

Population and Migration Statistics Committee (Scotland)

Mid-2001 Population Estimate by Ethnic Group

1. Introduction

- 1.1 With the 2001 Census quickly becoming out of date there is increasing and substantial interest in up-to-date estimates of ethnic minority populations living in Scotland. Currently, the only information available on the size of ethnic groups living in Scotland is from the 2001 Census and the Labour Force / Annual Population survey. However these sources have limitations. The former doesn't reflect the rapid growth in some ethnic groups since 2001, particularly around the time A8 accession countries were added to the European Union, and the latter are limited by high levels of age, sex and ethnic group aggregations and are not consistent with the Registrar General's mid-year population estimates for Scotland.
- 1.2 This paper describes the method used to produce 'experimental' estimates of the population of Scotland by ethnic group (PEEG) for the period mid-2001. The methodology – termed the cohort component method – is an adaptation of that used by the Office for National Statistics (ONS) to estimate the ethnic group population of England and its Local Authority Districts. The approach constrains population counts and components of change to be consistent with the Registrar General's 2001 mid-year population estimates (MYE) for Scotland (see [Annex A](#)).
- 1.3 The method is designed to produce Scotland level estimates split by single year of age, sex and 14-category (14-cat) ethnic group for the period mid-2001, which can then be rolled on to the present mid-year period. Where possible the method is consistent with that used for the Registrar General's MYEs for Scotland.
- 1.4 The data used is the best currently available.
- 1.5 For the purpose of this paper ethnic group is the self-assigned ethnicity chosen by a Census survey respondent from a set of 14 ethnic classifications. A person's ethnic group can change over time and may be different from his or her siblings, parents and offspring. As discussed in the ONS paper – 'Population Estimates by Ethnic Group Methodology' (see [Annex A](#)) – the description of ethnic group can change in different contexts.
- 1.6 Due to the changes in the ethnic group classification, 2011 Census data will not be directly comparable to the 2001 Census data and a number of considerations will have to be taken into account when looking at trends over time. It will still be possible to compare the data at the White, Mixed

or Multiple, Asian, African, Caribbean or Black and Other level. The differences in the data collected from the new 2011 question and that collected from the 2001 Census for each section are described in the following link:

<http://www.scotland.gov.uk/Publications/2008/12/05094441/1>.

2. The Cohort Component Method

- 2.1 The standard approach to estimating the population of Scotland and areas within Scotland is to use the cohort component method (CCM).
- 2.2 In summary, the CCM takes the Census population - ages it on, adds births, removes deaths, allows for migration to and from the country and adjusts for special groups such as armed forces and prisoners. This process is repeated year after year until the next Census.
- 2.3 The benefit of using this method to estimate the size of ethnic groups living in Scotland is that it:
 - is consistent with the Registrar General's MYE for Scotland methodology;
 - has the potential to be developed to produce sub-national estimates;
 - has the potential of being extended to produce Scotland level projections; and
 - allows for analysis and differentiation between the various components of the population.
- 2.4 The problem with using the CCM to create a PEEG is that the CCM relies on demographic rates and propensities recorded in the 2001-Census.
- 2.5 2001 Census data not readily available from the Scotland Census Results On-line (SCROL) website was supplied by the Dissemination and 2001 Census Analysis Branch of the General Register Office for Scotland. Commissioned data from the England and Wales 2001 Census and the Northern Ireland 2001 Census was supplied by the ONS Census Unit and the Northern Ireland Statistics and Research Agency (NISRA) Census Unit respectively.

3. Base Population

- 3.1 The starting population for the ethnic group estimates, also known as the base population, was the 2001 Census population split by age, sex and 14-cat ethnic group. The base population is summarised in Table 1 below.

Table 1: Population by ethnic group: Scotland, 2001

	Total	% of total
All People	5,062,011	100
White	4,960,334	98.0%
White Scottish	4,459,071	88.1%
Other White British	373,685	7.4%
White Irish	49,428	1.0%
Other White	78,150	1.5%
Indian	15,037	0.3%
Indian	15,037	0.3%
Pakistani and Other South Asian	39,970	0.8%
Pakistani	31,793	0.6%
Bangladeshi	1,981	0.0%
Other South Asian	6,196	0.1%
Chinese	16,310	0.3%
Chinese	16,310	0.3%
Other	30,360	0.6%
Caribbean	1,778	0.0%
African	5,118	0.1%
Black Scottish or Other Black	1,129	0.0%
Any Mixed Background	12,764	0.3%
Other Ethnic Group	9,571	0.2%

Source: 2001 Census

- 3.2 The base population was rolled forward (aged on) by nine weeks to Mid-2001. But before ageing-on and applying components of change, armed forces (AF) personnel and prisoners¹ were removed from the population. This is consistent with the approach used to produce the Registrar General's MYEs and by ONS when estimating the mid-year population by ethnic group in England. ONS also remove school boarders, however the General Register Office for Scotland (GROS) do not have the data to allow for this step, and the numbers are significantly smaller in Scotland.

4. Removal of Special Populations

- 4.1 The AF population, by ethnic group, recorded in the 2001 Census² was removed from the base population. According to the published 2001 MYE ([Annex A](#)) the AF population has assumed not to change during the nine week period. Therefore after ageing on the remaining population, the AF

¹ AF personnel and prisoners are given the term 'special populations' because they have specific age structures that remain fairly constant over time.

² GROS are not able to say how accurately the armed forces data collected in the 2001 Census reflect the actual totals at that time in Scotland. There was no specific question in the 2001 Census relating to AF. Instead the data was gathered through the occupation question and via defence establishment returns, both of which produced an underestimated count of armed forces personnel. The data gathered through the occupation question is believed to be the more realistic figure, and so it was chosen for use here.

population was simply added back in with the same age, sex and ethnic composition.

- 4.2 The prison population, by ethnic group, recorded in the 2001 Census was removed from the base population. As with AF, the table in [Annex A](#) shows no change in the prisoner population during the nine week period. Therefore after ageing on the remaining population the prison population was also added back in with the same age, sex and ethnic composition.

5. Ageing the base population by nine weeks

- 5.1 To age the base population by nine weeks it was necessary to identify the number of people (by age, sex and ethnic group) whose age had increased by one during the nine week period. So counts of all persons (by age, sex and ethnic group) whose birthday lay between 29th April 2001 and 30th June 2001 were extracted from the 2001 Census results. The base population was then aged on using this information.

6. Calculating and applying components of change

6.1 Births

- 6.1.1 When calculating the Registrar General's MYE for Scotland, we add in the number of births registered in the year to the mid-year period. The same approach was applied here except that it was necessary to somehow split the registered births among ethnic groups. This was done in the following way:
- i) The 2001 Census count of women aged 15-44 with a child aged zero was divided by the total Census population of women aged 15-44 for each single year of age (SYOA) to give age specific fertility rates (ASFRs (also known as mothering ratio)) for Scotland.
 - ii) Since a mother (of an infant) aged x at Census day may have been aged x or $x-1$ at the time of the infant's birth the final ASFRs were taken to be the mean of the ASFRs for the two applicable years.
 - iii) The 2001 Census count of women aged 15-44 with a child aged zero, by ethnic group of mother was obtained in order to calculate ASFRs for each ethnic group (in the same way as for Scotland as a whole).
 - iv) The ethnic group ASFRs from step 3 were divided by the Scotland ASFRs from step 1 to give a 'differential' for each ethnic group.
 - v) The number of births by women aged 15-44, by SYOA of mother and sex of infant for Scotland as a whole registered during the nine-week period was supplied by GROS' Vital Events Branch and a 'nine week ASFR' was calculated.
 - vi) The ASFR from step 5 was multiplied by the ethnic group differentials from step 4 to give a 'nine week ASFR' for each ethnic group.

- vii) Each ethnic group nine week ASFR was multiplied by the aged on base population to give an initial estimate of the number of births in each ethnic group for the nine week period.
- viii) The initial estimates were then constrained to the figure in the published components of change table in [Annex A](#).
- ix) Finally, the estimated number of male and female births in each ethnic group were added to the base population of zero year olds.

6.1.2 Adding births before taking account of migration has the weakness that slightly too few births will be generated for groups which have relatively high net in-flows of women of child-bearing age (and similarly slightly too many births generated for groups with relatively low net in-flows). However, this approach is consistent with the Registrar General's MYE for Scotland and its administrative areas.

6.1.3 Infants in households and communal establishments that are not linked with their mother on the Census records will not be reflected in the estimates of fertility differentials. ONS revised their methodology to scale the initial estimates of fertility rates to provide the best fit to the Census counts of *all infants* within each ethnic group. We looked into doing this to the Scottish estimates. However, the ethnic composition of unlinked children was nearly identical to that of linked children, so it was decided that the extra work involved in adjusting the fertility rates was not warranted.

6.1.4 The method used allows us to estimate the number of babies born to women of each ethnic group. However, it does not take into account heteroethnic infancies – the propensity for mothers to have different ethnic characteristics from their children. ONS improved their methodology to account – to some degree³ – for heteroethnic infancies, but the equivalent cannot currently be undertaken in Scotland due to resource and data constraints.

6.2 Deaths

6.2.1 The ethnic composition of deaths occurring during the nine week period was estimated. This was done by dividing the nine week death registration count (split by age and sex) by the base population to get an age/sex specific mortality rate (ASSMR) for Scotland as a whole. The ASSMR was then applied to each ethnic group mid-year population to get an initial death count for each ethnic group (by age and sex). This initial count was constrained to the figure published in the components of change table in [Annex A](#). The estimated number of deaths in each ethnic group, split by age and sex were then subtracted from the base population.

³ it becomes more difficult to account for heteroethnicity as you get further away from the 2001 Census because heteroethnicity is ever changing and is a consequence of and a driver of changing ethnic compositions of multicultural societies.

6.3 Migration

The migration component was by far the hardest to estimate, this is because:

- there is no comprehensive source of migration data – all existing migration statistics for Scotland are estimated using patient registrations extracted from the National Health Service Central Register (NHSCR) and survey data;
- England & Wales (E&W) Census data and Northern Ireland (NI) Census data on the ethnic composition of in-migrants from Scotland was used and both sources have a different ethnic group classification to Scotland;
- the propensity to migrate will be different for different ethnic groups; and
- there is a lack of data on the ethnic characteristics of those seeking Asylum in Scotland and those migrating to/from the Republic of Ireland.

6.3.1 Within Scotland (domestic) migration

Although not required for Scotland level estimates, it has been investigated for future work.

6.3.2 Migration to/from rest of the UK (RUK)

The ethnic composition of people migrating into Scotland from the rest of the UK is thought to be different for different constituent countries. For example, migrants from NI will be predominantly White Irish which will not be the case for migrants from E&W; therefore migration from each constituent country of the UK is dealt with separately.

Inflow from NI

The 2001 Census count of migrants from NI split by age, sex and ethnic group was obtained and the ethnic composition of each age/sex combination was applied to the 'agreed'⁴ nine week flow of migrants from NI.

Inflow from E&W⁵

2001 Census count of migrants from E&W split by age, sex and ethnic group were obtained and the ethnic composition of each age/sex combination was applied to the agreed nine week flow of in-migrants from E&W by SYOA and sex.

⁴ 'Agreed' flows are ones which, historically, have been mutually signed off by Northern Ireland Statistics and Research Agency, the Office for National Statistics and the General Register Office for Scotland.

⁵ It is believed that the historic record of the nine week 'agreed' inflow from and outflow to E&W held by GROS is not the figure used historically to calculate the components of change shown in Annex A, therefore these flows were adjusted when calculating the PEEG estimates.

The initial estimates were then adjusted so that the overall estimated net civilian migration would match that published in the components of change table in [Annex A](#).

Outflow to NI

The NI 2001 Census count of in-migrants from Scotland split by age-group, sex and five category ethnic group was obtained and the age/sex/ethnic composition was applied to the agreed nine week flow of out-migration to NI.

The five category ethnic grouping was then broken down to match the Scottish 14 category classification using a combination of the ethnic distribution of the population recorded by the Scottish Census and the ethnic distribution of in-migrants from NI recorded by the Scottish Census.

The age composition of out-migration to NI recorded in GROS' historic mid-2001 migration data was used to disaggregate age-groups into single year of age.

Outflow to E&W

The E&W 2001 Census count of in-migrants from Scotland split by age-group, sex and 16 category ethnic group was obtained. The counts were converted to the Scottish 14-cat ethnic classification and then constrained to the agreed nine week flow of out-migration to E&W.

The age composition of out-migration to E&W recorded in GROS' historic mid-2001 migration data was used to disaggregate age-groups into single year of age.

The initial estimates were then adjusted so that the overall estimated net civilian migration would match that published in the components of change table in [Annex A](#).

Net migration between Scotland and Rest of UK split by ethnic group, age and sex was calculated by subtracting the NI and E&W outflows from the NI and E&W inflows.

6.3.3 International migration

In-line with the ONS methodology (published in January 2006), international migration was broken into three components:

- Migration measured by the International Passenger Survey (IPS) incorporating 'Visitor Switchers';
- the migration of Asylum Seekers into Scotland; and
- migration to and from Ireland.

IPS / Visitor Switcher component

The IPS provides a measure of the number of people migrating to Scotland and staying for at least 12 months. 'Visitor switchers' – temporary visitors who stay longer than initially planned and intended migrants who leave before 12 months – are already corrected for in the IPS figures used here. It is assumed that the ethnic composition of visitor switchers is the same as that of intended migrants captured by the IPS.

- Inflow

The 2001 Census count of migrants from overseas, by age, sex and ethnic group was obtained and the ethnic composition was applied to the agreed nine week IPS (+ visitor switcher) in-migration total.

- Outflow

Calculating the ethnic composition of people emigrating to overseas during the nine week period was slightly more involved than calculating the inflow from overseas. The approach taken was as follows:

- i) IPS data was obtained from the Migration Statistics Unit of ONS detailing the number of migrants leaving the UK during the year to mid-year 2002, split by age, sex and country of birth (COB).
- ii) The Census cross tabulation of COB by 14-cat ethnic group (by sex) was obtained.
- iii) The IPS COB classification was matched to the 2001 Census COB classification to derive a cross tabulation of IPS COB by 14-cat ethnic group (by sex).
- iv) The ethnic group composition of each IPS COB category was then applied to the IPS migrant count totals (for each COB category) to derive a total IPS outflow by 14-cat ethnic group and sex. Which was then further disaggregated into 'IPS defined' age-groups based on the proportions presented in the original IPS table.
- v) The new outflow (by age-group, sex, and ethnic group) was then scaled to the agreed nine week flow (IPS total flows + visitor switcher).
- vi) The age-distribution of Scotland to the 'rest of UK' migrants (which is more robust than the Scotland to Overseas data), taken from GROS mid-2001 historical migration data, was used to disaggregate the age-groups into single year of age.

- Net migration between Scotland and Overseas split by ethnic group, age and sex was calculated by subtracting the overseas outflows from the overseas inflows.

Asylum Seeker component

In 2001 outward asylum seekers weren't included in the migration component of the mid-year estimates for Scotland; therefore they are not included in the mid-2001 migration component for PEEG. Inward asylum seekers are however included.

The agreed mid-2001 count of asylum seekers migrating into Scotland was provided historically by ONS. It was necessary to split this count by age, sex and ethnic group.

The first stage was to calculate a male and female age distribution.

- Stage 1: calculating the age distribution for each sex
 - i) Home Office (HO) data on applications received for asylum in UK by age and sex was downloaded from the HO website ([see reference 8.2](#)).
 - ii) The agreed figure was split first by sex and age-group by applying the distributions found in the table referred to above.
 - iii) The age-group counts, for each sex, were then disaggregated by SYOA using the same distribution that was used in the 2001 MYE for Scotland calculations – that being the mid-2001 SYOA distribution of Asylum Seeker migrating into E&W including dependents (provided historically by ONS)⁶.

The next stage was to disaggregate the agreed figure by ethnic group

- Stage 2 calculating the ethnic composition:
 - iv) The Census cross tabulation of COB by 14-cat Ethnic Group (by sex) was obtained.
 - v) HO data on those granted asylum/permission to stay in the UK in 2001, by sex and nationality was downloaded from the HO website ([see reference 8.3](#)).
 - vi) The HO nationality classification from the table referred to above was matched to the table in step 4 to derive a cross tabulation of HO nationality by 14-cat ethnic group (by sex). Assuming that no asylum-seekers are White British, White British ethnic groups were set to zero.
 - vii) The ethnic group composition of each HO nationality category was then applied to the count of those 'granted asylum/permission to stay' (for each nationality category) to derive a 'granted asylum/permission to stay' count split by 14-cat ethnic group and sex. This was then further disaggregated into SYOA using the age distribution calculated in stage 1.

⁶ To be consistent with the Registrar General's MYE for Scotland the same distribution should be used to create mid-2002, mid-2003, and mid-2004 estimates. For mid-2005 to present the 2005 MYE age-distribution of Asylum Seekers should be used.

The resultant table of Asylum Seekers granted asylum/permission to stay in the UK in 2001, by 14-cat ethnic group, SYOA and sex was then constrained to the agreed nine week figure.

Irish Republic component

Information on inflows from the Republic of Ireland is not available from the 2001 Census so 2001 Census data on inflows from Northern Ireland was used as a proxy. It was assumed that the ethnic composition of Republic of Ireland inflows and outflows is similar to that of inflows from Northern Ireland recorded in the Census.

- Inflow

The number of people moving into Scotland from the Irish Republic is simply the Census table of in-migrants from NI, by age, sex and ethnic group controlled to the agreed nine week inflow from the Irish Republic.

- Outflow

The number of people moving out of Scotland to the Irish Republic is simply the derived table of out-migrants to NI by age, sex and ethnic group (see section 6.3.2), controlled to the agreed nine week outflow to the Irish Republic.

- Net migration between Scotland and the Irish Republic split by ethnic group, age and sex was calculated by subtracting the Irish Republic outflows from the Irish Republic inflows.

The derived Overseas net migration, Asylum Seeker in migration and Irish Republic net migration was combined to give a **total international migration** table of net flows, by SYOA, sex and 14-cat ethnic group.

Total international migration was combined with net migration between Scotland and Rest of UK and added to the base population (after adjustment for natural change), to give a mid-2001 population of Scotland split by ethnic group (14 classification), age and SYOA.

7. Mid-2001 population estimate by ethnic group, age and sex

When summed across ethnic group, age and sex the estimates match the Registrar General's 2001 MYE for Scotland.

As shown in table 2 below, the population change between Census day and 30 June equates to 2,189, which is attributable to a net in-flow of 2,493 migrants in the nine week period, partially offset by a natural decrease (births minus deaths) in the period of 304.

Not surprisingly the distribution of the population among ethnic groups remains fairly constant over the nine week period, as does the median age and the percentage of the population that are of child bearing age and sex. This is shown in table 3.

Table 2: Components of population change by ethnic group; Census day 2001– 30 June 2001

	Census Day population 29 April 2001	Births	Deaths	Natural change	Estimated net civilian migration	Other ¹ changes	Estimated population 30 June 2001	Population change Number	%
SCOTLAND	5,062,011	8,821	9,125	-304	2,493	0	5,064,200	2,189	0.0
White	4,960,334	8,580	9,067	-487	1,548	0	4,961,396	1,062	0.0
White Scottish	4,459,071	7,596	8,137	-541	2,274	0	4,460,804	1,733	0.0
Other White British	373,685	728	703	25	-1,780	0	371,929	-1,756	-0.5
White Irish	49,428	82	122	-40	-14	0	49,374	-54	-0.1
Other White	78,150	174	105	70	1,069	0	79,288	1,138	1.5
Indian	15,037	31	10	20	-102	0	14,956	-81	-0.5
Indian	15,037	31	10	20	-102	0	14,956	-81	-0.5
Pakistani and Other South Asian	39,970	108	21	87	429	0	40,486	516	1.3
Pakistani	31,793	91	16	76	2	0	31,870	77	0.2
Bangladeshi	1,981	3	1	2	150	0	2,134	153	7.7
Other South Asian	6,196	13	4	9	277	0	6,482	286	4.6
Chinese	16,310	32	10	22	106	0	16,438	128	0.8
Chinese	16,310	32	10	22	106	0	16,438	128	0.8
Other	30,360	71	17	54	511	0	30,925	565	1.9
Caribbean	1,778	2	2	1	-2	0	1,776	-2	-0.1
African	5,118	14	2	12	199	0	5,329	211	4.1
Black Scottish or Other Black	1,129	3	1	2	12	0	1,143	14	1.2
Any Mixed Background	12,764	20	8	12	31	0	12,807	43	0.3
Other Ethnic Group	9,571	32	4	27	272	0	9,870	299	3.1

¹ Includes changes in the number of armed forces stationed in Scotland and prisoners.

Table 3: Population by ethnic group: Scotland 2001; Census day and mid-year

	% of Population					% of Population			
	Total	% of total	median age	female and aged 15-44		Total	% of total	median age	female and aged 15-44
All People	5,062,011	100	39	21	All People	5,064,200	100	39	21
White	4,960,334	98.0%			White	4,961,396	98.0%		
White Scottish	4,459,071	88.1%	39	21	White Scottish	4,460,804	88.1%	39	21
Other White British	373,685	7.4%	42	23	Other White British	371,929	7.3%	42	23
White Irish	49,428	1.0%	46	21	White Irish	49,374	1.0%	46	21
Other White	78,150	1.5%	33	30	Other White	79,288	1.6%	33	30
Indian	15,037	0.3%			Indian	14,956	0.3%		
Indian	15,037	0.3%	29	26	Indian	14,956	0.3%	29	26
Pakistani and Other South Asian	39,970	0.8%			Pakistani and Other South Asian	40,486	0.8%		
Pakistani	31,793	0.6%	24	27	Pakistani	31,870	0.6%	24	27
Bangladeshi	1,981	0.0%	24	24	Bangladeshi	2,134	0.0%	26	26
Other South Asian	6,196	0.1%	28	24	Other South Asian	6,482	0.1%	28	24
Chinese	16,310	0.3%			Chinese	16,438	0.3%		
Chinese	16,310	0.3%	28	29	Chinese	16,438	0.3%	28	29
Other	30,360	0.6%			Other	30,925	0.6%		
Caribbean	1,778	0.0%	34	28	Caribbean	1,776	0.0%	34	28
African	5,118	0.1%	29	29	African	5,329	0.1%	29	29
Black Scottish or Other Black	1,129	0.0%	29	24	Black Scottish or Other Black	1,143	0.0%	29	24
Any Mixed Background	12,764	0.3%	17	24	Any Mixed Background	12,807	0.3%	19	24
Other Ethnic Group	9,571	0.2%	30	33	Other Ethnic Group	9,870	0.2%	30	32

Source: 2001 Census

Source: GROS Population Estimates

8. Recommendation

PAMs are invited to send comments to Esta Clark by 18 June 2010 on the estimates and methodology.

9. References

9.1 Office for National Statistics. Population Estimates by Ethnic Group Methodology Paper, (2006), available via <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=14238>.

9.2 Home Office. Asylum Statistics United Kingdom 2001 [table 5.1], available via <http://www.homeoffice.gov.uk/rds/immigration-asylum-publications.html>.

9.3 Home Office. Asylum Statistics United Kingdom 2001 [table 5.2], available via <http://www.homeoffice.gov.uk/rds/immigration-asylum-publications.html>.

Annex A

Table 4 Components of population change by council area; Census Day 2001 - 30 June 2001									
	Census Day population 29 April 2001	Births	Deaths	Natural change	Estimated ¹ net civilian migration	Other ² changes	Estimated population 30 June 2001	Population change	
								Number	%
SCOTLAND	5,062,011	8,821	9,125	-304	2,493	0	5,064,200	2,189	0.0
Aberdeen City	212,125	327	373	-46	-169	0	211,910	-215	-0.1
Aberdeenshire	226,871	381	305	76	-7	0	226,940	69	0.0
Angus	108,400	220	233	-13	-17	0	108,370	-30	0.0
Argyll & Bute	91,306	110	178	-68	62	0	91,300	-6	0.0
Clackmannans	48,077	85	85	0	-7	0	48,070	-7	0.0
Dumfries & Gal	147,765	181	258	-77	92	0	147,780	15	0.0
Dundee City	145,663	231	284	-53	-150	0	145,460	-203	-0.1
East Ayrshire	120,235	213	246	-33	108	0	120,310	75	0.1
East Dunbarton	108,243	175	148	27	-20	0	108,250	7	0.0
East Lothian	90,088	157	143	14	78	0	90,180	92	0.1
East Renfrewsl	89,311	155	128	27	72	0	89,410	99	0.1
Edinburgh, City	448,624	749	712	37	359	0	449,020	396	0.1
Eilean Siar ³	26,502	29	56	-27	-25	0	26,450	-52	-0.2
Falkirk	145,191	221	261	-40	119	0	145,270	79	0.1
Fife	349,429	623	628	-5	346	0	349,770	341	0.1
Glasgow City	577,869	1,128	1,238	-110	951	0	578,710	841	0.1
Highland	208,914	344	407	-63	69	0	208,920	6	0.0
Inverclyde	84,203	138	168	-30	-23	0	84,150	-53	-0.1
Midlothian	80,941	178	147	31	-22	0	80,950	9	0.0
Moray	86,940	155	135	20	40	0	87,000	60	0.1
North Ayrshire	135,817	245	252	-7	10	0	135,820	3	0.0
North Lanarksh	321,067	613	540	73	40	0	321,180	113	0.0
Orkney Islands	19,245	24	46	-22	-3	0	19,220	-25	-0.1
Perth & Kinross	134,949	227	250	-23	24	0	134,950	1	0.0
Renfrewshire	172,867	331	327	4	-21	0	172,850	-17	0.0
Scottish Border	106,764	190	198	-8	194	0	106,950	186	0.2
Shetland Islanc	21,988	41	35	6	-34	0	21,960	-28	-0.1
South Ayrshire	112,097	186	222	-36	99	0	112,160	63	0.1
South Lanarkst	302,216	534	534	0	124	0	302,340	124	0.0
Stirling	86,212	134	154	-20	8	0	86,200	-12	0.0
West Dunbarto	93,378	166	184	-18	-40	0	93,320	-58	-0.1
West Lothian	158,714	330	250	80	236	0	159,030	316	0.2

¹ Includes movements to/from armed forces
² Includes changes in the number of armed forces stationed in Scotland
³ Formerly Western Isles