

Mid-2018 Small Area Population Estimates, Scotland

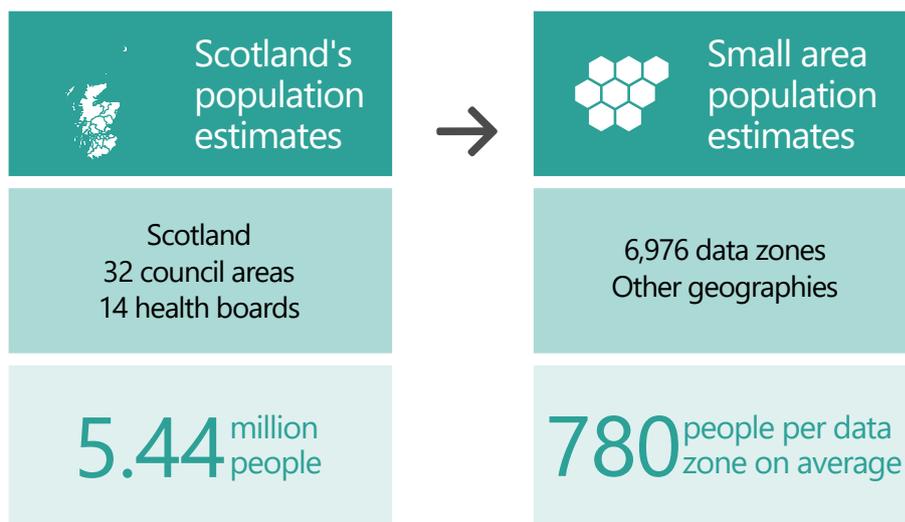


Published on 22 August 2019

This statistical report provides population estimates by sex and age for small areas, known as data zones, across Scotland.

Scotland's national population estimates can be broken down into small areas, known as data zones

Data zones are a small area geography used to provide statistics at local level. There are 6,976 data zones covering the whole of Scotland and they nest within council areas.

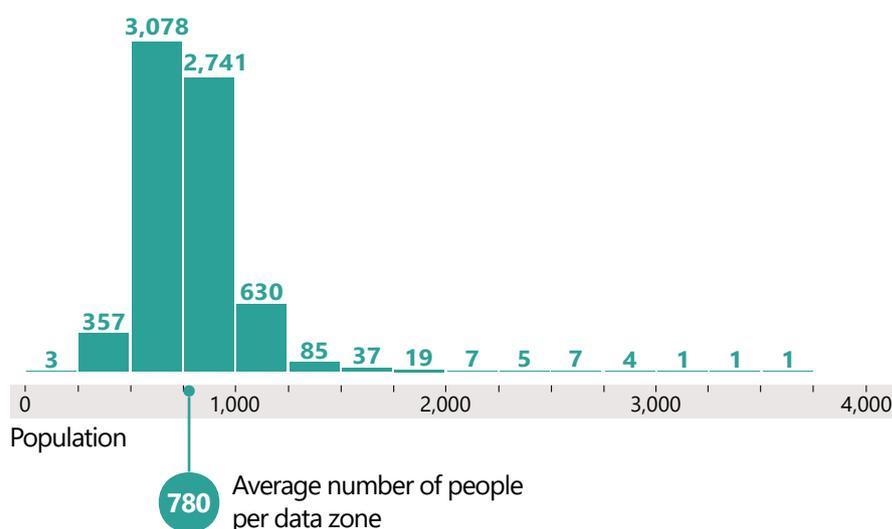


Data zone populations

Data zones are designed to have a population of approximately 500 to 1,000 household residents. However, data zone populations change over time.

In mid-2018, there were on average 780 people per data zone.

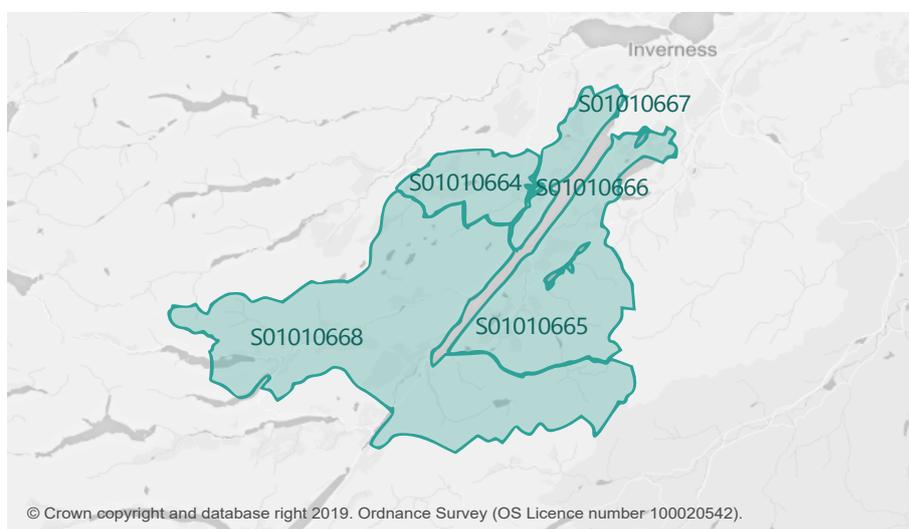
Number of data zones



Find out about the data zone you live in

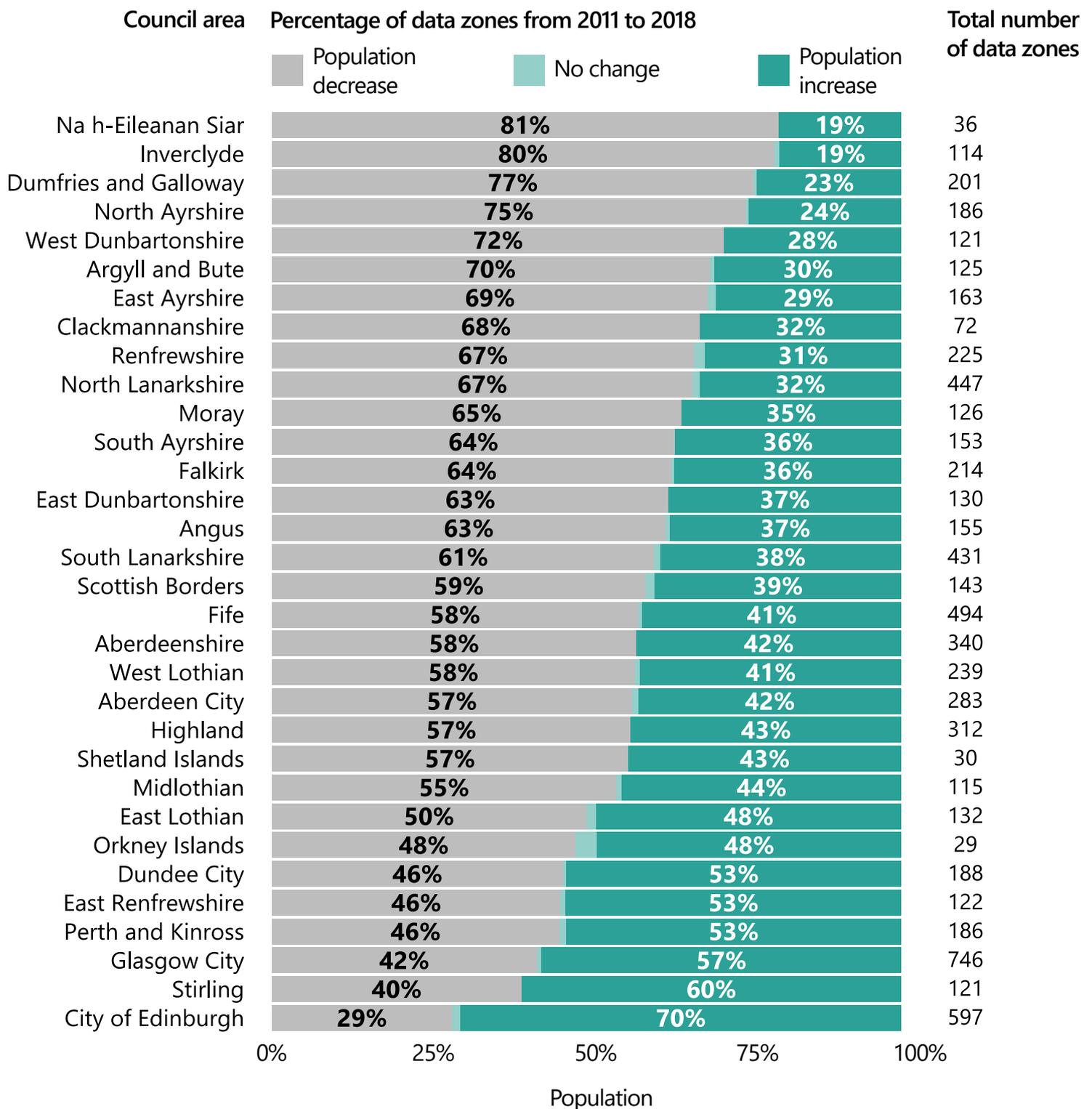
Search for a postcode on scotland.shinyapps.io/nrs-small-area-population-estimates to see the map of the data zone it is in, and to access a summary of the latest population estimates.

Detailed data tables with the latest population estimates by data zone and other geographies are available on nrscotland.gov.uk.



Data zone population change by council area

Data zone populations vary across Scotland and they will change over time due to migration into or out of an area, as well as births and deaths. Between mid-2011 and mid-2018, council areas which have seen a large proportion of data zones decrease in population are mainly rural and island areas, as well as areas in the West of Scotland. In contrast, four of the six council areas which had the largest proportion of data zones that increased in population were cities.



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Key Findings

- On 30 June 2018, the population of Scotland was 5,438,100, which is an increase of 13,300 people (0.2%) since mid-2017. The national population estimate can be broken down into small areas, known as data zones, of which there are 6,976 across Scotland. In summary:
 - 350 data zones had a population of less than 500 people;
 - 5,822 data zones had a population of between 500 but less than 1,000 people;
 - 720 data zones had a population of between 1,000 but less than 1,500 people; and
 - 84 data zones had a population of 1,500 people or more.
- The average data zone population in Scotland was 780 people. The council area with the highest average data zone population was City of Edinburgh (869 people), whereas Inverclyde had the lowest average data zone population at 686 people.
- The median age of the population of Scotland was 42 years in mid-2018. At data zone level, the median age ranged from 19 years to 72 years.
- Over the past seven years, council areas with the highest percentage of data zones experiencing depopulation are mainly rural and island areas, as well as areas in the West of Scotland.
- The majority of Scotland's population (71%) live in large urban and other urban areas (settlements of 10,000 or more people, based on the Scottish Government's Urban Rural 2016 Classification).
- Glasgow City had the highest percentage of population (32%) living in the 10% most deprived areas in Scotland whereas East Renfrewshire had the highest percentage of population (37%) living in the 10% least deprived areas in Scotland (based on the Scottish Index of Multiple Deprivation 2016).

1. Introduction

This report summarises the mid-2018 Small Area Population Estimates (SAPE) for Scotland, which relate to the population as at 30 June 2018. The estimates are fully consistent with the headline mid-2018 population estimates published for higher level geographies at council area, health board area and Scotland.

Small area population estimates are published using 2011 Data Zone boundaries. [Data zones](#) are the Scottish Government's small area statistical geography. There are a total of 6,976 data zones in Scotland which cover the whole of Scotland and nest within council area boundaries. Population estimates for other areas, such as parliamentary constituencies, urban/rural and deprived areas, are approximated by adding together the populations of the data zones they contain. Data zone boundaries are produced every ten years, based on populations from the Census, and are designed to have populations of between 500 and 1,000 household residents. However, following changes in population mainly due to housing developments and demolitions, many data zones have exceeded the upper limit and others have seen a reduction in population. A review of data zone boundaries will take place as part of work for the 2021 Census.

Alongside this release, an [updated back series](#) for small area population estimates has been published. This includes rebased estimates for the period 2001 to 2010 using the latest 2011 Data Zone boundaries. These are consistent with the mid-year population estimates already published for these years. Previously small area population estimates for 2001 to 2010 were based on 2001 Data Zone boundaries, created for the 2001 Census. The rebased estimates now provide consistent time series from 2001 to 2018.

Information about the methodology and data sources for producing the small area population estimates, as well as the strengths and limitations, can be found in the [methodology guide](#) on the National Records of Scotland (NRS) website.

Small area population estimates provide important information at neighbourhood level and can be used as building blocks to provide estimates for a variety of different geographies. They have a wide range of users including central and local government and are used to inform planning, provision of services and allocation of resources at local level. The estimates are also important in a number of other applications such as the development and maintenance of the Scottish Government's [Urban Rural Classification](#) and the [Scottish Index of Multiple Deprivation](#) (SIMD).

Along with this release, NRS have published the following new tables:

- Population estimates by SIMD 2016 deciles, single year of age and sex broken down by council area and NHS health board area,
- Total in, out and net migration by SIMD 2016 deciles,
- Total in, out and net migration by the Scottish Government's Urban Rural Classification 2016.

What are you looking for?

Population estimates by data zone, 2018

Time series of data zone population estimates

Population estimates for other geographies

Open data

Find out about the population of the data zone you live in

Where is it?

[Excel tables](#)

[Time series](#)

[Excel tables](#)

statistics.gov.scot

[Interactive data visualisation](#)

2. Latest population estimates, 2018

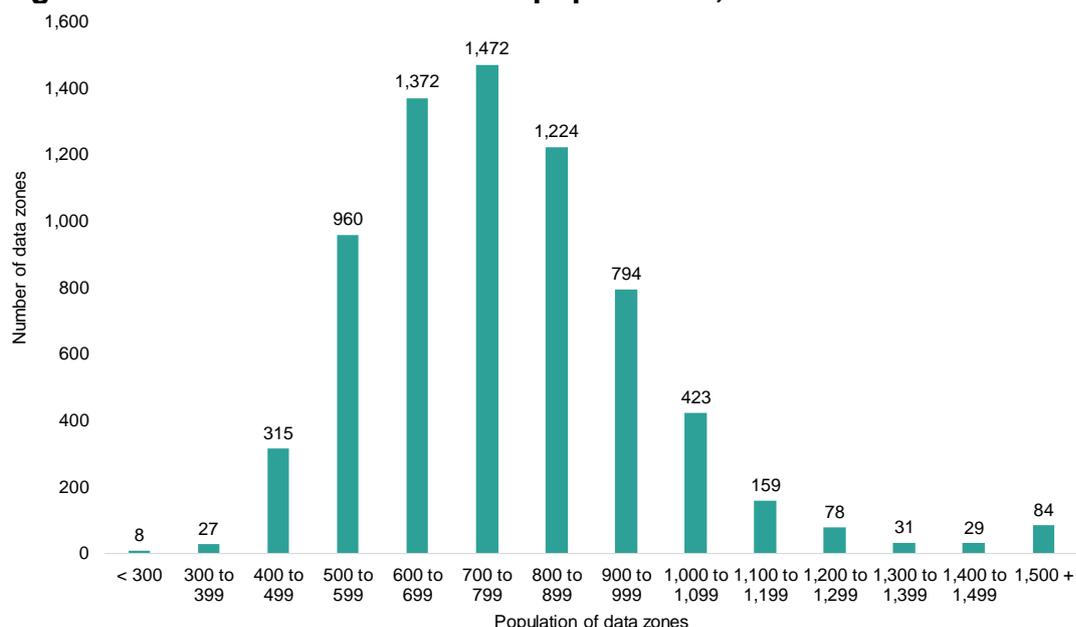
On 30 June 2018, the population of Scotland was 5,438,100. The population of the 6,976 data zones across Scotland ranged from 0 to 3,658 people, however most data zones (5,822) had a population of between 500 and 999 people. [Figure 1](#) shows the distribution of data zone populations.

Did you know: Data zones were designed to have populations of between 500 and 1,000 household residents based on the 2011 Census population.

In mid-2018, 350 data zones had a population of less than 500, while 804 had a population of greater than or equal to 1,000 people. Some data zones have a substantially large population which results in the average data zone population of 780 people being greater than the median¹ figure of 755 people.

¹ The median is the midpoint of a group of values which have been arranged in ascending or descending order. Fifty per cent of the values will be less than or equal to the median, the remainder will be greater than the median.

Figure 1: Distribution of data zone populations, mid-2018



Data zones with a population of fewer than 500 people

There were 350 data zones across Scotland with a population of less than 500 people in mid-2018, with no council area having a particularly high number of data zones in this category. South Lanarkshire had the highest with 33 data zones in this category, followed by Aberdeenshire with 29 data zones, shown in [Table 1](#). Shetland Islands was the only council area which had no data zones with a population of less than 500.

When analysed by the Scottish Government’s 6-fold Urban Rural Classification, the number of data zones with a population of fewer than 500 are mostly in other urban and large urban areas (refer to [Background notes](#) for definition of these), largely because these areas are where most data zones are located.

Table 1: Data zones with a population of fewer than 500 people, mid-2018

Council area	No. of data zones	Urban/Rural Classification ¹	No. of data zones
South Lanarkshire	33	Large Urban Area	71
Aberdeenshire	29	Other Urban Area	148
North Lanarkshire	21	Accessible Small Towns	36
Glasgow City	19	Remote Small Towns	13
City of Edinburgh	19	Accessible Rural	50
Fife	19	Remote Rural	32
Others ²	<= 18		
Total			350

Footnote

1) Scottish Government 6-fold Urban Rural Classification 2016.

2) 'Others' includes the rest of the council areas (25 out of 32) that have 18 or fewer data zones with a population of fewer than 500 people. The exception is Shetland Islands that has no data zones with these characteristics.

Data zones with a population of 1,500 or more people

More than two in three council areas have a data zone with a population of 1,500 people or more.

In mid-2018, there were 84 data zones with a population of 1,500 people or more across Scotland. Table 2 shows that Glasgow City and City of Edinburgh council areas had the highest number of data zones in this category at 15 each. More than two thirds of Scotland's council areas (23 out of 32) had at least one data zone with a population of 1,500 people or more.

The majority of data zones with a population of 1,500 people or more are in large urban and other urban areas, based on the Scottish Government's 6-fold Urban Rural Classification. Data zones which have large populations are often in areas where new housing development has resulted in an increase to the local population. Other data zones have high populations due to the presence of large communal establishments such as student halls of residence, prisons or armed forces bases.

Table 2: Data zones with a population of 1,500 or more people, mid-2018

Council area	No. of data zones	Urban/Rural Classification ¹	No. of data zones
Glasgow City	15	Large Urban Area	38
City of Edinburgh	15	Other Urban Area	23
Fife	5	Accessible Small Towns	6
Aberdeen City	5	Remote Small Towns	2
East Lothian	5	Accessible Rural	14
Others ²	<=4	Remote Rural	1
Total			84

Footnote

1) Scottish Government 6-fold Urban Rural Classification 2016.

2) 'Others' includes the rest of the council areas (16 out of 32) that have 4 or fewer data zones with population of more than 1,500 people. There are also 11 council areas that have no data zones with these characteristics.

How do data zone populations vary across Scotland?

In mid-2018, the average data zone population was 780 people. Across council areas in Scotland, the average data zone populations were:

- Highest in City of Edinburgh (869), Glasgow City (840) and East Dunbartonshire (833).
- Lowest in Inverclyde (686), Argyll and Bute (690) and Clackmannanshire (714).

With the exception of Shetland Islands and West Dunbartonshire, the median data zone population was lower than the average population. This suggests that most council areas have a number of data zones with large populations that inflate the average population but have little or no effect on the median data zone population.

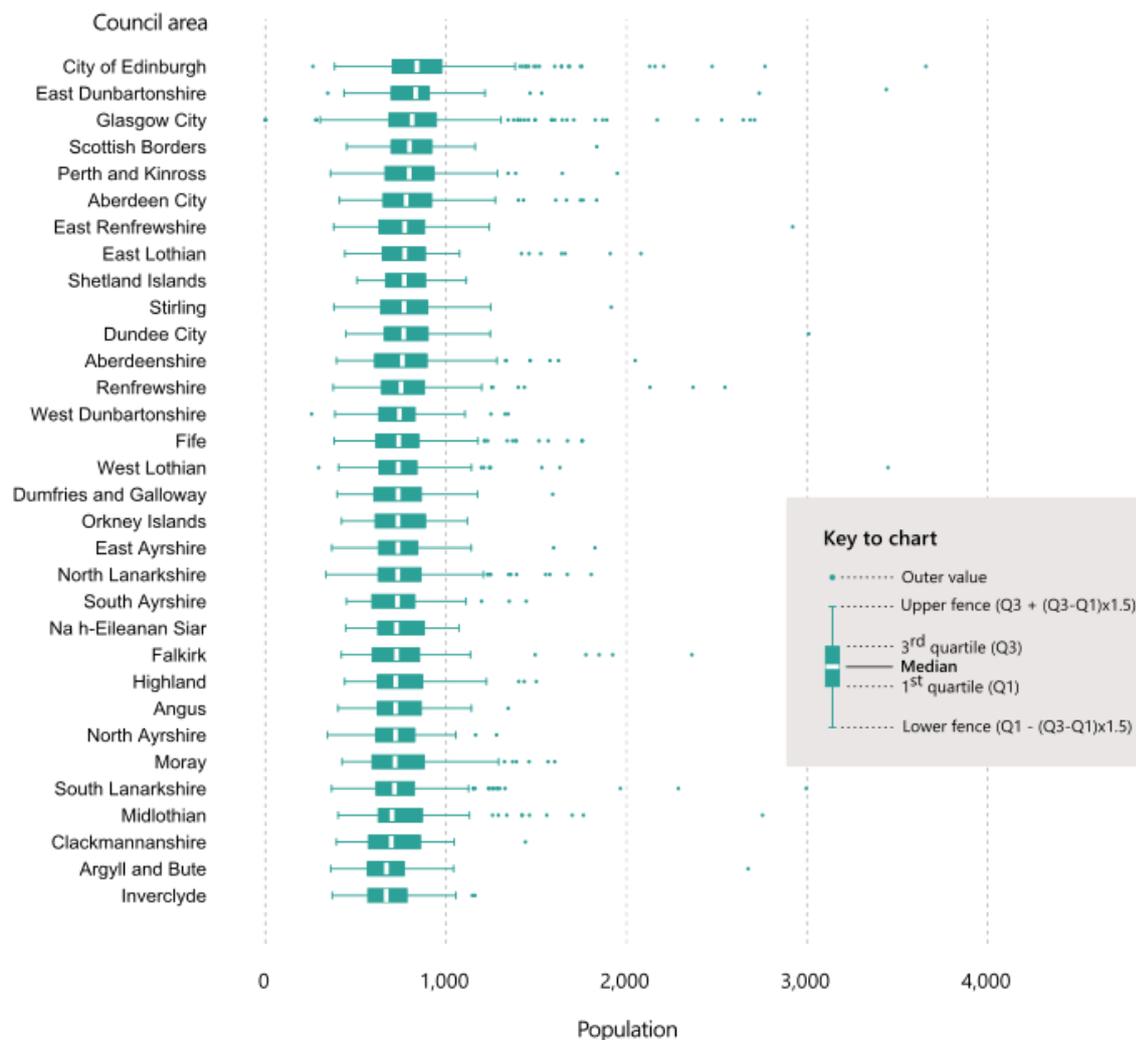
Figure 2 shows the distribution of data zone populations across Scotland's council areas. The first quartile indicates the population that 25% of data zones lie below. For example, 25% of data zones in Aberdeen City have a population of 652 people or less. Similarly, the third quartile indicates the population that 25% of data zones lie above. Detailed summary statistics of data zone populations by council area is available in [Table A](#) on the NRS website.

Three data zones in Glasgow City have **zero population** due to demolition of housing.

Some council areas contain data zones with populations that are much larger than others in the council area. These are often caused by large communal establishments or housing development. For example, the data zone with

the largest population across Scotland is 'Currie West – 01' in Edinburgh City which contains a large concentration of student accommodation for Heriot Watt University. In contrast, three data zones in Glasgow City have no people living in them due to housing being demolished.

Figure 2: Data zone populations by council area, mid-2018



What is the age distribution of data zones?

As well as variations in the population of data zones, there are also variations in the age distributions. While the median age for Scotland as a whole was 42 years, the median age of data zones ranged from 19 years in 'Newington and Dalkeith Road – 03' and 'Ruchill – 04' which contain student accommodation for the University of Edinburgh and University of Glasgow respectively to 72 years in 'Falkirk - Town Centre and Callendar Park – 02' which contains a high number of elderly residents.

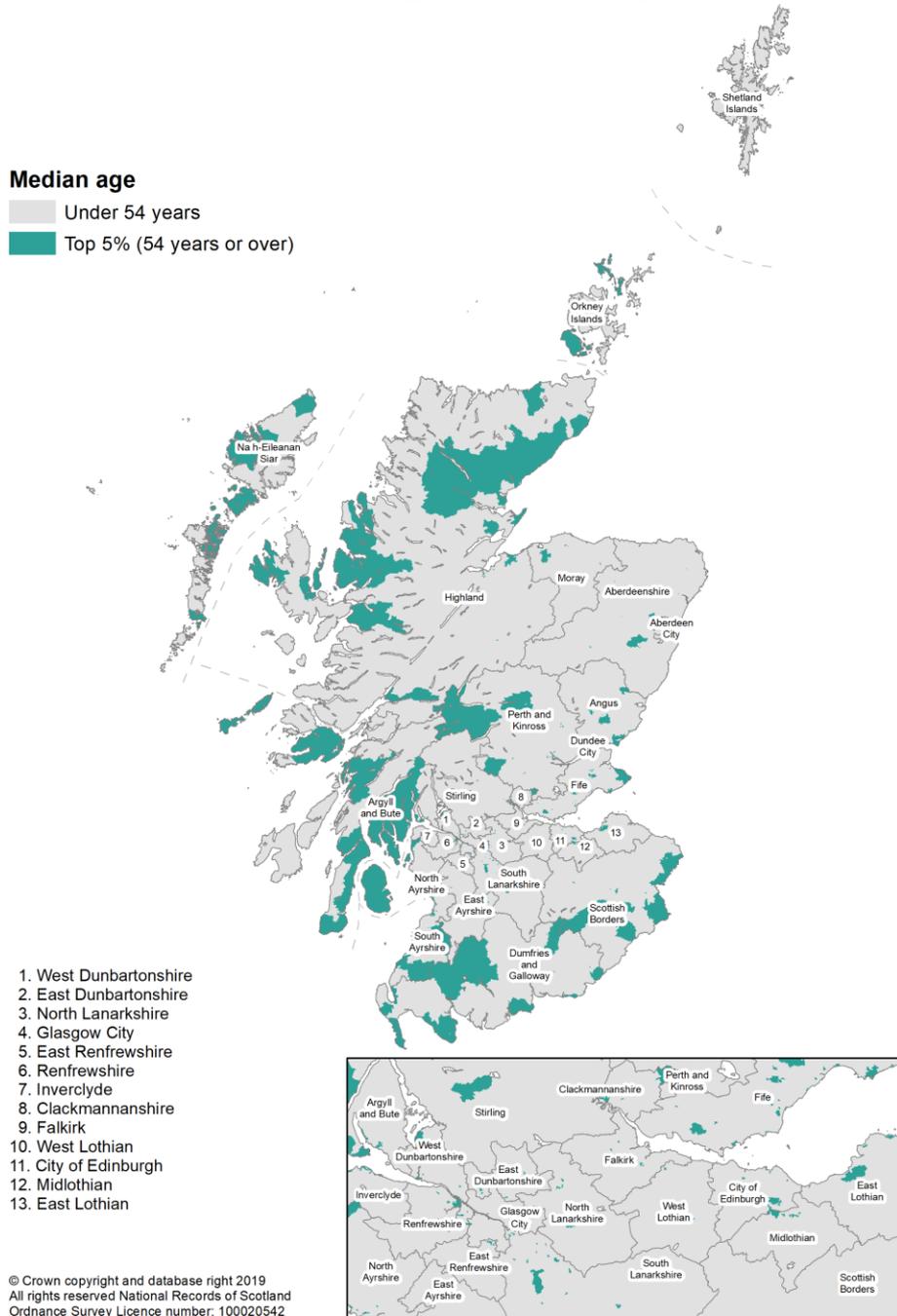
The median age was slightly higher for females (between 19 to 74 years) than for males (18 to 71 years), in mid-2018. This is reflective of the higher ratio of females to males in older age groups due to longer life expectancy for females in Scotland².

In mid-2018, there were 11 data zones with a median age of 21 years or less. These areas typically have a high student population (living in either residential accommodation or halls or residence) or contain some other type of large communal establishment for young people. In comparison, there were 35 data zones with a median age of 60 years and over. These are mainly in popular retirement areas and data zones with accommodation for the elderly.

Figure 3 shows the data zones which have a median age in the top 5% (a median age of 54 years or over). Whilst these data zones are spread across Scotland, the council areas with the highest proportion of data zones in this group are mainly rural or island areas. For example, the median age of around one in four data zones in Argyll and Bute and South Ayrshire is in the top 5% (54 years or over).

2) National Records of Scotland (2019) ['National Life Tables for Scotland, 2015-2017'](#)

Figure 3: Data zones with the highest median age, mid-2018



3. Population change over time, 2011-2018

How has the population changed across data zones in Scotland?

Between mid-2011 and mid-2018, the population of Scotland has increased by 138,200 people (2.6%) from 5,299,900 to 5,438,100. [Table 3](#) shows how data zone

populations have changed over this period. Since mid-2011, the number of data zones with a population of fewer than 500 people has increased by 37 to 350 in mid-2018. Over the seven year period, the number of data zones with a population of 1,000 people or more has increased by 239 to 804 in mid-2018.

Table 3: Data zones within broad population bands, mid-2011 to mid-2018

Year	< 300		300 - 499		500 - 999		1,000 - 1,499		1,500 +	
	Count	%	Count	%	Count	%	Count	%	Count	%
2011	1	0.0	312	4.5	6,098	87.4	551	7.9	14	0.2
2012	1	0.0	304	4.4	6,063	86.9	594	8.5	14	0.2
2013	3	0.0	320	4.6	6,017	86.3	617	8.8	19	0.3
2014	3	0.0	317	4.5	5,985	85.8	649	9.3	22	0.3
2015	4	0.1	319	4.6	5,934	85.1	683	9.8	36	0.5
2016	4	0.1	322	4.6	5,897	84.5	698	10.0	55	0.8
2017	6	0.1	331	4.7	5,867	84.1	702	10.1	70	1.0
2018	8	0.1	342	4.9	5,822	83.5	720	10.3	84	1.2

Note

Total number of data zones each year = 6,976.

Table 4 shows the average (mean) data zone population increased from 760 in mid-2011 to 780 in mid-2018, a reflection of the increase in Scotland's population. Over this period, the median data zone population remained steady suggesting that the increase to the average data zone population has been driven by a small number of data zones with substantial population increases.

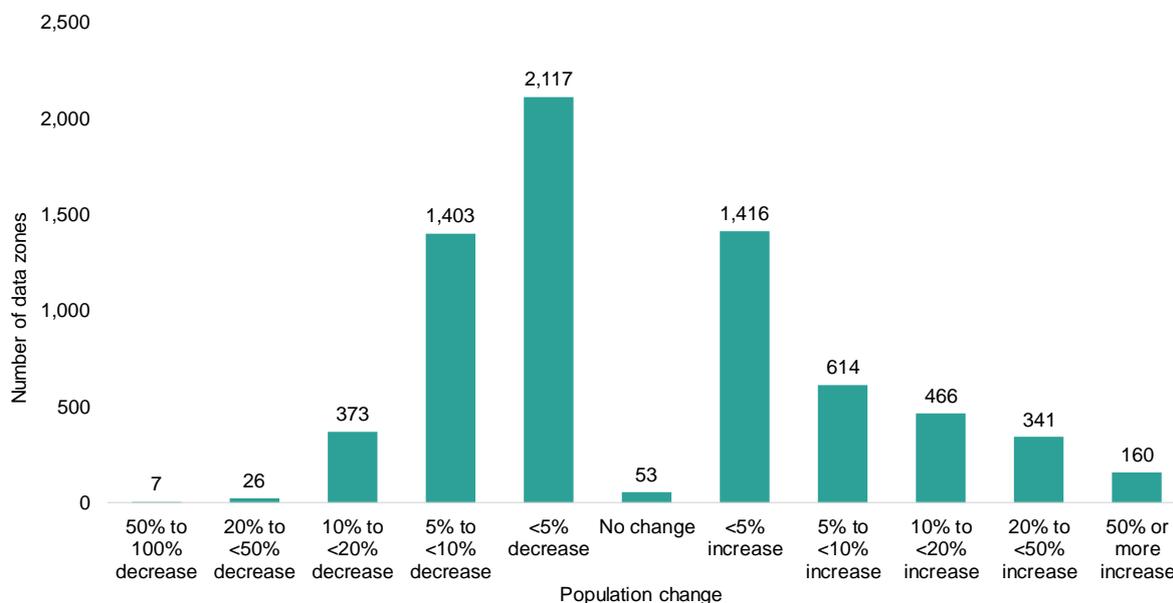
Table 4: Data zone population summary statistics, mid-2018

Year	Minimum population	Maximum population	Mean population	Median population
2011	145	2,943	760	751
2012	162	2,878	762	752
2013	0	3,230	764	753
2014	0	3,139	767	753
2015	0	3,385	770	754
2016	0	3,559	775	756
2017	0	3,847	778	755
2018	0	3,658	780	755

Although the population of Scotland increased between mid-2011 and mid-2018, more data zones had a decrease in population than increase, shown in Figure 4. Over this period, the population of 3,926 data zones (56%) decreased while 3,050 data zones (44%) increased or had no change to the population.

Over the last seven years, there were more large population increases of 20% or more (501 data zones) than population decreases of 20% or more (33 data zones). In contrast, more of the small population changes (less than 20%) were decreases. These small decreases may be related to the declining average household size, with more people living alone or in smaller households³.

Figure 4: Data zone population change, mid-2011 to mid-2018



How has the population changed within Scotland’s council areas?

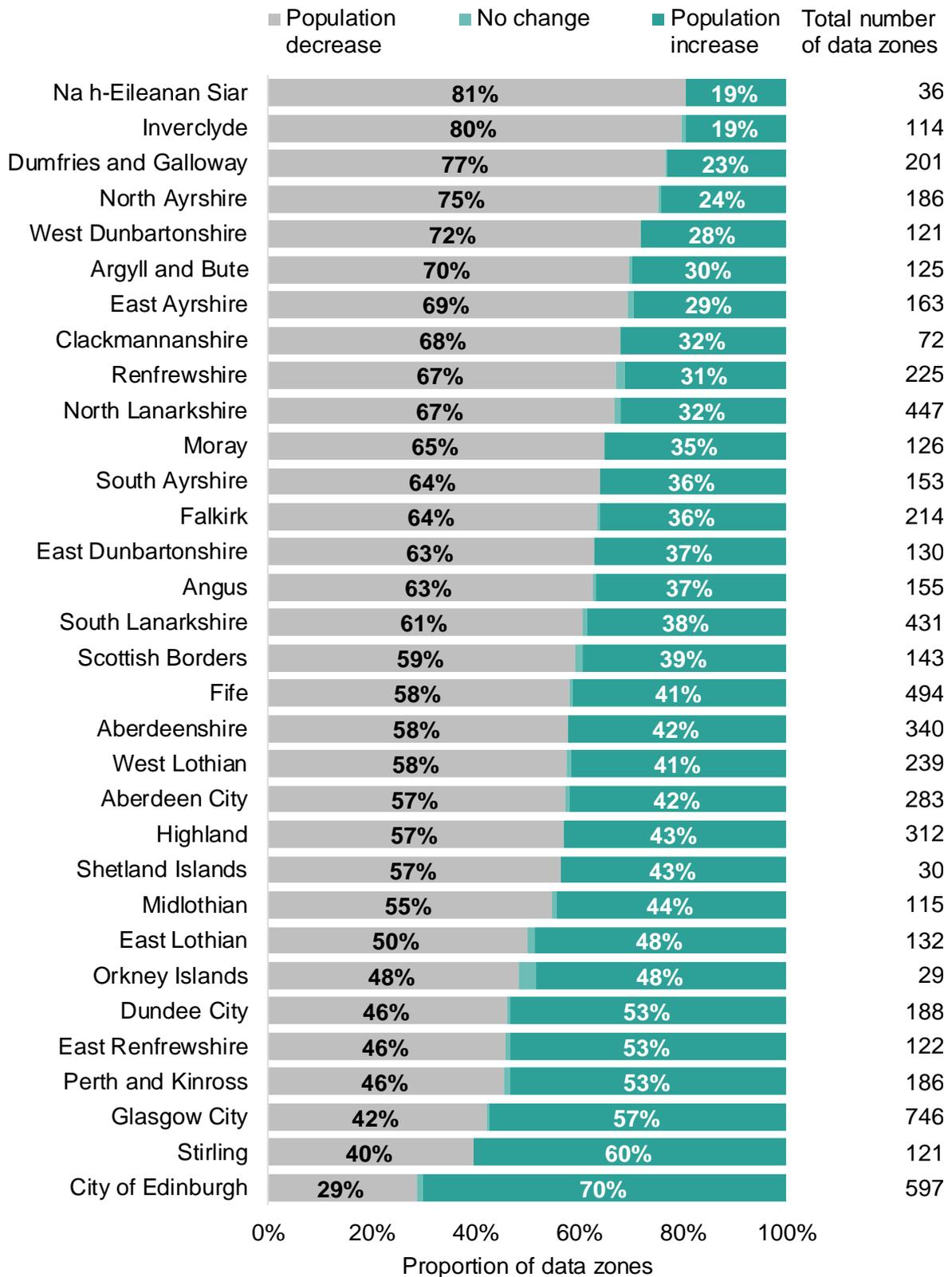
Areas with the highest percentage of data zones experiencing **depopulation** are mainly rural and island areas, as well as areas in the West of Scotland.

Figure 5 shows the proportion of data zones within each council area that have increased in population, decreased or stayed the same between mid-2011 to mid-2018. Areas which have seen a large proportion of

data zones decrease in population are mainly rural and island council areas, with 81% of data zones in Na h-Eileanan Siar experiencing depopulation. However it is important to remember that the number of data zones in each council area varies. For example, in Na h-Eileanan Siar there are only 36 data zones, compared to Glasgow City which has 746 data zones. In contrast, four of the six council areas which had the largest proportion of data zones increase in population were cities, with 70% of data zones in Edinburgh City experiencing an increase in population.

3) National Records of Scotland (2019) '[Estimates of Households and Dwellings in Scotland, 2018](#)'

Figure 5: Percentage of data zones by population change and council area, mid-2011 to mid-2018



4. Population estimates for other geographies

Did you know: NRS publish population estimates for a range of other geographies including:

- Electoral Wards
- Nomenclature of Units for Territorial Statistics (NUTS) – the statistical geography of the EU (Eurostat)
- Scottish Government Urban Rural Classification
- Scottish Index of Multiple Deprivation (SIMD) deciles
- Scottish Parliamentary Constituencies (SPC)
- UK Parliamentary Constituencies (UKPC)

Population estimates for other geographies are produced by aggregating the data zone population estimates, using geography area lookup tables which can be downloaded from statistics.gov.scot. More information on how population estimates for other geographies are produced is available in the [background notes](#).

Along with this release, NRS have published the following new tables:

- Population estimates by SIMD deciles, single year of age and sex broken down by council area and NHS health board area,
- Total in, out and net migration by SIMD 2016 deciles,
- Total in, out and net migration by the Scottish Government's Urban Rural Classification 2016.

Small area population estimates are summarised below for urban rural areas, SIMD deciles, Scottish Parliamentary Constituencies and UK Parliamentary Constituencies. Population estimates by sex and single year of age for other small areas can be found on the [Special Area Population Estimates](#) section of the NRS website.

Urban Rural populations

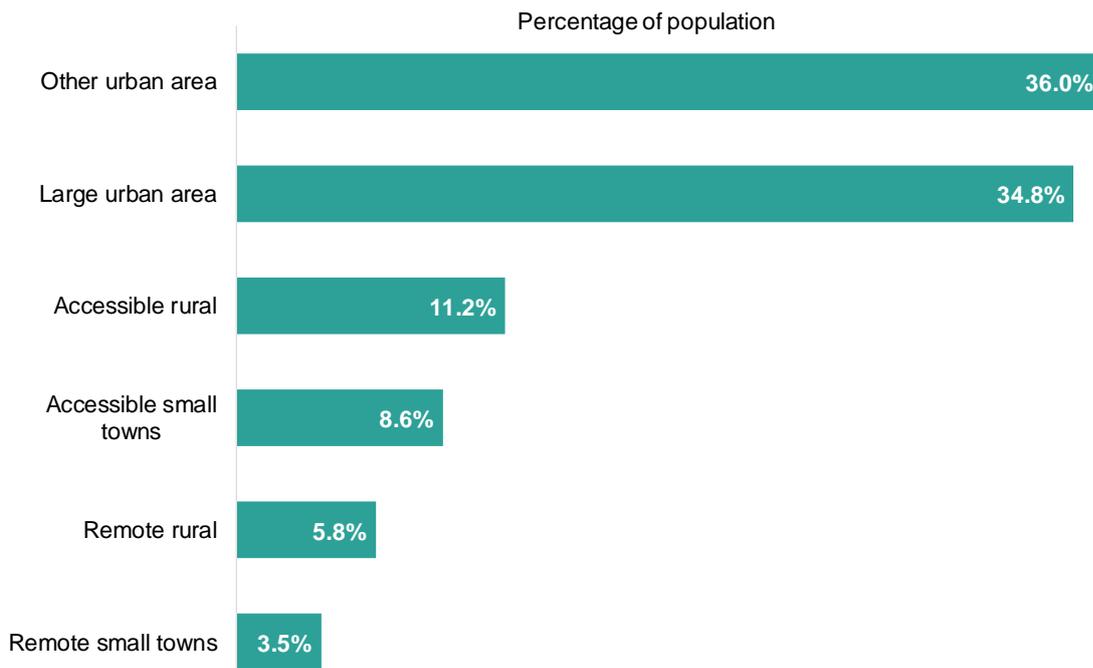
The Scottish Government's Urban Rural Classification defines urban and rural areas across Scotland based on population and accessibility (using drive-time analysis). The main classifications are the 6-fold and 8-fold which distinguish between urban, rural and remote areas in six and eight categories respectively. More information is available on the Scottish Government's [Urban Rural Classification](#) website.

Population estimates by [Urban Rural Classification](#) (6-fold and 8-fold) by single year of age and sex are available from the NRS website for years 2011 to 2018. [Figure 6](#) shows that in mid-2018:

- 71% of Scotland's population (over 3.8 million people) lived in large urban and other urban areas,
- 20% of the population (over 1 million people) lived in accessible small towns and accessible rural areas, and
- 9% of the population (over 500,000 people) lived in remote small towns and remote rural areas.

Most of Scotland's population live in **large and other urban areas.**

Figure 6: Scotland's population by 6-fold Urban Rural Classification¹, mid-2018

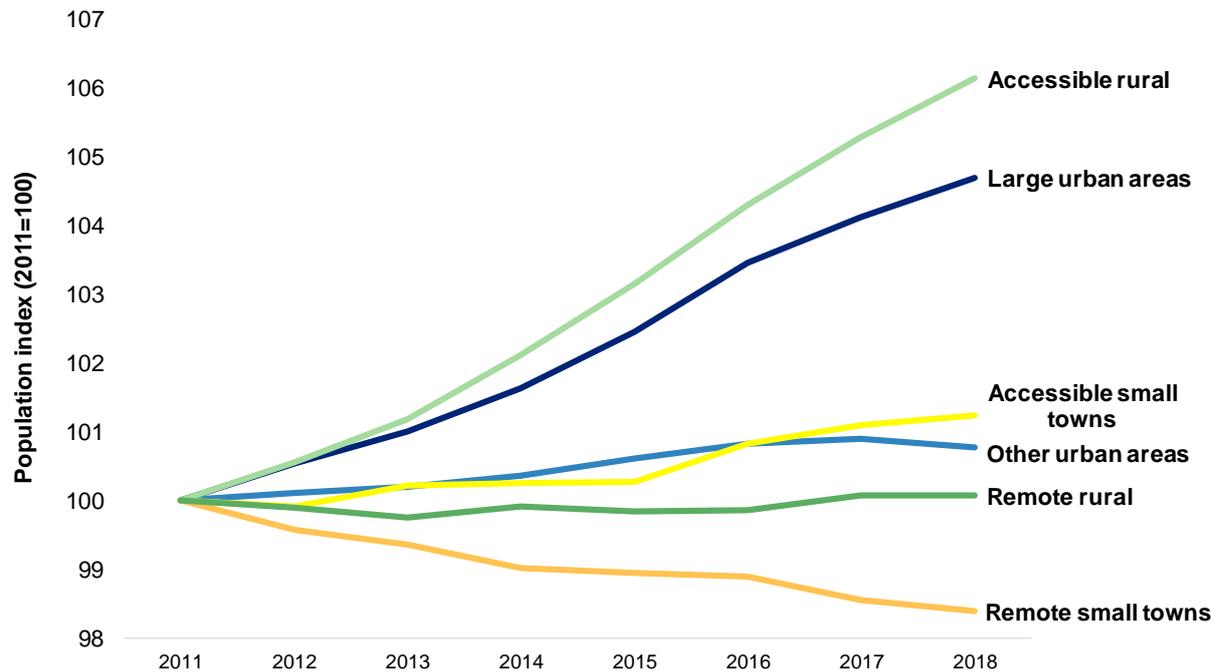


Footnote

1) Based on Scottish Government's Urban Rural Classification 2016.

Figure 7 shows the percentage change in population since mid-2011 by Urban Rural Classification. Between mid-2011 and mid-2018, accessible rural areas had the largest increase in population (6.1%) followed by large urban areas (4.7%). Meanwhile remote small towns was the only category to experience a decrease in population (-1.6%) between mid-2011 and mid-2018.

Figure 7: Change in population by Urban Rural Classification¹, mid-2011 to mid-2018²



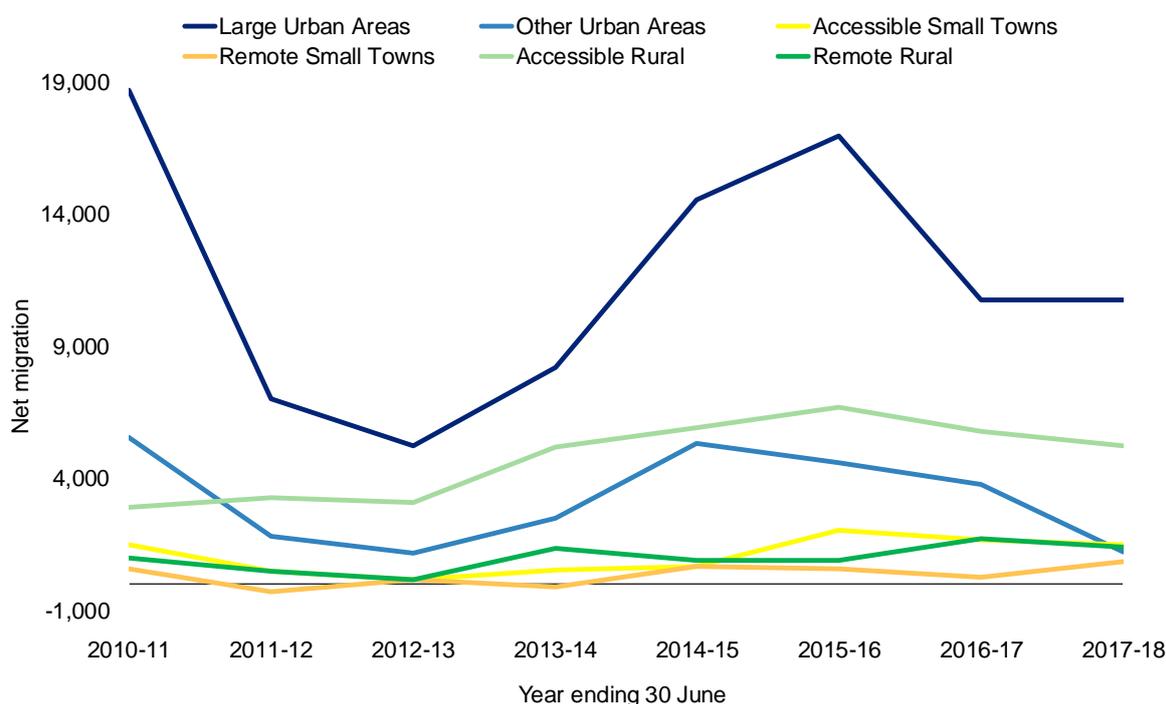
Footnote

- 1) Based on Scottish Government’s Urban Rural Classification 2016.
- 2) Population for each area shown as a percentage of the mid-2011 population.

Net migration was positive for every urban rural category over the latest year to mid-2018 and was highest for large urban areas with 10,750 more people moving into these areas than leaving . [Figure 8](#) shows net migration (moves into areas minus moves out) for urban rural areas over the last eight years. Since the year ending mid-2011:

- Large urban areas have had the highest net migration every year, with between 5,210 to 18,730 more people moving in than out of these areas.
- Accessible rural areas have seen an overall increase in net migration from 2,900 to 5,230 in the year to mid-2018.
- Remote small towns was the only category to experience negative net migration at points between the years to mid-2011 and mid-2018.

Figure 8: Net migration by 6-fold Urban Rural Classification¹, 2010-11 to 2017-18



Footnote

1) Based on Scottish Government’s Urban Rural Classification 2016.

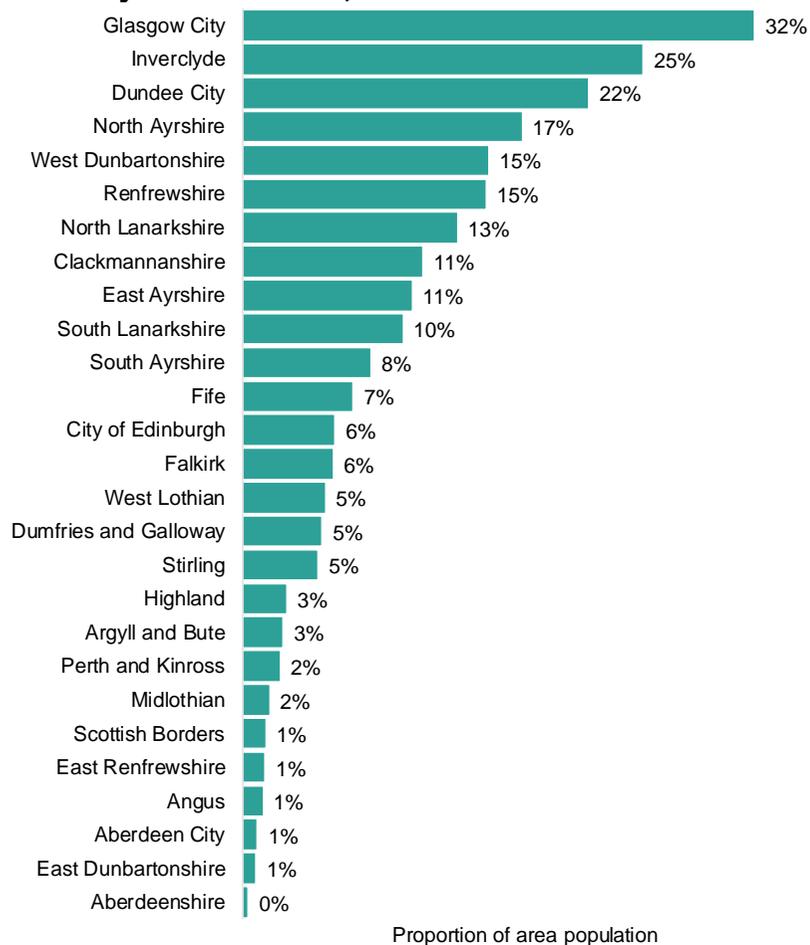
Scottish Index of Multiple Deprivation (SIMD) populations

The SIMD is used to identify small area concentrations of multiple deprivation across Scotland. SIMD uses multiple measures of deprivation to rank each data zone from 1 (most deprived) to 6,976 (least deprived). The population estimates by SIMD are created by adding up the data zone population estimates in each decile, with each decile containing 10% of Scotland’s data zones. SIMD is updated every few years and the population estimates published on the NRS website relate to the SIMD 2016 (the latest available). More information is available on the Scottish Government’s [SIMD](#) website.

Population estimates by [SIMD](#) deciles by single year of age and sex are available from the NRS website for years 2011 to 2018.

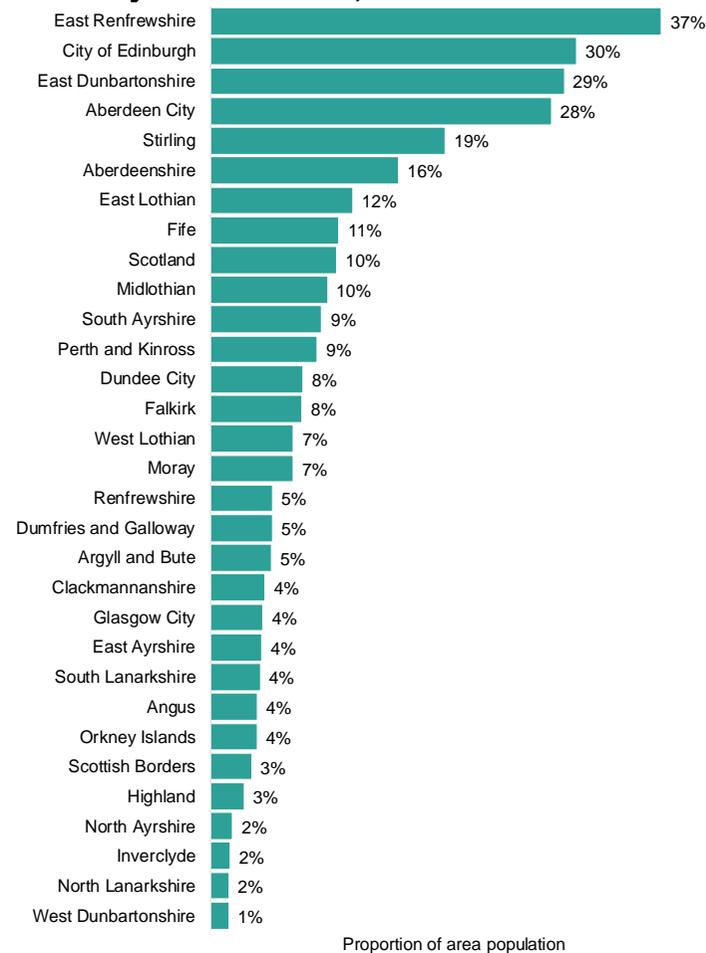
Whilst each SIMD decile contains approximately 10% of Scotland’s population, this varies across council areas. [Figure 9](#) shows that Glasgow City has the highest percentage of population (32%) in the most deprived areas (decile 1), reflecting the higher number of deprived data zones in Glasgow City. In contrast, [Figure 10](#) shows that 4% of Glasgow City’s population is in the least deprived areas (decile 10). East Renfrewshire had the highest percentage of population (37%) in the least deprived areas (decile 10), with 1% of the population living in the most deprived areas (decile 1).

Figure 9: Proportion of population in the most deprived decile by council area¹, mid-2018



1) Five council areas have no population in the most deprived SIMD decile (East Lothian, Moray, Na h-Eileanan Siar, Orkney Islands and Shetland Islands).

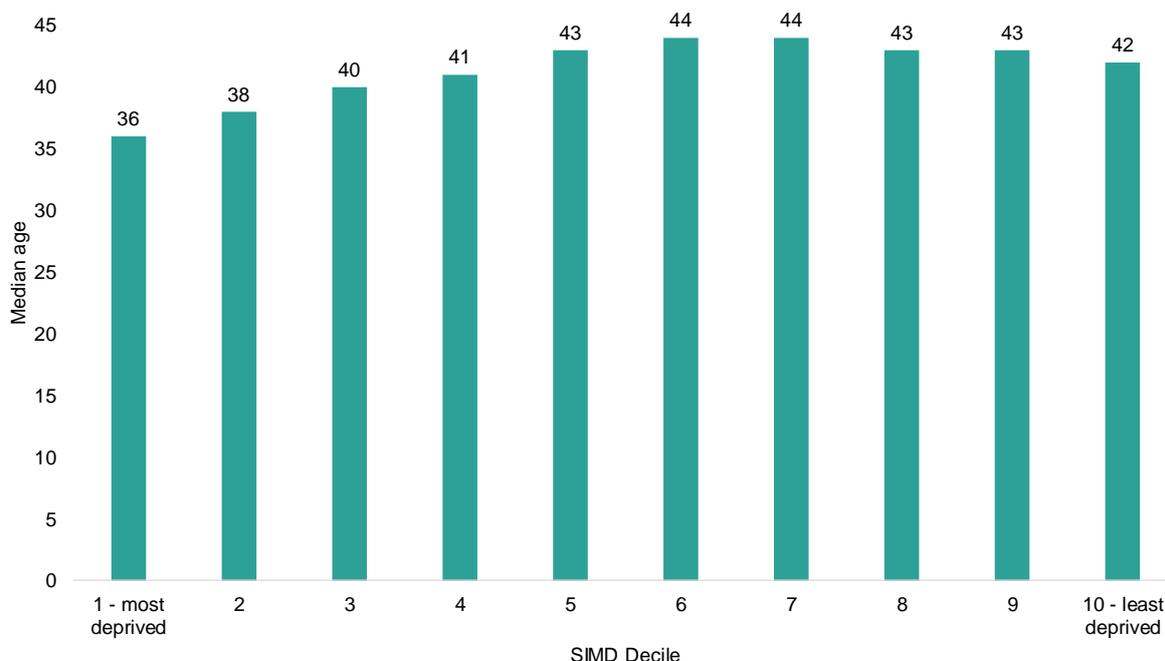
Figure 10: Proportion of population in the least deprived decile by council area¹, mid-2018



1) Two council areas have no population in the least deprived SIMD decile (Na h-Eileanan Siar and Shetland Islands).

In mid-2018, the median age of Scotland’s population was 42 years, however the median age by SIMD deciles ranged between 36 and 44 years. [Figure 11](#) shows that the more deprived areas have a younger population, with decile 1 having the youngest median age at 36 years. In contrast, the least deprived areas have higher median ages, with deciles 6 and 7 having the highest median age at 44 years.

Figure 11: Median age by SIMD decile, mid-2018



Scottish Parliamentary Constituency populations

The Members of the Scottish Parliament (MSPs) at Holyrood represent 73 constituencies. The constituency boundaries were re-drawn in 2014, with the population estimates in this section relating to the 2014 boundaries for all years. Population estimates for [Scottish Parliamentary Constituencies](#) by single year of age and sex are available from the NRS website for years mid-2011 to mid-2018.

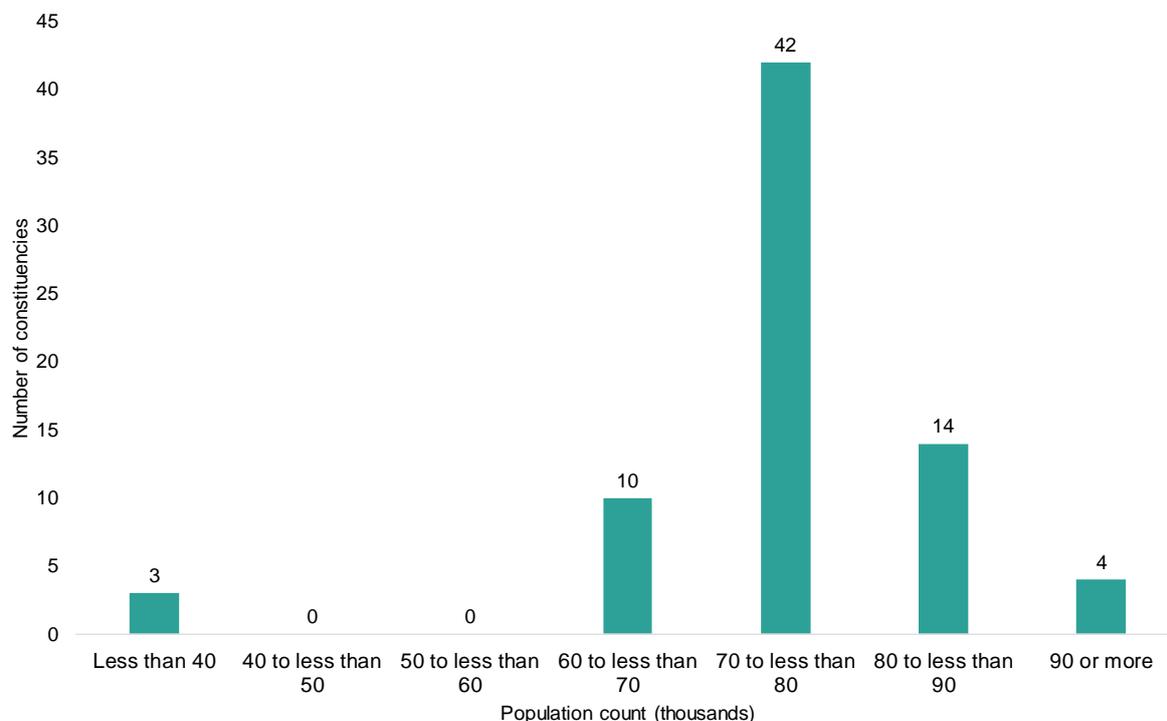
The constituency population estimates for mid-2018 ranged between 22,190 people (Orkney Islands) to 95,663 people (Linlithgow). [Figure 12](#) shows that the majority of constituencies have a population of greater than 70,000 but less than 80,000 people. The proportion of people aged 16 and over⁴ in each constituency ranged from 79% in Eastwood to 92% in Glasgow Kelvin. The high proportion of people aged 16 and

⁴ People aged 16 and over can vote in Scottish Parliament and Local Government elections in Scotland.

over is likely due to a high student population as the Glasgow Kelvin constituency contains the University of Glasgow.

Information on population change in Scottish Parliamentary Consistencies between mid-2011 and mid-2018 is available in [Figure A](#) on the NRS website.

Figure 12: Population count by Scottish Parliamentary Constituency, mid-2018



UK Parliamentary Constituency populations

The Members of Parliament (MPs) at Westminster represent 59 Scottish constituencies. The population estimates in this section relate to the boundaries used in the 2015 and 2017 general elections for all years. Population estimates for [UK Parliamentary Constituencies](#) by single year of age and sex are available from the NRS website for years mid-2011 to mid-2018.

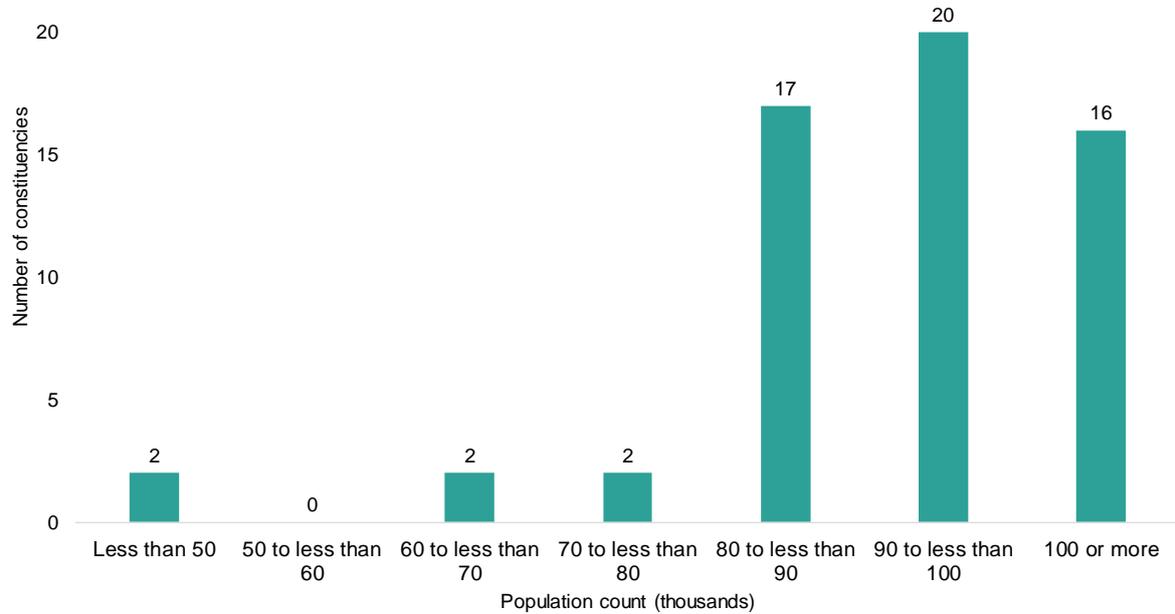
The constituency population estimates for mid-2018 ranged between 26,830 people (Na h-Eileanan an Iar) to 119,251 people (Linlithgow and East Falkirk). [Figure 13](#) shows that the majority of constituencies have a population of greater than 80,000 but less than 100,000 people. The proportion of people aged 18 and over⁵ in each constituency ranged from 77% in East Renfrewshire to 87% in Glasgow North. The

⁵ People aged 18 and over can vote in UK Parliament elections.

high proportion of people aged 18 and over is likely due to a high student population as the Glasgow North constituency contains the University of Glasgow.

Information on population change in UK Parliamentary Consistencies between mid-2011 and mid-2018 is available in [Figure B](#) on the NRS website.

Figure 13: Population count by UK Parliamentary Constituency, mid-2018



5. Background Notes

Consistent back series

The population estimates in this report are based on the 2011 Data Zone boundaries. Following the 2011 Census, the Scottish Government completed a consultation on the redrawing of data zone boundaries and finalised boundaries for the 2011 Data Zones were published at the end of 2014. More information on the [data zone geography](#) can be found on the Scottish Government website.

Along with this release, NRS have published a consistent back series of population estimates from 2001 to 2010 using the 2011 Data Zone boundaries. [Time series](#) of population estimates from 2001 to 2018 on the latest data zone boundaries are available on the NRS website.

Methodology

The small area population estimates are produced using the demographic cohort component method and are constrained to population estimates for Scottish council areas. More information about the methodology, including the strengths and limitations of the data can be found in the [methodology guide](#) on the NRS website.

There were no changes to the methodology for the mid-2018 small area population estimates. However, a summary of past changes to the population estimates methodology is available in the mid-year population estimates [methodology guide](#).

Accuracy

Although the figures reported in this publication and tables are given to unit level, it is not implied that the population estimates are accurate to this level of detail. The figures are not rounded to allow more accurate aggregation of data zones. The population estimates have gone through a number of stages of processing, each of which may impact on the quality of the estimates. Limitations in the administrative data sources used to produce the figures may increase the uncertainty of the estimates.

NRS have recently identified issues affecting historic estimates of student migration such as incorrect postcodes being assigned by GP practices and limited patient list cleaning. These problems have been corrected in the back series of SAPE published along with this release (for 2001 to 2010). From 2011 onwards, some student areas in Edinburgh City are affected with the largest overestimate being an extra 400 people in the data zone containing Heriot Watt campus. NRS have made manual adjustments to the mid-2018 SAPE to correct for these issues and will adjust accordingly when a back series of SAPE is produced on the 2021 Data Zones.

Quality of administrative data

A [report](#) is available on the NRS website providing information on the quality assurance arrangements for administrative data used in population estimates, along with information on the suitability of each data source used in the production of the population estimates.

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.

In 2018, NRS corrected an error in the Scottish mid-year population estimates for 2002 to 2010 due to an issue with the method of rebasing the population estimates using the 2011 Census results. [A document](#) outlining the statistical outputs affected and the overall impact can be found on the NRS website. SAPE for this period were corrected as part of the work to produce a consistent SAPE back series from 2001 to 2010 using the 2011 Data Zone boundaries.

Population estimates for other geographies

Data zones do not always fit the boundaries of other geographies exactly. In the case where a data zone boundary crosses that of another geography, it is allocated to the area that contains the population-weighted centroid of the data zone. An [evaluation of non-standard geography population estimates](#) was carried out to assess population estimates built up from data zones and showed this method gave good results for certain higher-level geographies.

Scottish and UK Parliamentary Constituencies

Population estimates for Scottish and UK Parliamentary Constituencies were derived by aggregating data zone population estimates. However, data zones do not always fit the constituency boundaries exactly and those that cross a boundary are allocated to the constituency that contains the population-weighted centroid of a data zones.

For Scottish Parliamentary Constituencies, previous research shows that the data zone to constituency fit was good in all areas except Glasgow Kelvin and Glasgow Maryhill and Springburn. Based on this research an adjustment has been made to the population of both data zones whereby 3.4% of the population of Glasgow Maryhill and Springburn is transferred from Glasgow Kelvin to Glasgow Maryhill and Springburn each year.

For UK Parliamentary Constituencies, previous research shows that the data zone to constituency fit was good in all areas except Glasgow North and Glasgow North West. Based on this research an adjustment has been made to the population of both data zones whereby 2.3% of the population of Glasgow North West is transferred from Glasgow North to Glasgow North West each year.

For both Scottish and UK Parliamentary Constituencies, the adjustments are spread equally across the age/sex distribution. More information of the adjustment method can be found in [The Evaluation of Non Standard Geography Population Estimates](#) report.

Definitions

- **Best-fit:** Aggregating data zones to a higher-level geography does not always give an exact match. In these cases, data zones are allocated on a 'best-fit' basis to give the best possible match. The [Geography Best Fit Matrix](#) on the Scottish Government website shows how well the boundaries for different geographies match, while the paper '[Evaluation of Non Standard Geography Population Estimates](#)' on the NRS website assesses the accuracy of population estimates built up from data zones.
- **Boxplots:** A box plot is sometimes used to visually represent data. It usually shows a measure of an average and the quartiles of the data.

The median is the midpoint of a group of values which have been arranged in ascending or descending order. Fifty percent of the values will be less than or equal to the median, the remainder will be greater than the median.

Quartiles are similar to the median, except that quartiles split the values into four equal groups instead of two. For example, the first quartile has the first 25% of the values. The first quartile is often called the lower quartile; the second quartile is the same as the median; the third quartile is often called the upper quartile and contains 75% of the values.

Unusually high maximum and minimum values are known as outliers or outer values, and can be present in large datasets. However, these extreme values do not represent where the majority of data points lies within a distribution of the dataset.

To provide an accurate representation of the population distribution, the boxplots used in this publication show the median, interquartile range (IQR) (the range between first (Q1) and third quartile (Q3)), and upper and lower fences. Upper fence includes values that lie within $1.5 \times \text{IQR}$ above the third quartile; and lower fence includes values that lie within $1.5 \times \text{IQR}$ below the first quartile. Outliers (or outer values) lie outside the upper and lower fences, and are shown as individual points on a boxplot. In other words, these boxplots show where the majority of the data lies, as well as the range of outer values ([Figure 2](#)).

- **Decile:** A decile splits a group of values which have been arranged in ascending or descending order into ten equal groups. For example, the first decile has the first ten percent of the values.
- **Population-weighted centroid:** This identifies the centre of a data zone by taking into account the size and location of the population, as well as the physical

characteristics of the data zone. More information is available in the paper '[Data Zone Centroids Methodology](#)' on the SG website.

- **Urban Rural Classification:** This Scottish Government classification is used to define urban, rural and remote areas in Scotland based on population density in different postcodes using NRS Small Area Population Estimates and the Royal Mail Postcode Address File. The definition of urban and rural areas is specific to Scotland and population estimates for these areas cannot be compared with similar estimates for other countries.

The latest 6-fold Urban Rural Classification categories are:

1. Large urban areas	Settlements of over 125,000 people
2. Other urban areas	Settlements of 10,000 to 125,000 people
3. Accessible small towns	Settlements of between 3,000 and 10,000 people and within a 30 minutes' drive of a settlement of 10,000 or more
4. Remote small towns	Settlements of between 3,000 and 10,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more
5. Accessible rural areas	Settlements of fewer than 3,000 people and within 30 minutes' drive of a settlement of 10,000 or more
6. Remote rural areas	Settlements of fewer than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more

6. Links to related statistics

Population estimates for various other geographies are available on the NRS website. This includes:

- Population estimates for [Scotland](#) and its constituent NHS Board and council areas.
- Population estimates for [other special areas](#) within Scotland including Parliamentary Constituencies, Electoral Wards, Scottish Index of Multiple Deprivation deciles, Urban Rural Classification and Nomenclature of Units for Territorial Statistics.
- Population estimates of [settlements and localities](#) within Scotland (latest available relates to mid-2016).

Data zones are unique to Scotland and cannot be compared directly with small area geographies used in other countries. However, more information on small area population estimates for other parts of the UK are available from:

- The Office for National Statistics (ONS) publish [small area population estimates](#) at Lower and Middle Super Output Areas for England and Wales.
- The Northern Ireland Statistics and Research Agency (NISRA) publish [small area population estimates](#) for Super Output Areas in Northern Ireland.

How to find data

Where is it?

[Tables and figures](#)

[Times series data](#)

[Excel tables](#)

[Open data](#)

[Interactive data visualisation](#)

What are you looking for?

The data used in this publication in Excel and CSV format

Time series of small area population estimates, 2001 to 2018

Population estimates for other geographies

The mid-2018 population estimates will be available as open data within one month of publishing

Select and compare population estimates for Scotland and its council areas

7. 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 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 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.
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