

Mid-2021 Population Estimates, Scotland

Published on 13 July 2022



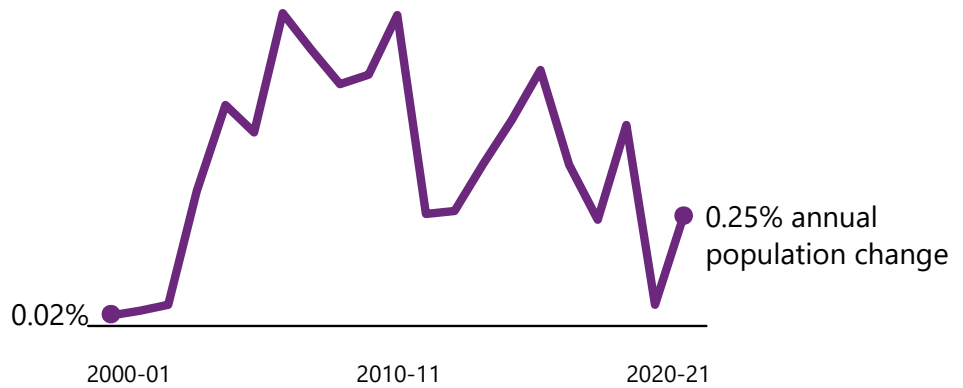
This statistical report provides population estimates for Scotland, its council areas and NHS boards, by sex and age.

Scotland's population growth has slowed

The latest estimate of Scotland's population (on 30 June 2021) is 5,479,900.

Population growth in the latest year was +0.25% (13,900 people), which is lower than the average annual growth in the 5 years before the pandemic at 0.43% (23,100 people).

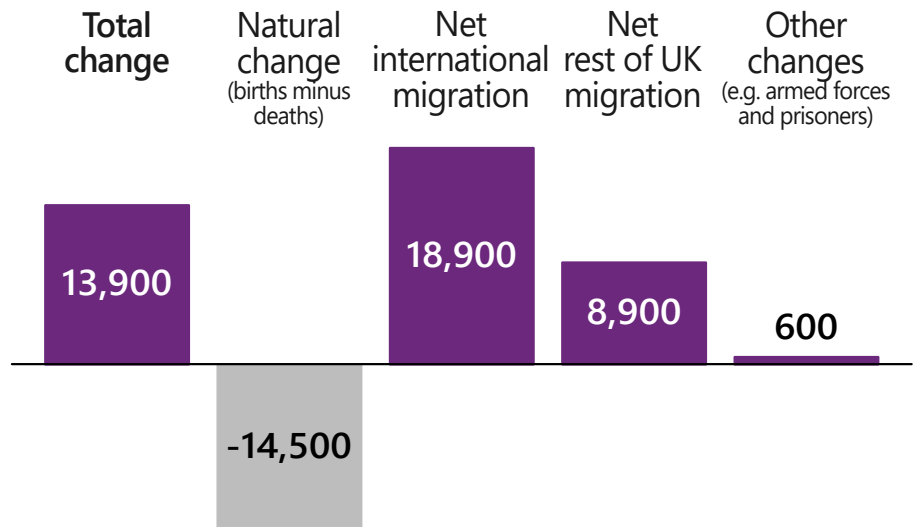
Annual percentage change in number of people



Migration main driver of population growth

International migration and migration from elsewhere in the UK continued to add to Scotland's population.

In contrast, deaths outnumbered births by the largest amount on record.

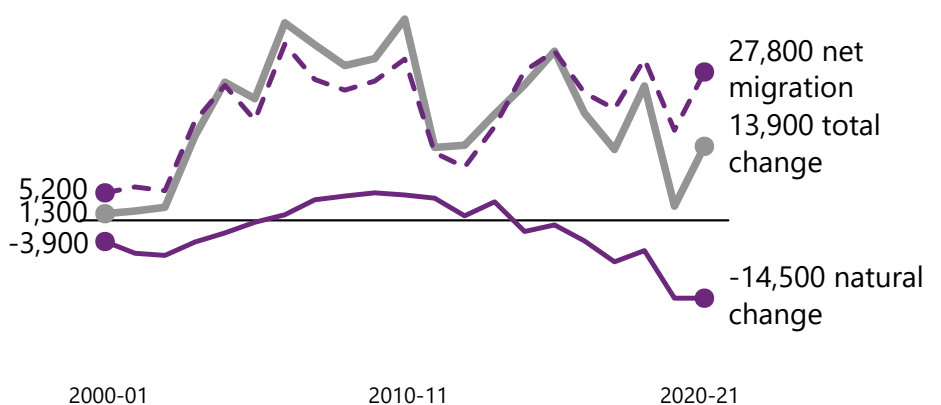


Deaths outnumber births for seventh year

Deaths have outnumbered births in each of the last seven years, with the year ending June 2021 the largest difference on record.

More people moved to Scotland than left, as has been the case for the last two decades.




Number of people

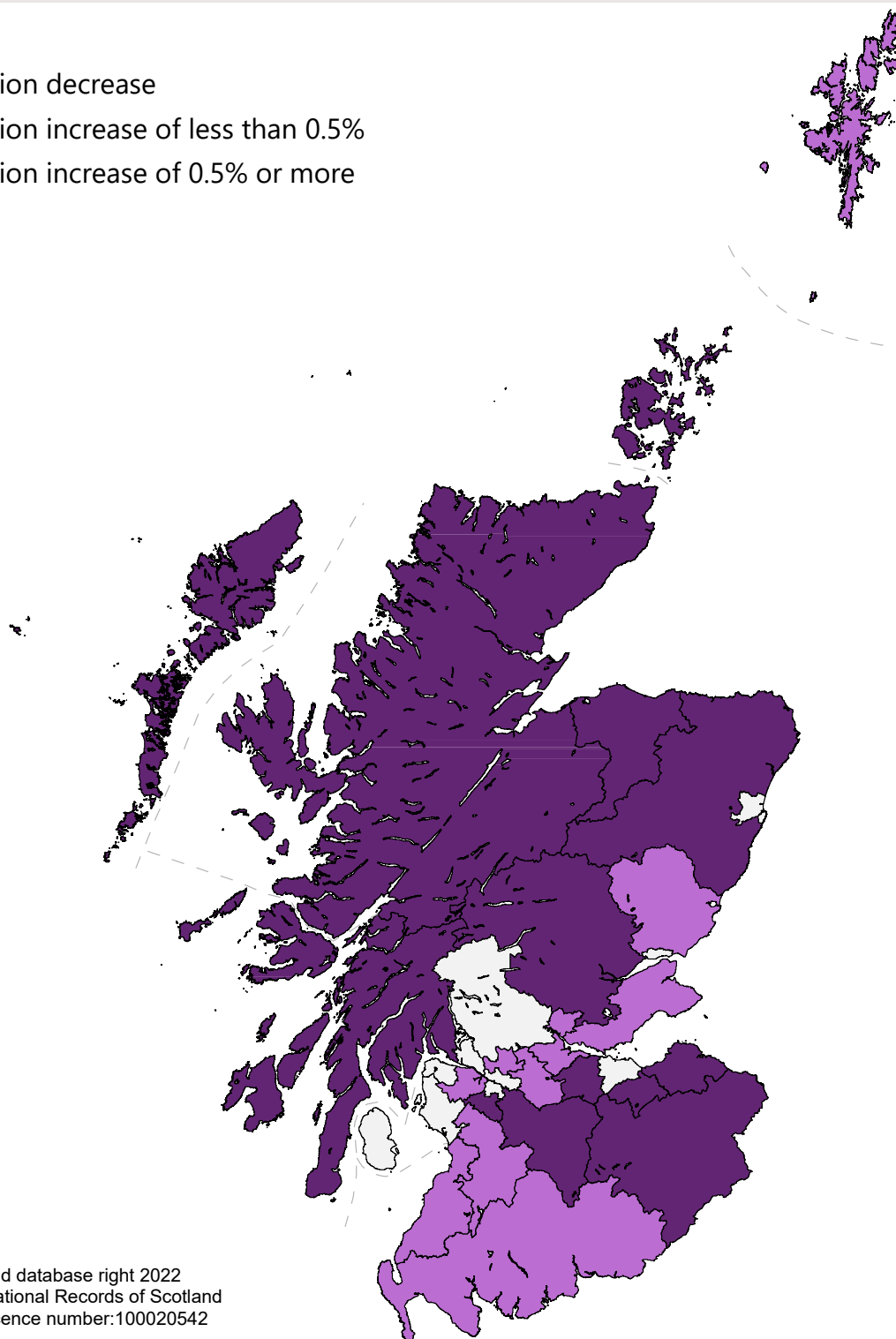


* International migration statistics methodology changed in 2021.

Population change varies across Scotland's council areas

Over the last year, 24 council areas increased in population and 8 decreased. The pattern of population change is different to previous years. The population of the largest cities has generally been increasing in recent years. However, in the latest year, the population of these cities fell. In contrast, the population of many rural council areas, and areas around Edinburgh, grew over the latest year.

-  Population decrease
-  Population increase of less than 0.5%
-  Population increase of 0.5% or more



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It is important to remember that within every council area, there are pockets of both growth and depopulation. NRS' small area population estimates for mid-2021 will be published in September 2022 – these can be used to help understand how the population of local areas are changing.

Main points

- Scotland's population was estimated to be 5,479,900 at mid-2021 (30 June 2021).
- The population increased by 13,900 people (0.25%) in the year to mid-2021. The average annual growth in the 5 years before the pandemic was higher than this, at around 23,100 people (0.43%).
- There have been more deaths than births for the last seven years. In the latest year, deaths outnumbered births by the largest amount on record¹.
- Migration was the main driver of population growth over the latest year. More people moved to Scotland than left, as has been the case for the last two decades.
- The pattern of population change was different to previous years. In the latest year, the population of the largest cities fell, which was a change from growth in previous years. The greatest population growth was in council areas around Edinburgh. In addition, many rural areas which previously had falling populations saw an increase in population over the latest year.

Impact of COVID-19 on these figures

These statistics take into account changes in the population from **1 July 2020 to 30 June 2021**. This means the entire year covered in this publication was affected by the COVID-19 pandemic. The pandemic has impacted the number of deaths across Scotland and affected movement within the UK and internationally.

The COVID-19 pandemic has impacted some of the data sources which feed into the population estimates. More information about the [impact on data sources](#) can be found at the end of this document.

¹ Mid-year records began in 1952. There were also more deaths than births than any calendar year back to 1855.

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1. The population of Scotland

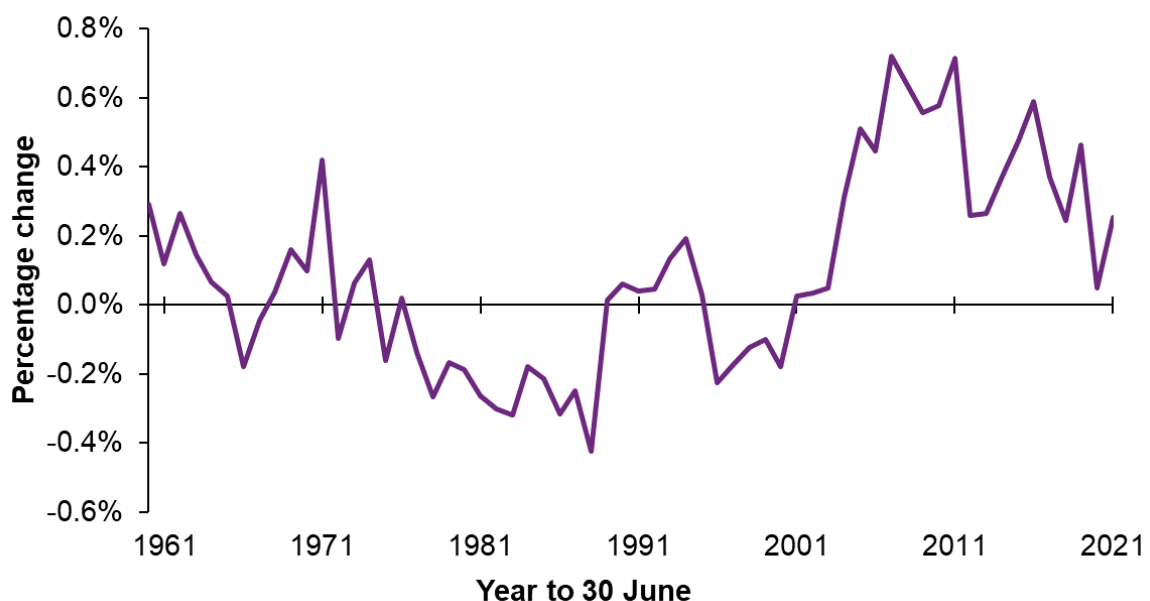
Scotland's population has grown

We estimate that Scotland's population on 30 June 2021 was **5,479,900 people**. The population increased by 13,900 people (0.25%) over the year to mid-2021.

Scotland's population has been increasing for the last 20 years. Population growth was higher in the year ending mid-2021 than it was in the previous year. However, it was still lower than most years from 2004 to 2019, as shown in [Figure 1](#).

[Figure 1](#) also shows that population growth was higher than most years during the late 20th century.

Figure 1: Annual population change, 1960 to 2021



Links to data

What are you looking for?

The data used in this publication

Information on how the population is calculated

Demographic profiles of council areas

Select and compare the population of council areas

Open data

Where is it?

[Data and charts](#)

[Methodology guide](#)

[NRS Council area profiles](#)

[Interactive charts](#)

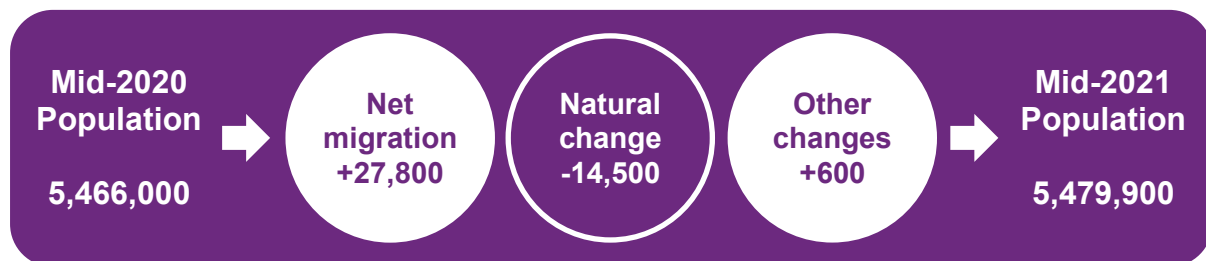
[Open data](#)

What has caused the growth in population?

Population change is driven by two main components, natural change and net migration:

- **Natural change** is the number of births minus the number of deaths.
- **Net migration** is the number of people moving into an area minus the number of people leaving.

The higher growth in population has been mainly due to an increase in international net migration.



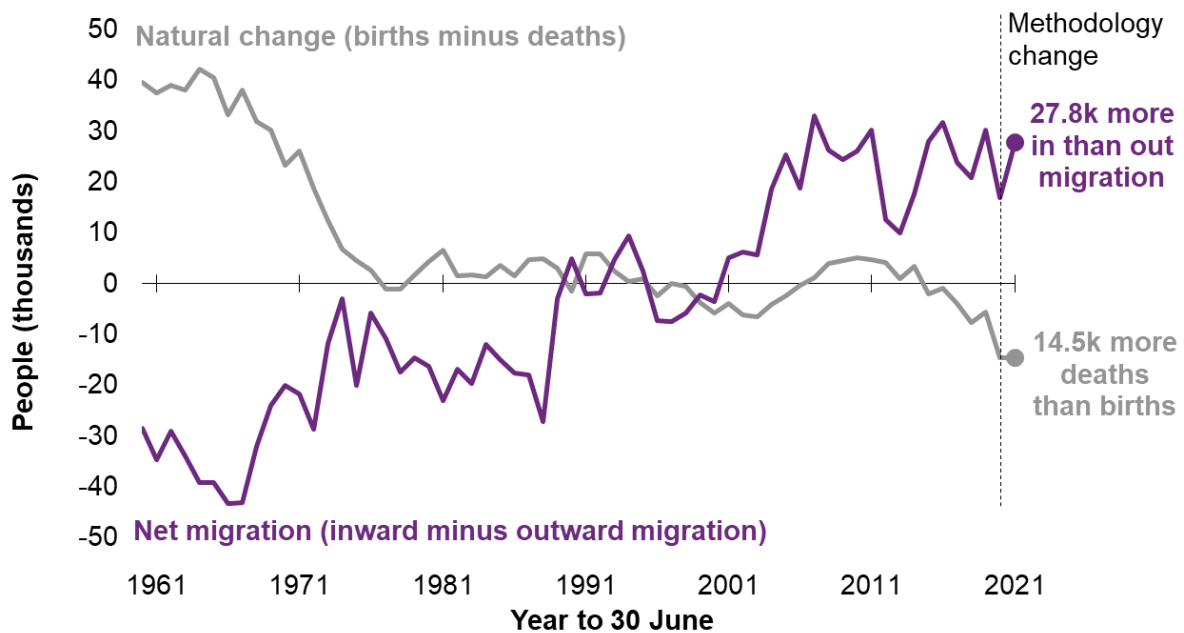
There were 14,500 more deaths than births across Scotland over the year to mid-2021. There have been more deaths than births in each of the last seven years, as shown in [Figure 2](#). The gap between births and deaths is getting wider over time, and the latest natural decrease (the result of more deaths than births) was the largest since records began.

In contrast, migration was the main driver of the latest population growth with 27,800 more people moving to Scotland than leaving. Migration has been adding to Scotland's population for the last 21 years, as more people moved to Scotland than left.

Other changes over the year to mid-2021 resulted in a small increase of 600 people across Scotland².

² 'Other changes' include changes in the prison population, changes in the number of armed forces personnel based in Scotland and small rounding adjustments.

Figure 2: Natural change and net migration, 1960 to 2021



Note

Due to changes in the methods for producing international migration statistics in the years ending mid-2020 and mid-2021, direct comparisons of migration with previous years should be treated with caution. More information can be found in [Section 7](#).

2. Births and deaths

Deaths remain higher than before 2020

In the year to mid-2021, there were 61,300 deaths in Scotland. Deaths over the latest year were 1,900 lower than those in the year to mid-2020 (63,100). While deaths were lower than the previous year, they were the second highest since the year ending mid-1994, as shown in [Figure 3](#).

The increased number of deaths in the years to mid-2020 and to mid-2021 can mainly be attributed to excess deaths as a result of the COVID-19 pandemic.

These are the first estimates to cover a full year of the pandemic. The year to mid-2020 only took into account the first three months of the pandemic in Scotland.

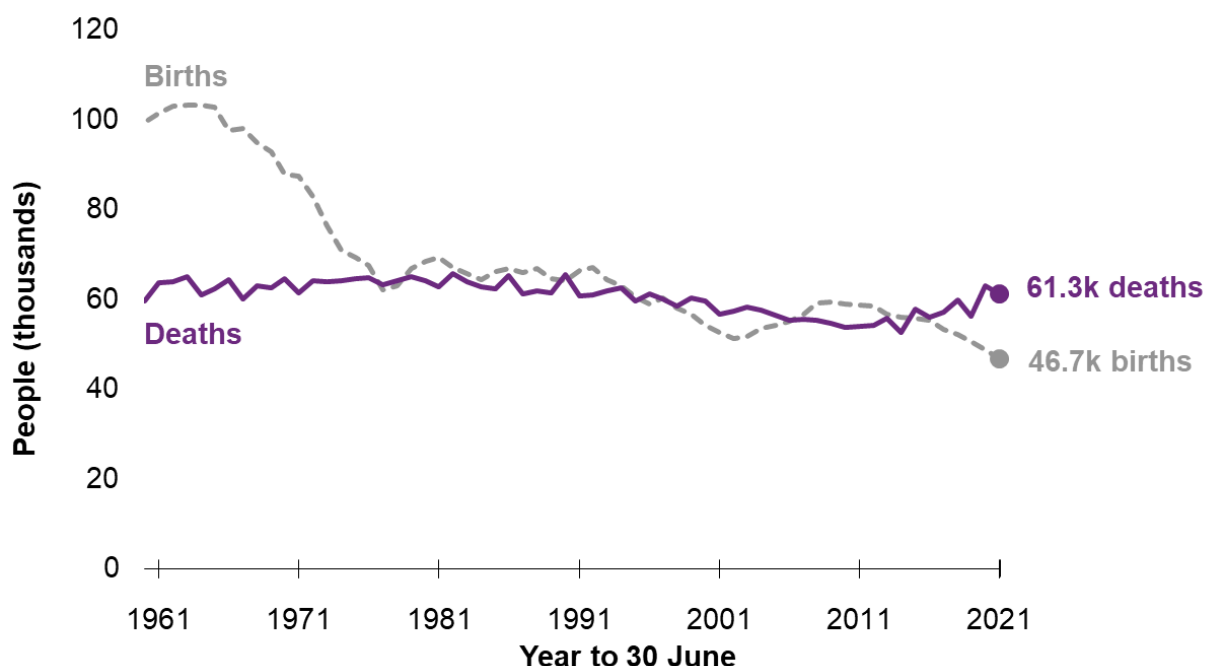
There were more deaths due to COVID-19 than in the year to mid-2020. However, the overall count of deaths from all causes was lower. Provisional quarterly data

shows this was driven by fewer deaths from other respiratory diseases, particularly during the first quarter of 2021³.

Between 29 June 2020 and 27 June 2021⁴, 6,030 deaths involving COVID-19 were registered across Scotland. The total number of deaths registered in this period was 60,860, which was 3,240 (5.6%) more than the five-year average of this period before 2020.

Weekly statistics on deaths involving COVID-19, as well as additional analysis are available from the [National Records of Scotland \(NRS\) website](#). Detailed analysis of births and deaths in Scotland can be found in the NRS [Vital Events Reference Tables](#).

Figure 3: Mid-year births and deaths, 1960 to 2021



Number of births continues to decrease

The 46,700 births recorded in Scotland were the lowest since mid-year records began in 1952. They are also lower than any calendar year births back to 1855.

The number of births across Scotland has decreased in each of the last 12 years since mid-2009. There were around 2,000 fewer births in the latest year than in the year to mid-2020 (48,700). This decrease in births is in line with previous trends showing a declining number of births across Scotland.

³ Quarterly figures for deaths by cause can be found in the [Births, Deaths and Other Vital Events - Quarterly Figures](#) publication from NRS.

⁴ Data based on registrations is published by week. The week commencing 28 June 2021 only covers three days of the year ending 30 June so this data has not been included.

3. Migration to and from Scotland

During 2020 and 2021, the COVID-19 pandemic caused travel restrictions, and may have also affected where people chose to live. This publication contains data covering the year to 30 June 2021, so the pandemic affected the whole year covered in this report.

For the last two decades, net migration has been driving population growth in Scotland. Over the latest year to mid-2021, 27,800 more people moved to Scotland than left.

In the year to mid-2021:

- 97,200 people moved to Scotland; and
- 69,400 people left Scotland.

As illustrated in [Figure 4](#), there are two types of migration flows which add to Scotland's population:

- **Rest of the UK** – moves between Scotland and other countries in the UK
- **International** – moves between Scotland and countries outside of the UK

How is international migration calculated?

A long-term international migrant is defined by the United Nations as someone who changes their country of residence for 12 months or more. There is no single source which counts the movements of all people into and out of the UK.

International migration figures are compiled by the Office for National Statistics (ONS). ONS are continually improving their methodology to measure migration; these latest figures are produced using a new method that relies less on International Passenger Survey data and statistical modelling, and makes greater use of administrative data. Because of this change in method, the latest figures on international migration may not be comparable with previous estimates.

More information about these figures and how they are produced can be found on the [ONS website](#).

International moves in and out

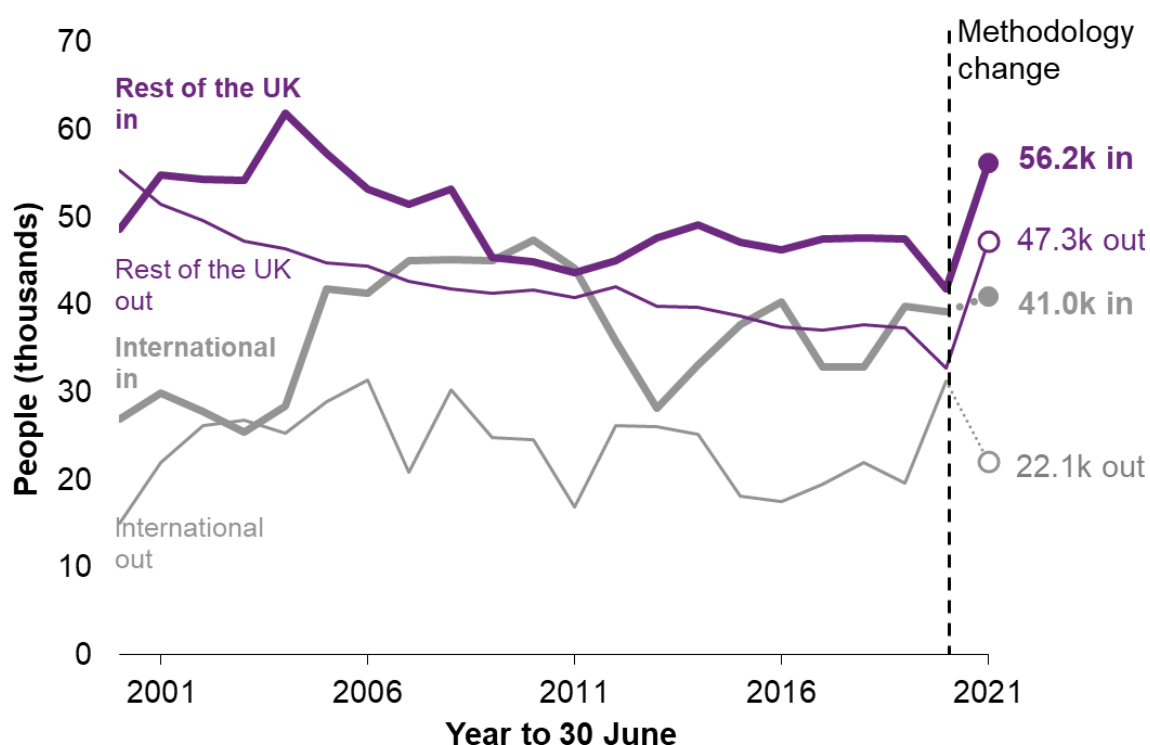
International immigration was higher than emigration in the year to mid-2021. This continues a pattern over the last two decades of more international moves into Scotland than out.

Over the year to mid-2021:

- international immigration into Scotland was 41,000.
- international emigration from Scotland was 22,100.

This resulted in net international migration being +18,900.

Figure 4: Movements to/from the rest of the UK and internationally, 2000 to 2021



Note

Due to changes in the methods for producing international migration statistics in the years ending mid-2020 and mid-2021, direct comparisons with previous years should be treated with caution. More information can be found in [Section 7](#).

More moves between Scotland and the rest of the UK

More people moved between Scotland and the rest of the UK in the year to mid-2021 than the previous year. However, both moves to and from the rest of the UK increased by similar amounts, so net migration was similar to previous years. Over the year to mid-2021:

- moves in from the rest of the UK were 14,400 higher (+34%) than mid-2020.
- moves out to the rest of the UK were 14,500 higher (+44%) than mid-2020.
- 8,900 more people moved to Scotland from the rest of the UK than moved to the rest of the UK from Scotland. This is 100 less (-1%) than last year.

How have moves within the UK been affected by COVID-19?

Migration within Scotland, and between Scotland and the rest of the UK, is estimated based on GP registrations. The higher figures seen for moves between Scotland and other parts of the UK, and between different parts of Scotland, may be due to a combination of:

- People being more likely to make long-term moves, such as moving from cities to rural areas.
- People making short-term moves, such as students moving from their term-time address to their parents' address.
- People registering a change of address with their GP, when the move itself could have taken place in the past. For example, people may have wanted to check that their GP had details of their correct address to ensure that they received details of their COVID-19 vaccination appointments.

4. The age structure of the population

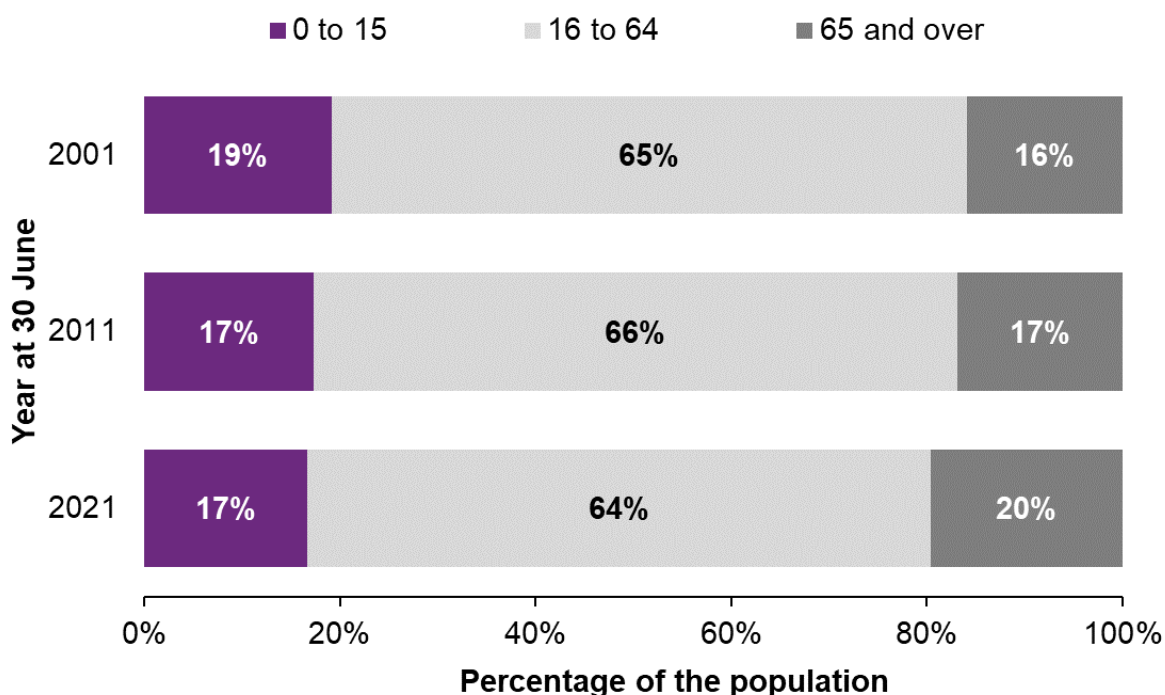
The population of Scotland is ageing

Scotland's population is ageing compared with previous decades, as shown in [Figure 5](#). There is also a higher ratio of females to males in older ages, reflecting the longer female life expectancy.

The main reasons for Scotland's ageing population are:

- people born in the post-war baby boom getting older;
- the number of births dropping since the 1960s; and
- higher life expectancy.

Figure 5: Age groups as proportion of Scotland's population, mid-2001 to mid-2021



How has the age structure of the population changed?

Scotland's population has been increasing since 2000, but growth differs by age. In the last **two decades**, the number of people aged:

- 0 to 15 years (children) has decreased by 58,900 (-6%).
- 16 to 64 years has increased by 207,900 (+6%).
- 65 years and over has increased by 266,700 (+33%).

5. Population change across Scotland

Population change varies across Scotland. In the latest year to mid-2021, the population grew in 24 council areas and decreased in the other 8 areas.

Figure 7 shows how population change varies across the country. The pattern of population change is different to previous years. The population of the largest cities has generally been increasing in recent years. However, in the year to mid-2021, the population of these cities fell.

In contrast, the population of many rural council areas, and areas around Edinburgh, grew over the last year. In some areas, such as Aberdeenshire and Argyll and Bute, this reversed the trend of several years of falling populations. In other rural areas such as Highland and Perth and Kinross, which had seen steady growth or small decreases in recent years, the rate of growth increased. Reasons for these changes were discussed in Section 3.

This publication is accompanied by [interactive charts](#) and [time series data](#), which allow users to view data for a particular area, and see how it has changed over time. Figure 6 shows an illustration of one of the interactive charts, which shows how the population of each council area has changed over the last two decades.

Figure 6: Illustration of interactive chart, showing population change by council, mid-2001 to mid-2021

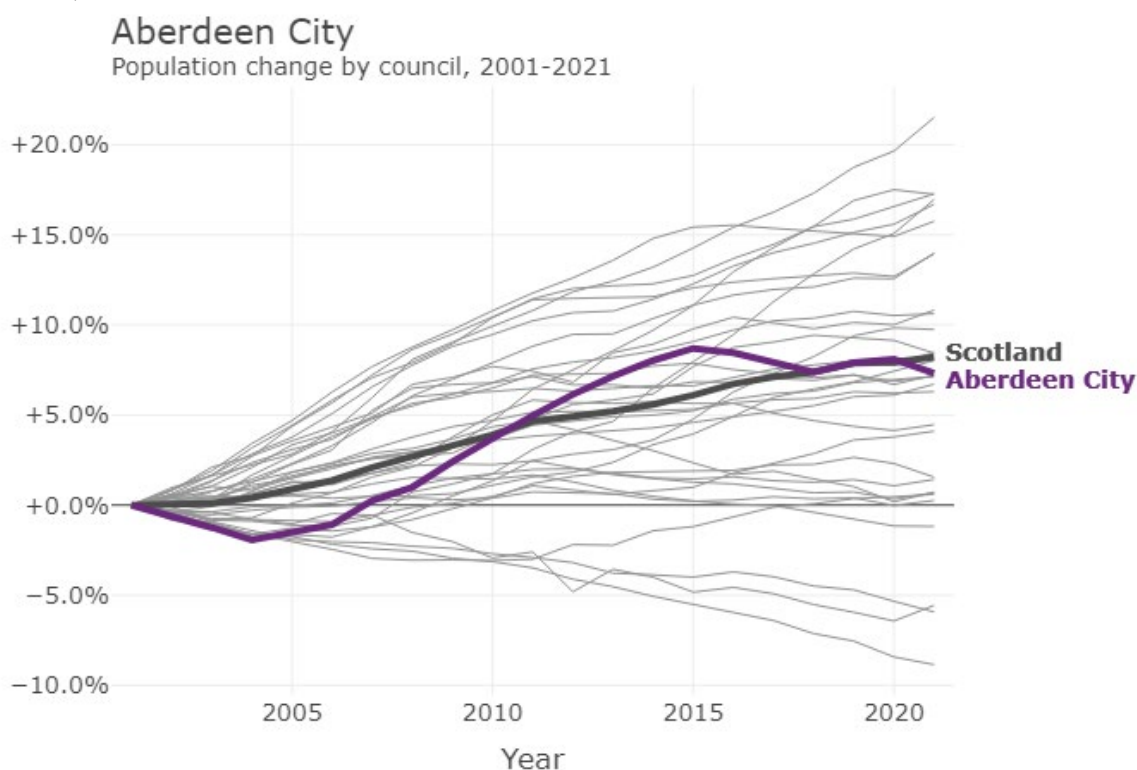
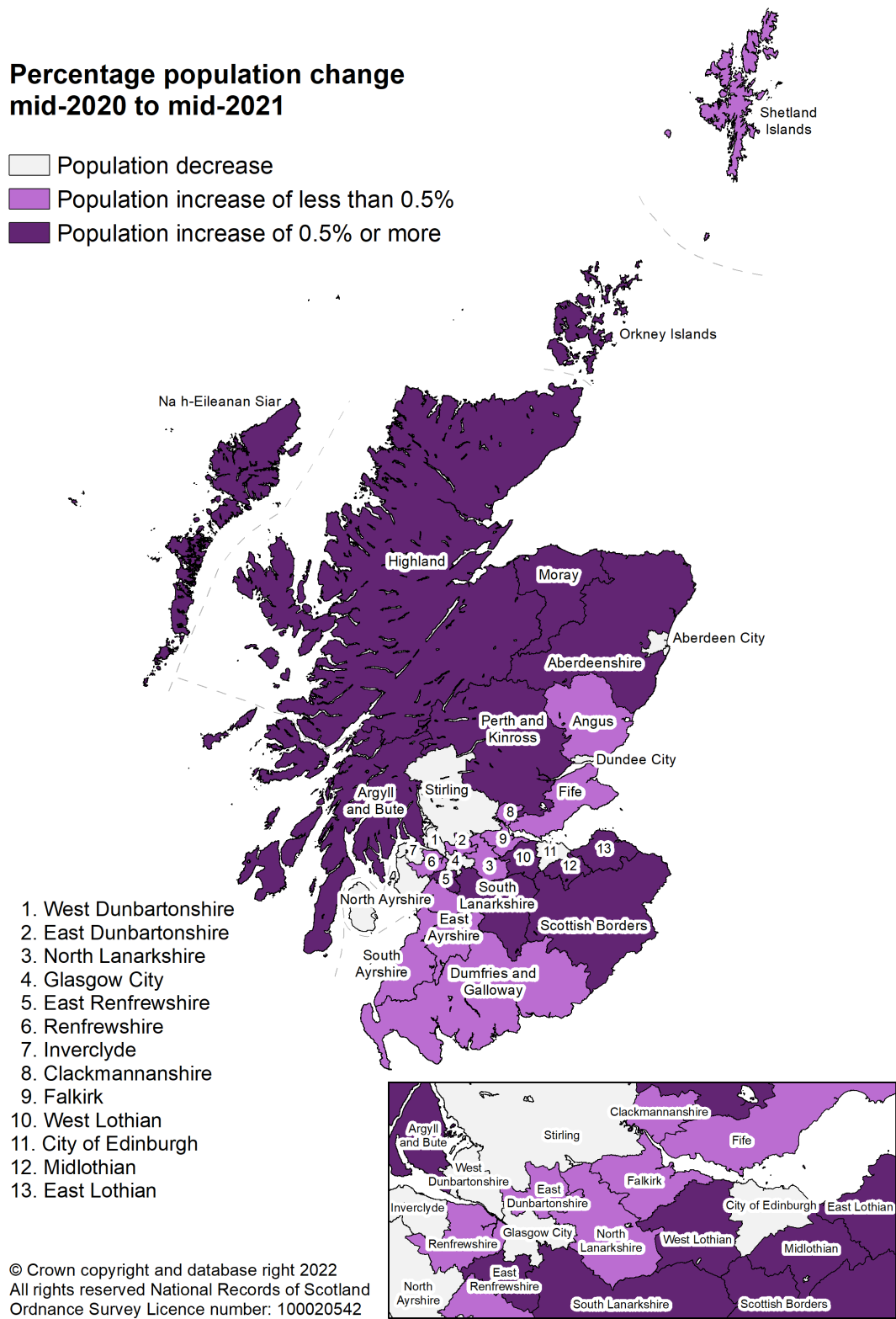


Figure 7: Population change by council area, mid-2020 to mid-2021



Did you know: The Scottish Government's [National Performance Framework](#) includes an indicator on Scotland's population, measuring population change by council area. This sits under the National Outcome "**we are open, connected and make a positive contribution internationally**".

The Scottish Government's Ministerial Taskforce on Population is helping tackle Scotland's population challenges – find out more information about the work of the Taskforce on the [Scottish Government website](#).

Why has the population of an area changed?

Figure 8 shows the components driving population change in **council areas** between mid-2020 and mid-2021. The main components of population change are natural change and net migration.

Other smaller changes come from the prison population and number of armed forces personnel based in Scotland, and small rounding adjustments.

In the year to mid-2021, net migration was positive in 27 of Scotland's 32 council areas. In contrast, natural change (births minus deaths) was negative in all council areas except Midlothian and City of Edinburgh.

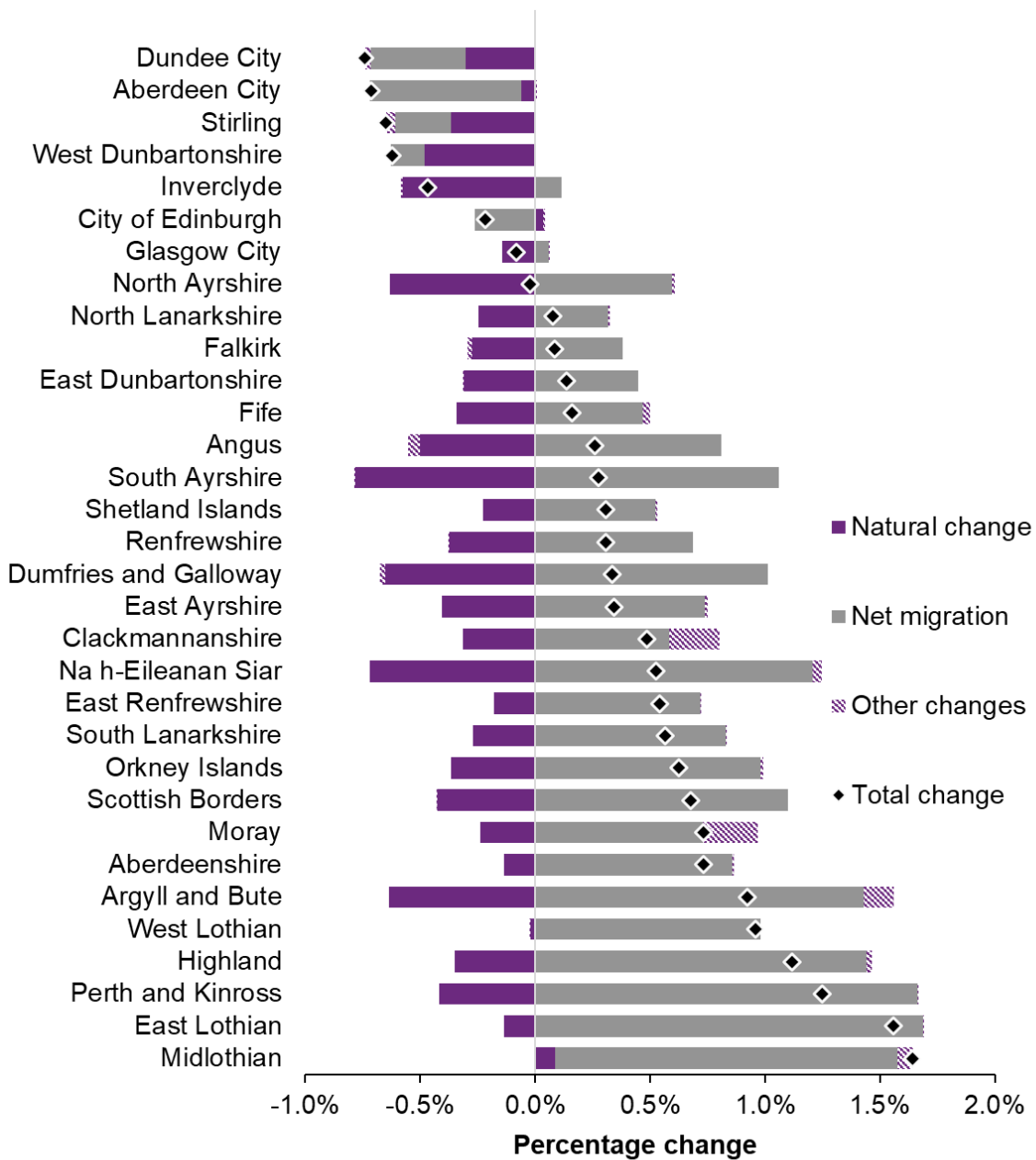
Of the 8 areas which experienced **population decline** over the latest year:

- 7 areas had more deaths than births
- 5 areas experienced negative net migration (more people leaving than arriving)

Of the 24 areas which experienced **population growth**:

- Net migration was the main driver of growth in all areas
- All areas had more deaths than births except Midlothian

Figure 8: Components of population change for council areas, mid-2020 to mid-2021⁵



Ordered by descending percentage population change.

There are 15 council areas that decreased in population last year (up to mid-2020) whose population has increased between mid-2020 and mid-2021. In all areas, this increase was driven by migration. There were three areas that increased last year and decreased this year. All of them were cities.

⁵ 'Other changes' includes changes in the prison population, changes in the armed forces personnel based in Scotland and small rounding adjustments.

More information about the population and components of population change for the year to mid-2021 are available from table 2⁶ on the NRS website.

How does migration differ across areas in Scotland?

Figure 9 shows population change in the year to mid-2021 due to different types of migration as a percentage of the total population. It is important to remember that small changes in the population can result in large percentage changes in areas with small populations.

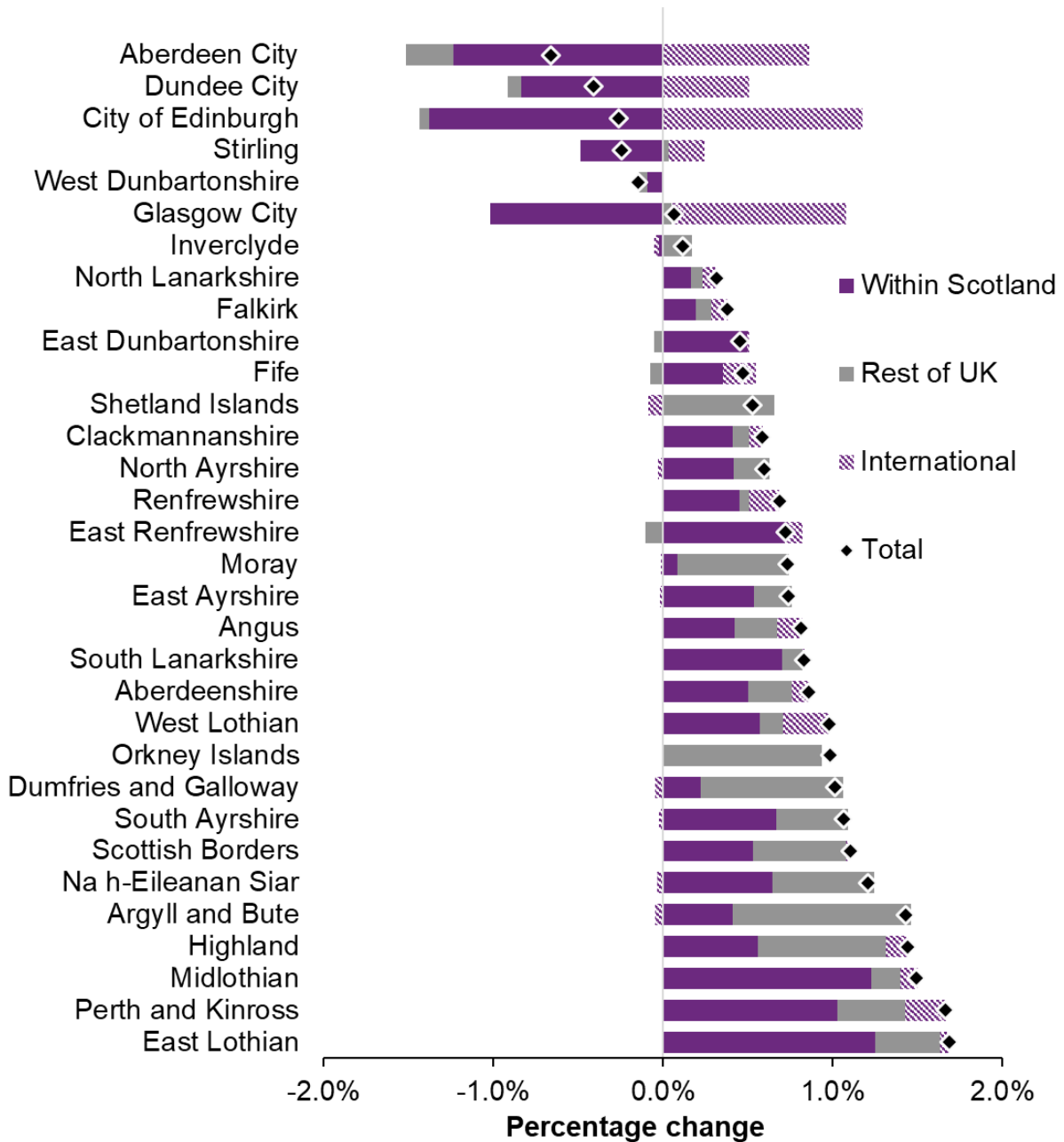
The most common moves **within Scotland** were from the largest cities (Glasgow, Aberdeen and Edinburgh) to their neighbouring council areas.

International immigration was highest in the three largest cities (Glasgow, Edinburgh and Aberdeen).

Migration from the rest of the UK added to the population in all but seven council areas (25 of 32) in the year to mid-2021. The largest percentage increases in population due to this tended to be in island areas, areas with armed forces bases, and areas bordering England.

⁶ [Table 2](#): Components of population change by administrative area, mid-2020 to mid-2021.

Figure 9: Components of population change due to net migration by council area, mid-2020 to mid-2021

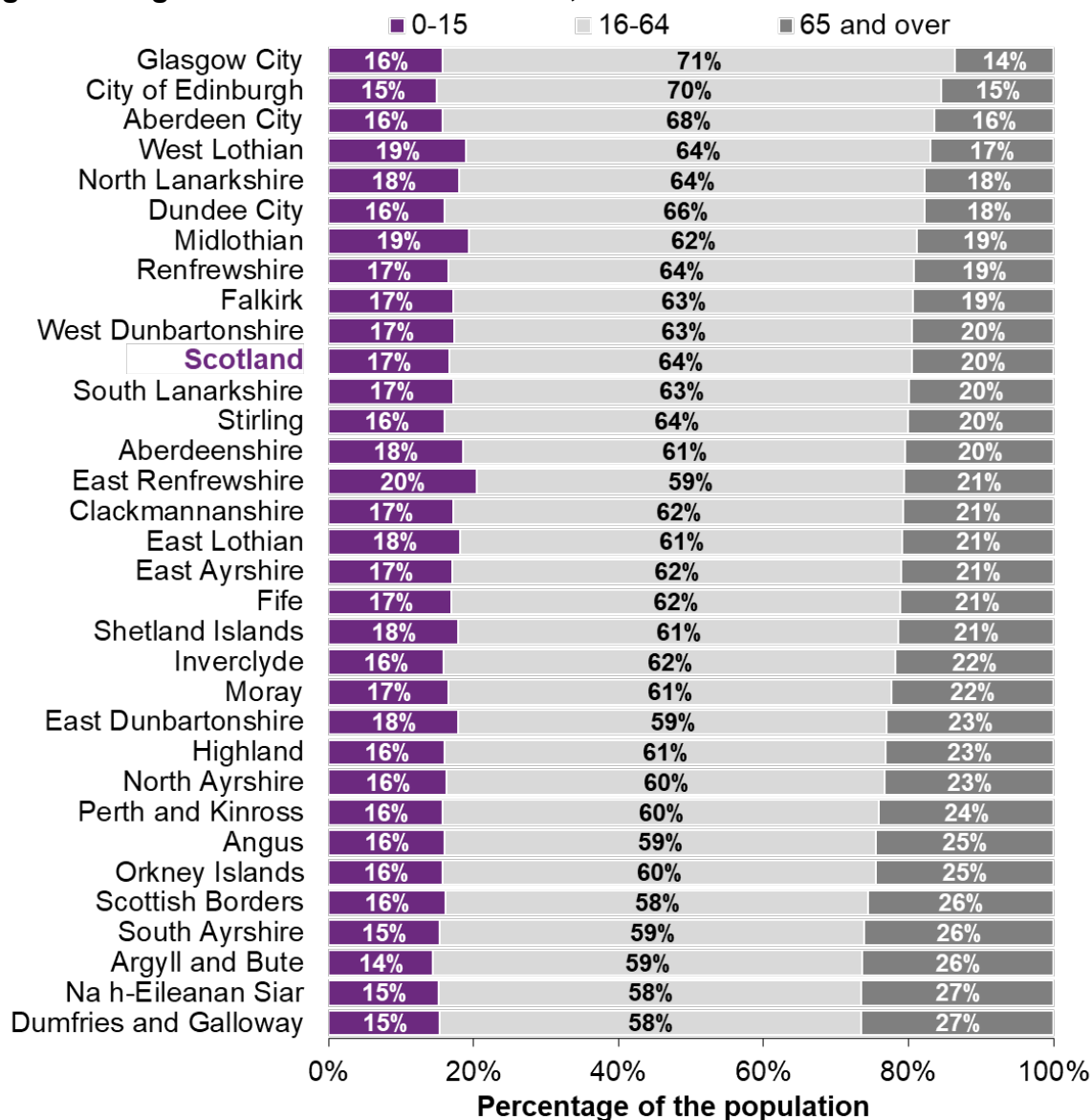


Ordered by descending overall net migration.

What is the age structure of the population across Scotland?

Although the age distribution across Scotland is complex, some general themes are visible. Figure 10 shows the proportion of the population in three age groups in each of Scotland's council areas.

Figure 10: Age structure of council areas, mid-2021



Figures are rounded so may not add up to 100%. Ordered by percentage aged 65+.

In mid-2021, the four largest cities in Scotland had the highest proportion of population **aged 16 to 64 years**, as well as some of the lowest proportions of people aged 65 and over.

Whilst the cities tend to have lower proportions of children aged **0 to 15 years**, the areas neighbouring the cities had some of the highest.

Rural and island areas tend to have an older age profile. They have some of the highest proportions of people **aged 65 and over**, and some of the lowest proportions of the other age groups.

How has the age structure of the population changed in Scottish areas?

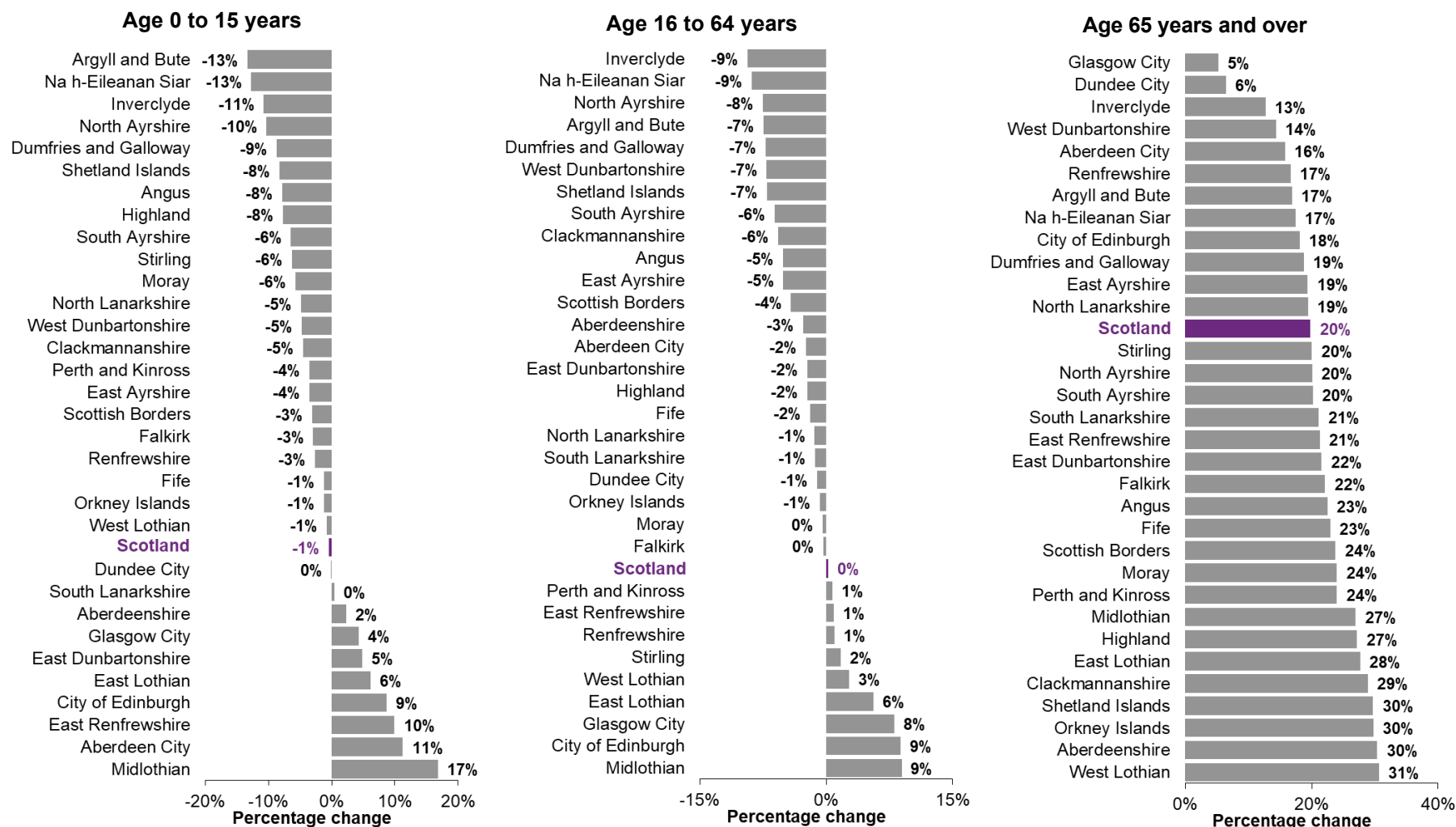
Figure 11 shows how the population has changed in broad age groups over the last decade to mid-2021.

Over the last decade, the three largest Scottish cities (Glasgow, Edinburgh and Aberdeen) and some of their neighbouring council areas were the only areas that saw an increase in the population of children aged 0 to 15. Many of these areas have also had the greatest increase in the population aged 16 to 64.

Areas with the greatest decrease in population aged 0 to 15 were mainly rural and island areas. The five areas (Argyll and Bute, Na h-Eileanan Siar, Inverclyde, North Ayrshire, and Dumfries and Galloway) which had the greatest decrease in the population aged under 16, also had the greatest decline in the population aged 16 to 64.

All 32 Scottish council areas have seen an increase in their population aged 65 and over in the last decade – including those areas where the total population fell. The greatest increases in the population aged 65 and over were in West Lothian (31%), Aberdeenshire (30%) and Orkney Islands (30%).

Figure 11: Percentage change in age group by council area, mid-2011 to mid-2021



6. Background notes

How are population estimates calculated?

Population estimates are based on the census and are updated each year to account for population change from 1 July to 30 June. They are based on the usually resident population which covers people living in Scotland for a period of at least 12 months, whatever their nationality.

The three elements of population change are:

- Natural change: births minus deaths
- Net migration: the difference between long-term moves into and out of Scotland
- Other changes: changes in the armed forces, prison population and any rounding adjustments

How are population estimates used?

Population estimates are used for a variety of purposes including:

- Resource allocation
- Planning of services such as education and health
- Informing local and national policy
- Modelling the economy
- As a base for demographic projections
- Incorporating into a range of other official statistics

Population estimates are also used to measure progress of the population indicator in Scotland's [National Population Framework](#).

What method is used to estimate the population?

A [methodology guide](#) is available from the NRS website. This publication provides more detail on the method used to calculate the population estimates, data sources and known uses of the data.

When will the next set of population estimates be published?

Population estimates for mid-2022 are planned for release in 2023, after the publication of results from Scotland's Census 2022.

Revisions

Revisions and corrections to previously published statistics are dealt with in accordance with the Scottish Government Statistician Group [corporate policy statement](#) on revisions and corrections.

Strengths and limitations

It is important to have high quality statistics on the latest population (mid-year population estimates). NRS produces detailed annual estimates on the resident population of Scotland using a range of data gathered from statistical censuses and surveys, as well as administrative data. There are processes in place to check the suitability of these sources.

Quality assurance takes place throughout the production of population estimates, with checks in place to ensure consistency and completeness. More information on the [quality assurance arrangements](#) for administrative data used in population estimates is available on the NRS website, along with information on the suitability of each data source used in the production of the population estimates.

It is important to consider the **limitations** when using population estimates. The population estimates use the census as the base population. Population change is applied to the base population each year to create the annual population estimates.

Migration is the most difficult part of the population estimates to estimate precisely, as migratory moves are not registered in the UK, either at the national or local level. The best proxy data available on a consistent basis, such as patient registers and surveys, are used to estimate migration. NRS are part of a cross-government transformation programme, being led by the Office for National Statistics, to [improve population and migration statistics](#) through greater use of administrative data sources.

Scotland's Census 2022 will provide a new base population and as a result, the population estimates for mid-2012 to mid-2021 will be rebased to bring them in line with the 2022 Census population.

7. Changes to data sources

Methodology changes and the COVID-19 pandemic have impacted the availability of a number of data sources which feed into the population estimates. As a result, these statistics were delayed from their usual publication date in April to July 2022.

International migration

International migration estimates for the year ending June 2021 are using a different method to those previously published. They rely less on International Passenger Survey (IPS) data and make greater use of administrative data. This means that the latest figures on international migration may not be comparable with previous estimates produced from the IPS or more recently using some statistical modelling

(for the year ending June 2020). **More information on this and the different methodologies can be found on the [ONS website](#).**

Internal migration and cross border flows

Migration within Scotland and between Scotland and the rest of the UK is estimated based on GP registration data. People who moved before mid-2020 may have not registered a change of address with their GP until the roll out of the vaccine, which began in Scotland in December 2020. NRS have not made any adjustments to the established method to estimate migration within Scotland and between Scotland and the rest of the UK. Therefore, moves which were registered this year will count toward our estimates of migration.

8. Future developments

The methodology used in the mid-year estimates is ever-evolving as more administrative data sources become available to NRS. Any improvements to the data sources and methodology of these statistics are discussed and assessed with the [Population and Migration Statistics Committee \(Scotland\)](#).

Improving the use of the NHSCR

NRS are continuing to review the process for estimating migration flows within Scotland and from the rest of the UK using a direct extract of anonymised records from the NHS Central Register (NHSCR). This should result in more accurate migration data at council and small area level.

Transformation of population and migration statistics

In Scotland, NRS are working with the Office for National Statistics, and other Government Statistical Service partners, as part of the [transformation programme](#) to improve international migration statistics. This should help address user demand for more evidence on the impacts of international migration, particularly at local level, as well as provide the best estimate of international migration to feed into Scotland's population statistics.

One of the objectives of Scotland's Census 2022 Programme is to make recommendations for future censuses. In order to feed in to this recommendation, a project to create Administrative Data Population and Household Estimates was commissioned. The aim of this project is to look at the future use of administrative data collected by public bodies and services to augment or replace NRS' data collected by a traditional census.

NRS are working to create admin-based population outputs from various sets of administrative data, and the most recent sets of [administrative based population estimates for 2016 to 2018](#) were published in December 2021. These were published as experimental statistics under the Code of Practice for Official Statistics, and allow a discussion with users about the use of administrative data within the field

of demographic statistics. As this area of statistics develops, information will be updated on the following webpage:

<https://www.scotlandscensus.gov.uk/administrative-data>

If you have an interest in attending any future stakeholder events where administrative data is being discussed, please contact:

Scotlandscensus@nrscotland.gov.uk

9. Links to related statistics

[Population projections](#) for Scotland (2020-based) and sub-national areas (2018-based) are available from the NRS website.

[Population estimates for the UK](#) and its constituent countries are available from the Office for National Statistics website.

Population estimates for [small areas and other areas](#) within Scotland for mid-2021 will be released in September 2022.

The [Vital Events Reference Tables](#) for 2021 including calendar year births and deaths across Scotland are available on the NRS website.

[Deaths involving COVID-19](#) are published weekly every Thursday by NRS. This includes all deaths where COVID-19 is mentioned on the death certificate. These figures are broken down by age, sex, location of death and geographic area.

Population estimates of [centenarians and people aged 90 and over](#) at Scotland and sub-national levels for mid-2021 will be published in September 2022.

10. Notes on statistical publications

National Statistics

The United Kingdom Statistics Authority (UKSA) 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 [UKSA](#) 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 [metadata](#) 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 aim is to provide relevant and reliable information, analysis and advice that meets the needs of government, business and the people of Scotland. 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](#)

Enquiries and suggestions

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