Scotland’s Population

The Registrar General’s Annual Review of Demographic Trends

2016

162nd Edition

Preserving the past  |  Recording the present  |  Informing the future

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162\textsuperscript{nd} Edition

To Scottish Ministers

I am pleased to present to you my Annual Report for the year 2016, which will be laid before the Scottish Parliament pursuant to Section 1(4) of the Registration of Births, Deaths and Marriages (Scotland) Act 1965.

\textbf{Tim Ellis}
Registrar General for Scotland
2 August 2017

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Introduction

I have pleasure in introducing my fifth annual report as Registrar General and Chief Executive of National Records of Scotland. This is the 162\textsuperscript{nd} edition of the Registrar General’s Annual Review.

The population of Scotland is at its highest ever at 5.4 million, growing by 5\% over the last 10 years. The majority of this growth has been due to migration, as natural change (the number of births minus deaths) has not contributed significantly to Scotland’s population growth. The number of people coming to Scotland from the rest of the UK has been larger than the number coming from overseas. On the other hand, the number moving to the rest of the UK has also been larger than the number leaving for overseas. The events of 2016, with the UK voting to leave the European Union, will undoubtedly have consequences for the people of Scotland and may have an impact on the decisions made by people considering whether to come to, stay in or leave Scotland. It is even more important that good evidence is available to support any policies or decisions that are made.

As well as providing information about trends in migration and the number of births and deaths in Scotland, this edition also provides information about past and projected changes in the age structure of the population. Scotland is similar to the rest of the UK and many countries around the world in enjoying the positive benefits associated with people living longer. Over the next 25 years, there is a projected increase of 28\% in the number of pensioners in Scotland, compared to 33\% for the UK as whole. The number of people of working age is projected to increase by only 1\% in Scotland and by 11\% in the UK as whole. This has implications for funding allocations, tax revenues, pensions, education, health and social care provision.

There has been a long-term downward trend in overall numbers of deaths. This has slowed in recent years, partly due to the growing and ageing population. Since the beginning of the 21\textsuperscript{st} Century, there have been changes in the underlying causes of death. Deaths from circulatory diseases have declined over this period; in particular coronary heart disease and cerebrovascular disease (including strokes) fell by 46\% and 39\% respectively. Deaths from dementia and Alzheimer’s disease have more than doubled since 2000 and have now overtaken deaths from cerebrovascular disease. This is partly because people are living longer, and fewer people are dying from other conditions such as circulatory diseases. However, the single biggest cause of death is still cancer, which has risen by 6\% between 2000 and 2016.

While surveys can provide up to date information at a national level, they generally do not allow consideration of the detail at local authority level or smaller areas. Although the census was taken six years ago, it is still a rich source of detailed information about particular aspects of the population such as those born in particular countries and data at smaller geographies. It also forms the basis for our
local authority and small area statistics. These are important in planning services and tackling inequalities.

While the number of households has also been increasing, the ageing population, increased separation and divorce, and lower fertility have resulted in households becoming smaller. Having good evidence on this is important for informing decisions about housing need and the provision of services such as waste collection and community care. My invited chapter, contributed by Professor Elspeth Graham, Dr Francesca Fiori and Dr Kim McKee, examines household changes and the implications for housing provision. Their research shows that more young adults are staying longer in their parental home or renting privately because they are unable to afford a place on their own.

Over the year, we have developed and extended our use of infographics and data visualisations to help present information in a user friendly way to reach a wider audience.

As we look ahead to the following year, we will continue to provide trustworthy and relevant data and information to inform the decisions that need to be made in what are undoubtedly changing times.

Tim Ellis
Registrar General,
National Records of Scotland
Important points

Population

The estimated population of Scotland on 30 June 2016 was 5,404,700 - the highest ever recorded for the seventh year running.

The population of Scotland grew by around 31,700 in the 12 months between 1 July 2015 and 30 June 2016, an increase of 0.6%, which was driven mainly by net in-migration.

The population increased because in-migration exceeded out-migration by approximately 31,700 between mid-2015 and mid-2016. Deaths exceeded births by approximately 800 and other changes, such as in armed forces and prisoners, resulted in an increase of approximately 800 people.

The age of the population of Scotland was as follows:

- 17% of people were aged under 16;
- 65% of people were aged 16 to 64; and
- 18% of people were aged 65 and over.

Scotland’s population has been fairly stable over the past 50 years. It last peaked at 5.24 million in 1974 before falling to 5.06 million in 2000. It then increased each year to reach the highest estimate so far of 5.40 million in 2016. The increase since 2000 has mainly been the result of more people moving to Scotland than leaving.

2014-based projections (estimates for future years largely based on past trends) suggest that the population of Scotland will rise to 5.7 million by 2039. If current trends continue, the population is also projected to age, with the number of people aged 75 and over increasing by 85%, from 0.43 million in 2014 to 0.80 million in 2039. The populations of most countries in Europe are projected to increase over the next few years. Scotland’s population is projected to rise by 7% between 2014 and 2039 compared with 15% for the UK as a whole.

Births

There were 54,488 births registered in Scotland in 2016.

There were 610 (1.1%) fewer births in 2016 than in 2015 and 13,455 (19.8%) fewer births than in 1975. This is lowest annual total since 2005. In the last decade there was a peak of 60,041 births in 2008 followed by a mainly downward trend to the 2016 level.

The average age of mothers has increased from 26.0 in 1975 to 30.3 in 2016. Similarly, the average age of fathers has increased from 28.4 in 1975 to 32.9 in 2016.

The percentage of babies born to unmarried couples was 50.9% in 2016, compared to 47.7% 10 years earlier and 36.0% in 1996. Most births were registered by both parents, whether married or not.
The majority of mothers who gave birth in Scotland in 2016 were born in the UK (83%), including 73% who were born in Scotland. Nine per cent of mothers had been born elsewhere in the European Union (EU), including 5% from the countries which joined the EU in 2004 (the largest number were mothers born in Poland). Mothers whose country of birth was a Commonwealth Country accounted for 5% of births.

Considering only births where both the mother’s and father’s country of birth was known, in 17% of births in 2016 neither parent was born in Scotland (compared with 10% in 2006), and in 12% of births neither parent was born in the UK (compared with 5% in 2006).

Deaths

There were 56,728 deaths registered in Scotland in 2016. This was 851 (1.5%) fewer than in 2015 and represented 10.5 deaths per 1,000 population. The downward trend in deaths has slowed in recent years, to some extent due to the growing and ageing population. The age-standardised mortality rate – which takes account of changes in the population structure and shows what the trend would be if the population structure had remained the same over time - decreased by 27% between 1994 and 2016 compared to a 4% decrease in the number of deaths over the same period.

The main causes of deaths in 2016 were:

- cancer, 15,901 deaths (28% of all deaths);
- respiratory system diseases (such as pneumonia or chronic obstructive pulmonary disease (COPD)), 7,296 deaths (13% of all deaths);
- ischaemic (coronary) heart disease (CHD), 6,697 deaths (12% of all deaths);
- Dementia and Alzheimer’s disease, 5,571 deaths (10% of all deaths); and
- cerebrovascular disease (including strokes), 4,142 deaths (7% of all deaths).

The number of deaths from cancer has risen by 6% between 2000 and 2016. Deaths from circulatory diseases have declined over this time period; in particular coronary heart disease (CHD) and cerebrovascular disease – which fell by 46% and 39% respectively. Deaths from dementia and Alzheimer’s disease have more than doubled since 2000 and have overtaken deaths from cerebrovascular disease.

Age-standardised mortality rates from cancer, coronary heart disease and cerebrovascular disease in Scotland are well above the rates for the other countries in the UK.

There were 236 stillbirths and 181 infant deaths in Scotland in 2016. In 2016 the stillbirth rate (4.3 per 1,000 live and stillbirths) and the infant death rate (3.3 per 1,000 live births) were, despite a slight increase on the 2015 levels, very low in historic terms.
Life expectancy

Life expectancy at birth has improved over the past three decades and the gap between males and females is decreasing:

- Life expectancy has increased from 69.1 years for males and 75.3 years for females born around 1981 to 77.1 years for males and 81.1 years for females born around 2014.
- The gap in life expectancy between males and females has decreased from 6.2 years for those born around 1981 to 4.1 years for those born around 2014.

The pace of increasing life expectancy has slowed over recent years and the latest estimates show life expectancy for men and women have remained unchanged in both Scotland and the UK:

- Life expectancy for those born around 2014 was the same as for those born around 2013, at 77.1 years for males and 81.1 years for females.

Life expectancy at birth increases as deprivation decreases:

- There is a difference between life expectancy in the most and least deprived areas of Scotland. For those born around 2014 (the latest life expectancy figures by deprivation) this is more pronounced for men (12.2 years) than for women (8.6 years).
- The gap between male and female life expectancy is also larger in the most deprived areas (6.3 years) than in the least deprived areas (2.7 years).

Life expectancy in Scotland has been lower than the other UK constituent countries and lower than most countries in Western Europe for both males and females for more than 30 years.

Migration (people moving into and out of the country)

In the last half of the 20th century, more people tended to leave Scotland than come to Scotland. However, since mid-2000, this trend has reversed.

In the year to 30 June 2016, the number of people moving to Scotland from other parts of the UK, and the number moving out of Scotland to other parts of the UK were as follows:

- 46,300 people came to Scotland from the rest of the UK; and
- 37,500 people left Scotland for other parts of the UK.

This movement of people increased the population by around 8,800 people.

In the year to 30 June 2016, the number of people moving to Scotland from overseas and the number moving out of Scotland to go overseas were as follows:

- 40,400 people came to Scotland from overseas; and
- 17,500 people left Scotland to go overseas.
This movement of people increased the population by around 22,900 between mid-2015 and mid-2016.

Migrants to Scotland tended to be younger than the general population. Of migrants to Scotland in the year to mid-2016, 52% were aged 18 to 32 years. Migrants from the rest of the UK peaked at the age of 19 while migrants to the rest of UK peaked at the age of 23. This is largely due to students starting higher education in Scotland, followed by them leaving after they graduate. The peak age for movers from overseas to Scotland is 23.

**Marriages and civil partnerships**

There were 29,229 marriages registered in Scotland in 2016. Of these, 28,231 were opposite-sex marriages and 998 were same-sex marriages (involving 391 male couples and 607 female couples). Around one in six same-sex marriages in 2016 were of couples who changed their existing civil partnership to a marriage (173, 17%). This is a large, and expected, fall from 56% of same-sex marriages in 2015 and it follows The Marriage and Civil Partnerships (Scotland) Act 2014 coming into force on 16 December 2014. With the introduction of same-sex marriages, those choosing to enter into civil partnerships have declined with only 70 civil partnerships in 2016.

There were 6,326 ‘tourism’ marriages (22% of the total) where neither the bride nor groom lived in Scotland. People living in Scotland who marry elsewhere are not included in the figures.

The average age at which people marry has risen for both males and females. For first marriages, the average age of males has risen from 24.3 in 1975 to 33.9 in 2016; the comparable figures for females are 22.4 in 1975 and 32.2 in 2016.

Just over half of all marriages in 2016 (52%) were civil ceremonies, carried out by a registrar – compared with 35% in 1975. There were 15,066 civil ceremonies in 2016. The number of religious and other belief system marriages has fallen by 44% since 1975. Most notably, there were declines in Church of Scotland and Roman Catholic ceremonies. In 2016, there were 3,675 marriages carried out by Church of Scotland ministers, with clergy from the Roman Catholic Church carrying out 1,346 marriages.

Since 2005, the number of marriages conducted by the Humanist Society of Scotland has increased considerably. In 2016, there were 3,040 marriages carried out by the Humanist Society of Scotland.

**Adoptions**

In 2016, there were 523 adoptions recorded in Scotland. This was 19 more than in 2015 and was the highest number recorded since 1996. This is around half the number recorded per year in the mid-1980s, and less than a third of the 1975 total.
Households and housing

In mid-2016, there were 2.45 million households in Scotland, which is an increase of around 157,000 over the past 10 years. The number of households has increased faster than the population over the last 10 years. This is because people are increasingly living alone or in smaller households. One person households have become the most common type in recent years. These changes are partly due to the ageing population, as elderly people are more likely to live alone or with just one other person.

Scotland’s population is projected to increase. The greatest increase is projected to occur in the older age groups, and household size is projected to fall further. Consequently, the household projections (which are based on past trends) project the number of households in Scotland increasing further, to 2.76 million by 2039, an average annual increase of around 13,800 between the years 2014 and 2039. The largest increases are projected to occur in the number of households where someone lives alone, particularly amongst older people. In contrast, the number of larger households is projected to fall.

Across Scotland in 2016, 3% of homes were empty and 1% were second homes, though there were wide differences across the country. Remote rural areas have the highest percentage of dwellings that are vacant and second homes.

Statutory registration

Since 1855, by law all births, deaths and marriages (and since 2005 civil partnerships) must be registered. Councils are responsible for providing the registration service under the supervision of the Registrar General.

There are currently three district examiners who are responsible for checking the accuracy of all the 144,000 records which are created each year.

Every year since 2007, registrars in the 32 councils have achieved a high rate of accuracy, with an average of around 97% of the records they create having no mistakes in them.

Invited chapter on household changes and housing provision in Scotland

This report also contains an invited chapter written by three academics, Prof Elspeth Graham, Dr Francesca Fiori and Dr Kim McKee. This chapter reviews recent changes in household composition and housing provision in Scotland and discusses the complex relationships between the two. It includes:

- an overview of the relevant statistics and research,
- new analysis of the housing patterns of young adults and older adults,
- analysis of interviews with young adults aged 18-35.
Chapter 1 - Population

Scotland’s population over time

The most recent mid-year population estimate for Scotland was 5,404,700 people on the 30 June 2016, the highest ever recorded for the seventh year running. There was an increase of 31,700 people (0.6%) over the year from 30 June 2015 to 30 June 2016, which was driven mainly by net in-migration. Figure 1.1 shows how Scotland’s population has remained relatively stable over the past 50 years, increasing from 5.10 million in 1951 to 5.24 million in 1974 before falling to a low of 5.06 million in 2000. The increase over the last 16 years to 5.4 million in 2016 is projected to continue in the future to reach 5.7 million people by 2039.

Figure 1.1: Estimated population of Scotland, actual and projected, 1951-2039

Components of population change, mid-2015 to mid-2016

Figure 1.2 summarises the components of population change from mid-2015 to mid-2016. Overseas in-migration exceeded overseas out-migration by approximately 22,900 people and accounted for 72% of the population increase. Over the same period, net in-migration from the rest of the UK exceeded out-migration to the rest of the UK by 8,800 people and accounted for 28% of the population increase. In the same year, there were 800 more deaths than births resulting in a negative rate of natural change (births minus deaths) for Scotland for the second year running.
Scotland’s Population - The Registrar General’s Annual Review of Demographic Trends

Figure 1.2: Components of population change in Scotland from mid-2015 to mid-2016

Comparisons between mid-2015 and mid-2016 population estimates

There were some differences between the mid-2015 and mid-2016 estimates of population change. In the year to 30 June 2016 there were approximately 800 more deaths than births, in comparison to the year to 30 June 2015 where there were 2,000 more deaths than births. The slight increase in the rate of natural change from mid-2015 to mid-2016 was largely due to a reduction in the number of deaths (down by 1,800), although this was partially offset by a reduction in the number of births (down by 600).

Components of population change over time

Figure 1.3 shows the rate of natural change (the number of deaths subtracted from the number of births) compared to net migration to Scotland. Until the late 1960s, Scotland experienced a positive rate of natural change indicating that there were many more births than deaths. At the same time, net migration was negative as more people left than came to Scotland. Following this period, the rate of natural change dropped sharply and has remained low for the past 50 years. For a more detailed analysis of the trends in migration to and from Scotland, please refer to Chapter 5 - Migration. In 2003, natural change began to increase, but this has fallen again over the past two years. In contrast, net migration has risen over the past 50 years, reaching a record level of 33,000 in 2007 and contributing to small population increases every year for the last 16 years. In 2016 there were 31,700 more people entering than leaving Scotland.
Understanding the age and sex structure of Scotland’s population is crucial, as changes in different demographic groups will have differing implications for social and economic policy. For example, increases in the elderly population are likely to place a greater demand on health and social services, while an increase in the population under ten years old may require funding for primary schools to be increased.

In 2016, approximately 17% of the population were aged 15 and under, 65% were of working age (between 16 and 64) and 18% were aged 65 and over. Amongst the elderly, the population of women is larger than men, particularly in those aged over 75, which reflects longer life expectancy for females.

In Figure 1.4, the sharp peak at age 69 represents the people born during the ‘baby boom’ of 1947 following the end of the Second World War. The large bulge around age 50 represents the second baby boom of the 1960s and the smaller bulge around age 25 represents the grandchildren of the first baby boomers and children of the second baby boomers.

Figure 1.5 shows how the age structure of Scotland’s population has changed over the last ten years. The greatest increases have been in the 65 to 74 and the 75 and over age categories (increases of 22% and 16% respectively) while the greatest decrease has been in the 25 to 44 age category (a decrease of 3%). These figures provide evidence of how Scotland’s population has aged over the past ten years.
Figure 1.4: Estimated population by age and sex, 30 June 2016

Figure 1.5: The changing age structure of Scotland’s population¹, 2006-2016

Footnote
¹) Population figures are in thousands and as at 30 June.
Population change in local areas

The way the population has changed varies across the council areas of Scotland. Over the past ten years, the majority of council areas have seen an increase in population, with the greatest increases seen in Scotland’s largest cities and the areas immediately outside them. The City of Edinburgh has had the largest change in population with an increase of 55,110 people (12.2%) over the past 10 years. Six council areas have experienced negative population change over the past ten years with the greatest decreases in Argyll and Bute (4.1%) and Inverclyde (3.8%). The map in Figure 1.6 shows the percentage population change for each council area over the past ten years.

Across the whole of Scotland, the largest contributor to positive population change is in-migration. This is also true for the majority of council areas where population has increased as can be seen in Table 1.1 (please note, for ease of display, other changes have been included with the figures for net migration). In 11 council areas, population growth has been entirely due to positive net migration, as the rate of natural change in these council areas is negative. Examples of council areas where this has occurred include Perth and Kinross and the Orkney Islands. West Lothian is the only council area with a positive population growth where more of the population change is attributable to natural change (increase of 4.2 people per 100 population) than to net migration (increase of 3.6 people per 100 population). In the council areas with the most negative rate of population change (Argyll and Bute, and Inverclyde) the decrease is mostly attributable to negative natural change (more deaths than births). West Dunbartonshire is the only council area where net migration is responsible for a greater decrease in population than natural change.
Figure 1.6: Percentage population change by council area, mid-2006 to mid-2016
<table>
<thead>
<tr>
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<th>Per cent population change(^2)</th>
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Footnotes
1) Change per 100 population at mid-2016. The underlying data used to produce these figures can be found in Table 6 of the ‘Mid-Year Population Estimates Scotland 2016’ publication.
2) Ordered by percentage population change.
Projected population

Population projections for Scotland are calculated and published every two years, most recently in 2015. These projections were based on the 2014 mid-year population estimates which themselves were calculated by rolling forward data from the 2011 Census. It is important to understand that the projections are calculated through extrapolation of existing trends and do not take into account the future impact of policy change or other factors which might affect population.

The 2014-based population projections for Scotland show an increase in population of 7% from 5.35 million in 2014 to 5.70 million in 2039. For the first ten years of the projected trend, natural change is projected to be positive and to account for 10% of the population increase. Following this, the number of deaths are predicted to outweigh the number of births and cause a negative rate of natural change between 2027 and 2039. By contrast, migration is projected to remain high and account for 90% of Scotland’s projected population increase over the next 10 years, 57% due to migration from overseas and 32% from the rest of the UK (please note the numbers don’t sum to 90 due to rounding). Figure 1.7 shows the historical and projected future numbers of births and deaths in Scotland.

Figure 1.7: Births and deaths, actual and projected, Scotland, 1951-2039

There is always a level of unpredictability around demographic behaviour and the rates of fertility, mortality and migration may vary year on year in an irregular manner. To address this, additional variant projections have been calculated using different assumptions about future fertility, mortality and migration. Of the nine variant projections calculated, seven show an increase in population across Scotland. The variants are intended to illustrate various plausible scenarios rather than the extremes of future demographic behaviour. All nine variant projections and
The trend of ageing in Scotland’s population is projected to continue into the next two decades as shown in the chart in Figure 1.8. The 75 years and above age group is projected to increase by 85% from 0.43 million in 2014 to 0.80 million in 2039. There is a projected increase in the 0 to 15 year old age group of 1% and in the 65 to 74 year olds of 27%.

**Figure 1.8:** The projected percentage change in age structure of Scotland's population, 2014-2039

Dependency ratios

Another helpful way to understand the age structure of Scotland’s population is to look at dependency ratios. Dependency ratios provide a crude but useful measure of the proportions of the population that are most likely to be ‘dependent’ on the working age population, however, care must be taken when interpreting the results. The ratios calculated here assume that people under 16 years of age and those over the state pension age are financially dependent on those of working age. The reality is of course much more complex and this assumption may be incorrect for a number of reasons. For example, people retire at a wide range of ages, many retired people are financially independent, and many people of typical working age may be economically inactive due to being at university, unemployed or chronically ill. However, these 'dependency' ratios provide a useful way to examine the relative age structure of the population.
Dependency ratios for Scotland are shown in Figure 1.9 and are calculated as:

- the number of people of state pension age and over per 1,000 people of working age (aged 16 to state pension age\(^1\));
- the number of people aged under 16 per 1,000 people of working age; and
- the number of people aged under 16 plus the number of people of state pension age and over per 1,000 people of working age.

Figure 1.9: Projected dependency ratios\(^1\) (per 1,000 working population), 2014-2039

Figure 1.9 shows a projected initial decrease from 2014 to 2020 in the number of dependants per 1,000 people of working age, which is largely due to changes in the state pension age. Following this, the number of dependants is projected to rise until another increase in the state pension age between 2026 and 2028, when the ratio will briefly decrease. The number of dependants is then projected to increase steadily, reaching 668 per 1,000 people of typical working age in 2039. The rate of children under 16 to the working age population is projected to remain stable at 270 per 1,000 between 2014 and 2039.

**Footnote**

1) 2014-based projections of population at 30 June.

The figures for working age and pensionable age and over take into account the changes in the State Pension Age (SPA) as set out in the 2014 Pensions Act. Between 2014 and 2018 SPA will rise from 62 to 65 for women. Then between 2019 and 2020, it will rise from 65 years to 66 years for both men and women. A further rise in SPA to 67 will take place between 2026 and 2028. Between 2044 and 2046, SPA will increase from 67 to 68. The UK Government plan to review state pension age every five years in line with life expectancy and other factors. In addition, an independent review of the state pension age was carried out by John Cridland in 2017. On 19 July 2017, the department for Work and Pensions published the state pension age review, proposing the increase in state pension age to 68 years be brought forward to between 2037 and 2039. This chart does not take into account this change. Further information regarding these changes can be found at The new State Pension section of the GOV.UK website.

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Scotland’s population within Europe

The population increase projected in Scotland is repeated across the majority of countries across Europe. Within the UK, Scotland’s population is projected to increase by 7% between 2014 and 2039, while the projected increase for England is 17%, 10% for Northern Ireland and 6% for Wales. The population of the European Union\(^2\) (EU-28\(^3\)) is projected to increase by 4% between 2014 and 2039 with Luxembourg experiencing the largest population increase of 55%. However, Italy, Greece and Portugal as well as most of the EU-8\(^3\) countries, the EU-2\(^3\) countries and Croatia, are projected to experience a population decline as Figure 1.10 shows.

Scotland is not alone in having an ageing population. The pattern of change over the last 20 years, and the projected change in the age distribution, is similar to that of other countries in the UK and Europe, although the rate of change varies.

Footnotes

1) The Eurostat EUROPOP15 projections of population in selected European countries (found on the Eurostat website) are not directly comparable to the Office for National Statistics (ONS) projections of population in the countries of the UK. The Eurostat projections are based on estimates of the population at 1 January 2015 to 1 January 2081 while the ONS projections are based on estimates of the population at 30 June 2014 to 30 June 2039. The methodologies in determining the underlying fertility, mortality and migration assumptions also differ.

2) Refer to Appendix 2 – ‘Notes, definitions and quality of statistics’ for definitions of EU-2, EU-8 and EU-28.
Figure 1.10: Projected percentage population change in selected European countries, 2014-2039

Source: Office for National Statistics (ONS) (UK and constituent countries) and Eurostat.
More information about population statistics

More detailed information about Scotland’s population, including estimates and projections at national and sub-Scotland levels, as well as estimates of specific population groups, can be found within the Population section of the National Records of Scotland website.
Chapter 2 - Births

Numbers

In 2016, 54,488 births were registered in Scotland, 610 (1.1%) fewer than in 2015. This is lowest annual total since 2005. In the last decade there was a peak of 60,041 births in 2008 followed by a mainly downward trend to the 2016 level. The total in 2016 was 5,553 (9.2%) lower than the 2008 peak, and it was well below the peak of over 100,000 per year in the early 1960s, and the level of around 65,000 to 70,000 per year between the mid-1970s and the early 1990s, as Figure 2.1 shows.

In the 1950s, 1960s and the first half of the 1970s there were considerably more births each year than deaths. This had been the case every year since records began (with the introduction of civil registration in 1855). 1976 was the first year with more deaths than births. The following 15 or so years mostly had more births than deaths, followed by a period from 1995 to 2005 with more deaths than births. Since 2006 there had again been more births than deaths until 2015 which had around 2,500 more deaths than births. This continued in 2016 when there were 2,240 more deaths than births.

Figure 2.1: Births and deaths, Scotland 1951-2016

The proportion of births to unmarried parents (including births registered solely in the mother's name) was 50.9% in 2016 compared to 47.7% 10 years earlier and 36.0% in 1996. However, the proportion of births registered solely in the mother's name – generally around 6 to 7% in the 1980s and 1990s – has fallen in more recent years to 4.3% in 2016, suggesting that the increase in births to unmarried parents has been in babies born to unmarried partners who are in a relationship.
Fertility Rates

The simplest fertility rate is the crude birth rate, which is defined as the number of live births per 1,000 total population. Appendix 1, Table 1 shows that in 2016 the crude birth rate for Scotland stood at 10.1 compared to an average of 17.9 per year in the late 1960s. Appendix 1, Table 2 and Appendix 1, Table 3 show crude birth rates for administrative areas in Scotland and selected European countries. Because it takes no account of the age/sex structure of the population, the crude birth rate has only limited value (for example giving rough comparisons between areas with broadly similar age/sex structures). Appendix 1, Table 2 also gives standardised birth rates for the administrative areas of Scotland; these adjusted birth rates take account of the population structures in the different areas. The overall rate for Scotland (10.1 births per 1,000 population), can be compared with a low of 7.7 in City of Edinburgh, and a high of 13.0 in Midlothian and 13.3 in Shetland.

Another approach is to consider the General Fertility Rate (GFR) which is based on the numbers of females of childbearing age. Figure 2.2 shows the general fertility rate (births per 1,000 females aged 15 to 44), along with the number of females aged 15 to 44. During the ‘baby boom’ of the 1960s, the GFR reached 99.5 (in 1962). It then fell sharply to around 60 in the late 1970s and stabilised at this level during the 1980s before declining further during the 1990s, eventually dipping below 50 at the start of the 21st century. It then rose slightly to 56.4 in 2008, and fell in most of the following years to stand at 52.6 for 2016. Interestingly, the female population aged 15 to 44 was relatively low during the baby boom of the 1960s. Moreover, in the 1980s the relatively large number of females born in the 1950s and 1960s were passing through what were their peak childbearing years. However, those ages’ fertility rates were falling during that period, resulting in a levelling off of the number of births rather than the increase that may have been expected.

Figure 2.2: Estimated female population aged 15-44 and general fertility rate (GFR), Scotland, 1951-2016
A more detailed picture is given by the Age Specific Fertility Rates (ASFRs) by mother's age, in five-year age groups, in Figure 2.3. This shows many significant age-related features of the pattern of childbearing over the last 60 years. As well as having fewer babies, females are also having them later in life.

**Figure 2.3:** Live births per 1,000 women, by age of mother, Scotland, 1951-2016

![Births to women aged](image)

Other points of interest are:

- The ‘baby boom’ of the 1960s was mostly due to increased birth rates of females in their twenties.
- Since the early 1960s, females in their twenties have experienced a dramatic fall in fertility. For females aged 20 to 24 the fertility rate has fallen by around three-quarters, and for those aged 25 to 29 it has fallen by over a half.
- The rate for 15 to 19 year olds fell by around one-third during the 1970s and remained around 30 births per 1,000 females for the following 20 years, before falling by more than half since the turn of the century, to under 14 births per 1,000 females.
- Fertility rates for females aged 30 and above have gradually increased over the last 40 years. In particular, the rate for 30 to 34 year olds overtook that of 25 to 29 year olds in 2002 and now stands at just below 100 births per 1,000 females. Similarly, the rate for females aged 35 to 39 has nearly trebled since the mid-1980s and is now higher than that for those aged 20 to 24. The 15 to 19 and 20 to 24 age-groups account for most of the reductions in the numbers of births between 2008 and 2016.
Since the mid-1970s, there has been a trend towards having children at older ages. The percentage of births to mothers aged under 20 fell from an average of about 11% between 1976 and 1980 to less than 4% in 2016. Mothers aged 20 to 24 accounted for roughly a third of all births in 1976 to 1980 and 15% in 2016. The percentage of births to mothers aged 25 to 29 has also fallen, from around 35% in 1976 to 1980, to 27% in 2016. As a result, females aged over 30 accounted for over half of all births in 2016; 32% were to mothers aged 30 to 34, 18% were to 35 to 39 year olds and 4% were to females aged 40 and over.

Figure 2.4 further illustrates the ageing pattern of fertility by showing detailed ASFRs for selected years: 1951, 1964 (peak number of births), 1977 (end of steep decline), 1991 recent peak) and 2016. Though the levels differed considerably, the age patterns of fertility for 1951, 1964 and 1977 were roughly the same. However, the age distributions for 1991 onwards show distinctly older peaks and that for 2016 reveals a further reduction in fertility of females in their twenties, mirrored by an increase for females in their thirties, compared with 1977 and 1991.

**Figure 2.4:** Live births per 1,000 women, by age, selected years

The trend towards later childbearing is underlined by changes in the average age of all females giving birth. This was 30.3 in 2016, compared to 27.4 in 1991, 26.1 in 1977 and 27.4 in 1964. Similarly, the average age of fathers (excluding births registered in the mother’s name only, where the father’s details were not provided) was 32.9 in 2016 compared to 30.0 in 1991 and 28.6 in 1977.
The Total Fertility Rate (TFR) is a commonly used summary measure of fertility levels calculated by summing the age specific rates for a single year. It gives the average number of children that a group of females would expect to have if they experienced the observed ASFRs in each of their childbearing years. For a population to replace itself, the TFR needs to be around 2.1.

The TFR for Scotland since 1951 is plotted in Figure 2.5. Not surprisingly, it follows the same general pattern as the GFR described above. It rose to 3.09 in 1964 before dropping sharply to 1.70 in 1977. Since then, with a few minor fluctuations, it fell more slowly to the 2002 rate of 1.47 before increasing to 1.77 in 2008 – its highest level for 26 years. Since then it has generally declined, reaching 1.52 in 2016.

**Figure 2.5: Total fertility rate, Scotland, 1951-2016**

![Graph showing the total fertility rate from 1951 to 2016. The rate peaked at 3.09 in 1964 and reached its lowest point at 1.47 in 2002.]

Though widely used, in part because it is relatively easy to calculate, the TFR has serious deficiencies as it is based on only one year's observations. For example, when females are delaying childbearing, as it appears that they have been in Scotland (given the trend towards later childbearing), the TFR is likely to underestimate the number of children females will eventually have.

A more satisfactory measure is average completed family size. **Figure 2.6** shows the completed family size (or cumulative cohort fertility) by age for females born in selected years. Those born in 1951 had attained an average completed family size of 2.03 by the time they reached age 44, whereas for those born in 1956 and 1961 the figures were 1.93 and 1.87 respectively. The figure also permits the comparison of family size at selected ages for the various cohorts as they pass through the childbearing ages. Of crucial importance is the extent to which the later cohorts are falling behind in family building. For example, by age 30 the cumulative childbearing of females born in 1976 was about 0.5 lower than that of the 1956 cohort. Of the
cohorts shown, the 1981 cohort is the first to show a higher fertility rate than the previous cohort. However, at ages 25 and 26 the fertility rate of the 1986 cohort was fractionally higher than that of the 1981 cohort, although it has fallen back in later years. The 1991 and 1996 cohorts show considerably lower rates than the 1981 and 1986 cohorts. Whilst the generally increasing fertility rates of those aged over 30 may lead to further catching-up, it is unlikely that this will increase the average completed family size to the levels attained as recently as the cohorts of females born in the 1960s.

Figure 2.6: Cumulative cohort fertility rate for selected birth cohorts, Scotland

Since the early 1980s, Scotland’s fertility has been lower than fertility in the other parts of the UK. Figure 2.7 compares the TFRs for England, Wales and Northern Ireland since 1971 with those for Scotland. Until the late 1970s, Scotland’s TFR was slightly higher than that for England and Wales. However, since the early 1980s, Scotland’s TFR has dropped steadily below the levels for England and Wales. In 1971, the TFR for Northern Ireland was markedly higher than for the other three countries but since then the differential has been significantly reduced. The rise in fertility levels in Scotland between 2002 and 2008 was broadly paralleled elsewhere.
in the UK. Fertility rates for all UK countries have fallen since 2008 with Scotland falling at a faster rate than the other countries.

**Figure 2.7:** Total fertility rates, UK countries, 1971-2016

![Graph showing total fertility rates for UK countries from 1971 to 2016]

Note: The label for Northern Ireland quotes the 2015 total fertility rate because at the time of writing the 2016 figure was not available.

**Country of birth of parents**

Over 8 in 10 (83%) of births in 2016 were to mothers who had been born in the UK, including 73% to females who were born in Scotland. A further 9% of mothers had been born elsewhere in the EU, including 5% from the countries which joined the EU in 2004 (the largest number were to mothers born in Poland). Commonwealth countries were the birthplace of 5% of mothers, including 2% from the Indian sub-continent. In the cases where the father’s country of birth was known, 84% had been born in the UK, including 74% who were born in Scotland.

Considering only births for which both the mother’s and the father’s countries of birth were known, in 17% of births in 2016 neither parent was born in Scotland, and in 12% of births neither parent was born in the UK. These figures compare to 10% and 5% respectively in 2006.

**More information about birth statistics**

More detailed information about Scotland’s births can be found in the Vital Events – Births section or in the Births section of the Vital Events Reference Tables of the National Records of Scotland (NRS) website.
Chapter 3 - Deaths

Numbers
In 2016, 56,728 deaths were registered in Scotland. This was 851 (1.5%) fewer than in 2015. It represented 10.5 deaths per 1,000 population in 2016.

From the 1950s up to the early 1990s the annual number of deaths remained relatively stable at about 60,000 to 65,000 a year. The total then declined gradually to 53,661 in 2011 which was the lowest total recorded since the introduction of civil registration in 1855. Since then the number of deaths has risen, with the 2016 figure being the second highest since 2003.

With a growing and ageing population, it might be expected that the number of deaths would begin to increase. Age-standardised mortality rates account for changing population size and structure and may, therefore, offer a more useful picture of trends in mortality.

Figure 3.1 shows that age-standardised mortality rates have decreased at a greater rate than the number of deaths over time. The age-standardised rates show what might have happened to the trend in the number of deaths if the population structure had remained the same over time, rather than the population ageing. The 2016 age-standardised mortality rate is the second lowest ever recorded. However, the last few years’ rates do suggest that the trend may be slowing or flattening off. There is not yet enough data to establish whether this is the case and the statistics will continue to be monitored over the next year or two to identify whether there is an emerging change in the mortality trend.
**Causes of death**

There has been a focus in recent years on deaths from cancer, coronary (ischaemic) heart disease and cerebrovascular disease - the so-called ‘three big killers’. In 1980, these accounted for around two-thirds of all deaths in Scotland. However, the proportion of deaths from these three causes has fallen over time and now accounts for less than half of all deaths (47% in 2016). The proportion of deaths caused by coronary heart disease has fallen from 29% in 1980-82 to 12% in 2016 and cerebrovascular disease from 14% to 7% over the same period.

In contrast, the number of deaths from cancer has risen (from an average of 13,903 per year in 1980-82 to 15,901 in 2016); as a proportion of all deaths, it increased from 22% to 28%. There has also been an increase in deaths from respiratory system diseases (for example pneumonia or chronic obstructive pulmonary disease) from 11% of all deaths in 1980-82 to 13% in 2016 and there are now more deaths from respiratory system diseases (7,294 in 2016) than from coronary heart disease (6,697). Deaths from dementia and Alzheimer’s disease have more than doubled in the last decade and now account for 10% of all deaths.
Table 3.1: Number of deaths from selected causes, by sex, 1980-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Cancer Males</th>
<th>Cancer Females</th>
<th>Coronary (Ischaemic) heart disease Males</th>
<th>Coronary (Ischaemic) heart disease Females</th>
<th>Cerebrovascular disease Males</th>
<th>Cerebrovascular disease Females</th>
<th>Total deaths from these causes Males</th>
<th>Total deaths from these causes Females</th>
<th>These causes as a per cent of all deaths Males</th>
<th>These causes as a per cent of all deaths Females</th>
<th>All deaths Males</th>
<th>All deaths Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-82</td>
<td>7,269</td>
<td>6,634</td>
<td>10,173</td>
<td>8,150</td>
<td>3,470</td>
<td>5,638</td>
<td>20,912</td>
<td>20,422</td>
<td>65%</td>
<td>65%</td>
<td>64,050</td>
<td>64,050</td>
</tr>
<tr>
<td>1990-92</td>
<td>7,664</td>
<td>7,324</td>
<td>8,964</td>
<td>7,846</td>
<td>2,913</td>
<td>5,029</td>
<td>19,541</td>
<td>20,199</td>
<td>65%</td>
<td>65%</td>
<td>61,168</td>
<td>61,168</td>
</tr>
<tr>
<td>2000-02</td>
<td>7,674</td>
<td>7,394</td>
<td>6,342</td>
<td>5,664</td>
<td>2,465</td>
<td>4,250</td>
<td>16,481</td>
<td>17,308</td>
<td>58%</td>
<td>58%</td>
<td>57,761</td>
<td>57,761</td>
</tr>
<tr>
<td>2010-12</td>
<td>7,930</td>
<td>7,618</td>
<td>4,392</td>
<td>3,379</td>
<td>1,780</td>
<td>2,831</td>
<td>14,102</td>
<td>13,828</td>
<td>52%</td>
<td>52%</td>
<td>54,188</td>
<td>54,188</td>
</tr>
<tr>
<td>2016</td>
<td>8,303</td>
<td>7,598</td>
<td>3,917</td>
<td>2,780</td>
<td>1,712</td>
<td>2,430</td>
<td>13,932</td>
<td>12,808</td>
<td>47%</td>
<td>47%</td>
<td>56,728</td>
<td>56,728</td>
</tr>
</tbody>
</table>

Footnote
1) Average over three year period.

Cancer

As the majority of cancer deaths occur in older age groups, an ageing population could be expected to lead to an increasing trend in the number of cancer deaths. This is counter balanced by the fact that the age-standardised cancer mortality rate has decreased by 21% since 1994.

Of the 15,901 deaths from cancer in 2016, cancer of the trachea, bronchus and lung was the most common type, with 4,035 deaths (2,081 males and 1,954 females). This accounted for a quarter of all cancer deaths.

The next most frequent type of cancer death was prostate for males (894 deaths) and breast for females (1,020 deaths). Bowel cancer caused 1,661 deaths (872 males and 789 females) and cancers of the lymphoid, haematopoietic and related tissue caused 1,086 deaths (603 males and 483 females).

Although overall death rates from cancer have risen since the start of the 1980s, from 291 (per 100,000 population) in 1980-82 to 316 for males and from 247 (per 100,000) in 1980-82 to 274 for females, they have actually fallen for those aged under 75. Table 3.2b shows that for males aged under 75 the rate fell from 214 (per 100,000 population) in 1980-82 to 172 in 2016 (although there was a slight rise between 2010-12 and 2016), and for females aged under 75 it fell from 170 (per 100,000 population) in 1980-82 to 141 in 2016. The average age at death from cancer has risen (Figure 3.2), and the under 75 age-standardised death rate (available on the National Records of Scotland (NRS) website) for cancer has fallen by 31% since 1994.

Circulatory Diseases (coronary heart disease and cerebrovascular disease)

Table 3.2a shows that, in contrast to the rises for cancer, death rates for coronary heart disease (ischaemic heart disease) and cerebrovascular disease have significantly declined. Between 1980-82 and 2016, rates for males fell by 63% for coronary heart disease and 53% for cerebrovascular disease, compared with reductions of 67% and 59% respectively for females. Table 3.2b shows that the improvement was proportionately greater for people aged under 75, with the coronary heart disease and cerebrovascular disease death rates falling by 74% and 72% respectively for males aged under 75. For females aged under 75 the
improvement was greater at 81% for coronary heart disease and 77% for cerebrovascular disease.

**Respiratory System Diseases**

Death rates due to respiratory diseases among men have fallen by 12% between 1980-82 and 2016 but over the same period increased by 14% among women. **Table 3.2b** shows a greater reduction among under 75 year olds with a decrease of 39% for men since 1980-82 and a decrease of 7% for women.

**Dementia and Alzheimer’s Disease**

**Table 3.2a** shows that crude death rates for dementia and Alzheimer’s disease have increased considerably over time. Figures before and after 2000 are not strictly comparable due to changes in death coding, but between 2000-02 and 2016 the death rate for men has almost tripled and for women has more than doubled. Rates in the under 75s are, as expected, very low for dementia and Alzheimer’s.
Table 3.2a: Crude death rates from selected causes, all ages, by sex, Scotland, 1980-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Cancer</th>
<th>Coronary (Ischaemic) heart disease</th>
<th>Cerebrovascular disease</th>
<th>Respiratory system diseases</th>
<th>Dementia &amp; Alzheimer’s disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-82</td>
<td>291</td>
<td>408</td>
<td>139</td>
<td>145</td>
<td>4</td>
</tr>
<tr>
<td>1990-92</td>
<td>314</td>
<td>367</td>
<td>119</td>
<td>137</td>
<td>8</td>
</tr>
<tr>
<td>2000-02</td>
<td>315</td>
<td>261</td>
<td>101</td>
<td>123</td>
<td>24</td>
</tr>
<tr>
<td>2010-12</td>
<td>309</td>
<td>171</td>
<td>69</td>
<td>123</td>
<td>48</td>
</tr>
<tr>
<td>2016</td>
<td>316</td>
<td>149</td>
<td>65</td>
<td>128</td>
<td>69</td>
</tr>
</tbody>
</table>

Table 3.2b: Crude death rates from selected causes, aged under 75, by sex, Scotland, 1980-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Cancer</th>
<th>Coronary (Ischaemic) heart disease</th>
<th>Cerebrovascular disease</th>
<th>Respiratory system diseases</th>
<th>Dementia &amp; Alzheimer’s disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-82</td>
<td>247</td>
<td>304</td>
<td>210</td>
<td>124</td>
<td>9</td>
</tr>
<tr>
<td>1990-92</td>
<td>278</td>
<td>297</td>
<td>191</td>
<td>142</td>
<td>19</td>
</tr>
<tr>
<td>2000-02</td>
<td>281</td>
<td>215</td>
<td>162</td>
<td>137</td>
<td>58</td>
</tr>
<tr>
<td>2010-12</td>
<td>279</td>
<td>124</td>
<td>104</td>
<td>138</td>
<td>101</td>
</tr>
<tr>
<td>2016</td>
<td>274</td>
<td>100</td>
<td>87</td>
<td>141</td>
<td>135</td>
</tr>
</tbody>
</table>

Footnote
1) Average over three year period.
Some other major causes of deaths

National Records of Scotland (NRS) publishes a wide range of other statistics on causes of death. They are available from the relevant parts of our website (which include some background information on the basis of the statistics):

- drug-related deaths
- alcohol-related deaths
- deaths involving healthcare associated infections (Clostridium difficile and MRSA)
- suicides
- accidental deaths
- hypothermia
- winter mortality
- avoidable mortality.

Mortality by age

The average age at death has increased fairly steadily for many years. Figure 3.2 shows that the average ages at death for the selected causes have generally increased in line with the average for all deaths, although – of the causes examined – the average age at death for dementia and Alzheimer’s is highest and for cancer is lowest.

Figure 3.2: Average age at death, selected causes, Scotland, 1979-2016
About 62% of deaths in 2016 were of people aged 75 and over, and a further 19% were between the ages of 65 and 74. The relative stability in the total number of deaths over recent years masks significant reductions in age-specific mortality. Figure 3.3 shows, for both males and females, selected age-specific mortality rates over the last 30 years relative to the 1981 rates. The three age groups shown (45 to 64, 65 to 74 and 75 and over) accounted for 96% of all deaths in 2016.

At all these ages, there have been greater improvements in male than in female mortality. In the 45 to 64 age group, the death rates for males and females dropped by 53% and 48% respectively. In the 65 to 74 age group, male rates decreased by 56% compared to 48% for females. The greatest differential is in the 75 plus age group, where male mortality has fallen by 35% compared to only 17% for females. These changes have narrowed the difference between female and (traditionally higher) male mortality.
Figure 3.3: Age specific mortality rates as a proportion of 1981 rate, 1981-2016

Geographical variations in mortality

Using 2015 data, the latest available for other parts of the UK, Figure 3.4 compares the death rates for the constituent countries of the UK for selected causes after adjusting for differences in age structure, by applying the European Standard Population age structure. The Scottish rates for cancer, ischaemic heart disease, and cerebrovascular disease are well above the rates for the other countries of the United Kingdom, for both males and females. The methodology for calculating...
age-standardised rates is available on the age-standardised death rates section of the NRS website.

**Figure 3.4:** Age standardised mortality rates, by selected cause and sex, 2015

Appendix 1, Table 3 shows the death rate for each of the EU member states, and for some other countries in Europe. These are crude death rates. They are calculated by expressing the number of deaths per 1,000 population. As a result, they do not take account of differences in the sex and age structures of the countries’ populations. All else being equal, a country with an unusually high proportion of its
population in the younger age groups could have an unusually low crude death rate. So, though the figure for Scotland is higher than those for most of the countries that are shown, this could to some extent be due to the structure of the Scottish population. A better way to compare Scotland's mortality with other countries' is to use the estimates of life expectancy for each country (please refer to Chapter 4 - Life Expectancy) or to consider age-standardised death rates (available on the NRS website).

**Stillbirths, perinatal deaths and infant deaths**

There were 236 stillbirths registered in Scotland in 2016. Stillbirths (where a child born after the 24th week of pregnancy does not breathe or show any other sign of life) are registered separately from live births and from deaths, and so are not included in either of those figures.

Perinatal deaths consist of stillbirths plus deaths in the first week of life (the latter are registered as live births and as deaths). There were 90 deaths of children who were aged under one week old, so there was a total of 326 perinatal deaths.

Infant deaths are deaths in the first year of life, all of which are registered as live births and as deaths. In total, 181 infant deaths were registered in Scotland in 2016 (including those who died in the first week of life).

Appendix 1, Table 1 shows that in 2016 the stillbirth rate (4.3 per 1,000 live and still births) and the infant death rate (3.3 per 1,000 live births) were, despite a slight increase on the 2015 levels, very low in historic terms. Both rates have fallen greatly since the Second World War. The stillbirth rate has fallen slowly in the past 30 years but the infant death rate has continued a steeper decline over the same period.

Appendix 1, Table 3 shows that the stillbirth rate for Scotland in 2016 (4.3) was lower than that for the UK as a whole (4.4) but higher than those of 20 of the 28 EU countries. The infant death rate for Scotland in 2016 (3.3) was below the UK rate (3.9) but higher than those of 11 of the 28 EU countries.

**More information about death statistics**

More detailed information about Scotland’s deaths can be found in the Vital Events - Deaths section or in the Deaths section of the Vital Events Reference Tables of the NRS website.
Chapter 4 - Life Expectancy

Historically, Scotland has experienced a steadily increasing expectation of life which has contributed to an ageing population structure - a common theme across many Western European countries. However, the pace of increasing life expectancy in Scotland has slowed over the years and the latest estimates indicate life expectancies for both men and women have remained unchanged for 2014 (the latest period for which estimates are available).

Life expectancy at birth is the average number of years that a new-born child could expect to live, subject to their current age-specific mortality rates. It is commonly used as an indicator of mortality conditions and is particularly useful for measuring the ‘health’ of a nation over time. Life expectancy estimates can also be used to make comparisons across smaller geographies within Scotland, and more widely at an international level.

Life Expectancy at Scotland Level

Figure 4.1 shows that life expectancy at birth in Scotland has improved over the last three decades, increasing from 69.1 years for males and 75.3 years for females born around 1981 to 77.1 years and 81.1 years respectively for those born around 2014.

Figure 4.1: Life expectancy at birth\(^1\), Scotland, 1981-2039

Footnote

\(^1\) Figures to 2014 are from National Life Tables produced by the Office for National Statistics (ONS). They are based on three years of data. For example, the 2014 figure uses data for 2013-2015. Figures from 2015 are projected single year life expectancies, ONS.
Life expectancy at birth has stabilised for both males and females, remaining unchanged for those born around 2013 compared to those born around 2014. The latest projections show improvements in life expectancy at birth with a projected rise to 82.3 years for males and 85.0 years for females by 2039.

The life expectancy estimates for Scotland are calculated using population estimates, births and deaths at all ages over a period of three consecutive years. Over the last few years, age-standardised mortality rates have suggested that the on-going decrease in mortality may be slowing (refer to Chapter 3 - Deaths). This is likely to be a contributing factor in the recent stabilisation of life expectancy.

The most recent life expectancy projections are based on 2014 data and indicate a decrease in life expectancy between 2014 and 2015 of 0.5 years for males and 0.4 years for females. From 2015 onwards, life expectancy is projected to begin increasing again.

There is not yet enough data to establish whether this observed and projected stall in life expectancy is part of a significant change in the life expectancy trend for Scotland. The statistics will continue to be closely monitored over the next year or two to determine whether this is the case. 2016-based projections for Life expectancy for Scotland will be available as part of the 2016-based Projected Population of Scotland, which will be published later in 2017.

Figure 4.1 also illustrates the gap between male and female life expectancy at birth, which has been steadily decreasing from 6.2 years for those born around 1981 to 4.1 years for those born around 2014. The gap between males and females is projected to reduce even further to 2.7 years by 2039.

**International Comparisons of Life Expectancy**

Figure 4.2a (males) and Figure 4.2b (females) give life expectancy at birth for both genders over the past 32 years. Comparisons are made within the rest of the UK, the 28 member states of the EU (EU-28) and internationally with Japan and the United States. For both males and females, life expectancy at birth in Scotland has been lower than any other constituent country of the UK since 1980-82; and the relative gaps in life expectancy between each UK country have remained fairly constant over time. Life expectancy has also stabilised for both genders in each constituent country of the UK and have neither risen or fallen from 2012-14 to 2013-15. In contrast, the majority of European countries have experienced an increase in life expectancy over the same period. Scotland has the lowest life expectancy at birth in the EU-15 for both males and females.

However, the gap between Scotland and the EU-28 country with the highest male life expectancy has decreased over the past 32 years. In 1980-82, the gap between Greece (with the highest EU-28 male life expectancy) and Scotland was 4.3 years. This has decreased to 3.8 years with Cyprus (current highest) in 2013-15. The countries with lower life expectancies than Scotland tend to come from Eastern Europe. Over the same period, the gap between Scotland and the EU-28 country with the lowest male life expectancy has widened. In 1980-82, there were 5.0 years between Scotland and Estonia while in 2013-15 it was 8.0 years between Scotland and Latvia.
For females, the gap between Scotland and the country with the highest life expectancy in the EU-28 has become wider over this period. In 1980-82, there was a difference of 4.0 years between Sweden and Scotland while in 2013-15 there was a 5.1 year difference between Spain and Scotland. Meanwhile the gap between Scotland and the country with the lowest female life expectancy in the EU-28 has slightly widened from 2.9 years between Scotland and Romania in 1980-82, to 3.1 years between Scotland and Bulgaria in 2013-15.

**Figure 4.2a: Male life expectancy at birth\(^1\) in European Union countries with further international comparisons to Japan and the United States, 1981 to 2014**

Footnote:
1) Figures are based on three years of data. For example, the 2014 figure uses data for 2013-2015. Source: Office for National Statistics, Eurostat (tps000025) and World Bank Data Bank. The scale differs from the corresponding female figure.
Internationally, Japan has maintained one of the most consistently high life expectancies in the world, often achieving the highest life expectancy for both genders. Currently, Japan’s life expectancy at birth is 80.5 years and 86.8 years for males and females respectively, with only a couple of European countries reaching a higher male life expectancy in recent years. For males, the difference in life expectancy between Scotland and Japan has fallen from 4.7 years in 1980-82 to 3.8 years in 2013-15. However, for females, the gap in life expectancy between Scotland and Japan has increased from 4.0 years to 5.7 years.

Until recently, the United States had had higher life expectancies for both males and females compared with Scotland. Currently, the United States has a male and female life expectancy of 76.4 years and 81.2 years respectively, compared with male and female Scottish life expectancies of 77.1 years and 81.1 years. Scotland and the United States exhibit very similar trends with rates of increasing life expectancy slowing in recent years. The life expectancies in the United States also appear to have stabilised at 76.4 years for males and 81.2 years for females since 2011.

For males, the gap in life expectancy between the United States and Scotland has decreased from 1.7 years in 1980-82 to 0.7 years in 2013-15. The rate of increasing male life expectancy particularly slowed for the United States which led to it falling below that of Scotland around 2010. For females, the gap between the United States and Scotland similarly decreased over the same period. However, the United States maintains a slightly higher female life expectancy than Scotland with a difference of only 0.1 years in 2013-15.
Life Expectancy at council area level

The increasing trend of life expectancy is also exhibited at council area level within Scotland. However, there are considerable differences in life expectancy at these lower geographies as illustrated in Figure 4.3.

The highest council area life expectancy for males in Scotland is for East Dunbartonshire, with those born around 2014 expected to live for 80.5 years. This is 7.1 years higher than Glasgow City which has the lowest life expectancy for males at 73.4 years. For females, East Dunbartonshire also has the highest life expectancy (83.5 years); 4.8 years more than West Dunbartonshire which has the lowest council area life expectancy of 78.7 years.

Figure 4.3 can also give an indication of the spatial variation of life expectancy in Scotland. The highest life expectancies appear more spread out geographically, whereas the lowest life expectancies are seen predominantly in the West of Scotland. Despite this, there are still high life expectancies observed in the West of Scotland with both East Dunbartonshire and East Renfrewshire ranking highly. In particular, East Dunbartonshire has the highest male and female life expectancies in the country. In contrast, West Dunbartonshire experiences the second lowest male life expectancy and lowest female life expectancy of the Scottish council areas.

Figure 4.3: Male and female life expectancy at birth by council area with associated 95% confidence intervals (CI)¹, 2013-2015

Footnotes:
1) Life expectancy at birth is an estimate which is subject to a margin of error. The accuracy of results can be indicated by calculating a confidence interval which provides a range within which the true value underlying life expectancy would lie (with 95% probability).
2) The Scotland-level life expectancy estimates are for use only as a comparator for the corresponding sub-Scotland-level figures. The definitive Scotland-level life expectancy estimates (based on National Life Tables) is published by the Office for National Statistics.
3) Ordered by lowest to highest male life expectancy.
Figure 4.4a (males) and Figure 4.4b (females) further illustrate the spatial variability of life expectancy, presenting the upper and lower quartiles of council area life expectancies across Scotland. At the upper end, East Dunbartonshire and East Renfrewshire rank highly for both male and female life expectancies.

The lowest life expectancies are concentrated in the West of Scotland with some exceptions such as Dundee City which also experiences one of the lowest life expectancies for both males and females. With the highest council area population in Scotland, Glasgow City has a major influence on the Scotland level life expectancy, providing the lowest male and second lowest female council area life expectancy. In the same way, North Lanarkshire and Renfrewshire have a similar effect but at a lesser magnitude as they have smaller council area populations.
Figure 4.4a: Life expectancy at birth\(^1\) by council area, upper and lower quartiles\(^1\), males, 2013-2015

Footnote
1) A percentile is a statistical measure indicating the value below which a given percentage of the data fall. Similarly, the quartile is the value for which 25% of the data may be found.
Figure 4.4b: Life expectancy at birth\(^1\) by council area, upper and lower quartiles, females, 2013-2015

Footnote
1) A percentile is a statistical measure indicating the value below which a given percentage of the data fall. Similarly, the quartile is the value for which 25% of the data may be found.
Life Expectancy by Area Deprivation

Life expectancy increases as deprivation decreases, as illustrated by Figure 4.6. Males born around 2014 in the 10% least deprived areas of Scotland can expect to live around 12.2 years longer than those in the 10% most deprived areas (82.3 years compared with 70.1 years). Females in the 10% least deprived areas of Scotland can expect to live around 8.4 years longer than those in the 10% most deprived areas (85.0 years compared with 76.4 years).

Figure 4.6: Male and female life expectancy at birth by level of deprivation\(^2\), with associated 95% confidence intervals (CI)\(^1\), 2013-2015

Furthermore, the gap between male and female life expectancies of those in the most deprived areas (lowest deciles) is wider than between those in the least deprived areas (highest deciles), indicating that the differences between male and female life expectancies are greater in the most deprived areas.

More information about life expectancy statistics

Life expectancy is typically reported as life expectancy from birth, however life expectancy trends can also vary by age and so additional estimates are routinely calculated for each single year of age. More detailed information about Scotland’s life expectancy across all ages can be found within the Life Expectancy section of the National Records of Scotland (NRS) website.

A further extension of life expectancy estimates is Healthy Life Expectancy (HLE) which is published by the Information Services Division (ISD) of the NHS. Healthy Life Expectancy adds a quality of life dimension to estimates of life expectancy and can be defined as the number of years people can expect to live in good health. More information on HLE in Scotland is available on the website of the Scottish Public Health Observatory (ScotPHO).
Chapter 5 - Migration

International migration is currently high on the public agenda, particularly in light of the UK’s decision to leave the EU. Understanding the trends in migration flows, and the contributions migrants make while living and working in Scotland is of key interest to users. Migration is a key driver of Scotland’s projected population growth, and continued inward migration to Scotland can help mitigate against the effects of an ageing population.

Trends in migration since 1956

Before the turn of the century, Scotland was predominantly a country of net out-migration, with more people leaving to live elsewhere than moving to live in Scotland. As Figure 5.1 shows, 1956 to 1989 was a period of net out-migration; with the highest net-out figure occurring in 1966, when there was a net loss of 43,200 people. A few years of net in-migration were first recorded in the early 1990s. Since 2001, Scotland has been in a period of net in-migration with more people moving to live in Scotland than leaving. From the year to mid-2004 until the year to mid-2011 there were net gains of at least 18,600 per year every year, and in the year to mid-2007 the net migration gain was 33,000, the highest since these estimates began. In the year to mid-2016, there was a net migration gain of 31,700 people.

Figure 5.1: Net migration\(^1\), Scotland, 1955-56 to 2015-16

Net migration can be significantly affected by relatively small changes in the much larger flows of migrants into or out of Scotland year-on-year, particularly if one flow rises while the other falls. Between the year to mid-2004 and the year to mid-2010 in-migration to Scotland was above 90,000 per year, every year. Out-migration from Scotland over this same time period fluctuated between 63,600 and 75,800 people per year.

Footnote
1) Inward minus outward migration.
Over the last five years, in-migration has been lower than the levels seen between mid-2004 and mid-2011. In the year to mid-2016, around 86,700 people came to Scotland, which is a 2% rise on the mid-2015 estimates and a 5% rise on the mid-2014 estimates. Since the millennium, out-migration has generally been falling. There was a peak in out-migration figures recently with 68,300 people leaving in the year to mid-2012. This figure has fallen every year since then, with the year to mid-2016 showing an out migration figure of 55,000 people, a 4% decrease on the previous year.

**Origins and destinations of migrants**

Changes to Scotland’s population through migration can be looked at in terms of changes to the flows of migrants between Scotland and the rest of the UK, and between Scotland and overseas. In the year to mid-2016, around 46,300 people came to Scotland from the rest of the UK and around 37,500 people left Scotland for the rest of the UK; resulting in a net gain of approximately 8,800 people. During the same period, around 40,400 people came to Scotland from overseas and around 17,500 left Scotland to go overseas, resulting in a net gain of approximately 22,900 people.

Table 5.1 summarises the migration flows between Scotland and the rest of UK and Scotland and overseas between mid-2015 and mid-2016. The in-flows from both the rest of the UK and overseas are larger than the out-flows to the rest of the UK and overseas, resulting in net migration gains from both flows.

**Table 5.1: Migration between Scotland and rest of UK and Overseas, mid-2015 to mid-2016**

<table>
<thead>
<tr>
<th></th>
<th>In</th>
<th>Out</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rest of UK</td>
<td>46,300</td>
<td>37,500</td>
<td>8,800</td>
</tr>
<tr>
<td>Overseas</td>
<td>40,400</td>
<td>17,500</td>
<td>22,900</td>
</tr>
<tr>
<td>Total</td>
<td>86,700</td>
<td>55,000</td>
<td>31,700</td>
</tr>
</tbody>
</table>

**Note**

Numbers have been rounded to the nearest hundred.

International migration is the most difficult to estimate as it is based primarily on the International Passenger Survey (IPS). This is a sample survey conducted at the channel tunnel, main ports and airports across the UK, and the sample size for Scotland is very small (around 150 migrant contacts between mid-2015 and mid-2016).

Internationally, a migrant is defined as someone who changes country of usual residence for 12 months or more, so a short-term seasonal migrant worker will not be counted in the migration estimates or in the mid-year population estimates.

**Figure 5.2** illustrates the trend in flows of people to and from the rest of the UK and overseas since the year to mid-1996. Out-migration to the rest of the UK has generally fallen since 2000, from around 55,000 to just under 40,000 in the year to mid-2016. Out-migration to overseas has fallen every year since 2012. The highest number of migrants leaving for overseas occurred in 2006, with a loss of 31,400 people. This compares most recently to 17,500 people leaving for overseas in the year to mid-2016.
In-migration from the rest of the UK has generally fallen since 2003, but currently remains higher than in-migration from overseas. Most recently 46,300 people came to Scotland from the rest of the UK in the year to mid-2016.

**Figure 5.2: Movements to/from the rest of the UK and overseas, 1996 to 2016**

![Graph showing movements to and from the rest of the UK and overseas, 1996 to 2016](image)

Figure 5.3 illustrates the trends in net migration of people to and from the rest of the UK and overseas. Since the year to mid-2001, there has been positive net in-migration from the rest of the UK, with a peak of around 15,500 more people moving to Scotland than leaving in the year to mid-2004. Following a period of net out-migration from Scotland to overseas in the year to mid-2003 there have been net migration gains in each subsequent year, with a peak of around 27,300 more people moving into Scotland than leaving in the year to mid-2011.

Most recently in the year to mid-2016, the net migration gain from overseas was higher than from the rest of the UK, with the gap between the two flows increasing on the previous year.
Age and sex of migrants

With increasing attention being given to migration flows, it is useful to be able to understand the age and sex distribution of people coming to live in Scotland; both from the rest of the UK and overseas.

Figure 5.4 illustrates the change in inward migration by age group since 2010. The age group with the highest number of migrants was 25-44, in each of the years across the period. The number of migrants aged 25-44 in the year to mid-2016 was 34,200, an increase of around 500 on the previous year. The number of migrants in both the 16-24 and 25-44 age groups has increased each year since 2013. This reverses a trend from 2010 to 2013, where these flows had fallen year-on-year.

Figure 5.4: Migrants to Scotland by age group, 2010 to 2016
Figure 5.5 shows the number of migrants to Scotland over the past year by age and sex, relative to the total population in each single year of age. Of the people that migrated to Scotland (both from overseas and from the rest of the UK) between mid-2015 and mid-2016, 52% were between the ages of 18 and 32.

In terms of sex distribution, migrants to Scotland in the year to mid-2016 were 52% females and 48% males, whereas the population of Scotland as a whole is made up of 51% females and 49% males.

**Figure 5.5:** Migrants to Scotland by age and sex, relative to the population as a whole, mid-2015 to mid-2016

![Figure 5.5: Migrants to Scotland by age and sex, relative to the population as a whole, mid-2015 to mid-2016](image)

Figure 5.6 illustrates the age distribution of people moving between Scotland and the rest of the UK between mid-2015 and mid-2016. The peak age for migration into Scotland from the rest of the UK is 19, and there is a pronounced net migration gain at this age. The peak age for migration out of Scotland to the rest of the UK is 23, resulting in notable net migration losses at this age. These large in- and out-flows are the result of an influx of students from outside Scotland starting higher education in Scotland, followed by moves out of Scotland after graduation.

**Figure 5.6:** Age distribution of people moving between Scotland and the rest of the UK, mid-2015 to mid-2016

![Figure 5.6: Age distribution of people moving between Scotland and the rest of the UK, mid-2015 to mid-2016](image)

Figure 5.7 shows the age distribution of people moving between Scotland and overseas from mid-2015 to mid-2016. The peak age for migration into Scotland from overseas is 23. There are also high numbers of in-migrants (500 or more) for each age from 18 to 37, reflecting the fact that many migrants move for work reasons. The peak age for migration out of Scotland to overseas is 25. There are high numbers of out-migrants (500 or more) for each age from age 21 to 30. The number of in-migrants is higher over these age ranges, resulting in net in-migration for all ages through to age 66.

**Figure 5.7:** Age distribution of people moving between Scotland and overseas, mid-2015 to mid-2016

![Figure 5.7: Age distribution of people moving between Scotland and overseas, mid-2015 to mid-2016](image)
Both Figure 5.6 and Figure 5.7 represent migrants by age at mid-year. The age at which migrants actually move can be younger than their age at mid-year. For example, students from the rest of the UK often move to Scotland around August.
and September when they are still aged 18, but turn 19 prior to the mid-year point
the following June when the population is estimated by NRS. They are therefore
counted as in-migrants at age 19 even though they were aged 18 when they made
their move to Scotland.

**Migration and mitigating against the effects of demographic change**

Assumptions about future levels of migration, as well as future levels of fertility and
mortality, feed into our National Population Projections (NPP). More details about the
latest 2014-based NPPs can be found in Chapter 1 - Population.

The 2014-based projections are trend-based and do not take into account changes
in government policy and other social and economic factors. As can be seen in
Figure 5.8, Scotland’s population is projected to increase by 353,900 (7%) over the
next 25 years to 2039. This increase is attributable to gains from migration alone,
with a projected increase of 238,400 people from overseas and 138,400 people from
the rest of the UK. In contrast, natural change (births minus deaths) is projected to
be negative with a loss of 22,900 people projected over the next 25 years to 2039.

**Figure 5.8: Components of projected population change, Scotland, 2014-2039**

As outlined in Chapter 1 – Population, Scotland is projected to have an ageing
population over the period from 2014-2039, with a projected increase of 28% for
people of pensionable age. In contrast, the working age population is projected to
increase by only 1% over the next 25 years to 2039. Continued inward migration can
help Scotland support its growing number of older people, maintain a healthy
working age population and boost population growth. In November 2016, NRS
published illustrative population projections using alternative EU migration
assumptions to understand the potential impact on Scotland’s population. It is

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**Footnote**

migration, UK and Scotland, National Records of Scotland, 23 November 2016.
important to note that these projections are illustrative and are included to show the possible effect on Scotland’s population and its structure because of changes in EU in-migration. There is a high degree of uncertainty around projecting varying levels of migration in the principal population projection and this is only increased by trying to model what the future level of EU migration might be following the UK leaving the EU. These additional variant projections remain trend-based and are not forecasts of what the government expects to happen based on policy.

The three additional variant projections produced, for both Scotland and the UK, are:

- zero future EU migration;
- 50% future EU migration (50% less future EU migration); and
- 150% future EU migration (50% more future EU migration).

Figure 5.9 shows that Scotland’s population is projected to grow by 7% between 2014 and 2039. However, in a situation where EU migration to Scotland falls to half of current levels, population growth is 5% over the same period, and with no EU migration, population growth is 3%.

**Figure 5.9: Percentage change in population from 2014 to 2039, principal and alternative EU migration variant projections**

As the size and composition of the population is determined by the pattern of births, deaths and migration, it is also helpful to compare the projected age structure of the population using the alternative EU migration variants. **Figure 5.10** compares the projected age structure of the population in Scotland and the UK based on the principal (main) projection and the zero future EU migration projection.

In Scotland, the working age population is projected to increase by 1% over the next 25 years to 2039 based on the principal projection. However in a scenario of zero EU migration, Scotland’s working age population is projected to decline by 3% over the same period. Similarly for children (aged under 16 years), the population is projected to increase by 1% between 2014 and 2039 based on the principal projection but in a scenario of zero EU migration, the population of children is projected to decline by 5%. This is because migrants tend to be younger than the rest of the population.
Migration and the distribution of people in Scotland

Net migration rates (the amount of net migration between mid-2015 and mid-2016 as a proportion of the mid-2015 population) are a useful indicator when comparing migration between areas of different sizes. Net migration rates for council areas are shown in Figure 5.11. This includes migration within Scotland, migration between Scotland and the rest of the UK and with areas overseas.

The net migration rates over the period mid-2015 to mid-2016 show that the only council areas with net out-migration rates were Aberdeen City, Na h-Eileanan Siar, Aberdeenshire, Inverclyde and the Shetland Islands. The council areas with the highest net in-migration rates were the City of Edinburgh, Glasgow City and Midlothian respectively. Looking at only migration with areas outside Scotland (the rest of UK and overseas) shows a slightly different pattern. Figure 5.12 displays the migration rates for the period mid-2015 to mid-2016 with areas outside Scotland. The only council area in Scotland with a net out-migration rate, in this respect, was Aberdeenshire. The council areas with the highest net-in migration rates were the City of Edinburgh, Glasgow City and the Orkney Islands respectively.
Figure 5.11: Net migration as a percentage of population by council area

Migration Rates
- Less than 0%
- 0% to less than 0.25%
- 0.25% to less than 0.5%
- 0.5% to less than 1%
- More than 1%

1. West Dunbartonshire
2. East Dunbartonshire
3. North Lanarkshire
4. Glasgow City
5. East Renfrewshire
6. Renfrewshire
7. Inverclyde
8. Clackmannanshire
9. Falkirk
10. West Lothian
11. City of Edinburgh
12. Midlothian
13. East Lothian

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Figure 5.12: Net migration with areas outside Scotland as a percentage of population by council area, 2015-16

Migration Rates
- Less than 0%
- 0% to less than 0.25%
- 0.25% to less than 0.5%
- 0.5% to less than 1%
- More than 1%

1. West Dunbartonshire
2. East Dunbartonshire
3. North Lanarkshire
4. Glasgow City
5. East Renfrewshire
6. Renfrewshire
7. Inverclyde
8. Clackmannanshire
9. Falkirk
10. West Lothian
11. City of Edinburgh
12. Midlothian
13. East Lothian

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Overseas migrants living and working in Scotland – Information from the 2011 Census

The census provides us with a wealth of information about the characteristics of Scotland’s population. We can use the census to identify international migrants, based on their country of birth, and understand their characteristics by analysing alongside health, social and labour market questions from the census.

In April 2017, NRS published ‘Demographic and census profiles of European Economic Area (EEA) born residents in Scotland’ for each council area in Scotland. These profiles draw on the latest migration data from the mid-2016 population estimates showing migration trends over time as well as 2011 Census data showing the number of EEA-born people living in each area, their age profile and labour market characteristics. EEA countries include EU member countries at March 2011 (excluding the UK in this data) as well as Norway, Iceland and Liechtenstein.

Over 9 in 10 (93%) of the people in Scotland on Census Day 2011 stated they were born within the UK, a decrease of three percentage points since 2001. Of the 7% (369,000) of people in Scotland who were not born in the UK, 15% (55,000) were born in Poland, and 6%(23,000) were born in each of India and the Republic of Ireland.

3% (160,000 people) of Scotland’s population on Census Day 2011 were born within the EEA. Figure 5.13 shows the age profile of EEA-born residents in Scotland. In 2011, 82% of EEA–born residents (131,000 people) were aged 16-64 years, compared with 66% for Scotland as a whole. Only 9% of EEA-born residents (14,000 people) were aged 65 years and over, compared with 17% of the whole population of Scotland.

Figure 5.13: Percentage of the population in each age group by country of birth, Scotland, 2011

![Figure 5.13: Percentage of the population in each age group by country of birth, Scotland, 2011](image-url)
In 2011, a higher proportion of EEA-born residents in Scotland aged 16 and over were in employment (67%; 97,000 people) compared with the total population aged 16 and over of Scotland (58%). The proportion of the EEA-born residents of Scotland aged 16-74 with a degree level qualification in 2011 was 46% (63,000 people), compared with 27% for all people aged 16-74 in Scotland.

Figure 5.14 shows the percentage of residents born within the EEA (excluding residents born in the UK) by council area. The council areas with the highest percentages of EEA born residents were Aberdeen City and the City of Edinburgh, where 7% of the population for both were born in the EEA.

Profiles for each council area in Scotland are available at on the NRS website.

Data Sources, methodology and other information

More detailed information on the methodology for estimating migration is available on the Migration - Methodology section of the National Records of Scotland website.
Figure 5.14: Percentage of residents born in European Economic Area (EEA) by council area, Scotland, 2011
Chapter 6 - Marriages and Civil Partnerships

Marriages

There were 29,229 marriages in Scotland in 2016, 462 (1.6%) fewer than in 2015. Of these, 998 were same-sex marriages (involving 391 male couples and 607 female couples) following The Marriage and Civil Partnership (Scotland) Act 2014 coming into force on 16 December 2014. There were 173 (17%) of same-sex marriages in 2016 were of couples who changed their existing civil partnership to a marriage. This is a large, and expected, fall from 56% of same-sex marriages in 2015.

Figure 6.1 shows that, following a decline from over 40,000 marriages a year in the early 1970s, the annual total levelled out at around 30,000 in the mid-1990s. The highest total recorded in recent years was 32,154 in 2004 (the highest total since 1993), whilst the highest ever recorded was 53,522 in 1940. The 2009 total (27,524) was the lowest since Victorian times, and the lowest ever recorded was 19,655 in 1858.

Figure 6.1: Marriages, Scotland, 1971-2016

The information in this section covers all marriages registered in Scotland, regardless of where the couple lived. In 2016, there were 6,326 ‘tourism’ marriages (22% of all marriages) where neither partner was resident in Scotland. This represents a slight rise in number from 6,232 (21% of all marriages in 2015). Almost half (3,112) of the ‘tourism’ marriages in 2016 were at Gretna.

Gretna continues to be a popular venue for marriages, and the 3,671 registered in 2016 (13% of all marriages) was nearly 5% higher than the 3,511 registered in 2015. However, the 2016 total is more than a third down on the record total of 5,555 in 2004 (17% of all marriages in Scotland in 2004). Over the longer term, the number of marriages at Gretna increased from only 226 in 1981 through to 1,876 in 1991 and
5,055 in 2004. In 2016, 85% (3,112) of the marriages at Gretna did not involve a resident of Scotland.

Of course, many couples who live in Scotland go abroad to be married. These marriages are not included, and only some come to the attention of the Registrar General through notification to British consular authorities.

**Marital status at marriage**

*Figure 6.2* shows the percentage of marriages by marital status at the time of marriage between 1971 and 2016. The percentage of people marrying who had been divorced rose from just under 6% in 1971, to over a quarter in 2001 (28% for grooms and 26% for brides). The majority of this shift reflects a reduction in the proportion of marriages where one of the partners had never been married.

The proportion of those marrying who have been divorced was 23% in 2016 (24% for males and 22% for females). The proportion of those marrying who were widowed (2% in 2016) has hardly changed since 2001. Following the introduction of same-sex marriage, the additional marital status of civil partner is now included in *Figure 6.2*. From 16 December 2014, couples in a civil partnership which was registered in Scotland were able to change their civil partnership to a marriage. From 31 October 2015, couples in a civil partnership registered outside Scotland were also able to change their civil partnership to a marriage. Of the 998 same sex marriages which were registered in 2016, 17% involved couples changing their civil partnership to a marriage.
Figure 6.2: Marriages, by marital status (percentages) and sex of persons marrying, 1971-2016

**Males**

<table>
<thead>
<tr>
<th>Year</th>
<th>Single</th>
<th>Divorced</th>
<th>Widowed</th>
<th>Civil Partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>91</td>
<td>15</td>
<td>22</td>
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<tr>
<td>2011</td>
<td>73</td>
<td>25</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>

**Females**

<table>
<thead>
<tr>
<th>Year</th>
<th>Single</th>
<th>Divorced</th>
<th>Widowed</th>
<th>Civil Partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>91</td>
<td>14</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>1981</td>
<td>83</td>
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<td>2001</td>
<td>72</td>
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<td>22</td>
<td>23</td>
</tr>
<tr>
<td>2011</td>
<td>75</td>
<td>23</td>
<td>22</td>
<td>22</td>
</tr>
</tbody>
</table>

**Note**

There is a break here between two time series. 1971 to 2011 are shown for census years, and each year from 2012 is then shown. Only percentages greater than ten are shown on the bars.

**Age at marriage**

The average age at marriage has risen for both males and females. For first marriages, the average age of males has risen from 24.3 in the 1970s to 33.9 in 2016; the comparable figures for females are 22.5 in the 1970s and 32.2 in 2016.
Marriages by type of ceremony

Civil marriages are conducted by registrars, and they have wide discretion over the form of the ceremony, to meet couples' wishes. There were 15,066 civil marriages in 2016, accounting for just over half (52%) of all marriages compared to just under one-third (31%) in 1971, as shown in Figure 6.3.

The trend in civil marriages mainly reflects a decline in the number of religious ceremonies during the past 40 years. The small increase in religious marriages during the period 1997 to 2002 was largely associated with the increase of ‘tourism’ marriages, of which a significant proportion were carried out at Gretna. Since then, there was a decrease in the number of religious and other belief marriages, from 16,890 in 2003 to 13,285 in 2009 although numbers have risen since then, to 14,163 in 2016 – largely due to the increase in humanist marriages.

Religious marriages are conducted by a wide range of celebrants. The largest numbers of religious marriages were carried out by ministers of the Church of Scotland, who conducted 3,675 marriages in 2016, followed by clergy of the Roman Catholic Church, who conducted 1,346. The other religious and other belief bodies conducting more than 500 marriages in 2016 were the Humanist Society Scotland (3,040), Independent Humanist Ceremonies (936), Assemblies of God (625) and the Humanist Fellowship of Scotland (519). Humanist celebrants have been authorised to conduct marriages in Scotland since 2005. In 2016 they officiated at 5,260 marriages compared with 2,486 in 2011, and 434 in 2006.

Figure 6.3: Marriages, by type of ceremony, 1971-2016

Until 2002, civil marriages could only be held in registration offices. The Marriage (Scotland) Act 2002 allowed registrars to conduct ceremonies in other approved places, from June 2002. In 2003, the first full year of these arrangements, 3,465
ceremonies were carried out at these approved places. Changes in The Marriage and Civil Partnership (Scotland) Act 2014 removed the approved place status. From 1 September 2014, civil marriage may be solemnised at a place agreed between the couple and the local registration authority, other than religious premises. This flexibility already exists in relation to civil partnership ceremonies. In addition, a religious marriage ceremony may take place anywhere agreed between the couple and the celebrant.

Civil partnerships

There were 70 civil partnerships registered in Scotland in 2016, 6 (9%) more than in 2015. The Civil Partnership Act 2004, which applies throughout the UK and came into force on 5 December 2005, allows same-sex couples to register their partnership.

During 2006, the first full year of operation, 1,047 partnerships were registered in Scotland. In 2007, 688 partnerships were registered. This decrease was expected, because many long-standing relationships would have been registered as civil partnerships in the first full year of registration. The number of partnerships formed continued to fall to 465 in 2010. In 2011 and 2012 there were 554 and 574 registrations respectively; the first years to show an increase. In 2013 and 2014 there were falls in the number of partnerships formed, to 436 in 2014. This was followed in 2015 by a much larger fall to just 33 male partnerships and 31 female partnerships registered (Figure 6.4). This fall was expected following the introduction of same-sex marriages by the Marriage and Civil Partnership (Scotland) Act 2014 which came into force on 16 December 2014.

Figure 6.4: Civil partnerships, 2005-2016
More information about marriage and civil partnership statistics

More detailed information can be found in the Vital Events - Marriages and Civil Partnerships section or in the Marriages and civil partnership section of the Vital Events Reference Tables on the National Records of Scotland website.

There are no figures for divorces and dissolutions of civil partnerships in this publication, because the Scottish Government is now the only publisher of new statistics of divorces and dissolutions for Scotland.
Chapter 7 - Adoptions

The Registrar General recorded 523 adoptions during 2016, which is 19 more than in 2015. This is around half the number recorded per year in the mid-1980s, and around a quarter of the number recorded in the late-1960s.

Adoptions of children have been registered by law in Scotland since 1930. Today the Registrar General for Scotland registers them under the Adoption and Children (Scotland) Act 2007.

Adoptions include cases of step-parents adopting their spouse’s or partner’s children, and relatives adopting children of other family members, as well as people adopting children who are not related in any way to them. The figures include small numbers of foreign adoptions registered in Scotland, and parental orders granted following a birth by a surrogate mother.

Figure 7.1 shows that following a steady rise to a post-war peak of 2,292 in 1946, the total number of adoptions fell back to 1,236 in 1959, before peaking again at 2,268 in 1969. Since then, the annual number of adoptions declined fairly steadily to around 400 in 2000 and has been between roughly 400 and 500 in every year until 2014, and slightly over 500 in the two most recent years.

Figure 7.1:  Adoptions, Scotland, 1930-2016
Of the 523 children adopted in 2016, 20% were adopted by a step-parent and 75% were adopted by non-relatives of the child.

Figure 7.2 shows the children’s ages. Only 18% of children adopted in 2016 were aged under two, 19% were aged two, 24% were aged three to four, 27% were aged five to nine, 9% were aged 10 to 14 and 4% were aged 15 or over. Of the children aged under two, 74% were adopted by non-relatives. In contrast, only 26% of the 69 children aged 10 or over were adopted by non-relatives.

Figure 7.2: Age at adoption, Scotland, 2016

More information about adoptions

More detailed information about Scotland’s Adoptions can be found in the Vital Events - Adoptions section and the Adoptions section of the Vital Events Reference Tables on the National Records of Scotland website.
Chapter 8 - Households and Housing

There were 2.45 million households and 2.58 million dwellings in Scotland in 2016.

The number of households in Scotland has risen by around 157,000 over the past 10 years. Figure 8.1 illustrates that over the last decade, the number of households rose by 7%, which was faster than the increase in population.

Figure 8.1: Trends in households and population, June 2006 to 2016

The growth in households has been faster than the population growth because people are increasingly living alone or in smaller households. One person households have become the most common type in recent years, as shown in Figure 8.2. Over the last decade, the average number of people per household (‘household size’) fell from 2.20 people per household in 2006 to 2.16 people per household in 2016. These changes are partly due to the ageing population, as elderly people are more likely to live alone or with just one other person.
Looking to the future, Scotland’s population is projected to increase, and the greatest increase is projected to occur in the older age groups. Household size is projected to fall further to 2.01 people per household by 2039. Consequently, the household projections (which are based on past trends) project the number of households in Scotland increasing further, to 2.76 million by 2039, an average annual increase of around 13,800 between the years 2014 and 2039.

Projected changes in household type

The numbers of some household types are projected to increase more than others by 2039, as illustrated in Figure 8.3, which compares the projected number of households of each type in 2014 and 2039.

The largest projected increase (in number and percentage terms) is in households containing one adult only. Almost a quarter of people aged 16 or over are projected to live alone in 2039 (24%), compared to 20% in 2014. The numbers of households containing two adults only and one adult with children are also projected to rise. In contrast, numbers of larger households are projected to fall.
Projected changes in age group

The ‘head of household’ is the first person included on the census form, unless that person was aged under 16 or was not usually resident in the household. Figure 8.4 shows the projected number of households in 2014 and 2039, by the age of the head of household.

The number of households headed by older people is projected to rise, reflecting the ageing population in Scotland. The number of households headed by someone aged 65 or over is projected to increase by 47% between 2014 and 2039, to 963,400 households. The increases are particularly large in the oldest age groups, with the number of households headed by someone aged 85 or over projected to more than double from 81,000 to 191,800. In contrast, households headed by someone aged under 65 are projected to increase by just 2%, to around 1.80 million.

Older people tend to live in smaller households. By 2039 there are projected to be 484,800 people aged 65 and over living alone, an increase of 45% from 333,400 in 2014. Increases are particularly large in the oldest age groups (85 or over) where the number of people living alone is projected to be more than twice as high by 2039 (an increase of 139%).
Variation in trends in household numbers within Scotland

The number of households has grown in every council area over the 10 years to 2016. The areas with the greatest increase in households in percentage terms have been the Orkney Islands (an increase of 13.3%; 1,200 households) and Highland (an increase of 11.9%; 11,400 households). The City of Edinburgh has seen the largest increase in terms of absolute numbers (18,200 households; an increase of 8.5%).

Most council areas also saw a reduction in average household size over the last decade. However, in Perth and Kinross and the city council areas of Aberdeen, Edinburgh and Glasgow, household size began to increase after the economic downturn began in 2007/8.

The number of households is projected to increase in almost every council area over the 25-year period from 2014 to 2039, as shown in Figure 8.5. The largest projected increases are in Midlothian and the City of Edinburgh (31 and 30% respectively). In contrast, household numbers are projected to fall in Inverclyde (5% decrease), Argyll and Bute (1%) and Na h-Eileanan Siar (less than 1%). These figures are based on projections of past trends.

Vacant dwellings and second homes

Across Scotland, 96% of dwellings were occupied in 2016, while 3% of dwellings were vacant and 1% were second homes. Remote rural areas had the highest percentage of dwellings that were vacant and second homes (5.3 and 6.8% respectively, compared to 2.9 and 0.5% in large urban areas).
Figure 8.5: Projected percentage change in households by council area, 2014 to 2039 (Map)
More information about households and housing statistics

More detailed information about Scotland’s households and housing, including estimates and projections can be found in the [Households section](#) on the National Records of Scotland website.
Chapter 9 - Statutory Registration

Statutory Registration

Statutory registration in Scotland has a long and interesting history. It was introduced in 1855 (a little later than the start of statutory registration in England, which began in 1837) with the representative body for registrars, the Association of Registrars of Scotland (ARoS), formed a decade later in 1865. ARoS is ongoing and active. It is currently the longest-established such representative body in the world. Having helped commemorate their 150th anniversary a couple of years ago, National Records of Scotland (NRS) continues to enjoy an excellent relationship with ARoS working to support the registration service in Scotland into the future.

The uses to which the probative data generated by the Registration service is put are varied: from extracts from the registers (birth or death certificates), used by members of the public to attest to the true occurrence and details of different life events, to forming a key data source for demographic statistics produced by NRS, serving as the base for future family history research, and providing significant input to the promotion of positive social goods (such as public health, justice and medical research) and the prevention of social ills (like sham marriage, fraud and immigration offences).

In addition, the data generated by Registration underpins the NHS Central Register (NHSCR) and is shared widely with a range of other government departments, such as the Department for Work and Pensions (DWP), via the Tell Us Once scheme. This service continues to share, on a consent basis, key data on the death of individuals with a wide range of public sector bodies – from local authority housing to the Driver and Vehicle Licensing Agency (DVLA) – and saves informants a large amount of time and stress in winding up the myriad aspects of a person’s life. This year we have also taken a new birth data verification service for HMRC to the point of go-live, which when completed will make the process of verifying data on Scottish births provided in child benefit and tax-free childcare schemes much simpler and more efficient, both for customers and for HMRC themselves.

Responsibility for registering events in Scotland continues to lie with the 32 local authorities. The Registration service is small relative to the sizeable number of events it records (around 144,000 annually, across births, deaths and marriages) and in the current challenging climate is likely continue at this size, with both NRS and local authorities looking to make processes work as well as possible while continuing to provide excellent customer service.

As a group of professionals, registrars possess expert knowledge in the law and practice of registration, as well as a set of key interpersonal and administrative skills allowing them to support families and individuals through what can be very difficult circumstances. This includes guiding families through death registration, a difficult and detailed process originally but one extended and complicated by recent systematic changes to the process of death certification. To ensure high standards of service and data generation are upheld, registrars are encouraged and supported to study for the Certificate of Proficiency in the Law and Practice of Registration. We are currently finalising the process to deliver the first computerised sitting of this
long-standing registration qualification. The electronic sitting is planned for launch later in 2017 or early 2018 and will replace the traditional hand-written and marked paper process. This will allow registrars to demonstrate their levels of knowledge and skill in a setting more akin to the digital world in which they ordinarily operate, than the more old-fashioned pen and paper formats of the past.

The Certificate of Proficiency in the Law and Practice of Registration in Scotland is recognised by ARoS, the Convention of Scottish Local Authorities (CoSLA) and NRS as the professional qualification for registration staff. The certificate is awarded by an Examination Board consisting of representatives of ARoS, CoSLA and NRS. It was inaugurated in 1937 and the first examination was held in 1938, and the Board continues to engage with a range of issues around examination, question setting, standards and so on, meeting after each exam sitting to oversee the distribution of results, subsequent awards of the Certificate and any issues that arise during administration of the process.

The landscape of registration is, as ever, complicated and rapidly developing. Over the last decade or so a number of major Acts have shaped registration law and practice. These signal pieces of legislation include:

- The Marriage (Scotland) Act 2002 – provided for civil marriage at approved places.
- The Human Fertilisation and Embryology (Deceased Fathers) Act 2003 – enabled deceased fathers to be recorded in birth entry.
- The Immigration and Asylum (Treatment of Claimants) Act 2004 – new and very complex Home Office rules affecting the legal preliminaries for foreign nationals who want to marry or enter into civil partnerships in the UK.
- The Gender Recognition Act 2004 – new provisions to allow individuals to change gender legally and new registration procedures flowing from that.
- The Civil Partnership Act 2004 – new provisions to allow civil partnerships to be entered into legally and registered.
- The Family Law (Scotland) Act 2006 – abolition of legitimacy and acquisition of parental rights and responsibilities for unmarried fathers who register the birth jointly with the mother.
- The Local Electoral Administration and Registration Services (Scotland) Act 2006 – first major overhaul of principal registration statute for over 40 years.
- The Adoption (Scotland) Act 2007 – new provisions to enable same sex adoption.
- The Human Fertilisation and Embryology Act 2008 – new provisions to allow same-sex couples to have fertility treatment (assisted conception) and to register as parents of a child.
- The Certification of Death (Scotland) Act 2011 – new death registration provisions to enable checks to be made on causes of death.
- Marriage and Civil Partnership (Scotland) Act 2014 - introduction of same sex marriage ceremonies.

Over the last year, we have seen the bedding in and smooth operation of multiple large-scale programmes of change. This includes implementation of the Certification of Death (Scotland) Act 2011, which introduced a new system of medical scrutiny to
the death certification process, and has been operating smoothly across the sectors of registration, medical scrutiny and the funeral industry for a couple of years now. Issues do arise, but continued attention to detail, system development and on-going partnership working between NRS and the Death Certification Review service ensures these are dealt with in a timely fashion as they arise.

Similarly, the introduction of same sex marriage ceremonies, and an administrative route to changing Scottish civil partnerships to same sex marriages, following the Marriage and Civil Partnership (Scotland) Act 2014, was introduced successfully and is now an integral part of the registration landscape. A Home Office scheme to disrupt sham marriage through greater checking of those subject to immigration control who wish to get married in Scotland has bedded in fully, and is working well to deliver its objectives.

A key issue over the last period has also been the development of policy in and around gender recognition, which when completed is likely to have a significant effect on registration processes. Policies on gender recognition process (particularly evaluating the current tribunal model, and examining options for developing our approach to this) as well as in regard to intersex and non-binary people are currently in development by Scottish Government colleagues. NRS has fully engaged in this policy thinking and brought practical considerations to bear as the process goes forward. Once decisions have been reached we will work with Scottish Government to implement any changes to practice in these areas.

Within NRS, we have also taken the opportunity over the last year to review the role of the District Examiner, concluding that the scope and resourcing of the role is currently correct, but undertaking a number of developments around strategic engagement with local authorities; tackling the backlog of examined entries that developed in earlier years; sharing learning and best practice by Examiners; and improving internal engagement and intelligence-sharing.

Registrars have also - as usual - achieved a high level of overall accuracy in their records. Each year since 2007, registrars across the 32 councils have created around 97% of the records they make error free: an impressive performance, and one which we will strive to maintain going forward. As there have been significant challenges over the last year to the staffing of our District Examiner positions, we have recently completed and released the figures for 2015 (available in an annex to the previous year’s RGAR report) and have decided to postpone completion of the 2016 figures for a time until we can deploy dedicated resource to that task, beginning the ordinary round of examinations for 2017 at the normal time.

**NHS Central Register**

**Background**

The National Health Service Central Register (NHSCR) has been in existence since the 1950s and originates from the population register taken by the Registrar General Offices across the UK in 1939 at the outbreak of World War Two to help facilitate activities such as child evacuation, conscription and rationing. Following the war and
the establishment of the National Health Service (NHS) inflation of General Practitioner (GP) patient lists quickly became an administrative problem as the NHS had no central record of the population to ensure that patients were only registered with one doctor at a time. To address this, the 1939 population register was used to create the NHSCR to help the new NHS manage patient registrations. Its primary purpose since then has been to help ensure that the movement of patients between NHS Health Boards are properly recorded and to trigger the transfer of patient’s medical record to their new GP practice.

Content

The NHSCR contains a limited set of demographic information to allow it to carry out its purpose:

- NHS Number - for babies born in Scotland, the civil registration number of their birth, or a number given to a patient who was born outside Scotland but who registers with a Scottish doctor;
- Community Health Index (CHI) number – another identifier used by the NHS in Scotland;
- Unique Citizen Reference Number (UCRN) – a unique, anonymous number associated with an individual;
- Surname, forenames and any previous names;
- Mother’s birth surname;
- Sex;
- Date and place of birth;
- Postcode and address reference number;
- Unique Property Reference Number (UPRN) – a unique number associated with a property;
- Date of enlistment and discharge for Armed Forces personnel;
- Current and any previous Health Board (or health authority in the rest of the UK) area of GP registration (and equivalent information for Armed Forces personnel and their families);
- Medical research information for people who are registered as having had cancer, or are part of an approved medical research project; and
- Date of death or when contact with the patient was lost.

Operating the NHSCR

The Registrar General creates and maintains the register under Section 57 of the Local Electoral Administration and Registration (Scotland) Act 2006 (LEARS) and may add additional information under Schedule 1 of the Act. The Registrar General may share information from the register in ways specified under Schedule 2 of the Act.

The NHSCR is primarily maintained by changes to GP records in Scotland and birth and death records from the civil registration system. Anyone who was born or died in Scotland, or registered with a GP in Scotland, is included on the NHSCR.
Benefits to the NHS - Quality Assuring Patient Registration and Enabling Cross-Border Patient Moves

The NHSCR acts as a Scottish hub for information on births, deaths and changes to GP registrations across the UK. It is reconciled on a daily basis with NHS Scotland data to ensure that patient registers are accurate and up to date. This assists the NHS with patient identity verification, the prevention of fraud and in the administration of all parts of the health service.

Where a patient moves in or out of Scotland from/to the rest of UK the NHSCR triggers the health boards to send patient medical record envelopes to the new board. This does not involve the NHSCR having access to any medical records. For all Scottish births and deaths the NHSCR is the formal route to inform the NHS of these events.

This quality assurance, tracing and triggering process is mainly automated and represents the bulk of the work of the NHSCR with the skilled staff resolving cases clerically where automatic matches are not made. This processing includes all Scottish Health Boards, Health Boards across the rest of the UK and the Ministry of Defence (MoD) for armed forces personnel.

Benefits to Citizens - Improving Online Access to Public Services

The myaccount service has been developed, and is managed, by the Improvement Service on behalf of the Scottish Government. It provides an online account that allows citizens to use a single secure username and password to access a growing range of services provided by the NHS and local authorities.

When an individual applies for a myaccount, their personal identifying information (Name, Date of Birth and Gender), which they have consented to be used for this purpose, is verified against NHSCR using a combination of automated and clerical processes. A Unique Citizen Reference Number (UCRN) is attached to their account and is then used to uniquely identify the individual preventing multiple accounts from being created for the same person. With the help of myaccount, Scottish local authorities have made huge strides in digitising local services, including paying bills online, reporting repairs and accessing a range of common and personal information. They have collaborated on common approaches to Online School payments, resulting in 180,000 people taking up an online myaccount.

To deliver this system the Improvement Service is a data processor providing instant validation for citizens within the myaccount system on behalf of the Registrar General. The limited amount of NHSCR data used by myaccount remains under the control of the Registrar General and is held securely and updated daily to protect privacy and ensure accuracy.

In addition NHSCR can assist health and local authority bodies to quality assure their data to provide valuable public services. They may request their local data to be compared with the NHSCR to allow their data to be corrected. The NHSCR may only return corrected versions of information the authority already holds and may not provide new information or inform the authority of people they do not already know.
about. NHSCR may inform authorities of deaths in their records and can help to identify duplicate records assisting in the prevention of fraud.

**Benefits to Citizens – Tracing Service**

Certain organisations including solicitors, the police and charities may approach the NHSCR to help them trace individuals. In the case of solicitors this is normally to help trace those who are beneficiaries of wills. NHSCR may only disclose the fact the individual is contained on the register or fact and date of death. Charities may request help tracing individuals who have lost touch with their families. In these cases when NHSCR traces an individual they will work with trusted partners in health to contact the individual and give them the option of receiving a letter from their family member. Only where the person being traced gives written consent and an address of their choice will the family letter be forwarded to them.

In the case of the Police, the NHSCR is only for the purposes of tracing people in relation to serious crime as described in the Data Protection Act, 1998.

In the financial year 2016-17 the NHSCR attempted to trace a total of 686 people for charities (British Red Cross, Missing People and The Salvation Army). We do not disclose how many of these resulted in contact being established.

**Benefits to Society - Supporting Important Medical Research**

Information regarding individuals who are part of a research study may be shared with bona fide researchers following a rigorous application process involving independent assessment of the public benefits, risks and ethics of a given project. Members of approved research studies may be flagged on the NHSCR and the approved researchers can be informed if a member of their study dies or contracts a cancer to allow them to tailor their communication appropriately.

By the end of 2015-16 there were 407 live approved medical research studies involving NHSCR, with seven new studies in the year. The new studies came from the University of Edinburgh (two), University of Aberdeen, Institute of Occupational Medicine (two), Kings College London and University of Oxford.

**Benefits to Society – Contributing to Essential Statistics Describing Scotland**

The NHSCR is the most complete source of information on size of the population between censuses and so is used in NRS population statistics, internal migration statistics and data linkage as well as contributing to census planning and preparation. Data for the production of statistics is only shared within NRS and remains under the control of the Registrar General.

**Consultation on Changes to the LEARS Act**

During 2014 and 2015, NRS and Scottish Government carried out a public consultation on proposed changes to the regulations associated with the NHSCR that govern data sharing and specify the bodies able to share data from the NHSCR.
We received over 300 responses to the written consultation phase that closed in February 2015.

Following full consideration of responses, Scottish Government Ministers concluded that it would not be appropriate to broaden the range of bodies prescribed in legislation who can share data with the NHSCR, even subject to strong controls. Ministers therefore do not intend to take forward the amendments to this effect originally proposed.
Chapter 10 - Invited Chapter: Household Changes and Housing Provision in Scotland
Prof Elspeth Graham, Dr Francesca Fiori and Dr Kim McKee
Economic and Social Research Council (ESRC) Centre for Population Change and University of St Andrews

Summary
This chapter reviews recent changes in household composition and housing provision in Scotland and discusses the complex relationships between the two. Scotland’s population continues to age and the total number of households is increasing. The number of dwellings has not kept pace with demand and more young adults are staying longer in their parental home because they are unable to afford a place of their own. Some commentators argue that the housing problems facing young people could be solved if older people moved to smaller accommodation and released ‘under-occupied’ family housing - but what is the evidence?

The tenure structure of the housing stock (the relative proportions of people who own their own home, rent privately, or rent from the council or a housing association) has changed dramatically since the 1980s. More people are now renting their homes privately, than renting from councils. Average annual house prices more than doubled in all council areas in Scotland between 2001 and the global financial crisis of 2007-08, following which they fell slightly and then stabilised.

Two research studies, discussed in this chapter, provide further insight. One involved research using longitudinal data, and the other consisted of interviews with young adults. They are summarised below.

Research on housing patterns among older adults and younger adults

The first research study examined individuals’ housing situations over two 10-year periods (1991-2001 and 2001-2011) for young (aged 16-24) and older (aged 55-69) adults. Only a fifth of older adults moved house in the 2000s – down from a quarter in the 1990s - and nearly half of them downsized to a smaller dwelling. People who
were widowed or divorced were more likely to downsize, while having adult children living at home reduced the likelihood of both moving and downsizing. In general, moves to bigger or smaller homes are influenced by changes in people’s circumstances that sometimes limit the options for older households.

In the 2000s, 63% of young adults who moved out of their parental home became homeowners - down from 72% in the 1990s – and a fifth moved to private renting, more than double the proportion in the previous decade. Those employed in high status jobs and those whose parents were homeowners were most likely to become homeowners themselves, while young adults with low education and those living in areas with high house prices were most disadvantaged in the property market in the 2000s, in terms of their ability to buy a property. Following a decade of rising house prices and increasing economic insecurity, access to homeownership has become more socially and geographically uneven.

**Interviews with young adults**

The second study conducted interviews with young adults aged 18-35. Their stories complement the statistics. Three main themes emerged: (1) a strong desire to own one’s own home; (2) the interconnection between labour and housing markets; and (3) the importance of family support. These young people did not ‘blame’ the older generation for their housing situation, but they did draw attention to structural inequalities such as changes in housing and labour markets, and a withdrawal of the state-provided welfare safety net. They saw private renting as unsatisfactory because it did not provide the security needed to start a family, made it more difficult to save for a deposit to purchase a home, and was seen by others as a failure.

Overall, young adults’ experiences of navigating the housing market clearly varies, with their labour market situation (whether employed and type of employment) and ability to draw on support from their family being critical factors.

**Findings**

The two studies reveal the diversity in housing patterns within age groups, and the family circumstances that sometimes link the lives of young and older adults and influence their housing options. Suggesting that the selfish behaviour of older adults is responsible for housing problems facing young people is too simplistic because it overlooks this diversity and diverts attention from important structural dimensions of the housing crisis, such as the relationship between housing and labour markets, and the housing welfare safety net. What is needed urgently is a policy response that goes beyond populist preoccupations with inter-generational inequalities to address inequalities within generations.
Introduction to Invited Chapter

Scotland’s population is changing and ageing. At the census in 2011, people aged 65 and over made up almost 17% of the total population, compared with 16% ten years before, and this is projected to increase to 26% by 2039. The last census was also the first ever to record a higher number of people aged 65 and over than the number aged under 15. At the same time, the combined effects of greater longevity, rising separation and divorce, and low fertility have resulted in a fall in the average number of people per household. Moreover, the total number of households is increasing. In 2011 there were some 2,373,000 households in Scotland, compared with 2,192,000 in 2001 and 2,020,000 in 1991. Whereas in 1991, individuals living alone constituted 29% of all households, by 2011 this had reached 35% and is expected to increase further in the next decade.

These household changes have implications for the provision of housing, and there is evidence of housing demand outstripping housing supply. For example, more young adults are staying longer in their parental home, or returning there after college or university, because they are unable to afford a place of their own. Their unmet need for housing, in turn, has repercussions for other aspects of population change, including the rate at which the population is ageing.

Housing is typically seen as an important prerequisite for living independently, partnering and starting a family. When partnership and having children are delayed or foregone, the fertility rate falls and the proportion of the population in older age groups increases. Although an ageing population should be seen as offering opportunities as well as presenting challenges, rapid ageing heightens the challenges - especially when people are living longer. It is important, therefore, to understand the interdependencies between housing and household change in order to develop policies that could prevent what might otherwise become a downward spiral, negatively affecting Scotland’s economy. In the context of the housing boom and bust of the last decade and the recent economic downturn, some UK commentators have suggested that the housing problems facing young people could be solved if older people moved to smaller accommodation and released ‘under-occupied’ family housing. This seems too one-dimensional but we need first to review the evidence.

Changing living arrangements

Living arrangements change across an individual’s life course, although adult life courses are becoming more varied as different individuals follow different trajectories. The traditional sequence of leaving home, marriage, children, empty nest and widowhood is being transformed by rises in cohabitation, childlessness, having children outside formal marriage, divorce and separation, and the formation of complex families (for example, through people re-marrying), all of which influence living arrangements across the life course. These changes, along with the ageing of the population, have altered the distribution of households across the age spectrum. Figure 10.1 shows changes in the number of households according to the age of the ‘head’ of household over two decades.
In 1991, the number of households peaked in the age group 30 to 34. By 2001, the peak had shifted to the age group with ‘heads’ of household in their late 30s, and by 2011 it had shifted further to the age group in their late 40s, illustrating both changing life courses and the general ageing of the population. There were also increases in the number of older households, with ‘heads’ aged 65 and over, and in 2011 older people living on their own accounted for just over half of these households, with most of the remaining households in this age group consisting of couples. Only 4% of people aged 65 and over lived in communal establishments such as care homes. However, the percentage of older people living on their own actually declined slightly between 2001 and 2011, while the percentage of those living in a family unit (for example, in a couple) increased.

Figure 10.1 also shows a marked decline between 2001 and 2011 in the number of households with ‘heads’ aged under 40. This is of concern because these are the age groups associated with partnering and having children. Some of the decrease can be explained by changes in the age structure of the population; for example, the number of people aged between 30 and 44 declined by 9% between 2001 and 2011, although the number in the 16 to 29 age groups increased by 11%. However, there may be other factors such as extended periods spent in full-time education or lack of access to affordable housing that are also influencing this decline.

Further insight can be gained if we look at changes in the living arrangements of young adults aged between 20 and 34, the age groups most likely to make the transition out of their parents’ home to set up independent households. Comparing data for 2011 with data for a decade earlier (Figure 10.2), it is apparent that the largest decrease was for young adults living as a couple (from 46% to 41%) and the largest increase was for those living with parents (from 24% to 26%). The proportion...
in living arrangements linked to full-time education (such as educational establishments and all-student households) also increased, reflecting the substantial rise since the 1990s in those entering tertiary education.

**Figure 10.2: The living arrangements of young adults aged 20 to 34, 2001 and 2011**

The recent report on households in Scotland from which the above data on changing living arrangements are derived, cites the economic downturn in 2007-08 as a contributory factor, commenting that,

“… increases in unemployment, reductions in new house building and a constrained mortgage market have made it more difficult for young adults to afford to live on their own or as a couple …”

(National Records of Scotland, 2015: 29)

Financial constraints also appear to be encouraging increasing numbers of students to live at home during their studies. The percentage of school leavers from publicly funded schools in Scotland entering Higher Education or Further Education increased from 40% in 1992/93 to 67% in 2015/16. If we look at the most recent decade, we observe that the proportion of first year students living in their parental home during term time has increased since the economic downturn, from 19% in 2007-08 to 26% by 2015-16 (Figure 10.3). Overall more than a quarter of young adults aged 20-34 live with their parents (Figure 10.2), and despite the increases in students living in their parental home, students make up a relatively small proportion of this figure.
From this brief overview of the evidence, it is apparent that multiple factors are influencing household changes in Scotland, including population ageing, the expansion of tertiary education, and the postponement of partnering and family building. An approach is needed that allows further investigation of the simultaneous contributions of these drivers of change. However, as the fall in new house building and the increased difficulty in obtaining a mortgage since 2007 are also likely to play a role, it is important first to understand how housing provision has changed over time.

**Changing housing provision**

Scotland’s housing tenure structure has changed dramatically over the past forty years. The post Second World War domination of social housing has been replaced by the now dominant private sector, providing housing mainly for sale but also for rent. Figure 10.4 shows annual changes in the housing stock by tenure since 1984. While the proportion of local authority housing decreased significantly from 49% to 12% of the total stock over the period, the proportion of owner-occupied dwellings rose steadily from 41% in 1984 to 63% by 2000, after which it remained more or less constant until a small dip in the last five years. Housing associations increased their share of social housing and the relative importance of private renting rose from 7% of the total stock in 2000 to 15% by 2015.
Much of the change in the housing stock over this period is a result of the legislation introduced in 1980 that allowed social housing tenants to purchase their homes, along with stock transfers from local authorities to housing associations and low levels of new build social housing. The ‘right-to-buy’ has made the remaining local authority housing less attractive because tenants have purchased the more desirable units, and, as Figure 10.4 shows, housing associations have become nearly as important as local authorities in the provision of social housing. With the share of social housing declining, successive governments sought to encourage home ownership as an aspiration for all. In these circumstances, demand switched to owner-occupation, and the private sector responded with increases of between 20,000 and 25,000 new build units per year during the 1990s and early 2000s (Figure 10.5).
At the same time, the pressure of demand outstripping supply led to significant increases in house prices across Scotland, especially in hotspots such as the City of Edinburgh (Figure 10.6). Average annual house prices more than doubled in all areas between 2001 and the global financial crisis of 2007-08, following which there was a steep reduction in new private sector house building (Figure 10.5). Although house prices generally stabilised after the crisis, they have not decreased significantly. This indicates that there remains unmet demand in the housing market and that the current housing crisis in Scotland, as in the rest of the UK, reflects a mismatch between the need for housing and its provision (Berrington and Simpson, 2016). Given the difficulties faced by first time buyers in buying a home, it is likely that much of this unmet demand comes from young adults.
One result of these recent trends has been that levels of homeownership within the population have declined over the past decade, while renting in the private rented sector has risen in importance. Homeownership is currently the most common tenure in Scotland, but not all households desire to own their own home. Evidence shows that some prefer to rent in the social rented sector for reasons of affordability and security, amongst others (McKee et al., 2015). Yet this sector has also experienced a contraction in size over the past decade. Access to social housing therefore continues to be constrained due to limited supply, coupled with the operation of a needs-based allocation system that prioritises the most vulnerable. While social housing is more prevalent in Scotland than elsewhere in the UK, and the supply of new affordable housing is a stated policy priority of the Scottish Government, there remains a need to increase the provision of social housing (Powell et al., 2015).

For the majority of young people, however, homeownership is a strong future goal (McKee et al., 2015), even if this aspiration is becoming more difficult to realise. Many factors contribute to the challenges that young adults currently face in getting onto the property ladder. These include increasingly precarious labour markets and downward pressure on wages, the declining affordability of housing as property prices rise ahead of household incomes, the continuation of stricter mortgage lending criteria first introduced in the aftermath of the global financial crisis, and the inability of new supply to meet rising demand for housing. Consequently, some young adults (who may aspire to be homeowners) have now turned to the private rented sector. Although historically this sector has been strongly associated with those - such as young professionals, migrants and students - requiring ‘flexible’ housing solutions, more recently it has become home to tenants who in the past would have been in social housing. The rapid growth of the private rented sector and the diversification of its tenant base have resulted in legislative change in Scotland to deliver greater rights and protection for tenants (Hoolachan et al., 2017).
These general demographic and housing market trends suggest significant housing pressures in Scotland. However, not all areas are equally affected by recent changes in household size and number, nor is the housing stock the same across Scotland. Both supply and demand vary geographically. The areas with the largest average household size tend to be the local authorities outside the main cities, where many families live. The cities tend to have more young adults and a higher than average proportion of one-person households\(^5\). In contrast, rural areas have the highest percentage of older people and a lower than average proportion of one-person households. Rural areas face particular pressures in relation to affordable housing supply. This can contribute to the out-migration of young families and undermine the sustainability of local communities.

The dynamics of household change

The dynamics of change are not adequately captured by comparisons of aggregate data from the censuses, which do not provide insight into how individuals’ living arrangements are changing over time or why, for example, young people are staying longer in the parental home. A programme of research at the University of St Andrews is investigating these issues and we draw on this work to illustrate some of the findings to date. The research uses both statistical analysis of census data, in-depth interviews and focus group discussions to provide a wider perspective on the dynamics of household change.

The most useful secondary data for studying household change in Scotland comes from the anonymised records of the Scottish Longitudinal Study (SLS). This nationally representative, 5.3% sample of Scotland’s population (approximately 270,000 individuals) links individual records across different censuses, making it possible to examine change between consecutive census dates. The Growing Up and Growing Old in Scotland study\(^6\) used sub-samples from the SLS to examine changes in living arrangements and housing tenure over time for two population groups - older adults and young adults - crucial to understanding the dynamics of recent household changes. Of particular interest is how change during the 1990s (1991-2001) compares with change in the 2000s (2001-2011) when the housing boom and bust, combined with the economic downturn, are likely to have had a significant influence on housing outcomes.

Using sub-samples of around 28,000 older adults aged 55 to 69 who were living in private households at the beginning of each decade, we compared housing outcomes by 2001 with housing outcomes for the same age group by 2011\(^7\). Owner-occupation was the majority tenure for these older adults at the end of both decades. The main difference between 2001 and 2011 is the rise in owner-occupation and the accompanying decline in social renting. In 2011, almost 75% of older adults were owner-occupiers and 21% were social renters, compared to 65% and 31% respectively a decade earlier. Less than 5% of older adults were in

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**Footnotes**

5) The average proportion of one-person households in Scotland was 37% of all households in 2015.

6) The study was funded by ESRC Secondary Data Analysis Initiative, Grant number ES/K003747/1.

7) The sample sizes of older adults living in private households at the start of each decade were around 26,850 for 1991-2001 and 30,100 for 2001-2011. All analyses excluded the small minority of older adults aged under 80 years who moved into communal establishments.
privately rented accommodation and less than 2% were living in communal establishments at the end of both decades. The great majority of these older households did not change their place of residence in either decade. During the 1990s, 27% of the sample moved house, whereas in the 2000s this declined to under 20% (Graham et al., 2015a).

A similar comparison of around 14,000 young adults aged 16 to 24 and living in their parental home at the start of each decade distinguished between those (still) living in their parental home and those living in other accommodation (owner-occupiers, social renters, private renters/other tenure and communal establishments) by the end of the two decades\(^8\). While the majority of these young adults moved out of the parental home and into owner-occupation during both decades, an increasing percentage moved to private renting and the proportion (still) living with parents increased from 16% in 2001 to just over 20% in 2011\(^9\).

These changes in young people’s housing outcomes have been described as signalling the emergence of ‘Generation Rent’ (McKee et al., 2017a; Howker and Malik, 2013). This label reflects growing generational differences in housing pathways and opportunities between young and older people, highlighting the way in which changes in the housing tenure structure have differentially affected different age groups. The private rented sector is no longer a short-term ‘transitional tenure’ but increasingly a sector in which growing numbers of young adults now reside for extended periods of their lives. The reasons for the expansion of the private rented sector are complex, multi-faceted, and embedded within a broader process of welfare restructuring that has been occurring in both the UK and internationally since the 1980s (McKee, 2012).

To investigate the responses of young adults to changing housing provision, a second study interviewed young adults themselves. Data were collected from online focus groups and telephone interviews with 62 young people aged between 18 and 35 from across the UK. Three of the eight local authority case studies (and 24 of the participants) were located in Scotland, and included Edinburgh, North Lanarkshire and the Scottish Borders (McKee et al., 2017). The sample comprised young adults drawn from both rural and urban areas, and from local authorities with quite different housing market areas\(^10\).

Taken together, the two studies provide new evidence on the dynamics of household change and its relation to housing provision in Scotland. They also allow us to offer answers to three pressing questions:

- Are older adults downsizing?
- Are all young adults now disadvantaged in the property market?
- How do young adults navigate the housing market?

Footnotes
8) The sample sizes of young adults living in the parental home at the start of each decade were around 15,000 for 1991-2001, and 12,500 for 2001-2011.
9) Comparable data for 16-29 year olds (who were aged 26-39 at the end of each decade) show a rise in the proportion (still) living with parents from 20% in 2001 to 24% in 2011 (Graham et al., 2015b).
10) The study was funded by a Leverhulme Programme Grant, Grant number RP20 II-IJ-024. The research on young people was one work stream within a larger project concerned with inter and intra generational housing inequalities.
The answers contribute to understanding the complex interdependencies between population change and housing provision across the life course (Graham and Sabater, 2015).

**Are older adults downsizing?**

Downsizing housing means moving to a smaller home. There are various ways to measure housing size. We chose the number of rooms as our preferred measure because it allows us to see whether larger (family) housing is being vacated by older adults. ‘Downsizing’ is therefore defined as a reduction in the number of rooms, whereas ‘upsizing’ denotes an increase in the number rooms, and ‘same size’ indicates no change in the number of rooms in the housing unit before and after a move. Focussing only on the minority of older adults who did move house (one fifth of older adults between 2001 and 2011), Figure 10.7 compares moves to different sized houses during the two decades, 1991-2001 and 2001-2011. It shows that downsizing remained the most popular option among older movers, and that the proportion downsizing increased slightly to nearly 50% by 2011. At the same time, there was an increase in the proportion upsizing their housing.

**Figure 10.7: Housing adjustments among older adults who moved house, 1991-2001 and 2001-2011**

[Older adults aged 55-69 and living in private households at the start of each decade]

To gain a better understanding of downsizing among older adults and the changes between the two decades, we investigated the household factors associated with changes in housing size. Of particular interest was whether changes in the characteristics of an older person’s household are associated with a move to smaller housing. We examined all three house size outcomes (downsizing, upsizing and moving to the same size of house) simultaneously and, because we recognised that tenure would have an important influence on housing adjustments, we analysed the
two main tenure groups (owner-occupiers and social renters) separately\textsuperscript{11} (Fiori et al., forthcoming).

Several household changes appear to trigger residential moves among older adults. These include deteriorating health and leaving the labour market, which are both well-known influences on residential moves at older ages. However, there are two further factors that are even more important: a change in partnership, and children leaving home. Around a fifth of older adults in each decade saw a change in their partnership status (through separation/divorce, re-partnering or, more usually, due to the death of their spouse/partner). Those who experienced partnership changes had a greater propensity to move house than those who continued to live with the same partner. Further, more than a quarter had adult children living in the household at the start of each decade, and we found that the presence of adult children reduced the propensity to move house. We also tested the influence of local house prices on the residential mobility of older adults but found no significant association in either decade. It may be that house moves at older ages are motivated more by a desire to move nearer to friends and family, or by lifestyle choices, rather than being a direct response to housing costs.

The same household changes that influenced a move also influenced whether or not the move was to a smaller dwelling, although this varied according to housing tenure. Figure 10.8 summarises selected findings, focusing only on changes in the household over the decade. For some factors, the situation at the start of the decade was (also) predictive of adjustments in housing size. The comparison of the two decades allows us to identify differences in the housing consumption of older adults over time.

\textbf{Foonote}

\textsuperscript{11} All models took account of individual characteristics (gender, age, educational attainment, and social class).
Scotland’s Population - The Registrar General’s Annual Review of Demographic Trends

Figure 10.8: The likelihood of adjustments in dwelling size among older movers by tenure and household changes, 1991-2001 and 2001-2011

<table>
<thead>
<tr>
<th>Household changes during the decade</th>
<th>Housing adjustments 1991-2001</th>
<th>Housing adjustments 2001-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Downsizing</td>
<td>Upsizing</td>
</tr>
<tr>
<td></td>
<td>(compared to moving to the same sized dwelling)</td>
<td>(compared to moving to the same sized dwelling)</td>
</tr>
<tr>
<td><strong>Owner-occupiers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health deteriorates</td>
<td>more likely</td>
<td>-</td>
</tr>
<tr>
<td>Household retires</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Widowed/divorced</td>
<td>more likely</td>
<td>-</td>
</tr>
<tr>
<td>New partnership</td>
<td>-</td>
<td>more likely</td>
</tr>
<tr>
<td>Children leave home</td>
<td>-</td>
<td>less likely</td>
</tr>
<tr>
<td><strong>Social renters</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health deteriorates</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Household retires</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Widowed/divorced</td>
<td>more likely</td>
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<tr>
<td>New partnership</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Children leave home</td>
<td>-</td>
<td>more likely</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis of data from the Scottish Longitudinal Study

Movers from owner-occupied households where at least one member was in poor health at the start of the decade were more likely to downsize (and less likely to upsize) compared to movers in good health. A deterioration in health during the decade was also predictive of downsizing in the 1990s but, surprisingly, not in the 2000s. It seems that those who developed a limiting long-term illness during the 2000s were less inclined to move house, possibly due to greater difficulty finding or affording a suitable home. As the oldest members of the SLS samples were in their late 70s by the end of the decade, it may also be that fewer health conditions (yet) involved serious mobility impairment.

Retirement from the labour market among older owner-occupiers who moved house was not a major predictor of a change in housing size. Only in the 2000s were households in which older adults become economically inactive during each decade less likely to upsize (but not more likely to downsize) compared to households that were already economically inactive at the start of the decade. Overall, however, the role of retirement in prompting adjustments in housing size seems to have changed little between the 1990s and the 2000s.

The most important influence on downsizing among owner-occupiers was the end of a marital union/partnership during the decade. In both decades, those who were widowed or divorced were more than twice as likely to move to a smaller house compared to those who remained with the same partner. Indeed, the absence of a spouse/partner, either from the start of the period or following the dissolution of the union during the decade, was associated with a higher likelihood of downsizing and
a lower likelihood of upsizing. In contrast, those who (re-)partnered during the decade were more likely to move to a larger house.

The presence of children in the household, on the other hand, was an important impediment to downsizing among older owner-occupiers. Compared to those who already had no co-residing children at the start of the period, those whose adult children were (still) living with them at the end of the decade were less likely to downsize and more likely to upsize. Notably, those whose children left the household during the 1990s were less likely to upsize their housing, although they were not more likely to downsize. However, between 2001 and 2011, there is no evidence that older movers adjusted their dwelling size in response to the reduction in household size when their children left home. The increasing precariousness of young adults' housing trajectories may have played a role here, discouraging older adults from moving to smaller dwellings in case their children returned to the parental home.

The results for social renters differ from those for owner-occupiers and reflect the more constrained options for older tenants. With one exception, the household changes listed in Figure 10.8 were not associated with a higher likelihood of upsizing, although there is some evidence that those who formed a new partnership were more likely to upsize with a move to owner-occupation. Nor did deteriorating health prompt house size adjustments among older movers from the social renting sector in the 1990s. However, households in which an older adult developed a limiting long-term illness during the 2000s were more likely to downsize, possibly due to financial pressures or the need for supported accommodation. As might be expected given secure tenancies and controlled rents, retirement from the labour market had no impact on housing adjustments among older social tenants in either decade.

A more important determinant of downsizing among social renters in both decades was the loss of a partner. In common with owner-occupiers, those who were widowed or divorced during the decade were twice as likely to move to a smaller dwelling, compared to those who moved house but continued to live with the same partner. This may be a response to reduced financial circumstances after widowhood or divorce among less well-off older adults. More difficult to explain are the findings that social renters whose children left home during the decade were more likely to upsize in the 1990s, and less likely to downsize in the 2000s. One possible explanation is that the move predates the 'empty nest', but this cannot be confirmed as we have no information on the relative timing of these events. It may also be that older tenants, as well as homeowners, were responding to the possibility that their adult children might return to the parental home.

These findings illustrate the diversity of life course experiences among older adults in Scotland. Both residential moves and adjustments in housing size are influenced by changes in personal and household circumstances that sometimes limit the options for older households. In the owner-occupied and the social renting sectors, the immobility of older parents with co-resident adult children is especially notable, as is their greater tendency to upsize rather than downsize their housing if they do move. Changes in the housing patterns of older individuals between the 1990s and 2000s must be seen in the context of dramatic increases in house prices, a general shortage of affordable housing and critical changes in the tenure composition of the housing stock in Scotland that affect all age groups. At a time when adult children are staying longer in their parental home, or returning to it after a spell away, the
interdependencies between older and younger generations should not be ignored. The greater the uncertainties faced by young adults in the housing market, the more likely they are to rely on their parents for somewhere to live and the less likely their parents are to move to a smaller house.

Are all young adults now disadvantaged in the property market?

Young adults are not a homogenous group and they too have diverse experiences in relation to where they live. Figure 10.9 compares housing patterns of young adults who moved out of their parental home during the decades 1991-2001 and 2001-2011. The majority in both decades became homeowners but the proportion dropped significantly, from nearly 72% in the 1990s to 63% in the 2000s. The proportion in social renting declined less dramatically between the two decades – from around 20% to 16% - but the proportion renting in the private sector increased markedly – from 8% in the 1990s to 20% in the 2000s.

**Figure 10.9: Housing tenure among young adults who moved out of their parental home, 1991-2001 and 2001-2011**

[Young adults aged 16-24 and living in their parental home at the start of each decade]

The decline in owner-occupation is of particular interest. Young adults have faced new challenges getting onto the property ladder since the economic downturn, but not all young adults may be equally affected. To investigate this, we examined which characteristics of young adults, their parents and the housing market context were predictive of a move to homeownership. **Figure 10.10** summarises selected results for two groups of young men and women – those who were single and those who were partnered at the end of the decade.

The top panel summarises the results for those who were single. It shows that single men and women who were employed in occupations classified as high social status were consistently more likely to become homeowners across the two decades than those who were employed in lower status occupations. In addition, single young
adults whose parents were homeowners were more likely to become homeowners themselves. What changed over time were the roles of educational attainment and local house prices. In the 1990s, those with low education\textsuperscript{12} were equally likely to become homeowners when they left the parental home, whereas in the 2000s, they become significantly disadvantaged in the property market relative to better-educated young singles. Nevertheless, while high average house prices were associated with lower levels of homeownership among young singles in the 1990s, by the 2000s this effect had disappeared, suggesting that the general rise in house prices across Scotland had reduced the likelihood of single young adults becoming homeowners in all areas.

The bottom panel of Figure 10.10 summarises the results for young men and women living with a partner, who were on average more likely than single young adults to make the transition out of the parental home and into homeownership. Most results are consistent over time. Having low education, even if living in a couple where housing costs can be shared, remained a disadvantage over the two decades. In contrast, those employed in high status occupations where both partners were earning, as well as those with parents who were homeowners, continued to be more likely to become homeowners themselves. For those living with a partner, the effect of having parents who were homeowners strengthened over time, suggesting that young couples are now turning to the ‘Bank of Mum and Dad’ to help them to buy a home. The main change between the two decades has been in the role of local housing markets. Whereas high local house prices (local authorities in the top 20\% for average house prices) had no significant effect in the 1990s, in the 2000s homeownership became less likely among young partnered adults living in the most expensive housing markets. The house price boom has made it more difficult for young couples to become homeowners in particular areas of Scotland, such as Edinburgh and East Dunbartonshire, where housing costs are well above the national average.

\textbf{Footnote}

\textsuperscript{12} Low education refers to a highest educational attainment of O Grades/Standard Grades, or less (equivalent to current National 5 or less).
Figure 10.10: The likelihood of becoming a homeowner among young men and women who moved out of their parental home, by partnership status, 1991-2001 and 2001-2011
[Young adults aged 16-24 and living in their parental home at the start of each decade]

<table>
<thead>
<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Single at end of decade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low education*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Employed/high social status</td>
<td>more likely</td>
<td>more likely</td>
</tr>
<tr>
<td>Parent is a homeowner</td>
<td>more likely</td>
<td>more likely</td>
</tr>
<tr>
<td>High average house prices in Local Authority of residence</td>
<td>less likely</td>
<td>less likely</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partnered at end of decade</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low education*</td>
<td>less likely</td>
<td>less likely</td>
</tr>
<tr>
<td>Employed/high social status + dual earner couple</td>
<td>more likely</td>
<td>more likely</td>
</tr>
<tr>
<td>Parent is a homeowner</td>
<td>more likely</td>
<td>more likely</td>
</tr>
<tr>
<td>High average house prices in Local Authority of residence</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis of data from the Scottish Longitudinal Study
*Note: highest educational attainment of O Grades/Standard Grades, or less.

These changes in the housing patterns of young adults in Scotland mirror those in the other parts of the UK where young people from disadvantaged backgrounds are also less likely to become homeowners. Not all young people are equally disadvantaged in the housing market (Coulter, 2016a). Our findings for Scotland indicate that some inequalities – such as those related to employment - have persisted over time but, following a decade of rising house prices and increasing economic insecurity, access to homeownership has become more socially uneven. In particular, the disadvantage of not completing secondary education has emerged as a significant impediment since 2001. The advantage of having parents who are themselves homeowners has strengthened and the intergenerational transmission of disadvantage from the smaller number of social tenants to their adult children has become more evident. Moreover, widening differences between the least and most expensive housing markets, in Scotland and elsewhere in the UK, are resulting in greater geographical variation in young people’s access to homeownership (Coulter, 2016b).
How do young adults navigate the housing market?

Among young adults who leave the parental home but do not become homeowners, more now move to the private rented sector than to social housing. The label ‘Generation Rent’ has gained popular currency with politicians and the media. Whilst it describes only a minority of young adults in our SLS samples, it is valuable for drawing attention to shifts in housing inequalities over time. There is nonetheless a danger that it may mask important differences in young adults’ experiences of navigating the housing market. This is because ‘Generation Rent’ is not a homogenous group. The ability of young adults to realise their housing aspirations varies significantly by social location, with young people’s employment status and the availability of family support being critical factors. It is vital that housing policy recognises this heterogeneity if young adults are to be provided with housing options that meet their needs.

From our interviews and discussions with a diverse sample of young adults from different areas across the UK, common themes emerged across the four nations, and three main themes were identified.

First, and in line with previous research in Britain (for example, Gurney, 1999), there was a strong desire to own one’s own home, which young people associated with having a family, security, and social ‘success’. Consequently, many felt frustrated and angry that they could not realise this goal, instead finding themselves ‘trapped’ in the private rental sector, or having to remain in the parental home for an extended period.

A young student in her late teens, who was renting from a private landlord in a large city, reflected on her frustration:

"I just think renting is just a waste of money. And it would obviously be ideal to get your own house and pay off your own mortgage; but I could never do something like that because of my situation. I feel I'm never going to get out of that and I'll constantly be renting"

Those with direct experience of renting privately were united in their emphasis on the need for more tenants’ rights, painting a bleak picture of high rents, poor conditions and difficult landlords. Some young people further lamented the judgements being made of them by others, and how they were made to feel like social ‘failures’. This underlines the way in which housing plays a key role in youth transitions to adulthood and independent living.

Footnotes
13) Generation Rent are loosely characterised as ‘millennials’: young people born between 1982 and 2000.
14) The Private Housing (Tenancies) (Scotland) Act 2016 aimed to modernise the private rented sector and afford tenants greater security of tenure. The legislation introduced streamlined, model tenancy agreements; brought to an end the ‘no fault’ grounds for possession; introduced some scope to implement rent controls in areas of concern; and introduced more progressive repossession grounds for rent arrears.
Another young private renter in the same city articulated concerns about other people’s expectations:

“I also get quite frustrated that the expectation is to own a home, and people that rent are somehow seen as lower-class citizens”

The second key theme to emerge from our interviews was the interconnection between labour and housing markets. Crucially, young people’s ability to realise their housing aspirations was seen as strongly related to their labour market situation. Many shared their experiences of student debt, insecure work and low wages, and easy credit such as payday loans – all of which undermined their ability to save for a deposit and service a mortgage. There were particular challenges for those living in rural areas where employment prospects are more limited, wages lower and affordable housing more scarce (McKee et al., 2017b; Hoolachan et al., 2017). Recent reforms by the UK Government to the social security system have further exacerbated the precarious nature of youth housing, as eligibility for state support has been further tightened.

A young female, living in a shared ownership property, echoed the views of many of our participants by drawing attention to the challenges facing today’s youth:

“[I]n the past, university meant getting a good job and good career and good wage and an opportunity to move out and buy a nice house. It doesn’t mean that anymore. It just means we are left with all this debt and we’ve got nowhere to live”.

The third theme that the young adults in our study emphasised was the importance of family support in helping them get on, and stay on, the housing ladder. Yet this familial safety net was highly unequal, and the forms of support offered were variable. These included small and large financial gifts and loans; space in the parental home at little or no cost; and additional services such as childcare, transport or help with home improvements or purchasing household items. Despite the pivotal role of these different forms of inter-generational family support, young people did not express any sense of ‘entitlement’.

Most importantly, not all young adults had such family support to draw on. Some were estranged from their family, while for others their parents’ own situation (such as divorce or unemployment) meant they were unable to provide financial help. Those unable to rely on what has been popularly characterised as the ‘Bank of Mum and Dad’ were more vulnerable to the challenges of the housing market, leaving them at greater risk of precarious living arrangements and homelessness.

Reflecting on her own experience, a female in her 20s from a rural area talked about the impact of uneven access to family support:

“I think there will be lots of families who won’t be able to help and that is just unfortunate, because like I said, without my partner’s parents helping us I would be in that position. With no support, other than living with my family. So, I suppose it is difficult”.

Young people tended to portray differential family help as ‘lucky’ or ‘unlucky’ family circumstances, as opposed to a mechanism that created and reinforced existing inequalities. Despite the rhetoric of inter-generational conflict that has been
popularised in the press, with the ‘greedy Baby-Boomers’ pitted against unfortunate ‘Generation Rent’, we found little evidence of any antagonism. Not only did the young adults feel gratitude towards their parents, but some also commented that it was unfair of them to rely upon their parents’ wealth because doing so may undermine their parents’ own welfare either now or in the future.

A young woman in her mid-20s, renting privately in a rural area, was amongst several interviewees to express concern for their parents:

“It’s like I said, my family members have offered to lend us money and things like that but I’d want them to enjoy their money that they’ve worked hard for in their life, that’s their money for their security”.

Nonetheless, there remained a sense that young people were facing unprecedented challenges in navigating the transition to adulthood and independent living. Another young adult in their mid-20s, who was living in their parental home in a rural area, captured this sense of generational difference very well:

“All the people that are 35+, 40+, 50+ are really affluent because of the choices they made as a young person … when things were so much easier. Things were cheaper, living was cheaper, you could buy a house for couple of grand, you could [get a] 110% mortgage and go on holiday and do your house up at the same time. [It’s] so much more difficult [now] and I don’t know that people in older generations understand that”.

For ‘Generation Rent’ reaching the adult-milestones of leaving the parental home, establishing a career and starting a family of their own is a much more protracted and difficult process. Yet young people did not ‘blame’ the older generation for this situation, despite some feeling that there was a lack of understanding. Rather they drew attention to structural inequalities such as changes in housing and labour markets, and a withdrawal of the state-provided welfare safety net. In this respect, the concept of ‘Generation Rent’ is useful in highlighting the differences between the housing experiences of today’s youth as compared to their parents’ generation. Nonetheless, our interviews also show that young people’s experiences of navigating the housing market clearly vary, with their labour market situation and ability to draw on familial support being critical factors.
Conclusion: challenges ahead

The new evidence reviewed in this chapter reveals the diversity in housing patterns within age groups and the ways in which the individual and family circumstances of young and older adults in Scotland influence their housing options. Most older adults did not move house during the study period and, as average house prices more than doubled, the proportion of non-movers increased. Among those who did move, most downsized and this proportion also increased in the 2000s. Both residential immobility and a reduced likelihood of downsizing were associated with having co-resident adult children. Further, some of those who did downsize will have done so to release housing equity in order to help their children get onto the property ladder. At the same time, the majority of young adults did make the transition out of the parental home and into homeownership during the study period, although the proportion declined. Importantly, the proportion of those moving to social renting also declined, reflecting reductions in the stock of social housing and greater limitations on access for young people. For an increasing proportion of young adults, moving to private rented accommodation became the only alternative to living in their parental home. Young people who were interviewed or took part in focus group discussions saw private renting as unsatisfactory because it did not provide the security needed to start a family, made it more difficult to save for a deposit to purchase a home, and was seen by others as a failure. Even some whose parents were in a position to provide financial help were not entirely happy about accepting it as they wanted their parents to enjoy the money they had worked hard for.

What is most striking about both of the studies we conducted is the consistent theme of inter-generational relationships, or linked lives, that challenges attempts to blame one generation for the problems of the next. Suggesting that the selfish behaviour of older adults is responsible for housing problems facing young people is too simplistic precisely because it overlooks diversity within these inter-related groups and diverts attention from important structural dimensions of the housing crisis. The shortfall in housing supply and the inflation in house prices far beyond any increase in wages is pricing many potential first time buyers out of the ownership market, while changes in the tenure structure of housing provision in Scotland have resulted in fewer secure alternatives. Further, the economic downturn has meant that reduced affordability is affecting not only young adults on low incomes but also those with above average earnings. No serious analysis of the current housing system can ignore these structural changes.

The recent rise in new affordable housing approvals and new legislation to address insecurity in the Scottish private rented sector indicate some modest progress towards tackling the housing problems in Scotland. Nevertheless, solving the current housing crisis remains an urgent challenge because the ageing population is facing a demographic deficit whereby young people entering the workforce are outnumbered by older workers retiring. Already the evidence points to the postponement of partnering and parenting among the younger generation, with the lack of affordable housing being one among several causes. Any further falls in fertility will only worsen the demographic deficit and may have negative consequences for the economy. However, perhaps the main reason for addressing the problem now is that failing to provide for the housing aspirations of young adults is likely to encourage out-migration. Locally this would threaten the sustainability of
more communities, especially in rural areas. Nationally, it could lead to a loss of young talent and threaten future economic prosperity.

What is needed is a policy response that goes beyond populist preoccupations with inter-generational inequalities (as captured by the idea of the ‘greedy Baby-Boomer’) to address inequalities, both persistent and emerging, within generations, and help young adults realise their housing aspirations. Otherwise, there is a real danger that homeownership may increasingly become the preserve of the children of homeowners with enough housing equity to help them onto the housing ladder. Fully understanding the diversity of young people’s experiences also requires greater attention to the role of geography. Housing and labour markets are intertwined and spatially driven, with young people’s experiences of navigating the housing market - and the policy measures necessary to support them - varying between rural and urban areas, and between areas of acute housing pressure and other locations where affordable housing is more readily accessible. Any policy solution that fails to recognise the diversity of young (and older) people’s housing situations is unlikely to be successful.
References


Graham E, Fiori F and Feng Z (2015a) To downsize or not? Household changes and housing consumption among older adults in Scotland. CPC Briefing Paper 30, ESRC Centre for Population Change, UK.


Acknowledgements

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## Table 1: Population and vital events, Scotland, 1855 to 2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated population (1000s)</th>
<th>Live births¹</th>
<th>Stillbirths¹,²</th>
<th>Infant deaths</th>
<th>Deaths</th>
<th>Marriages³</th>
<th>Civil Partnerships⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>1855-60</td>
<td>3018.4</td>
<td>102,462</td>
<td>34.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1861-65</td>
<td>3127.1</td>
<td>109,764</td>
<td>35.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1866-70</td>
<td>3275.6</td>
<td>114,394</td>
<td>34.9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1871-75</td>
<td>3441.4</td>
<td>120,376</td>
<td>35.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1876-80</td>
<td>3628.7</td>
<td>126,086</td>
<td>34.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1881-85</td>
<td>3798.2</td>
<td>126,409</td>
<td>33.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1886-90</td>
<td>3943.9</td>
<td>123,977</td>
<td>31.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1891-95</td>
<td>4122.5</td>
<td>125,600</td>
<td>30.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>1896-1900</td>
<td>4345.1</td>
<td>130,209</td>
<td>30.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>1901-05</td>
<td>4535.7</td>
<td>132,399</td>
<td>29.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1906-10</td>
<td>4679.9</td>
<td>128,987</td>
<td>27.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1911-15</td>
<td>4748.3</td>
<td>120,654</td>
<td>25.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1916-20</td>
<td>4823.8</td>
<td>109,750</td>
<td>22.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1921-25</td>
<td>4879.6</td>
<td>112,245</td>
<td>23.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>1926-30</td>
<td>4845.1</td>
<td>96,674</td>
<td>20.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1931-35</td>
<td>4905.1</td>
<td>89,306</td>
<td>18.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1936-40</td>
<td>4956.8</td>
<td>87,734</td>
<td>17.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1941-45</td>
<td>4711.9</td>
<td>91,593</td>
<td>19.4</td>
<td>3,393 35.7</td>
<td>6,202 67.7</td>
<td>66,302    13.8</td>
<td>43,772</td>
</tr>
<tr>
<td>1946-50</td>
<td>5043.2</td>
<td>122,200</td>
<td>22.0</td>
<td>3,047 29.2</td>
<td>4,789 47.3</td>
<td>63,854    12.6</td>
<td>43,206</td>
</tr>
<tr>
<td>1951-55</td>
<td>5103.6</td>
<td>91,366</td>
<td>17.9</td>
<td>2,390 25.5</td>
<td>3,009 32.9</td>
<td>61,838    12.1</td>
<td>41,718</td>
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<tr>
<td>1956-60</td>
<td>5145.2</td>
<td>98,663</td>
<td>19.2</td>
<td>2,307 22.9</td>
<td>2,755 27.9</td>
<td>61,965    12.0</td>
<td>41,671</td>
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<tr>
<td>1961-65</td>
<td>5201.0</td>
<td>102,642</td>
<td>19.7</td>
<td>2,000 19.1</td>
<td>2,568 25.0</td>
<td>63,309    12.2</td>
<td>40,235</td>
</tr>
<tr>
<td>1966-70</td>
<td>5204.3</td>
<td>93,033</td>
<td>17.9</td>
<td>1,415 15.0</td>
<td>1,970 21.2</td>
<td>62,797    12.1</td>
<td>42,832</td>
</tr>
<tr>
<td>1971-75</td>
<td>5234.7</td>
<td>75,541</td>
<td>14.4</td>
<td>939 12.3</td>
<td>1,421 18.8</td>
<td>63,808    12.2</td>
<td>41,404</td>
</tr>
<tr>
<td>1976-80</td>
<td>5213.9</td>
<td>75,758</td>
<td>12.6</td>
<td>529 8.0</td>
<td>900 13.7</td>
<td>64,343    12.3</td>
<td>37,801</td>
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<tr>
<td>1981-85</td>
<td>5151.9</td>
<td>66,422</td>
<td>12.9</td>
<td>389 5.8</td>
<td>695 10.5</td>
<td>63,723    12.4</td>
<td>35,756</td>
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<tr>
<td>1986-90</td>
<td>5089.5</td>
<td>65,544</td>
<td>12.9</td>
<td>350 5.3</td>
<td>550 8.4</td>
<td>62,796    12.3</td>
<td>35,440</td>
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<tr>
<td>1991-95</td>
<td>5093.5</td>
<td>63,571</td>
<td>12.5</td>
<td>382 6.0</td>
<td>418 6.6</td>
<td>61,171    12.0</td>
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<tr>
<td>1996-2000</td>
<td>5077.5</td>
<td>56,856</td>
<td>11.2</td>
<td>327 5.7</td>
<td>316 5.6</td>
<td>59,478    11.7</td>
<td>29,965</td>
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<tr>
<td>2001-2005</td>
<td>5078.6</td>
<td>52,914</td>
<td>10.4</td>
<td>297 5.6</td>
<td>275 5.2</td>
<td>57,178    11.3</td>
<td>30,648</td>
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<td>2006-2010</td>
<td>5200.0</td>
<td>58,270</td>
<td>11.2</td>
<td>311 5.3</td>
<td>245 4.2</td>
<td>54,920    10.6</td>
<td>28,934 316 329</td>
</tr>
<tr>
<td>2011-2015</td>
<td>5332.4</td>
<td>56,891</td>
<td>10.7</td>
<td>249 4.4</td>
<td>205 3.6</td>
<td>55,023    10.3</td>
<td>29,195 186 246</td>
</tr>
<tr>
<td>2016-2020</td>
<td>5368.7</td>
<td>80,533</td>
<td>11.1</td>
<td>653 9.5</td>
<td>536 7.8</td>
<td>71,266    10.6</td>
<td>25,995</td>
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</tbody>
</table>

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### Footnotes
1. Live births only, prior to 1939.
2. Refer to Notes, definitions and quality of statistics.
3. Figures for 2014-2018 include opposite-sex and same-sex marriages.
5. Rate per 1,000 population.
6. Rate per 1,000 live and still births.
7. Rate per 1,000 live births.
Table 2: Estimated population, births, stillbirths, deaths, marriages and civil partnerships, numbers and rates, by council area, Scotland, 2016

<table>
<thead>
<tr>
<th>Area</th>
<th>Estimated population at 30 Jun</th>
<th>Live births</th>
<th>Stillbirths</th>
<th>Infant deaths</th>
<th>Deaths</th>
<th>Marriages</th>
<th>Civil Partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number Rate1 Standardised Rate</td>
<td>Number Rate2 Standardised Rate</td>
<td>Number Rate3 Standardised Rate</td>
<td>Number Rate1 Standardised Rate</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>SCOTLAND</td>
<td>5,404,700</td>
<td>54,488</td>
<td>10.1</td>
<td>10.1</td>
<td>236</td>
<td>4.3</td>
<td>181</td>
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<tr>
<td>Council areas</td>
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<td></td>
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<td></td>
<td></td>
<td>3,368</td>
</tr>
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<td>Aberdeen City</td>
<td>229,840</td>
<td>2,521</td>
<td>11.0</td>
<td>8.5</td>
<td>13</td>
<td>5.1</td>
<td>8</td>
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<tr>
<td>Aberdeen Southshires</td>
<td>262,190</td>
<td>2,611</td>
<td>10.7</td>
<td>12.2</td>
<td>11</td>
<td>3.9</td>
<td>7</td>
</tr>
<tr>
<td>Angus</td>
<td>116,520</td>
<td>1,025</td>
<td>8.8</td>
<td>10.7</td>
<td>3</td>
<td>2.9</td>
<td>5</td>
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<tr>
<td>Argyll &amp; Bute</td>
<td>87,130</td>
<td>699</td>
<td>8.0</td>
<td>11.7</td>
<td>1</td>
<td>1.4</td>
<td>1</td>
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<tr>
<td>City of Edinburgh5</td>
<td>507,170</td>
<td>5,300</td>
<td>10.3</td>
<td>7.7</td>
<td>13</td>
<td>2.4</td>
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<td>Clackmannanshire</td>
<td>51,350</td>
<td>505</td>
<td>8.9</td>
<td>11.4</td>
<td>5</td>
<td>9.8</td>
<td>1</td>
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<tr>
<td>Dumfries &amp; Galloway</td>
<td>149,520</td>
<td>1,318</td>
<td>8.8</td>
<td>11.5</td>
<td>10</td>
<td>7.5</td>
<td>6</td>
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<tr>
<td>Dundee City</td>
<td>148,270</td>
<td>1,576</td>
<td>10.6</td>
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<td>10</td>
<td>6.3</td>
<td>12</td>
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<tr>
<td>East Ayrshire</td>
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<td>1,275</td>
<td>10.4</td>
<td>11.6</td>
<td>3</td>
<td>2.3</td>
<td>2</td>
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<tr>
<td>East Dunbartonshire</td>
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<td>951</td>
<td>8.8</td>
<td>11.7</td>
<td>3</td>
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</tr>
<tr>
<td>East Lothian</td>
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<td>1,041</td>
<td>10.0</td>
<td>11.4</td>
<td>6</td>
<td>5.7</td>
<td>4</td>
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<td>93,810</td>
<td>861</td>
<td>9.2</td>
<td>11.5</td>
<td>4</td>
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<tr>
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<td>11.0</td>
<td>19</td>
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<td>24</td>
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<td>Glasgow City</td>
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<td>6,833</td>
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<td>49</td>
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<td>Highland</td>
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<td>11.0</td>
<td>8</td>
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<td>3</td>
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<td>Inverclyde</td>
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<td>706</td>
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<td>-</td>
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<td>13.0</td>
<td>3</td>
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<td>1</td>
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<tr>
<td>Na h-Eileanan Siar5</td>
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<td>238</td>
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<td>21</td>
<td>5.9</td>
<td>4</td>
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<td>10.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Perth &amp; Kinross</td>
<td>150,680</td>
<td>1,325</td>
<td>8.8</td>
<td>10.6</td>
<td>4</td>
<td>3.0</td>
<td>8</td>
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<tr>
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<td>10.1</td>
<td>10.7</td>
<td>4</td>
<td>2.3</td>
<td>2</td>
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<td>12.0</td>
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<td>2.0</td>
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<td>11.5</td>
<td>13.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>South Ayrshire</td>
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<td>8.7</td>
<td>11.0</td>
<td>3</td>
<td>3.1</td>
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<tr>
<td>South Lanarkshire</td>
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<td>3,315</td>
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<td>8.6</td>
<td>-</td>
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<td>4.2</td>
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<tr>
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<td>11.4</td>
<td>4</td>
<td>2.0</td>
<td>7</td>
</tr>
</tbody>
</table>

Footnotes
1) Rate per 1,000 population.
2) Rate per 1,000 live and still births.
3) Rate per 1,000 live births.
4) Includes opposite-sex and same-sex marriages.
5) The alphabetical order of the council areas has changed due to adoption of the preferred forms of reference to the Edinburgh and Western Isles council areas. Previous versions of this table used the forms 'Edinburgh, City of' and 'Eilean Siar'.
### Table 3: International populations and vital statistics rates, selected countries, latest, available figures

<table>
<thead>
<tr>
<th>Country</th>
<th>Estimated population 2016 ('000s)</th>
<th>Live births</th>
<th>Stillbirths&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Infant deaths</th>
<th>Deaths</th>
<th>Marriages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland</td>
<td>5,405</td>
<td>2016 10.1</td>
<td>2016 4.3</td>
<td>2016 3.3</td>
<td>2016 10.5</td>
<td>2016 5.4</td>
</tr>
<tr>
<td><strong>European Union</strong></td>
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<td></td>
</tr>
<tr>
<td>Austria</td>
<td>8,690</td>
<td>2016 10.0</td>
<td>2013 3.4</td>
<td>2015 3.1</td>
<td>2016 9.2</td>
<td>2013 4.3</td>
</tr>
<tr>
<td>Belgium</td>
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<td>2015 3.3</td>
<td>2016 9.5</td>
<td>2015 3.6</td>
</tr>
<tr>
<td>Cyprus</td>
<td>848</td>
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<td>2007 3.1</td>
<td>2015 2.7</td>
<td>2016 6.4</td>
<td>2015 7.2</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>10,554</td>
<td>2016 10.7</td>
<td>2015 2.7</td>
<td>2015 2.5</td>
<td>2016 10.2</td>
<td>2015 4.6</td>
</tr>
<tr>
<td>Denmark</td>
<td>5,707</td>
<td>2016 10.8</td>
<td>2014 4.1</td>
<td>2015 3.7</td>
<td>2016 9.2</td>
<td>2015 5.1</td>
</tr>
<tr>
<td>Estonia</td>
<td>1,316</td>
<td>2016 10.7</td>
<td>2015 1.4</td>
<td>2015 2.5</td>
<td>2016 11.7</td>
<td>2015 5.2</td>
</tr>
<tr>
<td>Finland</td>
<td>5,487</td>
<td>2016 9.6</td>
<td>2015 2.1</td>
<td>2015 1.7</td>
<td>2016 9.8</td>
<td>2015 4.5</td>
</tr>
<tr>
<td>France</td>
<td>66,760</td>
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<td>2010 10.4</td>
<td>2015 3.7</td>
<td>2016 8.8</td>
<td>2012 3.7</td>
</tr>
<tr>
<td>Germany</td>
<td>82,176</td>
<td>2016 9.3</td>
<td>2015 3.8</td>
<td>2015 3.3</td>
<td>2016 11.2</td>
<td>2015 4.9</td>
</tr>
<tr>
<td>Greece</td>
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<td>2015 3.4</td>
<td>2015 4.0</td>
<td>2016 11.0</td>
<td>2015 5.0</td>
</tr>
<tr>
<td>Irish Republic</td>
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<td>2016 13.5</td>
<td>2014 2.4</td>
<td>2015 3.4</td>
<td>2016 6.4</td>
<td>2015 4.8</td>
</tr>
<tr>
<td>Italy</td>
<td>60,666</td>
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<td>2012 2.7</td>
<td>2015 2.9</td>
<td>2016 10.1</td>
<td>2015 3.2</td>
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<tr>
<td>Latvia</td>
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<td>2016 11.2</td>
<td>2015 3.3</td>
<td>2015 4.1</td>
<td>2016 14.6</td>
<td>2015 6.9</td>
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<tr>
<td>Lithuania</td>
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<td>2015 4.0</td>
<td>2015 4.2</td>
<td>2016 14.3</td>
<td>2015 7.6</td>
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<tr>
<td>Luxembourg</td>
<td>576</td>
<td>2016 10.4</td>
<td>2015 8.1</td>
<td>2015 2.8</td>
<td>2016 6.8</td>
<td>2015 3.6</td>
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<td>Malta</td>
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<td>2011 4.3</td>
<td>2015 5.8</td>
<td>2016 7.6</td>
<td>2015 7.0</td>
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<td>2015 2.9</td>
<td>2015 3.3</td>
<td>2016 8.7</td>
<td>2015 3.8</td>
</tr>
<tr>
<td>Poland</td>
<td>37,967</td>
<td>2016 10.1</td>
<td>2014 2.5</td>
<td>2015 4.0</td>
<td>2016 10.2</td>
<td>2015 5.0</td>
</tr>
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<td>2015 2.9</td>
<td>2016 10.7</td>
<td>2015 3.1</td>
</tr>
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<td>2015 5.1</td>
<td>2016 9.6</td>
<td>2015 5.3</td>
</tr>
<tr>
<td>Slovenia</td>
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<td>2015 2.7</td>
<td>2015 1.6</td>
<td>2016 9.5</td>
<td>2015 3.1</td>
</tr>
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<td>46,446</td>
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<td>2015 3.1</td>
<td>2015 2.7</td>
<td>2016 8.8</td>
<td>2015 3.6</td>
</tr>
<tr>
<td>Sweden</td>
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<td>2015 3.7</td>
<td>2015 2.5</td>
<td>2016 9.2</td>
<td>2015 5.3</td>
</tr>
<tr>
<td><strong>Other Europe</strong></td>
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<td>Macedonia</td>
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<td>2015 8.6</td>
<td>2016 9.9</td>
<td>2015 6.8</td>
</tr>
<tr>
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<td>2015 2.3</td>
<td>2016 7.8</td>
<td>2015 4.5</td>
</tr>
<tr>
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<td>2016 10.5</td>
<td>2014 4.3</td>
<td>2015 3.9</td>
<td>2016 7.8</td>
<td>2015 5.0</td>
</tr>
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<td>2015 10.7</td>
<td>2016 5.3</td>
<td>2015 7.7</td>
</tr>
</tbody>
</table>

**Footnotes**

1) The definition of a stillbirth varies from country to country and over time. The position in the UK is described in Appendix 2 - Notes, definitions and quality of statistics.

2) Rates per 1,000 population.

3) Rates per 1,000 live and still births.

4) Rates per 1,000 live births.

Sources: Eurostat, Office for National Statistics, Northern Ireland Statistics and Research Agency.
Appendix 2 - Notes, definitions and quality of statistics

This appendix gives general notes on some of the information and conventions used in this report, and defines some of the terms.

General

Rounding

Figures are calculated using non-rounded data

Conventions for tables

Where a range of years is listed in a table (for example, ‘1980-82’), the information we have given will be an average for that length of time or in the case of non-census migration it will refer to migration between 1 July (1980) to 30 June (1982).

In all tables ‘year’ means ‘calendar year’ unless we tell you otherwise. Many of the ranges of years start in a census year (for example, 1991).

The date events happen and the date of registration

The statistics about births and deaths in the Population chapter are for mid-year periods (from 1 July of one year to 30 June of the next) and relate to the date the event happened and not to the date the event was registered. For example, a birth on 30 June 2016 which was registered on 4 July 2016 would be included in the mid-2016 figures, which relate to the period from 1 July 2015 to 30 June 2016.

All the other statistics about births and deaths, as well as the statistics about stillbirths, marriages and civil partnerships, are for calendar years and relate to the date the event was registered, not the date the event actually happened. For example, a birth on 31 December 2015 which was registered on 4 January 2016 would be included in the 2016 figures. By law, births and stillbirths should be registered within 21 days, marriages and civil partnerships should be registered within three days, and deaths should be registered within eight days. Almost all births, stillbirths, marriages, civil partnerships and deaths are registered on time.

The place the relevant person usually lives and the place the event happens

Births, stillbirths, and deaths are generally allocated to the area in Scotland where the relevant person (the mother for births and stillbirths, and the person who has died for deaths) usually lives. If the relevant person does not usually live in Scotland, the event is allocated to the area in which it happened. However, a death may be allocated to the area where the person used to live if the area is in Scotland and the person had lived away from that area for less than 12 months.

Marriage and civil partnership figures relate to the area where the event took place.

Age

Ages relate to the person’s age on their last birthday.

When working out average ages (such as the average age at death and the average age of mothers at childbirth) we have added half a year to people’s age at their last birthday. For example, to work out the overall average age at death, we have
assumed that the average age of 77-year-olds who died was 77 years and six months.

**Age standardisation**

A straight comparison of rates between areas may give a misleading picture because of differences in sex and age between the different populations. For example, it would be unreasonable to expect a high birth rate in an area with a high proportion of elderly people. Because of this, we have standardised information in certain tables and charts. Standardisation allows areas with different age and sex structures to be easily compared, comparing the actual number of events that happen in an area with the total number of events that would be expected if the area had the rates of the standard population. In this report, the standard population refers to the overall Scottish population for the year or years in question.

**Lists of groups of countries**

**EU-2** refers to the countries that became member states of the European Union on 1 January 2007, which were Bulgaria and Romania.

**EU-8** refers to the countries that became member states of the European Union on 1 May 2004, which were Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

**EU-15** refers to the countries that were member states of the European Union before 1 May 2004, which were Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

**EU-25** refers to the EU-15, plus the countries that became member states of the European Union between 1 May 2004 and 31 December 2006, which were Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia and Slovakia.

**EU-28** refers to the EU-25, plus the countries that became member states of the European Union on 1 January 2007 (Bulgaria and Romania) and on 1 July 2013 (Croatia).

**Urban and rural classifications**

‘Large urban areas’ are settlements of over 125,000 people.

‘Other urban areas’ are settlements of 10,000 to 124,999 people.

‘Accessible small towns’ are settlements of 3,000 to 9,999 people that are within a 30-minute drive of a settlement of 10,000 people or more.

‘Remote small towns’ are settlements of 3,000 to 9,999 people that are not within a 30-minute drive of a settlement of 10,000 people or more.

‘Accessible rural’ settlements are areas of fewer than 3,000 people that are within a 30-minute drive of a settlement of 10,000 people or more.
‘Remote rural’ settlements are areas of fewer than 3,000 people that are not within a 30-minute drive of a settlement of 10,000 people or more.

You can get more information about the Scottish Government Urban Rural Classification in the Methodology section of the Scottish Government (SG) website.

**Deprivation**

The Scottish Government produces the Scottish Index of Multiple Deprivation to define small-area concentrations of deprivation across all of Scotland. The index is based on 38 indicators in seven fields – income, employment, health, education, skills and training, housing, geographic access and crime.

You can get more information about the Scottish Index of Multiple Deprivation on the SG website.

**Chapter 1 - Population**

All population figures refer to estimates at 30 June of the relevant year.

**Population covered**

The estimated population of an area includes all those who usually live there, whatever their nationality. Students are treated as living at their term-time address. Members of UK and non-UK armed forces stationed in Scotland are included, but UK forces stationed outside Scotland are not. Short-term international migrants (people who move to Scotland for less than 12 months) are also not included.

**Population projections**

Population projections are estimates for future years largely based on past trends. The Registrar General asks the Office for National Statistics (ONS) to prepare population projections with input from his own experts. The latest national projections were published in October 2015, and were based on 2014 population estimates. Sub-national population projections were published in October 2016 and cover council areas, health boards, national parks and Strategic Development Plan Areas.

**Sources and quality of statistics – population**

Population estimates are based on the 2011 Census and are updated each year by adding one year to the age of everyone in the population and including information on births, deaths and migration (people moving to or away from an area). Births and deaths are estimated using information from the civil registration system, which is virtually complete. Migration is more difficult to estimate because there is no complete migration registration system in the UK.

Sources and quality of statistics – population projections

More information about the quality of population projections can be found in the Quality and Methodology Information section on the Office for National Statistics website.

Chapter 2 - Births

Cohort

A cohort is a well-defined group of people who have had a common experience and are observed through time. For example, ‘the birth cohort of 1976’ refers to the people born in that year.

General fertility rate (GFR)

The number of births per 1,000 women of childbearing age (15 to 44).

Total fertility rate (TFR)

The average number of children who would be born, per woman, to a cohort of women who experienced, throughout their childbearing years, the fertility rates for the calendar year in question.

Age specific fertility rate (ASFR)

The number of births per woman for a specific age during a set time.

Marital status of parents

‘Married parents’ means parents who are married to each other. ‘Unmarried parents’ refers to parents who are not married, or who are married but not to each other.

Sources and quality of statistics – births

Statistics about births in Scotland are produced from information collected when the births are registered. The information should be very accurate as it is almost always provided by one or both of the baby’s parents, and the parent (or parents) and the registrar should check the details that will appear on the child's birth certificate before the certificate is produced. Also, each record of a birth is checked by one of our district examiners.

The statistics will cover almost 100% of all births in Scotland – because of the importance of a person's birth certificate, there will be very few births that are not registered, and they are likely to be the result of extremely unusual circumstances (for example, if a pregnancy was hidden, the baby killed and the body disposed of).

You can get more information about statistics on births from the Vital Events Births – Background section on the National Records of Scotland (NRS) website.

For general information on all vital events statistics please go to the Vital Events General Background Information section of the NRS website.
Chapter 3 - Deaths

Cause-of-death coding
Since 1 January 2000, deaths in Scotland have been coded in line with the International Statistical Classification of Diseases and Related Health Problems (Tenth Revision), also known as ICD10. We put the underlying causes of death into classes based on information collected from the medical certificate of cause of death, together with any extra information the certifying doctor provides later. We also take account of changes that procurators fiscal tell us about.

You can get more detailed information about death certificates and coding the causes of death, and how we produce statistics of deaths from certain causes from the Vital Events Deaths - Background Information section of the NRS website.

Stillbirth
Section 56(1) of the Registration of Births, Deaths and Marriages (Scotland) Act 1965 (as amended by the Still-Birth (Definition) Act 1992) defines a stillbirth as a child born after the 24th week of pregnancy which does not breathe or show any other sign of life.

Perinatal deaths
This refers to stillbirths and deaths in the first week of life.

Infant deaths
This refers to all deaths in the first year of life.

Sources and quality of statistics – deaths
Statistics about deaths in Scotland are produced from information which is collected when the deaths are registered. Details of the causes of death come from the Medical Certificate of the Cause of Death (MCCD), and so represent the results of a doctor’s clinical judgment, which may not be correct (and, sometimes, an investigator may feel that the doctor did not fill in the MCCD properly - for example, perhaps the doctor mentioned on the MCCD a medical condition that was not related in any way to the death). In some cases, the doctor, a procurator fiscal or a pathologist provides extra information about the cause of death later, for example following further investigations.

Other information about the person who has died will be provided by the person who registers the death (who is usually a son or daughter, sometimes a husband, wife or partner, another relative or a friend, or occasionally, someone like a police officer or a care-home manager) or the registrar can get the information from existing registration records (if the person who has died was born or married in Scotland). In a small percentage of cases, some of the information about the person who has died may not be complete or accurate (for example, if the person registering the death did not know the person very well, and the registrar could not get details from previous registration records). The person registering the death and the registrar should check the details before the certificate is produced. Also, each record of a death is checked by one of our district examiners.
The statistics will cover almost 100% of all deaths in Scotland, as a cemetery or a crematorium will not accept a body unless the death has been registered. However, occasionally a death may not be recorded (for example, because the authorities do not know that someone who is missing has died).

You can get more information about statistics on deaths from the Vital Events Deaths – Background Information section of the NRS website.

You can also get some general information on all vital events statistics from the Vital Events – General Background Information section of the NRS website.

Chapter 4 - Life expectancy

The average number of further years a person can expect to live subject to their current age-specific mortality rates. Life expectancy can be calculated at all ages but is most commonly referred to in relation to life expectancy at birth.

Sources and quality of statistics – life expectancy

The life expectancy estimates are based on the likely trends in the number of deaths indicated by the death records for the three years before the year the records are published. For example, the estimates based on the figures for 2013-2015 for administrative areas were published in November 2016.

You can get more information about the quality of statistics on life expectancy in the Life Expectancy for Scotland: Methodology Guide (PDF document) and on the Life Expectancy at Scotland Level Methodology page both available on the NRS website.

Chapter 5 - Migration

Net migration figures (the number of people moving to Scotland minus the number of people moving out of Scotland) do not include people joining and leaving the Armed Forces or other changes, such as changes in the numbers of Armed Forces stationed in Scotland.

Sources and quality of statistics – migration

Estimates of internal migration (that is, people moving between Scotland and the rest of the UK) are based on General Practitioners (GP) registrations and are considered reasonably accurate for most groups. They may be less accurate for young men, as they tend not to register with a GP immediately after moving.

The National Health Service Central Register (NHSCR) system records the movements of patients between NHS Board areas in the UK. Anonymised extracts from the National Health Service Central Register (NHSCR), linked with Community Health Index (CHI) postcodes that are shared by NHS National Services Scotland with NRS NHSCR are used to calculate moves between NHS Board areas within the UK.
The CHI holds records of people registered with an NHS doctor in Scotland. Unlike the NHSCR, these records contain the postcode of the patient's address. Migration at council area level and below is estimated using anonymised data from the CHI supplied with the permission of the Scottish Directors of Public Health.

International migration estimates (that is, people moving between Scotland and countries outside the UK) are based largely on the International Passenger Survey (IPS). However, these estimates may not be very accurate due to the size of the survey in Scotland (around 150 contacts between mid-2015 and mid-2016).

You can get more information about the quality of statistics on migration from the Migration - Methodology page and Migration Statistics - About this Publication (PDF document) on the NRS website.

**Chapter 6 - Marriages and civil partnerships**

Civil marriages were introduced by the Marriage (Scotland) Act 1939, which came into force on 1 July 1940.

The Civil Partnership Act 2004, which applies throughout the UK, came into force on 5 December 2005. The act allows same-sex couples aged 16 and over to get legal recognition of their relationship. In Scotland, the first civil partnership was registered on 20 December 2005.

The Marriage and Civil Partnership (Scotland) Act 2014 came into force on 16 December 2014, allowing same-sex couples to marry.

**Sources and quality of statistics – marriages and civil partnerships**

Statistics about marriages and civil partnerships in Scotland are produced from information which is collected when the marriages and civil partnerships are registered. The information should be very accurate as it will be provided by both parties to the marriage or civil partnership, and the couple and the registrar will check the details that will appear on the certificate before the certificate is produced. Also, each record of a marriage or a civil partnership is checked by one of our district examiners.

The statistics cover 100% of all marriages and civil partnerships in Scotland as a marriage or civil partnership is not legally formed unless a district registrar has carried out all the legal requirements.

You can get more information about statistics on marriages and civil partnerships from the Vital Events Marriage and Civil Partnerships – Background Information section of the NRS website.

You can also get some general information on all vital events statistics from the Vital Events – General Background Information section of the NRS website.
Chapter 7 - Adoptions

The Registrar General for Scotland registers adoptions under the Adoption of Children (Scotland) Act 1930.

Sources and quality of statistics – adoptions
You can get some more information about these statistics from the Vital Events Adoptions – Background Information section on the NRS website.

Chapter 8 - Households and housing

Household projections
We produce household projections (estimates for future years largely based on past trends) every two years. These are mainly used for informing decisions about future housing need and providing services. The latest household projections, covering the length of time from 2014 to 2039, take account of the results of the population projections. They use information from the last three censuses, along with recent survey data, to help project trends in how households are structured by type of household and by the age of the head of household. The head of household is defined in the census as the first person on the census form who is aged 16 or over and usually lives at the address in question. The projections give an indication of what would happen if past trends continue. They do not take account of policy initiatives, or other factors that may affect future populations. Projections for small groups are likely to be less reliable than those for larger groups.

Household estimates
Household estimates are produced every year from information on occupied and empty homes taken from council tax billing systems. An occupied home is roughly equivalent to a household. The estimates are used for a range of purposes including informing local authority decisions about housing need and providing services (including housing, planning waste collection and community care). Information on types of housing is taken from the Scottish Assessors’ Portal. The latest household estimates are for 2016.

Sources and quality of statistics – households and housing
Information on occupied and empty homes and on housing type comes from council tax billing systems and from the Scottish Assessors’ Association, and then goes through a thorough process of quality assurance. It is possible that not all of the information held on the billing systems is up to date. There can also be small differences in the definitions used for various categories in the billing systems. The details can change over time as a result of reviews of council tax discounts and exemptions and year-on-year differences in the way second homes and empty homes are classed by some local authorities. This can have a small effect on the percentages of homes which are classed as empty or second homes.

You can get more information from ‘Background Information’ (section 5) of the Estimates of Households and Dwellings, 2016 publication which is available on the NRS website.
Notes on statistical publications

National Statistics

The UK Statistics Authority has designated these statistics as National Statistics, in line with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics (available on the UK Statistics Authority website).

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority’s regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is National Records of Scotland’s responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

Information on background and source data

Further details on data source(s), timeframe of data and timeliness, continuity of data, accuracy, etc can be found in the About this Publication document that is published alongside this publication on the NRS website.

National Records of Scotland

We, the National Records of Scotland, are a non-ministerial department of the devolved Scottish Administration. Our purpose is to collect, preserve and produce information about Scotland’s people and history and make it available to inform current and future generations. We do this as follows:

- Preserving the past – We look after Scotland’s national archives so that they are available for current and future generations, and we make available important information for family history.

- Recording the present – At our network of local offices, we register births, marriages, civil partnerships, deaths, divorces and adoptions in Scotland.

- Informing the future – We are responsible for the Census of Population in Scotland which we use, with other sources of information, to produce statistics on the population and households.
You can get other detailed statistics that we have produced from the Statistics section of our website. Scottish Census statistics are available on the Scotland’s Census website.

We also provide information about future publications on our website. If you would like us to tell you about future statistical publications, you can register your interest on the Scottish Government ScotStat website.

You can also follow us on twitter @NatRecordsScot

Revisions and Corrections

We, the National Records of Scotland, label any revisions and corrections that we have applied to any of our statistics. These revisions and corrections are clearly marked on the webpage of the publication as well on our revisions and corrections page available on the NRS website.

Where applicable, revisions will also be carried out in accordance with the revisions policy for population, migration and life events statistics available on the ONS website.

Enquiries and suggestions

Please contact our Statistics Customer Services if you need any further information. Email: statisticscustomerservices@nrscotland.gov.uk

If you have comments or suggestions that would help us improve our standards of service, please contact:

Kirsty MacLachlan
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Edinburgh
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Phone: 0131 314 4242
Email: kirsty.maclachlan@nrscotland.gov.uk
## Related organisations

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Contact</th>
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<tr>
<td>The Scottish Government (SG) forms the bulk of the devolved Scottish</td>
<td>Office of the Chief Statistician and Strategic Analysis</td>
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<td>Administration. The aim of the statistical service in the SG is to</td>
<td>Scottish Government</td>
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<td>provide relevant and reliable statistical information, analysis and</td>
<td>2W, St Andrews House</td>
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<tr>
<td>advice that meets the needs of government, business and the people of</td>
<td>Edinburgh</td>
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<td>Scotland.</td>
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<td></td>
<td>Email: <a href="mailto:statistics.enquiries@gov.scot">statistics.enquiries@gov.scot</a></td>
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<tr>
<td></td>
<td>Website: <a href="http://www.gov.scot/Topics/Statistics">http://www.gov.scot/Topics/Statistics</a></td>
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<tr>
<td>The Office for National Statistics (ONS) is responsible for producing a</td>
<td>Customer Contact Centre</td>
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<td>wide range of economic and social statistics. It also carries out the</td>
<td>Office for National Statistics</td>
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<td>Census of Population for England and Wales.</td>
<td>Room 1.101</td>
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<td>Government Buildings</td>
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<td>Minicom: 01633 815044</td>
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<td>Email: <a href="mailto:info@statistics.gsi.gov.uk">info@statistics.gsi.gov.uk</a></td>
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<td></td>
<td>Website: <a href="http://www.ons.gov.uk">www.ons.gov.uk</a></td>
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<tr>
<td>The Northern Ireland Statistics and Research Agency (NISRA) is Northern</td>
<td>Northern Ireland Statistics and Research Agency</td>
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<tr>
<td>Ireland’s official statistics organisation. The agency is also responsible</td>
<td>McAuley House</td>
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<td>for registering births, marriages, adoptions and deaths in Northern</td>
<td>2-14 Castle Street</td>
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<td>Ireland, and the Census of Population.</td>
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<td>Email: <a href="mailto:info.nisra@dfpni.gov.uk">info.nisra@dfpni.gov.uk</a></td>
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<td>Website: <a href="http://www.nisra.gov.uk">www.nisra.gov.uk</a></td>
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