



DYNAMICS OF DIVERSITY: EVIDENCE FROM THE 2011 CENSUS ESRC Centre on Dynamics of Ethnicity (CoDE)

How has ethnic diversity changed in Scotland?

Summary

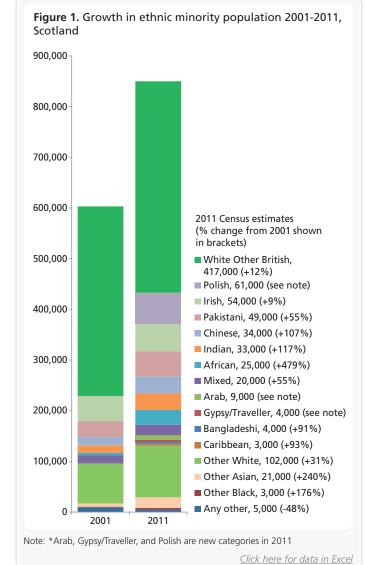
A comparison of recent censuses shows Scotland's growing ethnic diversity.

- Immigration and family-building have contributed to the rapid growth of Scotland's ethnic minorities who by 2011 numbered 850,000 or 16% of Scotland's residents. They include all who described themselves as other than 'White Scottish'.
- The largest minority is 'White: Other British' numbering 417,000 in 2011, an increase of 10% over the decade. About three guarters of this group were born in England.
- Change in the census question itself has added diversity, now identifying the Polish population. At 61,000 they are the second largest minority in 2011.
- Each minority increased its population during the last decade.
- The African population grew rapidly from 5,000 in 2001 to 30,000 in 2011. This growth was mainly from immigration, and was focussed on areas beyond those where Africans had mainly lived before.
- Other minority populations also dispersed across Scotland during the decade, growing faster outside of those areas in which they were most likely to be resident in 2001. The one exception is the Chinese population which has grown most in the student areas near universities where it was already concentrated.
- Scotland's diversity has increased both overall and in every local authority. Every ward in both Edinburgh and Glasgow has seen an increase in diversity.
- One in six of Scotland's households of two or more people have more than one ethnicity represented. Mixed or multiple ethnic groups number 20,000 people or 0.4% of the population.
- All of Edinburgh's population and two thirds of Glasgow's
 population live in electoral wards that are more diverse than
 Scotland as a whole. Both have become more diverse, and their
 diversity has spread more evenly through their cities, as it has
 through Scotland as a whole.

Scotland's ethnic diversity

Four and half million of Scotland's population describe their ethnic group as 'White Scottish'. Their number was steady between the censuses of 2001 and 2011. The remaining one sixth of Scotland's population total, 850,000, is a diverse mix of minorities that has increased in size by 29% in the same decade. Half of Scotland's ethnic minority population (417,000) described themselves as 'White: Other British' in 2011. Polish, Irish, Pakistani, Chinese, Indian and African ethnic groups each numbered between 30,000 and 61,000.

As Figure 1 shows, each minority population grew between 2001 and 2011. Several groups more than doubled their population in



a decade. The growth has occurred from immigration, and from an excess of births over deaths as expected in populations mainly comprising young adults.¹

In the 2011 Census 130,000 people did not find a single category suited them and so chose one of the 'Other' categories. The number of people choosing these 'Other' responses grew since 2001 despite the addition of three new categories: Polish, Gypsy/Traveller, and Arab. This suggests that the census ethnic group categories cannot capture the complexity of everyone's family background.

How has ethnic diversity changed in Scotland?



Further Census questions explore the diversity of family and cultural origins through religion, language, and country of birth. More than 300,000 of Scotland's residents speak a language other than English at home, and most of these are bilingual or multilingual since only 75,000 do not speak English well or very well. National Records of Scotland provides census data here.

Dispersal across Scotland

There has been recurring political interest in the extent to which ethnic groups mix or remain separate. The evidence from the Census shows that minorities are moving into new parts of Scotland.

Figure 2 shows that growth has been at least as great outside each group's 'clustered' wards as within them, with Chinese the only exception to this rule. For example, the Indian population grew by about a quarter in those areas where it was most clustered in 2001, including wards in Glasgow and East Dunbartonshire. But it grew much faster elsewhere, more than doubling in other areas. We can safely conclude that Indians were moving in substantial numbers to areas where they were not previously established.

The same is true of other minorities, including the White Other British and the Irish groups: on balance their populations grew faster in wards outside those where they had been most concentrated in 2001.

The Chinese population is the exception. It grew fastest in the areas in which it was established, including in Anderston and Hillhead in Glasgow and Southside in Edinburgh. Student immigration to these University areas is likely to have made their Chinese population grow faster than elsewhere.

Scotland's African population is another special case. Its five-fold growth between 2001 and 2011 has created new areas of settlement larger than the ones that had been its main clusters in 2001. Springburn in Glasgow had 322 African residents in 2001 and the highest proportion in Scotland, followed by two wards in Edinburgh. In 2011 Springburn's African population had increased rapidly to 2,360, but it is now followed by other wards in Glasgow and in Aberdeen, all of which had fewer than 100 African residents in 2001 but between 690 and 1,100 residents in 2011.

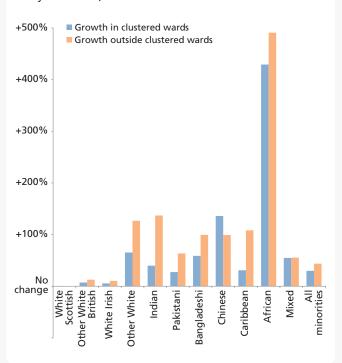
More mixed ethnicity for individuals and for households

Figure 3(a) shows the number of people with mixed ethnicity, which could be considered an indication of the most intimate form of mixing of ethnic groups in Scotland. There were 20,000 people recorded as 'Mixed or multiple ethnic groups' in the 2011 Census, up from 13,000 in 2001 but still just 0.4% of the population. The proportion is highest in the urban areas where ethnic diversity is also high.

The Census question on ethnicity

Scotland has developed its ethnic group question independently from other parts of the UK. The question distinguished 'White Scottish' from 'White Other British' for the first time in 2001. In 2011 it identified 'White: Polish', 'White: Gypsy/Traveller', and 'Arab' for the first time, and made African a separate category from 'Caribbean or Black'. Most answers 'written in' are collected under 'Other' categories and cannot be reliably compared from one census to the next. The categories that we considered as equivalent across the censuses are described in the data for this briefing.

Figure 2. Population growth of ethnic groups in the wards where each group is clustered, and population growth everywhere else, 2001-2011



Notes: The 'clustered wards' for each ethnic group include a fifth of the group's population in 2001 with highest percentage of the group. The other wards include the remaining four-fifths. The most clustered wards include: *Other White British*: Lomond North (Argyll&Bute), Forres (Moray), North Isles (Orkney), Annandale East (Dumfries&Galloway). White Irish: Southside Central, Langside, Anderston and Linn (Glasgow), West End (Dundee); *Pakistani*: Pollokshields and Southside Central (Glasgow); *Indian*: Pollokshields (Glasgow), Bearsden South and North and Bishopbriggs South (E Dunbartonshire); *Chinese*: Anderston and Hillhead (Glasgow), Southside and Liberton (Edinburgh), George St (Aberdeen); *African*: Springburn (Glasgow), Tillydrone and George St (Aberdeen), West End (Dundee).

Click here for data in Excel

Comparing areas within Scotland

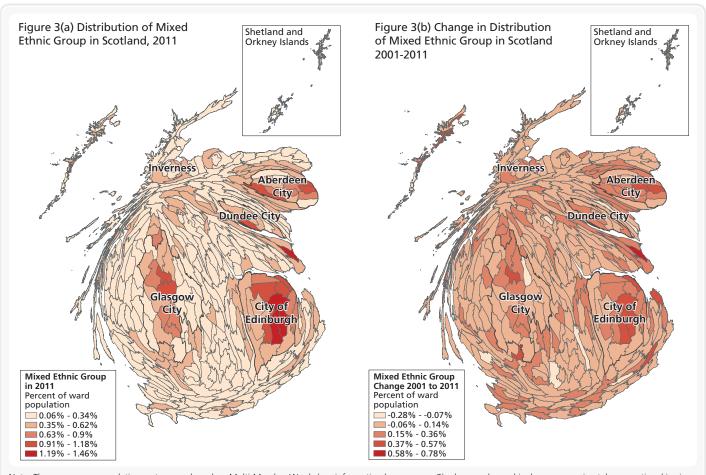
Only minor boundary changes have been made to Scotland's 32 Council Areas between 2001 and 2011. To compare smaller areas we have used the 353 Multi-Member Wards with boundaries established in 2007. Census output approximates these wards from both the 2001 and 2011 Censuses by adding together Census Output Areas. The approximation means that small changes between censuses for individual wards may not be reliable. We have focused on major results rather than marginal changes for single areas.

Figure 3(b) shows the change between 2001 and 2011 in the proportion of people with mixed ethnicity in the population for each ward in Scotland. Notably, this has increased rapidly outside the areas where mixed ethnicity is most common, although from a low level. This again suggests the spreading of diversity across Scotland.

Another indication of mixing is that among households with two or more people in Scotland, 16% or 1 in 6 are home to people of different ethnic groups.

How has ethnic diversity changed in Scotland?





Note: These maps are population cartograms based on Multi-Member Wards (see information box on page 2) where each ward is shown approximately proportional in size to its resident population. The highlighted areas are intended to act as reference points.

Click here for data in Excel

Ethnic diversity across Scotland

Ethnic diversity is on the increase, but how diverse is each area in Scotland? The 2011 Census tells us that no local authority is very diverse. On a scale of 0 to 100 (see information box), Edinburgh is the most diverse local authority in Scotland at 7.2, but the average for the whole of Scotland is just over 3. Scotland's diversity measured in this way has increased from 2.1 in 2001 and to 3.1 in 2011.

This may seem a small change, but it is an increase of fifty per cent in a decade. Every local authority has increased its diversity since

How does diversity grow?

Scotland's diversity has grown through immigration from other parts of the UK and from overseas, from movement within Scotland, but also from family building. Births outstrip deaths for many years in ethnic minority communities that have arisen through immigration, because immigrants are usually young adults. As children grow up they create their own households and often move within Scotland and away from their parents. This sequence of immigration to cities, settlement and family building, followed by movement to new areas, has been common for immigration to developed countries for several centuries. In addition, overseas students increase diversity around Universities. Since 2000, policies to disperse asylum seekers from the south of England have increased the African and other populations in Scotland, in particular in areas of Glasgow.³

Measuring geographical concentration

International migrants to Scotland tend to live in the most available rental accommodation, close to other immigrants who understand their language and their needs. These clusters of population grow after further immigration and as children are born. Movement within Scotland tends to be away from these areas of arrival to the extent that families desire to and can afford to move to other areas, but also because available accommodation within these clusters is reduced by their growing population.

Data about migration have not yet been released and so this briefing has measured changes in concentration of each group. For each group it identifies the wards which include a fifth of the group's population in 2001 with the highest percentage of the group. It measures the growth of the group between 2001 and 2011 in those most clustered areas, and the growth outside those areas. Higher growth outside the areas indicates moving that creates a more even spread in 2011.

2001. All but nine of the 353 wards in Scotland have increased diversity. Six of these decreased by a very small amount. The only three wards to have significantly decreased their diversity are in Argyll & Bute and Moray which may have been affected by reduced staffing levels and changing operations of nearby military bases.

How has ethnic diversity changed in Scotland?



Measuring diversity

Ecologists have a very useful notion of diversity which we have applied to calculate how closely each local authority and ward is to having an equal number of each ethnic group measured in the census. We have combined White Gypsy/Traveller and White Polish with Other White, and Arab with Other, for better comparability with 2001. Called the 'Reciprocal Diversity Index', the ecologists add the fourteen ethnic group squared proportions, and divide the sum into 1. The Index is greatest when there are equal numbers in each group, and lowest when there is only one group in an area. We have standardised the index by stretching it to be always within the range 0 to 100.4 The average across Scotland taken as one area has increased from 2.1 in 2001 to 3.1 in 2011. The values of diversity are between 0.5 and 17.5 for all wards in Scotland. Diversity tends to rise above 10 when more than one group has 10% of the local population.

Eight of the ten wards with greatest diversity are close to Universities: City Centre, Southside and Meadows in Edinburgh, St Andrews in Fife, Anderston and Hillhead in Glasgow, and George St/Harbour and Tillydrone/Seaton in Aberdeen City. In each of these a third or more of their adult residents are students.

The five most diverse wards which are not also student areas are Pollokshields and Southside Central in Glasgow, Leith and Leith Walk in Edinburgh, and North Isles in Orkney. In North Isles it is the large proportion which chose 'White Other British' which makes its ethnic diversity; 34% of North Isles residents were born in England.

There is a very strong relationship between diversity and the total population of ethnic minorities in a ward (the correlation coefficient is 0.97). The areas with the fewest White Scottish are also the most diverse.

The areas with little diversity are the areas where the population is almost entirely White Scottish, though in the main this is no longer a common feature of modern Scotland. Wards with more than 90% White Scottish are located mostly on the west of Scotland, on the edges of the Glasgow conurbation, and also the Shetland Isles.

On the other hand, White Scottish remains the largest ethnic group in every ward in Scotland, and only in the City Centre ward of Edinburgh did it constitute less than half of a ward's population. In other words, Scotland's growing diversity is not creating polarised islands of different groups, but a mosaic of differently mixed areas.

Comparison with England and Wales

Direct comparisons are not possible, because different questions were asked in the censuses, and local areas differ in size. However, England and Wales also has movement of minorities from established areas to other areas, and increasing diversity both overall and in all districts (see *How has ethnic diversity grown 1991-2001-2011* Briefing).

Diversity within Edinburgh and Glasgow

Edinburgh and Glasgow are the largest Scottish local authorities with one fifth of Scotland's population. They house 32% of Scotland's ethnic minorities, or 44% of the minority population if 'White Other British' is excluded. This is similar to London's 41% of all of England and Wales' minorities other than 'White British'.

There were notably different patterns of diversity within these two cities in 2001, with the ethnic minority population much more widely dispersed in Edinburgh than Glasgow.⁵ Is this still the case? Using the same measure of diversity as above, in 2011 all of Edinburgh's wards had higher diversity than Scotland's value of 3.1, while in Glasgow 68% of its population lived in wards with higher diversity than Scotland. While all of Edinburgh's wards in 2001 already had higher values of diversity than the national level, for Glasgow there had been a significant increase in diversity since 2001 as only 44% of its wards had been above the national level a decade ago.

In both cities the geographers' measure of separation, the Index of Dissimilarity for White Scottish versus all minorities, decreased in the decade. It started from a higher point and declined more rapidly in Glasgow (30% down to 25%) than in Edinburgh (25% down to 22%).

As city boundaries are changing and housing stock in the two cities is very different, it is not reasonable to draw strong conclusions from differences in these measures of diversity. What is clear is that both cities are becoming more ethnically diverse and their diversity has become more widely spread across their wards.

Beyond Edinburgh and Glasgow, where the majority of Scotland's population live, and the majority of its minorities live, diversity is growing even faster as described above. This growth is perhaps less noticeable because it is spread across a wider area.

Sources: The 2001 and 2011 Censuses (Crown Copyright)

This briefing is one in a series, *The Dynamics of Diversity: evidence from the 2011 Census*.

Author: Ludi Simpson

Centre on Dynamics of Ethnicity (CoDE)

The University of Manchester Oxford Road, Manchester M13 9PL, UK

email: censusbriefings@ethnicity.ac.uk

www.ethnicity.ac.uk











¹ Further discussion of the sources of population change for England and Wales is given in What makes ethnic group populations grow?

² Census ethnic group questions in the UK: What is your ethnic group? Extracted from the specimen Census forms as held on Census agencies' websites.

³ Sim, D. and Bowes, A. (2007). Asylum Seekers in Scotland: The Accommodation of Diversity. Social Policy & Administration, 41(7): 729–746.

⁴Simpson, L. (2007). Ghettos of the mind: the empirical behaviour of indices of segregation and diversity. Journal of the Royal Statistical Society: Series A (Statistics in Society), 170(2), 405–424.

⁵ See p26 in: Office of the Chief Statistician (2004). Analysis of Ethnicity in the 2001 Census, Summary Report, Scottish Executive, Edinburgh.