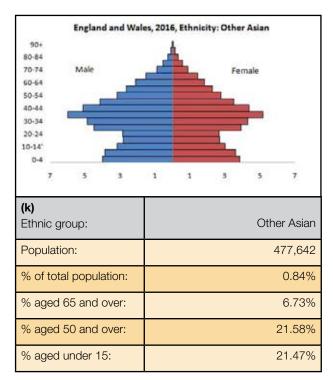
(h) Ethnic group:	Indian
Population:	1,789,111
% of total population:	3.14%
% aged 65 and over:	7.49%
% aged 50 and over:	22.83%
% aged under 15:	23.96%

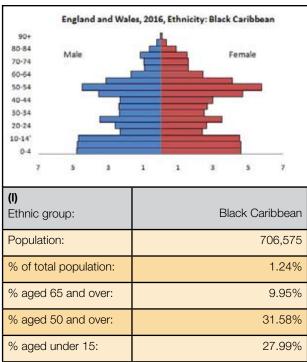
The older Indian ethnic minority population continues to grow with 23% aged 50 and over and 7.5% aged 65 and over by 2016, showing slight increases on 2007. The years leading up to 2016 will also show a surge in the numbers of young children in this ethnic group with the percentage aged under 15 rising from 17.1% in 2007 to 24% in 2016.



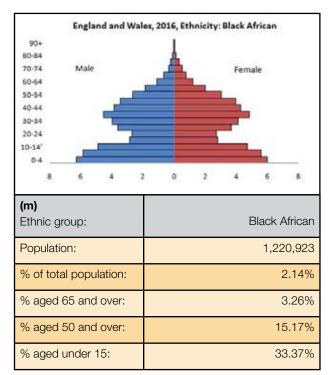


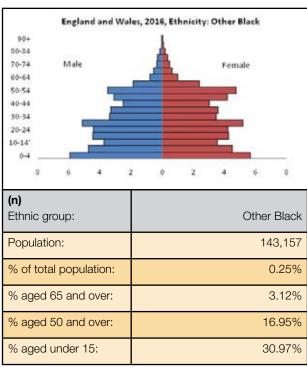
In 2016 the Pakistani and Bangladeshi ethnic minority groups continue to show high fertility with 35–41% of the population under the age of 15 and a small proportion (3–4%) of older people.



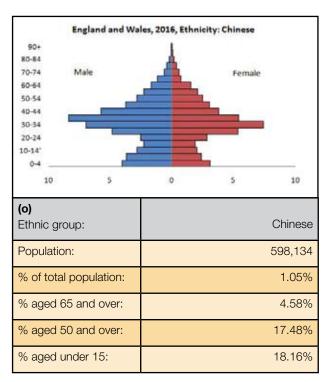


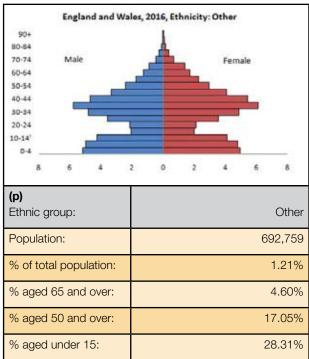
The Black Caribbean population shows a maturing age structure with over 10% aged 65 and over by 2016 but with a broad spread of ages and 28% aged under 15. The 'Other Asian' population continues to show an unexplained predominance of males over females with, in the 40–64 age group, 54% male and 46% female.





In 2016 the Black African ethnic group will have nearly eight times as many people as the 'Other Black' group. Both groups will have few older people with only 3% aged 65 and over, but each has high fertility with a large percentage of the population of child-bearing age and 30–33% aged under fifteen.





The Chinese population continues to grow rapidly but in 2016 has 100,000 fewer than the diverse 'Other' group. In 2016 both groups have relatively few older people with 4–5% aged 65 and over but the 'Other' group has well over one quarter of its members under the age of 15.

6.3. The ethnic minority population in 2026

By 2026 the ethnic minority population of England and Wales, including white minority groups, will have grown to 16.7 million which will be 27% of the overall population. The non-white ethnic minorities, at 13 million will make up over one fifth (21%) of the total population.

The largest ethnic minority groups in 2026 will remain 'Other White' at 3.3 million followed by the Indian (2.4 million), Black African (1.8 million), Pakistani (1.8 million) and the Chinese and diverse 'Other' group each at 1 million.

Although the ethnic minority groups generally still have a younger population structure, by 2026 there will be a significant older ethnic minority population with just under 4 million aged 50 and over and 1.3 million aged 65 and over.

Forty percent of the White British majority population will be over the age of 50 in 2026 but, through renewal, the median age will remain at 40. The mixed ethnic groups will remain the youngest groups on average with median ages of 16–18 but the median age of the White Irish ethnic group will rise to 58 and of the 'Other White' ethnic group to 42, partly through children, born in England and Wales, being thought of as White British.



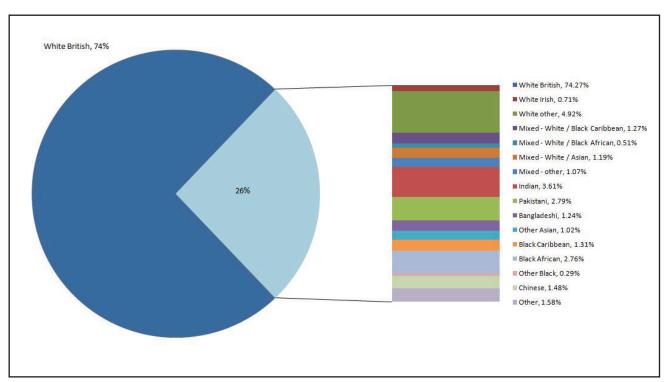
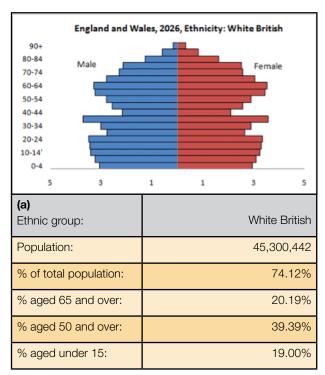
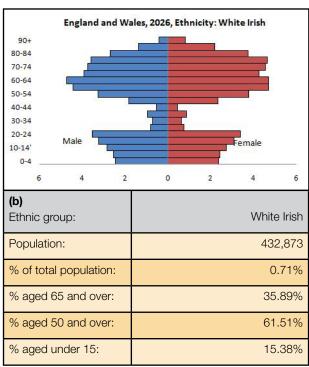
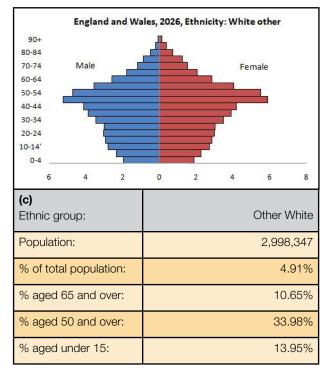


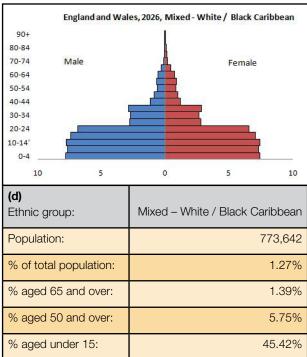
Chart 36. Age structure of ethnic minority groups, England and Wales, 2026



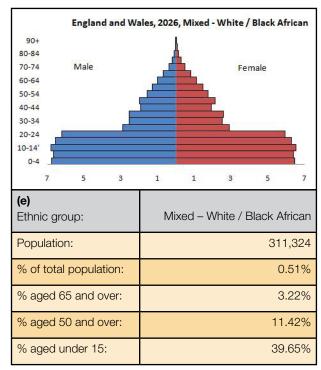


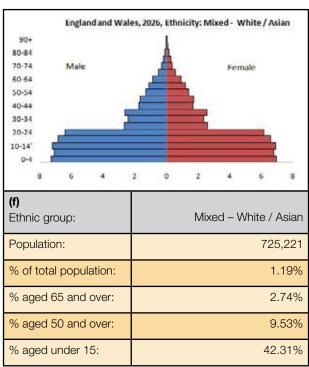
By 2026 the majority white population will have a high internal economic dependency ratio with nearly 40% of the group either aged under 15 or aged 65 and over. The rather bizarre shape of the White Irish pyramid assumes that ethnic switching out of this group will stay at the levels of 2001. It may well be that even fewer children or young people born to White Irish parents but living in England and Wales will declare themselves or be declared as White Irish and therefore an even higher proportion of this ethnic group than the 36% shown will be aged 65 and over and perhaps two thirds will be aged 50 and over as younger people switch to the White British group.



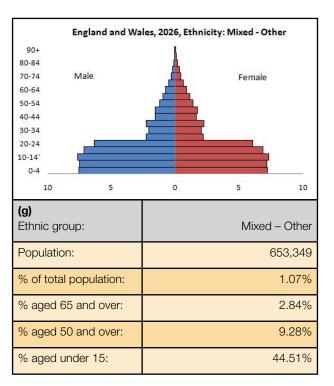


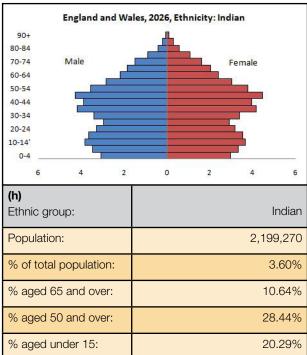
In 2026 the 'White Other' group has a maturing population structure with low fertility. Ten percent are aged 65 and over and over one third (34%) are aged 50 and over but just 14% are aged under 15.



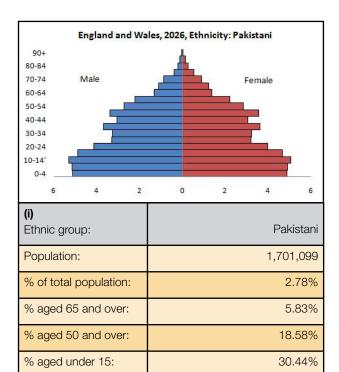


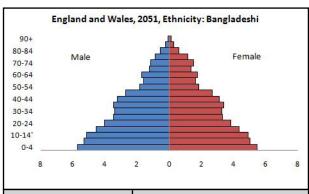
In 2026 the mixed ethnic populations groups continue to show a predominantly young population age structure with 40–45% under the age of 15. This is reinforced by the transfer to the mixed ethnic groups of children born to parents from other ethnic groups.





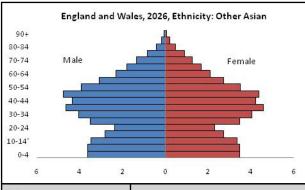
By 2026 the Indian ethnic minority in England and Wales will have reached 2.2 million and will show a maturing population structure. By 2026 around 10% of the Indian population of England and Wales will be aged 65 or over with 234,000 Indians in that age group and over 625,000 Indians aged 50 and over. At the same time one fifth of this ethnic group will be aged under 15.



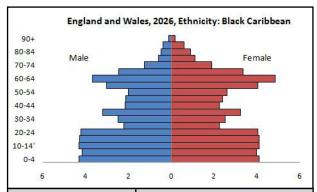


(j) Ethnic group:	Bangladeshi
Population:	756,559
% of total population:	1.24%
% aged 65 and over:	4.19%
% aged 50 and over:	15.37%
% aged under 15:	34.87%

In 2026 the Pakistani and Bangladeshi ethnic minority populations will continue to exhibit a relatively young population structure with 30–35% of the population aged under 15 and with a slightly increased proportion of older people but with people aged 65 and over still only making up 4–6% of that ethnic group. By 2026, however, there will be 316,000 Pakistani and 116,000 Bangladeshi people aged 50 and over compared with just 119,000 and 38,000 in 2007.

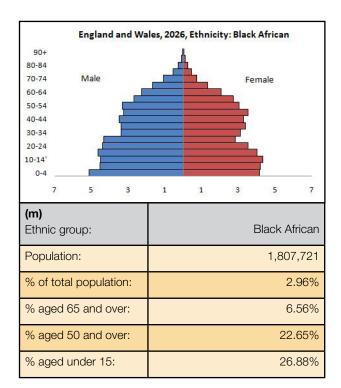


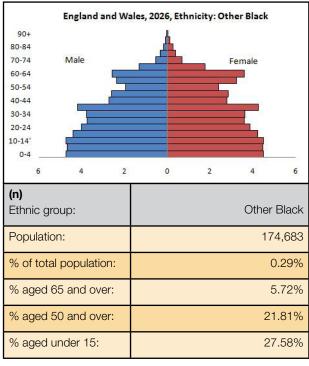
(k) Ethnic group:	Other Asian
Population:	623,593
% of total population:	1.02%
% aged 65 and over:	9.55%
% aged 50 and over:	27.75%
% aged under 15:	18.81%



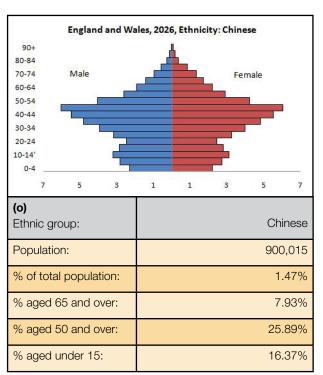
(I) Ethnic group:	Black Caribbean
Population:	796,168
% of total population:	1.30%
% aged 65 and over:	13.35%
% aged 50 and over:	33.58%
% aged under 15:	24.98%

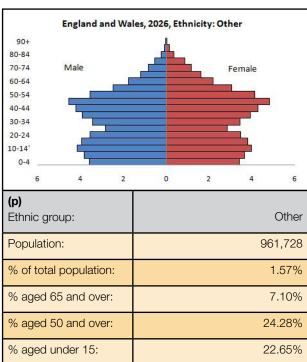
The proportion of older people in the Black Caribbean population continues to grow with just under 13% of the population aged 65 or over and one third aged 50 and over by 2026. The population however shows a mature population structure with births at replacement levels and 25% of the population aged under 15.





By 2026 the Black African and 'Other Black' populations show a slightly younger population structure than the Black Caribbean ethnic group with around 27% of their respective populations aged under 15. The numbers of older people, however, are still relatively small with just 5-6% of the population aged 65 and over.





In 2026 the population pyramid for the Chinese ethnic minority groups adopts a very distinctive pagoda shape reflecting a high proportion of the population in middle age (aged 40-49). The Chinese population of England and Wales as a whole continues to grow, reaching 900,000 by 2026 with 16% aged under 15 but with nearly one half (49%) between the ages of 30 and 54. This middle age spread will be reflected in a larger number of Chinese older people in later years.

6.4. The ethnic minority population in 2051

By 2051 the ethnic minority population of England and Wales, including white minority groups, will have grown to 25 million, 36% of the overall population, and the non-white ethnic minorities at 20.7 million will make up just under 30% of the total population.

The largest ethnic minority group in 2051 will continue to be 'Other White', at 4 million, followed by the Indian (3.2 million), Black African (3 million), Pakistani (2.9 million), the diverse 'Other' group (1.7 million) and then the Bangladeshi, Mixed – White / Black Caribbean, Mixed – White / Asian and Chinese, each with 1.4 million.

By 2051 there will be 7.3 million ethnic minority residents of England and Wales aged 50 plus with 3.8 million aged 65 and over and 2.8 million aged 70 and over.

The 7.3 million BME residents aged 50 and over in 2051 will be less than half of the 17.1 million aged 50 plus in the majority White British population but will still make up 30% of the total population of England and Wales aged 50 and over.

The ethnic minority population overall will continue to be younger than the majority White British population but by 2051 this difference will be less pronounced.

The 'Other White' ethnic group with a median age of 46, the Chinese with a median age of 44 and 'Other Asian' with a median age of 42, will all be older on average than the White British population with median age 41. The Indian population, with a median age of 40, will be close behind.

Chart 37. The ethnic minority population of England and Wales in 2051

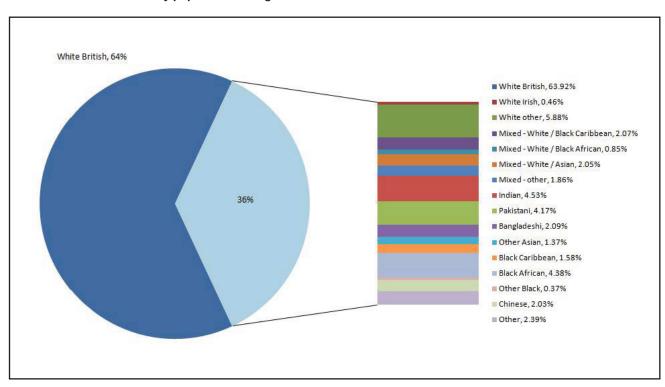
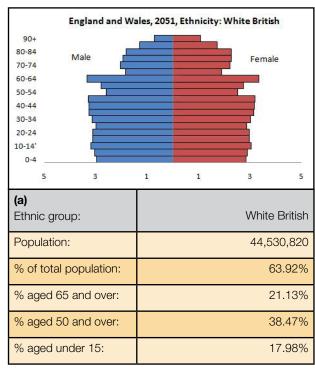
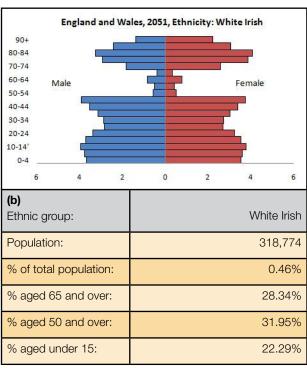
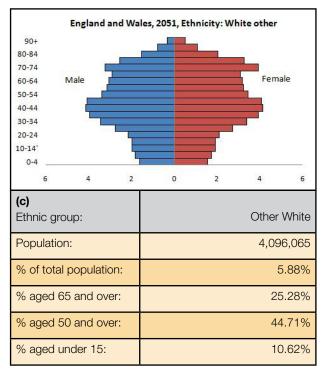


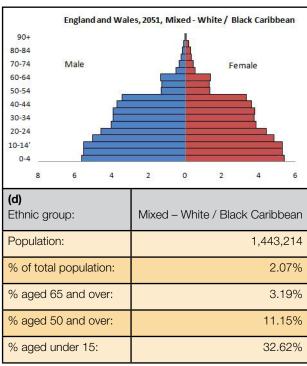
Chart 38. Age structure of ethnic minority groups, England and Wales, 2051



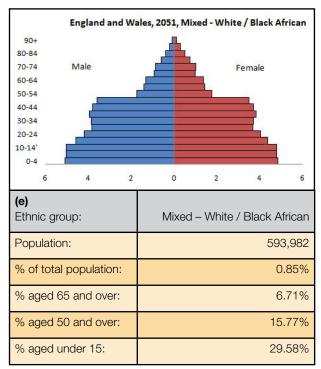


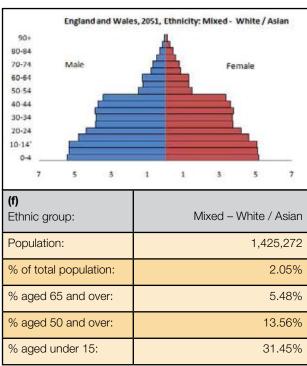
By 2051 39% of the majority White British population will be either aged under 15 or aged 65 and over. However by 2020 the state pension age for men and women will have equalised to age 65 and between 2024 and 2046 the state pension age will have risen to age 68. By 2051 seventy may be the new sixty-five as far as state pensions and economic dependency goes. By 2051 while one fifth of the White British and just over 28% of the White Irish population will be aged 65 and over, 17% of the White British population and just under 28% of the White Irish population will be aged 70 or over.



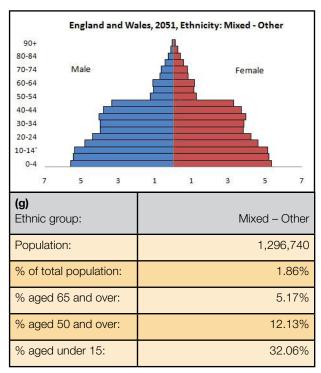


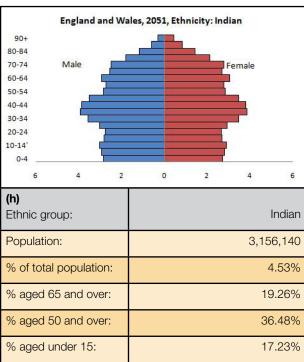
By 2051 the 4 million strong 'Other White' ethnic group will show an ageing population structure with 45% aged 50 and over, 25% aged 65 and over and 20% aged 70 and over but with just over 10% aged under 15. This may be due in part to the 'ethnic transfer' of younger members to the White British group.



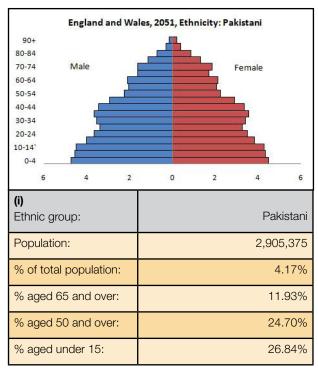


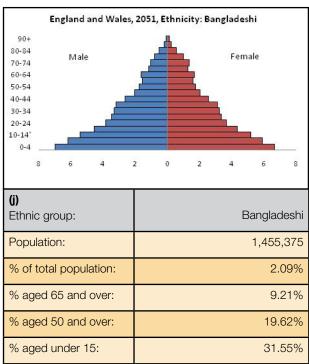
Re-enforced by children from partnerships between adults from different non-mixed ethnic groups, the mixed ethnic groups continue to have a young population structure with around 30% under the age of 15. However, although by 2051 the mixed groups will still only have 11–16% over the age of 50, 3–7% over the age of 65 and 2–5% over the age of 70, because of the growth in numbers that will mean there will be over 230,000 people with mixed ethnicity aged 65 and over living in England and Wales.





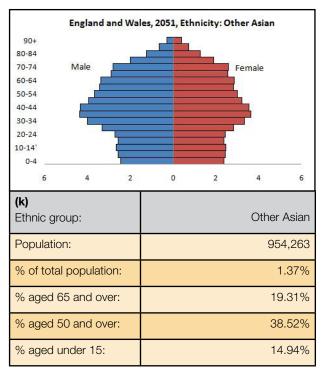
By 2051 there will be 3.1 million people from the Indian ethnic minority living in England and Wales. The Indian population continues to show a mature population structure and, by 2051, there will be over 600,000 Indians aged 65 and over and an estimated 440,000 (14%) aged 70 and over and 70,000 (2.2%) aged 85 and over.

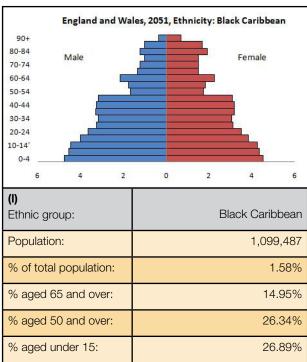




Unless fertility rates decline substantially and approach those of the majority population, in 2051, the 1.4 million strong Bangladeshi ethnic group will continue to have a young population structure with just 9% aged 65 and over, 7% aged 70 and over and 31.5% aged under 15.

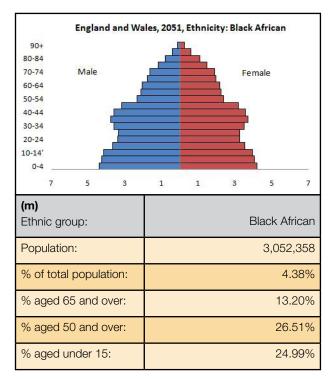
By 2051 there will be 2.9 million Pakistani ethnic minority residents in England and Wales with nearly 25% aged 50 and over, 12% aged 65 and over and over 8% aged 70 and over. By 2051 there will be over 346,000 ethnic minority Pakistanis aged 65 and over living in England and Wales with quarter of a million (8.6%) aged 70 and over. Despite this there will also be an estimated 780,000 ethnic minority Pakistani residents (27%) under the age of 15.

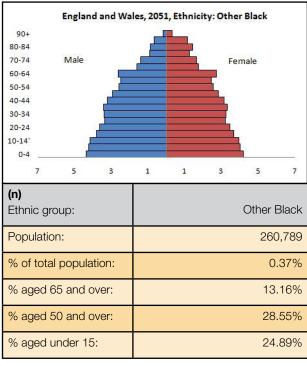




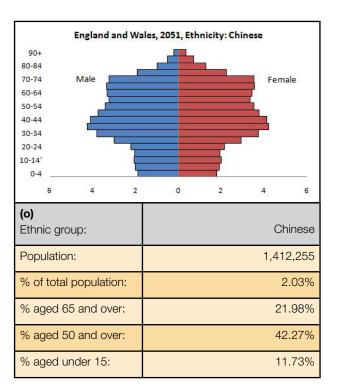
By 2051 the 'Other Asian' ethnic group will have a mature population structure with more than 38% of the population aged 50 and over, 19% aged 65 and over and 14% aged 70 plus but with 15% aged under 15.

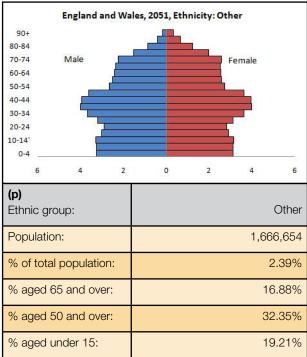
By 2051 the one million strong Black Caribbean ethnic minority population will have regenerated into a more youthful population structure and although over one quarter of the population will be aged 50 and over with nearly 15% aged 65 and over and 12% aged 70 and over, over one quarter (27%) will be under the age of 15.





By 2051 there will be 3 million Black African ethnic minority group members resident in England and Wales. In comparison the 'Other Black' ethnic minority group, with just 260,000 members, is very much smaller. By 2051, while still relatively young in structure, the Black African and 'Other Black' ethnic minority groups both show some signs of a maturing population structure with one quarter aged 50 and over, 13% aged 65 and over, just under 10% aged 70 and over but still with 25% aged under 15.





By 2051 there will be over 1.4 million ethnic Chinese living in England and Wales with 310,000 aged 65 and over and an estimated 213,000 (15%) aged 70 plus. The population structure is ageing with relatively low fertility and it is estimated that by 2051 there will be only 166,000 Chinese (12%) aged under the age of 15, with more Chinese aged 70 and over than under the age of 15.

The ethnically diverse 'Other' group will have topped 1.6 million by 2051 and will have developed a mature population structure with 32% aged 50 and over, 17% aged 65 and over, 12% aged 70 and over but 19% under the age of 15.

7. The older ethnic minority population

As we have seen already, going forward, the ethnic minority population of England and Wales has, in general, a younger population structure than the majority White British population. The notable exceptions to this are the White Irish, Indian, 'Other White' and Black Caribbean ethnic groups.

This should not be allowed to obscure the fact that, in the future there will be a substantial increase in the number of older people from ethnic minorities.

The number of people from ethnic minority groups aged 50 and over is projected to increase from 1.3 million in 2001 and 1.7 million in 2007 to 2.4 million by 2016, 3.8 million by 2026 and 7.4 million by 2051.

Typical of the rising numbers for an ethnic group with an ageing population structure is the number of over 50s in the Indian ethnic minority group which rises from 200,000 in 2001 and 282,000 in 2007, to 408,000 by 2016, 625,000 by 2026 and 1,150,000 by 2051.

There are fewer people from ethnic minority groups aged 65 and over but the number is projected to increase from half a million in 2001 and 675,000 in 2007, to 0.81 million by 2016, 1.3 million by 2026 and 3.8 million by 2051.

The 'Other White' group is projected to show the greatest increase in numbers aged 65 and over rising from 140,000 in 2001 to 204,000 in 2016, 319,000 in 2026 and one million by 2051.

Table 15 summarises the future rise in the numbers of BME older people to 2051. According to our projections, by 2051, in England and Wales, there will be 3.8 million Black and Minority Ethnic older people aged 65 and over and 2.8 million aged 70 and over. For the non-white ethnic groups alone, by 2051, there will 2.7 million aged 65 and over and 1.9 million aged 70 and over. If these projections are accurate, then the sharp rise in the number of BME older people after 2021 has implications for future policy and planning.

Table 15. The future older ethnic minority population of England and Wales (Thousands)

	Year										
	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
All minority ethnic groups											
Aged 50 and over	1,317	1,556	1,920	2,412	3,063	3,857	4,769	5,468	6,215	6,807	7,370
Aged 65 and over	532	597	674	813	1,020	1,310	1,701	2,196	2,773	3,415	3,823
Aged 70 and over	340	376	441	510	640	822	1,069	1,400	1,813	2,292	2,821
Non-white ethnic groups											
Aged 50 and over	659	868	1,166	1,541	2,015	2,572	3,247	3,817	4,454	4,958	5,436
Aged 65 and over	231	294	350	446	608	835	1,128	1,484	1,881	2,351	2,697
Aged 70 and over	132	172	225	269	355	496	692	939	1,233	1,556	1,943

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Chart 39. The ethnic minority population of England and Wales aged 50 and over.

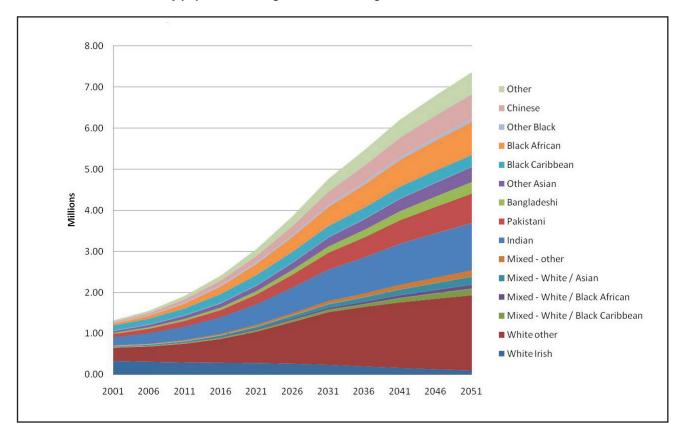


Chart 40. The Indian ethnic minority population of England and Wales aged 50 and over

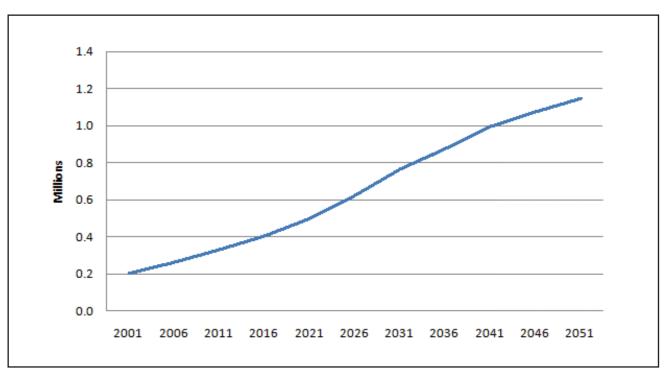


Chart 41. The ethnic minority population of England and Wales aged 65 and over.

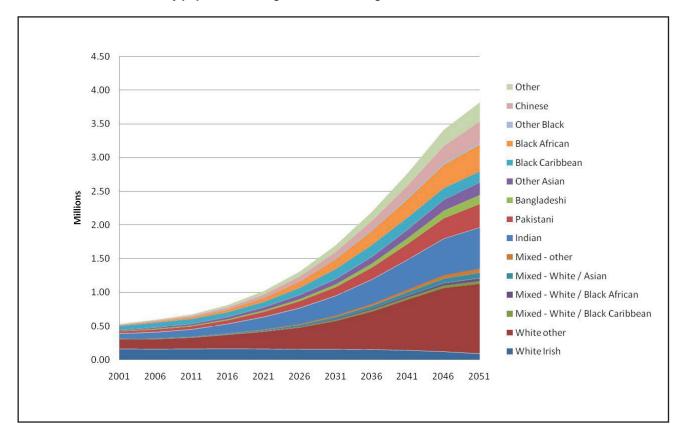
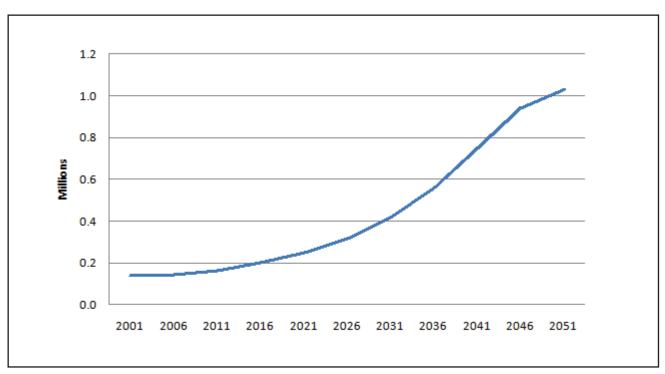
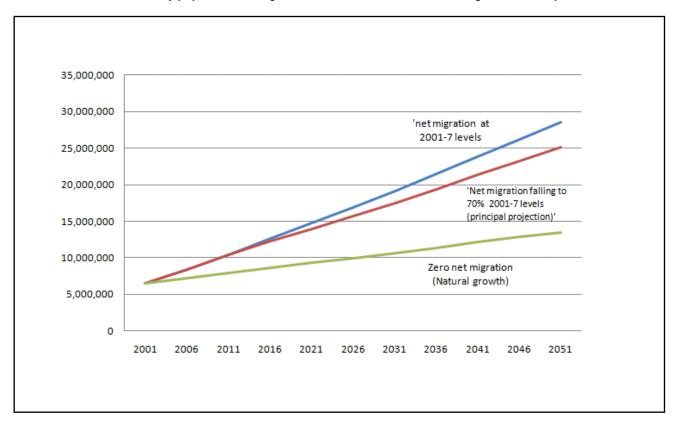


Chart 42. The 'Other White' population of England and Wales aged 65 and over.



8. Summary and conclusion

Chart 43. The ethnic minority population of England and Wales under alternative migration assumptions



The projections of ethnic minority numbers contained in this report are projections and not predictions. The cohort component projections are based on reasonable assumptions, outlined in section 5 and take into account likely future restrictions on migration and likely longer-term future improvements in mortality as well as transgenerational transference between ethnic groups.

The projections contained within this report assume a drop of 30% from 2001–2007 levels of net migration. Net migration, as oppose to natural change, the difference between births and deaths, is a large component of ethnic minority population projections. It is the present coalition government's declared intention to constrain non-EU net migration to the levels experienced in the 1990s. Lower levels of net migration are likely to have a significant effect on both the size and distribution of the ethnic minority population.

The overall population projections for England and Wales derived by summing the individual ethnic minority cohort component projections contained in this report are a close match to both the figures derived by extrapolation and to the principal ONS

population projections for England and Wales for 2016 and 2026. The overall population for England and Wales, derived by summing our individual ethnic minority group projections, continues to lie within 1% of ONS population projections for every 5 year time point all the way to 2051.

The cohort component projections contained in this report indicate that by 2051 the ethnic minority population of England and Wales will have risen to 25 million, making up 36% of the population while the non-white ethnic minority population of England and Wales will be 20.7 million making up an estimated 29.7% of the total population.

It is proposed that, by 2051, the state retirement age for all adults will have risen to 68 and because of economic constraints it may, by then, or soon after, have reached 70. Seventy will be the new sixty five for retirement benefits. Chart 45 shows the age distribution for ethnic groups in 2051 using 70+ rather than 65+ for the upper age group.

Although, by 2051, the population as a whole will be increasingly ageing with 38% of the White British population aged 50 and over, 21% aged 65 and

Chart 44. Ethnic minority groups as a percentage of the population of England and Wales under alternative migration assumptions

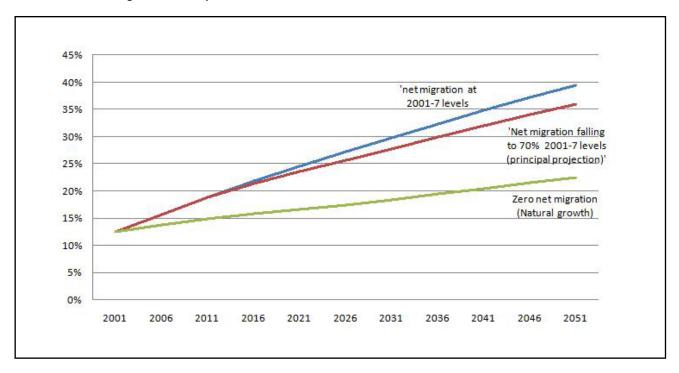


Chart 45. The age distribution of ethnic minority groups, England and Wales, 2051

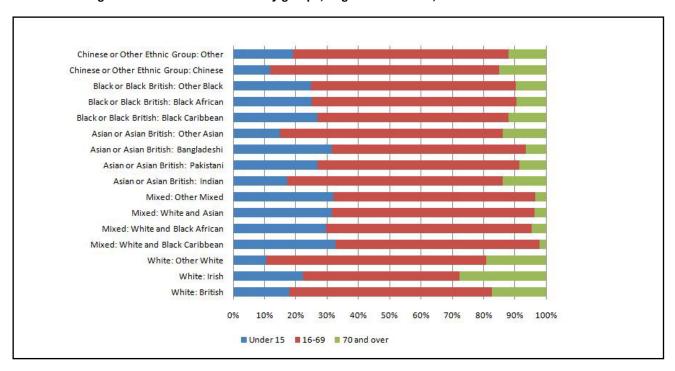


Table 18. Comparison of projected totals within this report with ONS projections for England and Wales

Source \ Year	2016	2026	2051
ONS	57.6 million	61.6 million	69.4 million
Extrapolation	57.5 million	62.9 million	-
Cohort Component	57.2 million	61 million	69.7 million

Source: ONS, Principal population projections, 2010

over and 17% aged 70 and over, the ethnic minority groups generally have younger population structures with less than 15% aged 65+ in 2051. The ethnic groups that are notable exceptions are the Indian and 'Other Asian' (19%), Chinese (22%), 'Other White' (25%) and White Irish (28%).

Despite the generally younger ethnic minority population, by 2051 there will be 7.3 million ethnic minority residents of England and Wales aged 50 plus with 3.8 million aged 65 and over, 2.8 million aged 70 and over and more than one quarter of a million (259,000) aged 85 and over.

This ageing of the ethnic minority population of England and Wales will raise important issues for policy makers and planners, particularly in localities which a higher ethnic minority concentration. This is not only because of the numbers involved but also because of the related issues of economic and health inequality.

The population projections contained in this report give an overall picture of the ethnic minority population developments for England and Wales to 2051 but the ethnic minority population of England and Wales is not evenly distributed. For example, in 2007, an estimated 38% of the ethnic minority population lived in London compared with only 14% of the population as a whole.

While overview projections are useful, because of the large variation in the distribution of ethnic minority groups throughout England and Wales, detailed local projections of ethnic minority numbers, such as those prepared by the Greater London Authority Data Management and Analysis Group (Klodawaski, 2009), the Cathie Marsh Centre for Census and Survey Research (Danielis, 2007; Simpson, 2007) or the School of Geography at the University of Leeds (Rees, Norman, Wohland and Boden, 2010) are essential for local planning.

Appendix (Tables)

Table A1: Ethnic transfer - Proportion of births assigned to each ethnic group

	Ethnicity of child	of child														
Ethnicity of mother	WB	×	MO	M-WBC	M-WBA	M-WA	O-W	₹	AP	AB	AO	BC	BA	ВО	HO H	ТО
White British	0.917	0.005	0.012	0.021	0.007	0.017	0.014	0.001	0.001	0.000	0.000	0.002	0.002	0.000	0.000	0.002
White Irish	0.527	0.321	090.0	0.027	0.009	0.022	0.018	0.001	0.001	0.000	0.000	0.002	0.002	0.000	0.003	0.005
White other	0.412	0.006	0.446	0.037	0.012	0.029	0.024	0.003	0.002	0.001	0.001	0.008	0.007	0.001	0.001	0.011
Mixed - White / Black Caribbean	0.157	0.002	0.005	0.411	0.033	0.082	0.066	0.005	0.003	0.001	0.001	0.113	0.099	0.020	0.000	0.000
Mixed - White / Black African	0.203	0.003	900.0	0.068	0.391	0.054	0.044	0.003	0.002	0.001	0.001	0.099	0.086	0.017	0.000	0.022
Mixed - White / Asian	0.312	0.004	0.009	0.073	0.024	0.442	0.048	0.020	0.014	0.005	0.005	0.000	0.000	0.000	0.000	0.043
Mixed - other	0.312	0.004	0.009	0.038	0.012	0.031	0.477	0.008	900.0	0.002	0.002	0.035	0.031	900.0	600.0	0.018
Indian	0.028	0.000	0.001	0.027	0.009	0.022	0.018	0.834	0.023	0.005	900.0	0.004	0.002	0.003	0.002	0.015
Pakistani	0.034	0.000	0.001	0.018	900.0	0.015	0.012	0.028	0.828	600.0	0.001	0.002	0.002	0.000	0.003	0.040
Bangladeshi	0.034	0.000	0.001	0.012	0.004	600.0	0.008	0.015	0.011	0.884	0.000	0.001	0.001	0.000	0.001	0.020
Other Asian	0.088	0.001	0.003	0.038	0.012	0.031	0.025	0.031	0.021	0.008	0.703	0.010	600.0	0.002	0.000	0.018
Black Caribbean	0.031	0.000	0.001	0.043	0.014	0.035	0.028	0.003	0.002	0.001	0.001	269.0	0.114	0.023	0.000	0.005
Black African	0.026	0.000	0.001	0.017	900.0	0.014	0.011	0.003	0.002	0.001	0.001	0.066	0.836	0.011	0.000	0.005
Other Black	0.054	0.001	0.002	0.066	0.022	0.053	0.043	0.004	0.003	0.001	0.001	0.083	0.073	0.591	0.000	0.004
Chinese	0.057	0.001	0.002	0.000	0.000	0.000	0.240	0.000	0.002	0.001	0.001	900.0	0.000	900.0	0.656	0.029
Other	0.138	0.002	0.004	0.089	0.029	0.072	0.058	900.0	0.004	0.002	0.001	0.014	0.012	0.002	0.021	0.544
Inward Transfer Index*	20.81	2.21	3.51	6.16	3.68	62.5	7.08	6.03	5.78	5.77	4.53	7.15	7.97	4.28	4.35	4.88
The Inward Transfer Index* for an ethnic around is the average of the retention probability for that around and the inward transfer probabilities from other ethnic arounds x 100. It is an indicator	ethnic arc	ath is the	average c	of the reter	tion probal	oility for th	at aroup a	Ind the in	ward trans	fer probe	hilities fro	m other e	thnic arou	ns x 100	It is an in	dicator

The Inward Transfer Index* for an ethnic group is the average of the retention probability for that group and the inward transfer probabilities from other ethnic groups x 100. It is an indicator of transfer patterns but ignores the relative sizes of the donor groups so does not measure the overall probability of transfer into a particular ethnic group.

Derived from Bains, Hollis and Clark, 2005.

Table A2: The ethnic minority population of England and Wales*

Ethnicity	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
White British	45,533,741	44,813,800	44,670,221	44,916,749	45,175,681	45,300,442	45,383,500	45,302,257	45,164,445	44,883,444	44,530,820
White Irish	641,804	589,243	542,396	503,503	466,931	432,873	403,000	376,550	354,480	334,940	318,774
White other	1,345,321	1,733,728	2,141,517	2,448,220	2,732,914	2,998,347	3,255,284	3,498,076	3,726,024	3,926,095	4,096,065
Mixed - White / Black Caribbean	237,4203	37,347	443,740	555,381	664,262	773,642	896,042	1,026,985	1,168,618	1,306,436	1,443,214
Mixed - White / Black African	78,911	124,574	172,912	219,529	265,209	311,324	362,786	418,143	477,782	536,068	593,982
Mixed - White / Asian	189,015	290,911	399,956	508,806	615,873	725,221	849,936	985,983	1,133,888	1,279,387	1,425,272
Mixed - other	155,688	245,921 3	47,355	450,885 5	51,863	653,349	766,856	889,801	1,025,119	1,160,296	1,296,740
Indian	1,036,807	1,286,127	1,560,023	1,789,111	2,002,425	2,199,270	2,397,293	2,595,778	2,796,929	2,983,368	3,156,140
Pakistani	714,826	897,309	1,107,737	1,309,696	1,506,180	1,701,099	1,918,261	2,152,736	2,406,174	2,654,876	2,905,375
Bangladeshi	280,830	365,352	463,795	61,296	656,862	756,559	874,725	1,007,080	1,152,895	1,299,844	1,455,375
Other Asian	241,274	316,839	400,023 4	77,642	552,443	623,593	694,092	762,647	830,411	894,196	954,263
Black Caribbean	563,843	611,291	660,483	706,575	750,573	796,168	850,660	910,494	976,107	1,038,004	1,099,487
Black African	479,665	720,077	985,854	1,220,923	1,451,953	1,682,274	1,932,465	2,198,946	2,485,179	2,768,890	3,052,358
Other Black	690'96	110,781	127,021	143,157	158,983	174,683	191,690	209,045	227,092	244,175	260,789
Chinese	226,948	373,784	534,418	662,350	785,168	900,015	1,011,190	1,118,236	1,222,644	1,320,949	1,412,255
Other	219,754	378,836	550,951	692,759	829,108	961,728	1,099,999	1,242,032	1,388,462	1,529,908	1,666,654
All	52,041,916	53,195,921	55,108,403	57,166,580	59,166,430	60,990,588	62,887,779	64,694,790	66,536,250	68,160,875	69,667,562
*Principal projection, migration falling to 70% of 2001-2007 average levels	ling to 70% of	2001-2007 av	rerage levels								

Table A3: The ethnic minority population of England and Wales (Males)*

Ethnicity	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
White British	22,175,065	21,956,732	21,985,122	22,195,141	22,371,999	22,457,071	22,511,172	22,487,110	22,443,880	22,340,171	22,206,028
White Irish	302,543	277,666	255,836	238,337	221,802	206,311	192,902	181,095	171,494	163,038	156,147
White other	626,682	820,306	1,024,519	1,178,844	1,321,727	1,454,205	1,582,091	1,702,662	1,815,902	1,914,902	1,999,368
Mixed - White / Black Caribbean	115,929	167,031	221,460	278,538	334,188	390,051	452,567	519,441	591,752	662,058	731,929
Mixed - White / Black African	38,736	61,900	86,422	110,084	133,244	156,608	182,696	210,753	240,983	270,504	299,879
Mixed - White / Asian	95,134	146,956	202,414	257,817	312,256	367,778	431,126	500,179	575,251	649,027	722,952
Mixed - other	75,342	121,332	173,011	225,819	277,286	328,954	386,782	449,400	518,339	587,180	656,656
Indian	515,431	638,318	774,176	888,193	994,214	1,091,732	1,189,816	1,288,003	1,387,855	1,480,536	1,566,836
Pakistani	362,258 4	52,714	557,598	658,730	757,291	855,048	964,111	1,081,991	1,209,487	1,334,521	1,460,516
Bangladeshi	141,755	183,683	232,811	281,681	329,664	379,904	439,630	506,658	580,421	654,588	732,940
Other Asian	132,117	169,139	210,004	252,4752	93,357	332,191	370,509	407,585	444,064	478,249	510,345
Black Caribbean	261,308	283,668	307,787	331,224	354,284	378,574	407,668	439,734	474,935	508,743	543,033
Black African	231,052	351,224	484,169	602,028	717,869	833,219	928,666	1,092,369	1,236,075	1,378,725	1,521,756
Other Black	45,670	53,076	61,267 6	9,428 7	7,446	85,411	94,056	102,908	112,143	120,977	129,726
Chinese	109,033	181,960	261,862	325,578	386,676	443,598	498,588	551,396	602,900	651,275	696,084
Other	97,871	177,482	263,699	334,828	403,144 4	69,548	538,950	610,343 6	84,203	755,550	824,610
All	25,325,926	26,043,186	27,102,156	28,228,744	29,286,446	30,230,201	31,201,330	32,131,626	33,089,684	33,950,045	34,758,805
* Principal projection, migration falling to 70% of 2001-2007 average levels	Illing to 70% of	2001-2007 av	verage levels								

Table A4: The ethnic minority population of England and Wales (Females)*

Ethnicity	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
White British	23,358,676	22,857,069	22,685,099	22,721,608	22,803,682	22,843,372	22,872,327	22,815,148	22,720,566	22,543,272	22,324,791
White Irish	339,261	311,5772	86,560	265,166	245,129	226,563	210,099	195,455	182,986	171,902	162,628
White other	718,639	913,422	1,116,998	1,269,376	1,411,188	1,544,142	1,673,192	1,795,414	1,910,122	2,011,193	2,096,698
Mixed - White / Black Caribbean	121,491	170,316	222,280	276,843	330,074	383,592	443,475	507,544	576,867	644,378	711,284
Mixed- White / Black African	40,175	62,674	86,490	109,445	131,965	154,716	180,089	207,390	236,799	265,564	294,103
Mixed - White / Asian	93,881	143,955	197,542	250,989	303,617	357,444	418,811	485,805	558,637	630,360	702,320
Mixed - other	80,346	124,590	174,344	225,066	274,577	324,396	380,075	440,401	506,780	573,116	640,085
Indian	521,376	647,810	785,847	900,919	1,008,211	1,107,538	1,207,478	1,307,775	1,409,074	1,502,832	1,589,303
Pakistani	352,568	444,595	550,139	996'099	748,889	846,051	954,150	1,070,745	1,196,688	1,320,355	1,444,859
Bangladeshi	139,075	181,669	230,984	279,615	327,199	376,655	435,095	500,423	572,474	645,255	722,435
Other Asian	109,157	147,700	190,019	225,167 2	59,086	291,402	323,583	355,062	386,348	415,947	443,917
Black Caribbean	302,535	327,623	352,696	375,351	396,289	417,595	442,992	470,760	501,171	529,261	556,453
Black African	248,613	368,853	501,686	618,895	734,084	849,055	973,799	1,106,577	1,249,104	1,390,165	1,530,602
Other Black	50,399	502,705	65,754	73,729	81,537	89,272	97,634	106,137	114,949	123,198	131,063
Chinese	117,915	191,825	272,556	336,771	398,492	456,417	512,602	566,840	619,744	669,674	716,171
Other	121,883	201,354	287,252	357,931	425,965	492,179	561,049	631,688	704,259	774,357	842,044
All	26,715,990	27,152,736	28,006,247	28,937,836	29,879,983	30,760,387	31,686,450	32,563,163	33,446,567	34,210,830	34,908,757
* Principal projection, migration falling to 70% of 2001-2007 average levels	lling to 70% of	2001-2007 av	verage levels								

Table A5: The ethnic minority population of England and Wales*

Ethnicity	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
White British	45,533,741	44,813,800	44,670,221	44,823,763	44,989,901	45,022,189	45,014,067	44,845,373	44,625,822	44,270,562	43,852,256
White Irish	641,804	589,243	542,396	498,877	458,136	420,374	387,271	358,085	333,758	312,425	294,909
White other	1,345,321	1,733,728	2,141,517	2,551,180	2,944,115	3,320,677	3,690,310	4,044,949	4,383,827	4,692,181	4,967,775
Mixed - White / Black Caribbean	237,420	337,347	443,740	555,010	664,833	775,799	900,244	1,033,407	1,177,883	1,319,167	1,460,469
Mixed - White / Black African	78,911	124,574	172,912	223,237	273,362	324,349	381,009	441,728	507,052	571,307	635,625
Mixed - White / Asian	189,015	290,911	399,956	514,855	629,629	747,713	881,898	1,027,861	1,186,576	1,343,751	1,502,545
Mixed - other	155,688	245,921	347,355	456,714	566,228	677,978	803,047	938,217	1,086,999	1,236,742	1,389,472
Indian	1,036,807	1,286,127	1,560,023	1,845,343	2,121,807	2,385,244	2,652,110	2,919,933	3,192,014	3,450,300	3,696,682
Pakistani	714,826	897,309	1,107,737	1,335,125	1,561,907	1,789,677	2,041,724	2,312,321	2,604,611	2,894,796	3,190,240
Bangladeshi	280,830	365,352	463,795	570,881	678,059	790,460	922,295	1,069,092	1,230,917	1,395,374	1,570,254
Other Asian	241,274	316,839	400,023	487,973	575,423	660,592	746,130	830,130	914,046	994,443	1,071,964
Black Caribbean	563,843	611,291	660,483	710,392	759,546	811,116	872,265	939,218	1,012,824	1,083,605	1,155,250
Black African	479,665	720,077	985,854	1,269,483	1,557,257	1,849,125	2,164,599	2,498,005	2,854,366	3,210,934	3,571,784
Other Black	690'96	110,781	127,021	144,355	161,708	179,139	198,045	217,399	237,634	257,084	276,331
Chinese	226,948	373,784	534,418	704,040	871,974	1,034,054	1,193,675	1,348,983	1,501,607	1,647,351	1,785,665
Other	219,754	378,836	550,951	730,284	908,198	1,084,662	1,268,424	1,456,354	1,649,574	1,838,084	2,022,659
All	52,041,916	53,195,921	55,108,403	57,421,512	59,722,112	61,873,149	64,117,113	66,281,057	68,499,508	70,518,107	72,443,879
* High migration –2001-2007 average levels	age levels										

Table A6: The ethnic minority population of England and Wales (Males)*

										erage levels	* High migration –2001-2007 average levels
36,105,653	35,092,531	34,040,459	32,899,053	31,795,435	30,655,923	29,553,800	28,350,849	27,102,156	26,043,186	25,325,926	All
1,001,403	908,712	814,069	716,998	622,807	530,764	442,521	353,501	263,699	177,482	97,871	Other
881,114	813,183	741,427	666,083	589,350	510,281	429,864	346,313	261,862	181,960	109,033	Chinese
137,527	127,454	117,432	107,098	97,242	87,643	78,809	70,026	61,267	53,076	45,670	Other Black
1,780,889	1,599,318	1,420,366	1,241,692	1,074,583	916,509	770,404	626,219	484,169	351,224	231,052	Black African
571,111	531,693	493,407	454,178	418,527	386,079	358,783	333,132	307,787	283,668	261,308	Black Caribbean
536,351	499,177	460,527	419,961	379,275	337,638	296,074	253,215	210,004	169,139	132,117	Other Asian
790,453	702,401	619,461	632,679	463,422	396,852	340,253	286,461	232,811	183,683	141,755	Bangladeshi
1,602,904	1,454,445	1,308,679	1,161,765	1,025,828	899,311	785,121	671,408	557,598	452,714	362,258	Pakistani
1,835,618	1,712,856	1,584,557	1,449,480	1,316,813	1,184,426	1,053,705	916,190	774,176	638,318	515,431	Indian
703,461	625,755	549,556	473,815	405,024	341,355	284,506	228,738	173,011	121,332	75,342	Mixed - other
761,731	681,322	601,682	521,182	447,152	379,047	319,156	260,837	202,414	146,956	95,134	Mixed - White / Asian
320,687	288,114	255,612	222,543	191,805	163,116	137,315	111,932	86,422	61,900	38,736	Mixed - White / Black African
740,894	668,684	596,583	522,798	454,771	391,193	334,505	278,361	221,460	167,031	115,929	Mixed - White /Black Caribbean
2,430,357	2,294,175	2,141,977	1,974,018	1,798,142	1,614,375	1,426,711	1,230,032	1,024,519	820,306	626,682	White other
144,405	151,953	161,285	171,991	185,141	200,140	217,458	236,052	255,836	277,666	302,543	White Irish
21,866,747	22,033,290	22,173,840	22,257,771	22,325,554	22,317,195	22,278,616	22,148,433	21,985,122	21,956,732	22,175,065	White British
2051	2046	2041	2036	2031	2026	2021	2016	2011	2006	2001	Ethnicity

Table A7: The ethnic minority population of England and Wales (Females)*

Ethnicity	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
White British	23,358,676	22,857,069	22,685,099	22,675,330	22,711,285	22,704,994	22,688,513	22,587,603	22,451,982	22,237,272	21,985,509
White Irish	339,261	311,577	286,560	262,825	240,677	220,234	202,130	186,094	172,472	160,472	150,504
White other	718,639	913,422	1,116,998	1,321,148	1,517,404	1,706,302	1,892,168	2,070,932	2,241,850	2,398,006	2,537,418
Mixed - White / Black Caribbean	121,491	170,316	222,280	276,650	330,327	384,606	445,473	510,609	581,300	650,483	719,575
Mixed - White / Black African	40,175	62,674	86,490	111,305	136,048	161,233	189,203	219,186	251,440	283,194	314,937
Mixed - White / Asian	93,881	143,955	197,542	254,018	310,503	368,665	434,746	506,679	584,894	662,430	740,814
Mixed - other	80,346	124,590	174,344	227,975	281,721	336,623	398,023	464,402	537,443	610,987	686,011
Indian	521,376	647,810	785,847	929,154	1,068,102	1,200,818	1,335,297	1,470,453	1,607,458	1,737,444	1,861,064
Pakistani	352,568	444,595	550,139	663,718	776,787	890,367	1,015,896	1,150,556	1,295,932	1,440,350	1,587,336
Bangladeshi	139,075	181,669	230,984	284,420	337,806	393,608	458,873	531,413	611,456	692,974	779,801
Other Asian	109,157	147,700	190,019	234,757	279,350	322,955	366,855	410,169	453,519	495,266	535,613
Black Caribbean	302,535	327,623	352,696	377,260	400,763	425,037	453,738	485,039	519,417	551,912	584,138
Black African	248,613	368,853	501,686	643,264	786,853	932,617	1,090,016	1,256,313	1,433,999	1,611,616	1,790,895
Other Black	50,399	502,705	65,754	74,329	82,899	91,496	100,803	110,301	120,202	129,630	138,804
Chinese	117,915	191,825	272,556	357,727	442,110	523,773	604,325	682,900	760,180	834,169	904,550
Other	121,883	201,354	287,252	376,782	465,677	553,898	645,617	739,356	835,505	929,372	1,021,255
All	26,715,990	27,152,736	28,006,247	29,070,663	30,168,313	31,217,226	32,321,678	33,382,004	34,459,049	35,425,575	36,338,226
*High migration -2001-2007 average levels	age levels										

Table A8: The ethnic minority population of England and Wales*

Ethnicity	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
White British	45,533,741	45,129,213	45,296,528	45,761,541	46,236,040	46,566,487	46,840,805	46,931,871	46,944,764	46,791,512	46,540,087
White Irish	641,804	607,446	577,370	549,281	522,397	496,759	474,065	453,497	436,032	419,785	405,508
White other	1,345,321	1,391,445	1,437,269	1,470,026	1,484,131	1,486,888	1,485,696	1,478,335	1,464,365	1,436,985	1,396,230
Mixed - White / Black Caribbean	237,420	336,533	436,790	538,349	637,664	737,898	849,017	965,948	1,089,807	1,208,133	1,323,609
Mixed - White / Black African	78,911	112,286	145,527	178,724	211,008	243,848	281,170	321,375	364,452	405,730	446,281
Mixed - White /Asian	189,015	270,900	353,511	437,320	519,313	603,630	700,814	806,286	919,651	1,028,988	1,137,244
Mixed - other	155,688	226,705	298,615	370,427	439,417	509,295	587,972	672,390	763,749	852,150	939,164
Indian	1,036,807	1,099,469	1,160,346	1,215,531	1,258,141	1,288,469	1,316,433	1,340,934	1,361,529	1,370,272	1,371,176
Pakistani	714,826	813,028	920,632	1,032,759	1,140,007	1,245,686	1,365,543	1,493,040	1,628,135	1,755,646	1,882,198
Bangladeshi	280,830	333,600	392,551	454,865	515,088	578,587	655,693	741,516	835,040	927,678	1,025,787
Other Asian	241,274	253,453	294,159	333,151	369,511	403,189	434,871	463,350	488,688	509,938	527,804
Black Caribbean	563,843	598,663	630,091	658,365	684,259	711,426	744,911	780,599	817,935	849,261	877,813
Black African	479,665	559,012	632,654	701,249	765,759	831,623	909,245	993,272	1,081,719	1,162,829	1,240,540
Other Black	690'96	106,811	117,828	128,977	139,746	150,360	161,750	172,851	183,789	193,319	201,914
Chinese	226,948	235,239	244,457	252,567	256,900	257,322	255,301	251,382	245,931	238,457	229,282
Other	219,754	254,233	286,435	314,695	338,218	360,404	386,487	415,118	445,553	473,263	499,453
All	52,041,916	52,328,037	53,224,765	54,397,828	55,517,601	56,471,872	57,449,772	58,281,764	59,071,139	59,623,948	60,044,089
* At zero net migration (natural growth)	owth)										

Table A9: The ethnic minority population of England and Wales (Males)*

Ethnicity	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
White British	22,175,065	22,113,432	22,296,748	22,615,839	22,900,484	23,088,172	23,237,220	23,298,118	23,328,507	23,286,760	23,201,361
White Irish	302,543	286,644	273,056	260,853	249,070	237,699	227,787	218,824	211,427	204,527	198,517
White other	626,682	650,208	674,574	692,866	701,754	704,603	705,568	703,715	699,152	688,121	671,103
Mixed - White / Black Caribbean	115,929	166,566	217,803	269,685	320,403	371,552	428,259	487,920	551,090	611,384	670,314
Mixed - White / Black African	38,736	55,778	72,752	89,687	106,141	122,871	141,893	162,384	184,344	205,385	226,098
Mixed - White /Asian	95,134	136,969	179,169	221,967	263,799	306,758	356,282	409,979	467,689	523,295	578,313
Mixed - other	75,342	111,713	148,512	185,264	220,546	256,248	296,476	339,628	386,349	431,550	476,044
Indian	515,431	545,428	575,058	602,221	623,153	637,916	651,607	663,680	674,262	679,303	681,001
Pakistani	362,258	410,716	464,194	520,284	574,169	627,333	687,768	752,157	820,469	884,948	949,018
Bangladeshi	141,755	167,856	197,227	228,441	258,719	290,845	330,006	373,693	421,223	468,148	517,687
Other Asian	132,117	137,606	171,942	205,139	236,722	266,593	295,040	321,327	345,435	366,715	385,442
Black Caribbean	261,308	277,359	292,548	306,993	320,923	335,929	354,430	374,312	395,234	413,609	431,258
Black African	231,052	271,016	308,033	342,557	375,123	408,429	447,850	490,660	535,865	577,741	618,439
Other Black	45,670	51,095	26,667	62,319	62,79	73,204	79,027	84,736	968'06	95,434	100,148
Chinese	109,033	113,088	117,669	121,741	123,955	124,230	123,352	121,636	119,362	116,192	112,161
Other	97,871	115,502	132,018	146,550	158,742	170,361	184,201	199,582	216,240	231,678	246,529
A⊪	25,325,926	25,065,032	25,307,687	25,974,095	26,702,946	27,403,831	28,011,692	28,597,094	29,249,394	30,039,755	30,906,515
*At zero net migration (natural growth)	owth)										

Table A10: The ethnic minority population of England and Wales (Females)*

Ethnicity	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
White British	23,358,676	23,015,782	22,999,781	23,145,702	23,335,556	23,478,315	23,603,585	23,633,752	23,616,257	23,504,751	23,338,726
White Irish	339,261	320,802	304,313	288,428	273,327	259,060	246,277	234,672	224,605	215,258	206,992
White other	718,639	741,237	762,695	777,160	782,377	782,286	780,128	774,620	765,213	748,863	725,127
Mixed - White / Black Caribbean	121,491	169,968	218,987	268,664	317,261	366,346	420,758	478,029	538,717	596,750	653,295
Mixed - White / Black African	40,175	56,508	72,775	89,037	104,867	120,977	139,277	158,991	180,108	200,344	220,183
Mixed - White / Asian	93,881	133,931	174,342	215,353	255,514	296,872 3	44,532	396,308	451,962	505,693	558,931
Mixed - other	80,346	114,992	150,103	185,164	218,871	253,047	291,497	332,761	377,400	420,600	463,119
Indian	521,376	554,042	585,287	613,310	634,988	650,553	664,826	677,255	687,267	696'069	690,175
Pakistani	352,568	402,311	456,438	512,474	565,839	618,354	677,775	740,882	807,666	869'028	933,181
Bangladeshi	139,075	165,744	195,324	226,424	256,369	287,742	325,688	367,823	413,817	459,529	508,100
Other Asian	109,157	115,847	122,217	128,011	132,789	136,596	139,831	142,023	143,252	143,223	142,361
Black Caribbean	302,535	321,305	337,543	351,372	363,336	375,497	390,481	406,287	422,701	435,652	446,555
Black African	248,613	287,996	324,622	358,692	380,636	423,193	461,396	502,613	545,854	585,089	622,102
Other Black	50,399	55,716	61,161	66,658	71,953	77,156	82,723	88,115	93,393	988'26	101,767
Chinese	117,915	122,151	126,789	130,826	132,945	133,093	131,949	129,747	126,569	122,266	117,121
Other	121,883	138,731	154,417	168,145	179,476	190,043	202,285	215,536	229,312	241,585	252,924
All	26,715,990	26,717,062	27,046,795	27,525,422	28,016,104	28,449,130	28,903,008	29,279,414	29,624,093	29,839,156	29,980,658
* At zero net migration (natural growth)	owth)										

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