

Mid-2011 to Mid-2014 Small Area Population Estimates Scotland

Population estimates by sex, age and 2011 Data
Zone

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Contents

Main Points	4
1. Introduction and Background	5
2. 2011 Data Zone Population Estimates, 2014	7
3. 2011 Data Zone Population Change, 2011 – 2014	13
4. Other Small Area Population Estimates	15
5. Notes and Definitions	28
6. Notes on statistical publications	31
7. Related organisations.....	33

List of Tables

Table 2.1: Characteristics of the 317 2011 Data Zones with a population of fewer than 500	8
Table 2.2: Characteristics of the 22 2011 Data Zones with a population of 1,500 or more..	8
Table 2.3: 2011 Data Zone population summary statistics by Council area, 2014.....	9
Table 3.1: 2011 Data Zones within broad population bands, 2011 - 2014.....	13
Table 3.2: 2011 Data Zone population summary statistics, 2011 - 2014	13
Table 3.3: Population change summary, 2011 – 2014.....	14
Table 4.1: Population estimate by 6-fold urban rural classification, 2014	16
Table 4.2: Population estimates by NUTS2, NUTS3 and NUTS4/LAU1 areas, 2014	19

List of Figures

Figure 2.1: Distribution of 2011 Data Zone population, 2014.....	7
Figure 2.2: 2011 Data Zone population summary statistics by Council area, 2014	10
Figure 2.3: Median age distribution of 2011 Data Zone population, 2014 by sex	11
Figure 2.4: Distribution of median ages throughout Scotland	12
Figure 4.1: Urban Rural 2013 – 2014 comparison of population and area	17
Figure 4.2: Change in population by NUTS2 area, 2011 – 2014	21
Figure 4.3: Population Frequency count by 2011 Scottish Parliamentary Constituency, 2014	22
Figure 4.4: 2011 Scottish Parliamentary Constituency, percentage change between mid-2011 and mid-2014 population estimates	23
Figure 4.5: Population frequency count by UK Parliamentary Constituency, 2014	24
Figure 4.6: UK Parliamentary Constituency, percentage change between mid-2011 and mid-2014 population estimates	26

Main Points

The main points in this report are:

- The small area population estimates for mid-2011 to mid-2014 in this report are based on the 2011 Data Zone boundaries. This series provides a consistent time-series of population estimates from mid-2011 to mid-2014 for each 2011 Data Zone in Scotland.
- As at 30 June 2014, the total estimated population of Scotland was 5,347,600 the highest ever. The population estimates for the 6,976 data zones in Scotland range from 0 to 3,302. But only 317 2011 Data Zones (4.5 per cent) had a population of fewer than 500 and 22 (0.3 per cent) had a population of 1,500 or more.
- The average population in a data zone for Scotland was 767. The council area with the highest average data zone population was Edinburgh, City of at (825). The council areas with the lowest average data zone populations were Argyll & Bute and Inverclyde (701).
- The median age, the age where half the population are below and above this age, for the population of Scotland as a whole in 2014 was 41. But the age distribution of 2011 Data Zones population varies considerably and the median ages ranged from 19 to 72 in 2014. The peak occurred in the 40-45 age group, with 2,330 data zones having a population median age of between 40 and 45.
- The population of most 2011 Data Zones has not changed by much over the past year, but a few experienced more substantial changes. Between mid-2011 and mid-2014 the population of 6,433 data zones changed by less than 10 per cent, while 17 data zones decreased by 20 per cent or more and the population of 177 2011 Data Zones increased by 20 per cent or more. These tended to be areas of demolition and house building.
- In 2014 over 69 per cent of the population of Scotland live in settlements of 10,000 or more people.
- The population of rural areas has grown at a faster rate than non-rural areas since 2011 (based on the 2013-2014 Scottish Government Urban Rural Classification).

1. Introduction and Background

This report summarises the mid-2011 to mid-2014 small area population estimates (SAPE) for the 6,976 2011 Data Zones in Scotland. 2011 Data Zone population estimates, by age and sex will be updated annually by the National Records of Scotland (NRS) following the publication of the mid-year population estimates at council and NHS board area levels (available at Mid-2014 Population Estimates Scotland). The 2011 Data Zone estimates are consistent with the mid-year population estimates for council areas.

The 2011 Data Zone population estimates in this report are based on the 2011 Census. This report is accompanied by a full set of tables showing the mid-2011, mid-2012, mid-2013 and mid-2014 population estimates for 2011 Data Zones by sex and single year of age. They are available on the [Small Area Population Estimates](#) section of the NRS website. Following the release of this publication NRS will be publishing a consistent back series of population estimates from 2001 to 2010 using 2011 Data Zone boundaries, these will be available by summer 2016.

2011 Data Zone population estimates are an important aspect of providing information at neighbourhood level. They can be used as building blocks for a variety of different geographies that can inform planning and the provision of services at sub-Council area level. They are used as the denominator in many of the rates available on the [Scottish Neighbourhood Statistics](#) website and the new open data publishing platform. They 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).

[Section 2](#) of this report highlights some of the main points to emerge from the mid-2014 population estimates at 2011 Data Zone level, while [Section 3](#) discusses some of the changes that have occurred between 2011 and 2014.

In addition, a number of other tables have been updated. These are the population estimates for urban/rural areas, the European Union statistical geography areas and parliamentary constituencies. The mid-2011 to mid-2014 estimates for each of these areas, built up from 2011 Data Zones on a best-fit basis, have been added to the [2011 Data Zone based Special Area Population Estimates](#) section of the NRS website. A summary of the main points from these tables is included in [Section 4](#).

2011 Data Zones are small area geography used by Scottish Government to allow statistics to be available across a number of policy areas. The 2011 Data Zone boundaries were developed following the 2011 Census. The 2011 Data Zone boundaries were created to nest within Council area boundaries and to have populations of between 500 and 1,000 household residents. As much as possible, 2011 Data Zones were set up to contain households with similar social characteristics and to take into consideration physical boundaries. More information on the 2011 Data Zone geography can be found on the Scottish Government website.

Although the figures reported here and in the tables are given to unit level, it is not implied that the population estimates are accurate to this level of detail. The reason the figures are not rounded is to allow more accurate aggregation of 2011 Data Zones. The population figures are estimates that have gone through a number of stages of processing, each of which may impact on the quality of the estimates. Also, there are limitations with the administrative data sources used to produce the figures which may increase the uncertainty in the estimates.

2011 Data Zones are unique to Scotland and cannot be compared with small area geographies used in other countries.

These population estimates are produced using the demographic cohort component method. The population from the previous year is 'aged on' one year (that is the 0 year olds become 1 year olds, and so on), the number of births in the year are added, the number of deaths subtracted and adjustments are made for estimated migration and other changes in special populations.

Small area population estimates have been assessed by the UK Statistics Authority and have been designated as National Statistics subject to completing five requirements. The assessment report¹ can be found on the UK Statistics Authority website. Some of the suggestions in the report for the publication have been addressed in this report. For example, Reference, or link to, relevant information about data assurance arrangements for administrative data from all population estimates and projections reports.

For ease of presentation 2011 Data Zones will be referred to in the main body of the text as data zones. Data zones are unique to Scotland and cannot be compared with small area geographies used in other countries. For more information on small area population estimates for England and Wales go to the [Office for National Statistics \(ONS\)](#) website and for [Northern Ireland go to the Northern Ireland Statistics and Research Agency \(NISRA\)](#) website. A paper describing the [Small Area Population Estimates across the UK](#) (PDF document) is also available on the NISRA website.

The methodology used to calculate mid-year population estimates is constantly being improved. In consultation with users on the [Population and Migration Statistics Committee](#) (information available on the NRS website), for the mid-2011 estimates onwards we have made improvements to the distributions we apply to international migration estimates and have introduced an adjustment to account for increases in the prison population. More details are found within the updated [methodology](#) paper for mid-year estimates (MYE) on the NRS website. As well as the methodology paper for the MYE at Council area there is also a [methodology](#) paper available for 2011 Data Zone estimates available on the NRS website.

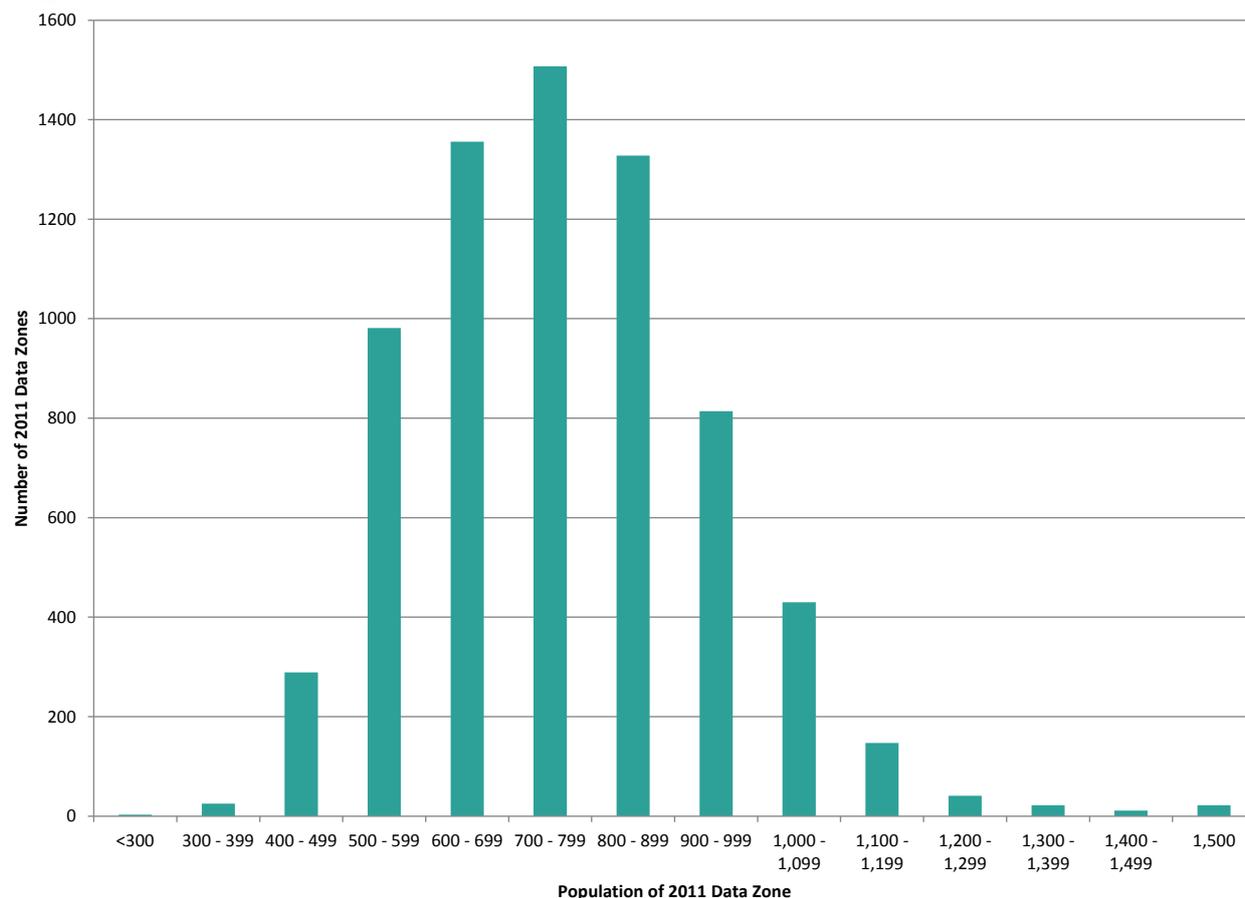
Footnote

1) UK Statistics Authority (2015). Assessment Report 311 [Population estimates and projections for Scotland \(National Records of Scotland\)](#) .

2. 2011 Data Zone Population Estimates, 2014

The overall estimated population of Scotland at 30 June 2014 was 5,347,600. The population of the 6,976 data zones in Scotland at this time ranged from 0 to 3,302 but the vast majority of the data zones (5,986) had between 500 and 999 people (Figure 2.1). A total of 317 data zones had a population of fewer than 500, while 22 had a population of 1,500 or more. Some of these 22 data zones had a population size substantially greater than 1,500 and, as a result, the mean (average) population size of 767 was higher than the median² (midpoint) of 753.

Figure 2.1: Distribution of 2011 Data Zone population, 2014



The 317 data zones with a population fewer than 500 in 2014 were spread throughout Scotland, with no council area having a particularly high number of data zones in this category – South Lanarkshire was the highest with 29 (Table 2.1). One council area (Shetland Islands) had no data zones with a population fewer than 500.

Many of these 317 data zones, especially those with a population fewer than 400, are in areas that have been targeted for regeneration by Community Planning Partnerships (CPPs). Because of the relatively small size of data zones major regeneration projects and housing developments can have a big impact on the population size and could, for example, result in the demolition of most or all of the dwellings in a data zone. Two data zones in Glasgow no longer had anybody living in them in 2014.

Footnote

2) The term 'median' used in this report refers to the midpoint value of a distribution – the $((n+1)/2)$ highest value. For example, the median of the Data Zone populations in Scotland is the $(6,976 + 1)/2$ which lies between the 3,488th and 3,489th highest population, which for 2014 was 753.

When analysed by urban rural classification, the number of data zones with a population of fewer than 500 is largely determined by the percentage of the total population living in each classification (see Section 4). Most of the 317 data zones are in urban areas, largely because these are the areas where most data zones are located.

Table 2.1: Characteristics of the 317 2011 Data Zones with a population of fewer than 500

Location		Urban/Rural	
Council	No. of 2011 Data Zones	Classification ¹	No. of 2011 Data Zones
South Lanarkshire	29	Large urban area	107
Edinburgh, City of	23	Other urban area	118
Glasgow City	22	Accessible small towns	22
Fife	21	Remote small towns	12
Aberdeenshire	19	Accessible rural	48
Others	< 16	Remote rural	10

Footnote

1) 2013-2014 Urban Rural Classification.

There were 22 data zones with a population of 1,500 or more in 2014. These data zones were spread throughout Scotland, with no council area having a particularly high number of data zones in this category – six in Glasgow City was the highest (Table 2.2). Twenty one council areas had no data zones with a population of 1,500 or more.

Many of the 22 data zones are in areas where house building has pushed up the local population in recent years. Others have a high population because of the presence of large communal establishments such as prisons, armed forces bases, or students' halls of residence. The relatively high number of data zones which have populations are within accessible small towns and this may indicate the development of rural areas close to cities and larger towns.

Table 2.2: Characteristics of the 22 2011 Data Zones with a population of 1,500 or more

Location		Urban/Rural	
Council	No. of 2011 Data Zones	Classification ¹	No. of 2011 Data Zones
Glasgow City	6	Large urban	8
Edinburgh, City of	4	Other urban	3
Aberdeen City	3	Accessible small towns	7
Others	< 2	Remote small towns	1
		Accessible rural	0
		Remote rural	3

Footnote

1) 2013-2014 Urban Rural Classification.

Table 2.3 shows how the characteristics of the data zones differed between council areas in 2014. The highest mean (average) data zone populations were for Edinburgh, City of (825), East Dunbartonshire (821) and Aberdeen City (809). The lowest average populations were for Argyll & Bute (701), Inverclyde (701) and Clackmannanshire (711). For all but two council areas (South Ayrshire and West Dunbartonshire) the median (midpoint) was lower than the mean (average). This is likely to indicate that most council areas have a number of data zones with large populations that inflate the mean but have no effect on the median. The lower quartile indicates the population below which 25 per

cent of the 283 data zones in Aberdeen City have a population of 663 or fewer. Similarly, the upper quartile indicates the population above which 25 per cent of the data zones lie for each council area. So, 25 per cent of the 283 data zones in Aberdeen City have a population of 919 or more. In other words, 50 per cent of data zones have a population between the lower and upper quartile values.

As can be seen from Table 2.3 and [Figure 2.2](#) Edinburgh, City of has the data zone with the largest population in Scotland. The data zone in question is S01008425, within the larger intermediate zone of Currie West, this data zone contains Heriot Watt University and as such has multiple large communal establishments. More information on how to interpret boxplots can be found in [Section 5](#).

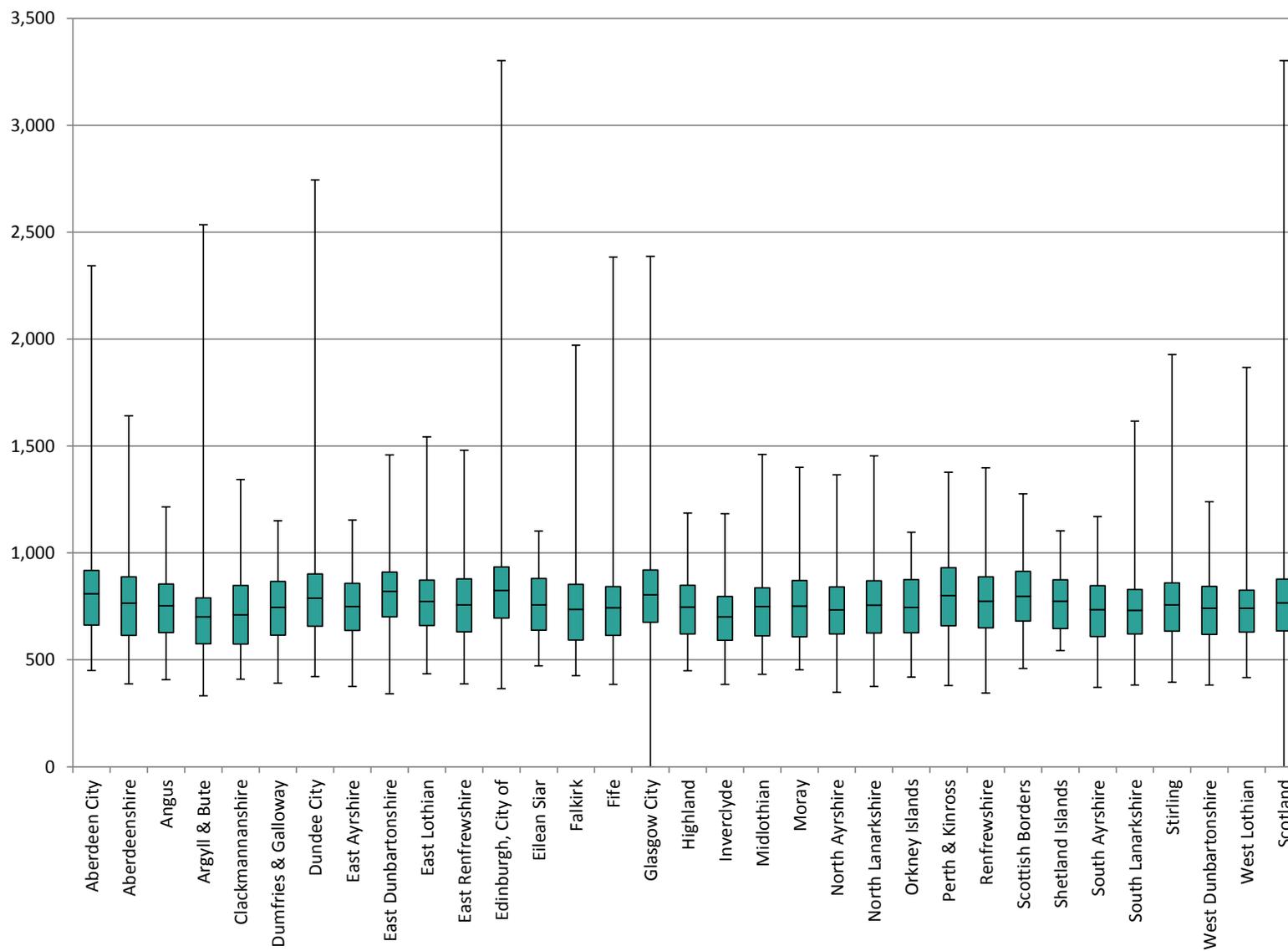
Table 2.3: 2011 Data Zone population summary statistics by Council area, 2014

Council		2011 Data Zone Population Estimates, 2014							
Name	Number of 2011 Data Zones	Total population*	Minimum population	Maximum population	Mean population	Median population	Lower quartile	Upper quartile	
Aberdeen City	283	228,990	450	2,343	809	801	663	919	
Aberdeenshire	340	260,500	387	1,641	766	766	615	888	
Angus	155	116,660	407	1,215	753	749	628	855	
Argyll & Bute	125	87,660	332	2,535	701	684	575	790	
Clackmannanshire	72	51,190	409	1,343	711	688	574	848	
Dumfries & Galloway	201	149,940	391	1,150	746	736	615	867	
Dundee City	188	148,260	422	2,744	789	770	657	902	
East Ayrshire	163	122,150	375	1,154	749	744	638	858	
East Dunbartonshire	130	106,730	341	1,459	821	821	701	910	
East Lothian	132	102,050	435	1,543	773	753	660	873	
East Renfrewshire	122	92,380	387	1,480	757	752	631	879	
Edinburgh, City of	597	492,680	366	3,302	825	817	695	935	
Eilean Siar	36	27,250	472	1,102	757	750	638	881	
Falkirk	214	157,640	426	1,972	737	722	592	853	
Fife	494	367,260	385	2,384	743	734	614	842	
Glasgow City	746	599,650	0	2,387	804	796	676	920	
Highland	312	233,100	449	1,187	747	728	621	849	
Inverclyde	114	79,860	385	1,183	701	699	592	796	
Midlothian	115	86,210	432	1,461	750	689	612	837	
Moray	126	94,750	453	1,400	752	719	608	871	
North Ayrshire	186	136,450	348	1,365	734	727	621	842	
North Lanarkshire	447	337,950	376	1,454	756	737	626	870	
Orkney Islands	29	21,590	419	1,097	744	736	627	875	
Perth & Kinross	186	148,880	380	1,377	800	797	659	931	
Renfrewshire	225	174,230	345	1,398	774	765	650	889	
Scottish Borders	143	114,030	460	1,276	797	796	682	914	
Shetland Islands	30	23,230	543	1,103	774	755	647	875	
South Ayrshire	153	112,510	371	1,170	735	741	609	847	
South Lanarkshire	431	315,360	382	1,616	732	727	621	829	
Stirling	121	91,580	395	1,928	757	750	634	860	
West Dunbartonshire	121	89,730	382	1,239	742	748	619	844	
West Lothian	239	177,150	417	1,867	741	721	630	827	

Footnote

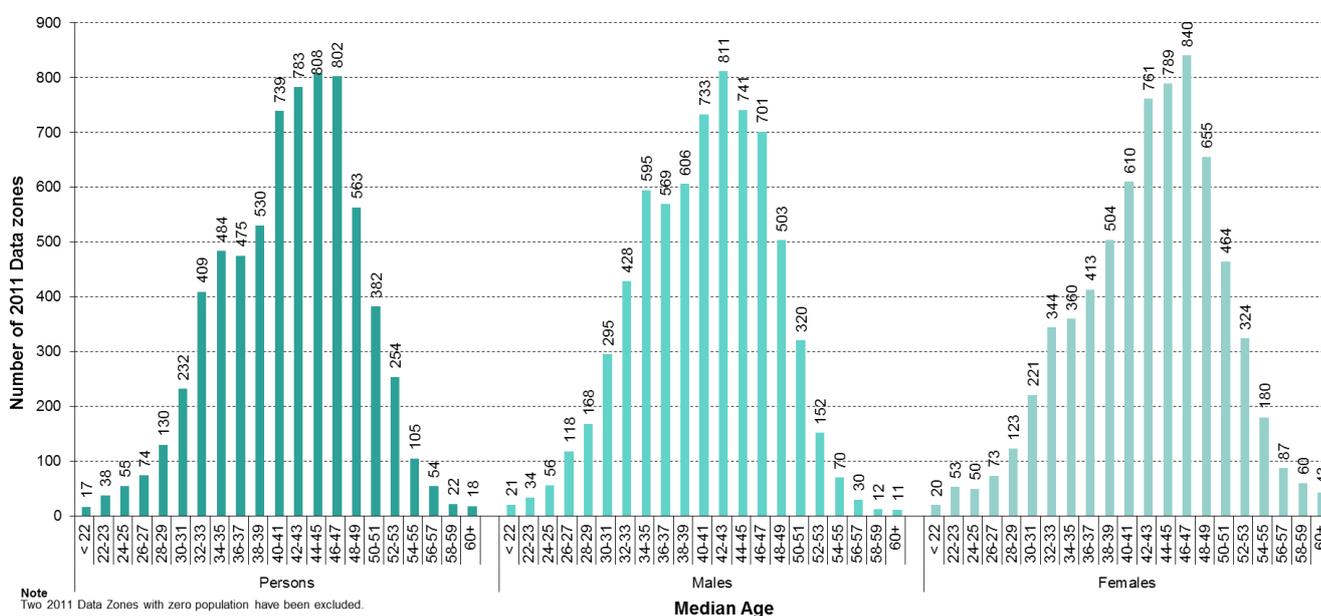
*Source: Mid-2014 Population Estimates Scotland, available on the National Records of Scotland (NRS) website.

Figure 2.2: 2011 Data Zone population summary statistics by Council area, 2014



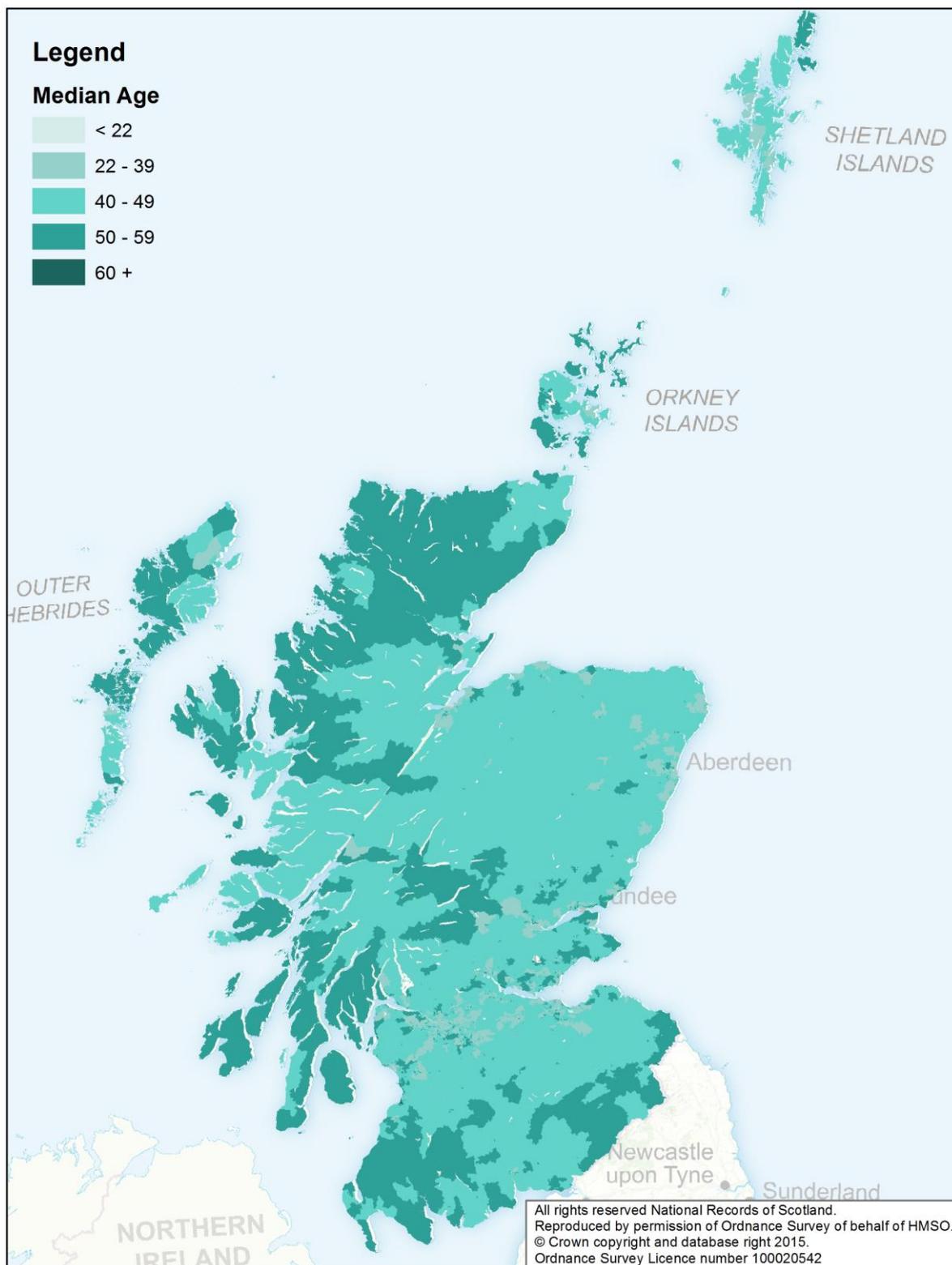
As well as varying by population size the age distribution of data zone populations varies considerably (Figure 2.3). While the median (midpoint) age for Scotland as a whole was 41, the median ages at data zone level ranged from 19 to 72 years. There were 17 data zones with a population median age of less than 22. These are areas with a high student population (living either in residential accommodation or halls of residence) or data zones with some other type of large communal establishment for young people, such as a young offenders institution. At the other end of the scale there were 18 data zones with a median age of 60 or more. These were mainly in popular retirement areas and data zones with substantial accommodation for the elderly. The peak age group was the early 40's, with 2,330 data zones having a population median age between 40 and 45.

Figure 2.3: Median age distribution of 2011 Data Zone population, 2014 by sex



The map in Figure 2.4 shows that data zones with younger median ages are generally located around the urban areas (lighter shaded areas).

Figure 2.4: Distribution of median ages throughout Scotland



3. 2011 Data Zone Population Change, 2011 – 2014

Between mid-2011 and mid-2014 the overall population of Scotland increased by 47,700 from 5,299,900 to 5,347,600. Table 3.1 shows how the data zone population sizes have changed over this period. The data zones were set up to have a total household population of between 500 and 1,000 wherever possible. Since 2011 the number of data zones with a population of fewer than 500 has remained fairly constant, from 313 in 2011 to 317 in 2014. However there are now over 100 more data zones with a population of 1,000 or more, growing from 565 in 2011 to 673 in 2014. A number of these large data zones contained sizeable non-household populations, such as prisons, halls of residence and care homes.

Table 3.1: 2011 Data Zones within broad population bands, 2011 - 2014

	<300		300-499		500-999		1,000-1,499		1,500 +	
	No.	%	No.	%	No.	%	No.	%	No.	%
2011	1	0.0	312	4.5	6,098	87.4	551	7.9	14	0.2
2012	1	0.0	306	4.4	6,065	86.9	559	8.5	14	0.2
2013	3	0.0	321	4.6	6,017	86.3	616	8.8	19	0.3
2014	3	0.0	314	4.5	5,986	85.8	651	9.3	22	0.3

Note

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

Table 3.2 further illustrates the changes in data zone populations since 2011. Both the mean (average) and median (midpoint) data zone population have seen a slight increase over the four years, from 760 and 751 in 2011 to 767 and 753 in 2014 respectively. The percentiles and quartiles show the population below which a particular percentage of the population lies³. In 2014, for example, five per cent of the data zones in Scotland had a population of 504 or less. The spread of the lower and upper quartiles has remained fairly constant from 239 in 2011 to 242 in 2014⁴, the spread from the 5th to the 95th percentile has seen an increase from 532 in 2011 to 558 in 2014.

Table 3.2: 2011 Data Zone population summary statistics, 2011 - 2014

Year	Minimum population	Maximum population	Mean population	Median population	5th percentile	Lower quartile	Upper Quartile	95th percentile
2011	145	2,943	760	751	506	634	873	1,038
2012	162	2,918	762	752	506	635	874	1,050
2013	0	3,345	764	752	504	636	875	1,056
2014	0	3,302	767	753	504	635	877	1,062

Table 3.3 provides further information on the nature of the changes at data zone level between 2011 and 2014. Although the population of Scotland increased overall between 2011 and 2014, more data zones had a decrease in population than an increase in population. In this period the population of 3,694 (53.0 per cent) decreased, while 3,197 data zones (47.0 per cent) either increased or had the same population in these years.

Most of the big changes were in data zones where the population increased. A total of 177 data zones had population increases of 20 per cent or more, compared with 17 data zones

Footnotes

3) The lower quartile is the same as the 25th percentile and upper quartile is the same as the 75th percentile.

4) The range (called the inter-quartile range) is 873 – 634 = 239 for 2011, and 877 – 635 = 242 for 2014.

which had a comparable population decrease. By contrast, most of the small changes were in data zones where the population decreased. A total of 6,433 data zones had a population change of less than 10 per cent, of which 3,608 data zones had a population decrease, compared with 2,740 which had an increase (the other 85 had the same population in 2011 as in 2014). Many of the small decreases may be related to the declining average household size in recent years, with more people living alone or in smaller households⁵.

Table 3.3: Population change summary, 2011 – 2014

Change in Population 2011-2014	Number of 2011 Data Zones	Percentage of 2011 Data Zones
Total increase	3,197	45.8
50% or more increase	30	0.4
20% to < 50% increase	147	2.1
10% to < 20% increase	280	4.0
5% to < 10% increase	589	8.4
< 5% increase	2,151	30.8
No change	85	1.2
< 5% decrease	2,981	42.7
5% to < 10% decrease	627	9.0
10% to < 20% decrease	69	1.0
20% to < 50% decrease	15	0.2
50% to 100% decrease	2	0.0
Total decrease	3,694	53.0

Footnote

5) National Records of Scotland (2015). 'Estimates of Households and Dwellings in Scotland, 2014'.

4. Other Small Area Population Estimates

In addition to data zone population estimates, National Records of Scotland (NRS) also publish 'best-fit' data zone-based population estimates for other geographies:

- Scottish Government urban rural classification;
- Nonmenclature of Units for Territorial Statistics (NUTS) – the statistical geography of the European Union;
- Scottish Parliamentary Constituencies (SPC); and
- United Kingdom Parliamentary Constituencies (UKPC).

These estimates are produced by aggregating the data zone population estimates, using the appropriate geography area lookup tables. The data zone lookup tables can be found in the [Scottish Neighbourhood Statistics](#) (SNS) reference section of the Scottish Government website. Data zones do not always fit these other boundaries exactly. In this case where a data zone boundary crosses that of another geography, the data zone is allocated to the area that contains the population-weighted centroid of the data zone. An evaluation of the non-standard geography population estimates⁶ was carried out to assess population estimates built up from data zones. This showed that, for certain higher-level geographies, population estimates built up from data zones gave good results.

In the past we have also published population estimates based on the Scottish Index of Multiple Deprivation (SIMD). However, at the current moment and time the SIMD has not been published on the 2011 Data Zone boundaries. There is currently a review of the SIMD process and more information can be found on the [Scottish Government](#) website.

Urban Rural Classification Populations

The Scottish Government Urban Rural Classification defines urban and rural areas across Scotland. The classification is based on population and accessibility (using drive-time analysis to identify accessible and remote areas). The main classifications are the 6-fold and 8-fold classifications which distinguish between urban, rural and remote areas using six and eight categories, respectively. Each data zone is assigned to one of the categories. The classification is updated every two years and the population estimates published alongside this publication are based on the 2013-2014 classification for all years. More background information on the urban rural classification is available on the Scottish Government's Urban Rural Classification website. More information on the 6-fold and 8-fold Urban Rural classifications can be found in [Section 5](#).

Population Estimates by Urban Rural Classification for the 6-fold and 8-fold classifications are available on the NRS website. The mid-2014 population estimates, based on the 2013-2014 6-fold classification, show that over 69 per cent of the population of Scotland live in settlements of 10,000 or more people (the 'large urban' and 'other urban' areas), while over 900,000 people live in 'accessible' and 'remote' rural areas (Table 4.1).

Footnote

6) Further details available within the Evaluation of Non Standard Geography Population Estimates publication on the NRS website.

Table 4.1: Population estimate by 6-fold urban rural classification, 2014

Classification	2014 population	2014 population (%)
Large urban areas	1,785,201	33.4
Other urban areas	1,927,232	36.0
Accessible small towns	525,349	9.8
Remote small towns	192,685	3.6
Accessible rural areas	586,649	11.0
Remote rural areas	330,484	6.2

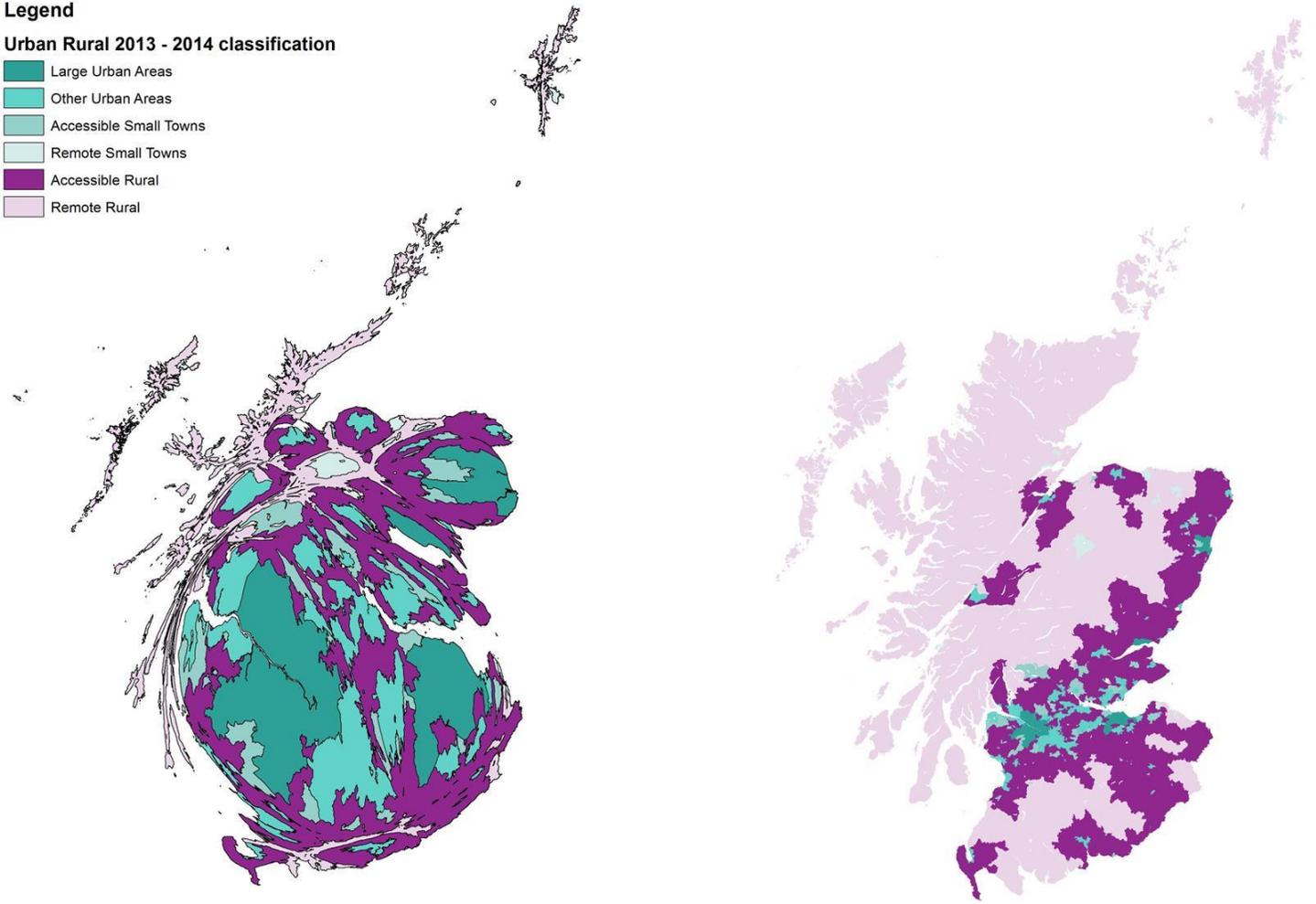
Figure 4.1 shows two maps of Scotland, the one on the right shows how the 6-fold Urban Rural classification is represented in Scotland. The green areas are the urban classifications and the purple areas are the rural areas. As expected large sections of Scotland are rural. The map on the left is a distorted map of Scotland where the geometry of the map has been distorted according to the mid-2014 population estimates. The shape of Scotland changes dramatically, as most of the population of Scotland live in either large urban or other urban the green areas become a lot more dominant.

Figure 4.1: Urban Rural 2013 – 2014 comparison of population and area

Legend

Urban Rural 2013 - 2014 classification

- Large Urban Areas
- Other Urban Areas
- Accessible Small Towns
- Remote Small Towns
- Accessible Rural
- Remote Rural



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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. Urban and rural population estimates can be used to support the work of various national and local authority government departments, such as the Rural Development Council⁷.

Nomenclature of Units for Territorial Statistics (NUTS) Populations

The European Union Nomenclature of Units for Territorial Statistics (NUTS) Regulation, enacted in June 2003, formalised the statistical geography of the European Union (EU). The United Kingdom NUTS structure was established in 1998 following an extensive consultation exercise. Some changes were made to the structure following a review in 2006 and 2012. The latest review took place in 2014, during this time no changes were made to the Scottish boundaries. The purpose of the NUTS regional structure is to provide a single uniform breakdown of territorial units for the production of regional statistics for the EU. The NUTS regional structure is used for various policy funding allocations whereby if any NUTS2 region has a Gross Domestic Product (GDP) per head of fewer than 75 per cent of the EU average it is entitled to financial support.

There are three levels of NUTS geography. It is a hierarchical structure – Scotland is one of the NUTS1 areas of the UK. Within Scotland there are 4 NUTS2 areas and 23 NUTS3 areas. The previously named NUTS4 areas were renamed Local Administrative Units (LAU1) but were not included in the regulation – there are 41 LAU1 areas in Scotland. Maps of the NUTS/LAU areas of Scotland are included in the Boundary Mapping section of the Scottish Government website.

NUTS Population Estimates by single year of age and sex for NUTS2, NUTS3 and LAU1 areas are provided on the NRS website. [Table 4.2](#) shows the population breakdown for mid-2014, at NUTS2, NUTS3 and LAU1 areas. These population estimates were derived by aggregating data zone estimates. Many NUTS areas are equivalent to council areas or groups of Council areas.

Footnote

7) Refer to, for example, 'Socio-economic briefing on rural Scotland: Demography', 2010 publication on Scottish Government website.

Table 4.2: Population estimates by NUTS2, NUTS3 and NUTS4/LAU1 areas, 2014

NUTS2 Name	NUTS3 Name	LAU1 Name	NUTS2 Population $n_2 = \sum n_3^*$	NUTS3 Population $n_3 = \sum n_4$	LAU1 Population n_4
Eastern Scotland	Angus and Dundee City	Angus	2,053,590	264,920	116,660
		Dundee City			148,260
	Clackmannanshire and Fife	Clackmannanshire		418,450	51,190
		Fife			367,260
	East Lothian and Midlothian	East Lothian		188,260	102,050
		Midlothian			86,210
	Scottish Borders	Scottish Borders		114,030	114,030
	Edinburgh, City of	Edinburgh, City of		492,680	492,680
	Falkirk	Falkirk		157,640	157,640
	Perth and Kinross and Stirling	Perth and Kinross		240,460	148,880
Stirling		91,580			
West Lothian	West Lothian	177,150	177,150		
South Western Scotland	East Dunbartonshire, West Dunbartonshire and Helensburgh and Lomond	Helensburgh and Lomond	2,337,146	222,623	26,163
		West Dunbartonshire			89,730
		East Dunbartonshire			106,730
	Dumfries and Galloway	Dumfries and Galloway		149,940	149,940
	East Ayrshire and North Ayrshire mainland	East Ayrshire		252,643	122,150
		North Ayrshire mainland			130,493
	Glasgow City	Glasgow City**		600,771	599,650
	Inverclyde, East Renfrewshire and Renfrewshire	East Renfrewshire		346,470	92,380
		Renfrewshire			174,230
		Inverclyde			79,860
	North Lanarkshire	North Lanarkshire**		336,829	337,950
	South Ayrshire	South Ayrshire		112,510	112,510
	South Lanarkshire	South Lanarkshire		315,360	315,360

* \sum = sum

** LAU1 areas for Glasgow City and North Lanarkshire don't equal those of the NUTS3 due to changes in boundaries. Due to legislation LAU boundaries changed following the change of Council area boundaries in 2011, whereas the NUTS boundaries weren't subject to the same legislation and didn't change.

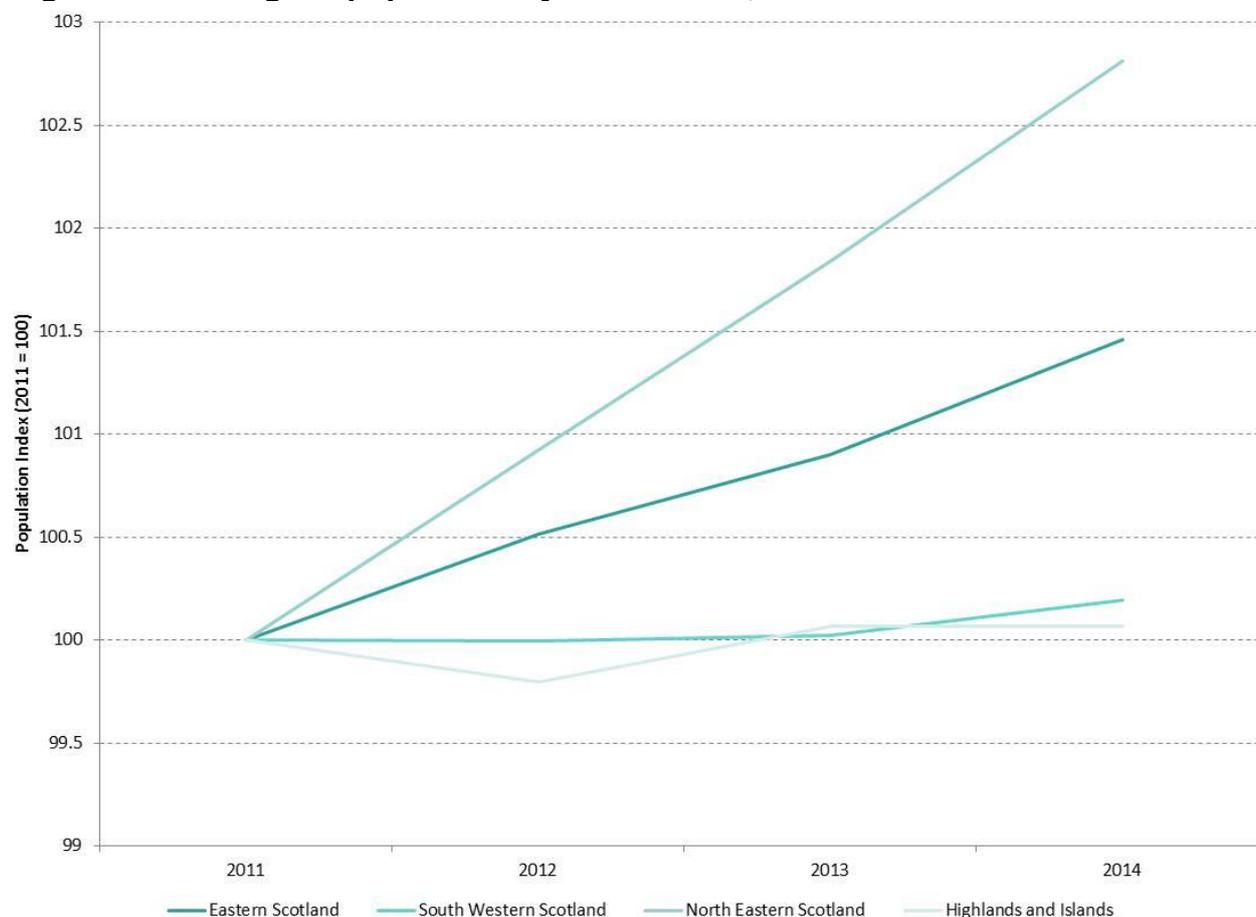
Table 4.2: Population estimates by NUTS2, NUTS3 and NUTS4/LAU1 areas, 2014 - continued

NUTS2 Name	NUTS3 Name	LAU1 Name	NUTS2 Population $n_2 = \sum n_3^*$	NUTS3 Population $n_3 = \sum n_4$	LAU1 Population n_4	
North Eastern Scotland	Aberdeen City and Aberdeenshire	Aberdeen City	489,490	489,490	228,990	
		Aberdeenshire			260,500	
Highlands and Islands	Caithness and Sutherland and Ross and Cromarty	Ross and Cromarty	467,374	93,761	54,631	
		Caithness and Sutherland			39,130	
	Inverness and Nairn and Moray, Badenoch and Strathspey		Inverness and Nairn	201,234		92,830
			Badenoch and Strathspey			13,654
			West Moray			23,854
			North East Moray			70,896
	Lochaber, Skye and Lochalsh, Arran and Cumbrae and Argyll and Bute		Arran and Cumbrae	100,309		5,957
			Argyll and Bute Islands			7,323
			Argyll and Islands			54,174
			Lochaber			19,772
			Skye and Lochalsh			13,083
	Eilean Siar (Western Isles)				27,250	27,250
	Orkney Islands				21,590	21,590
	Shetland Islands				23,230	23,230

* \sum = sum

Since 2011, the populations of the NUTS2 areas South Western Scotland and Highlands and Islands have increased slightly by around 0.1 per cent (Figure 4.2). The population of Eastern Scotland has grown by 1.5 per cent, while the population of North Eastern Scotland has changed by over 2.8 per cent during this period.

Figure 4.2: Change in population by NUTS2 area, 2011 – 2014



Scottish Parliamentary Constituency Populations

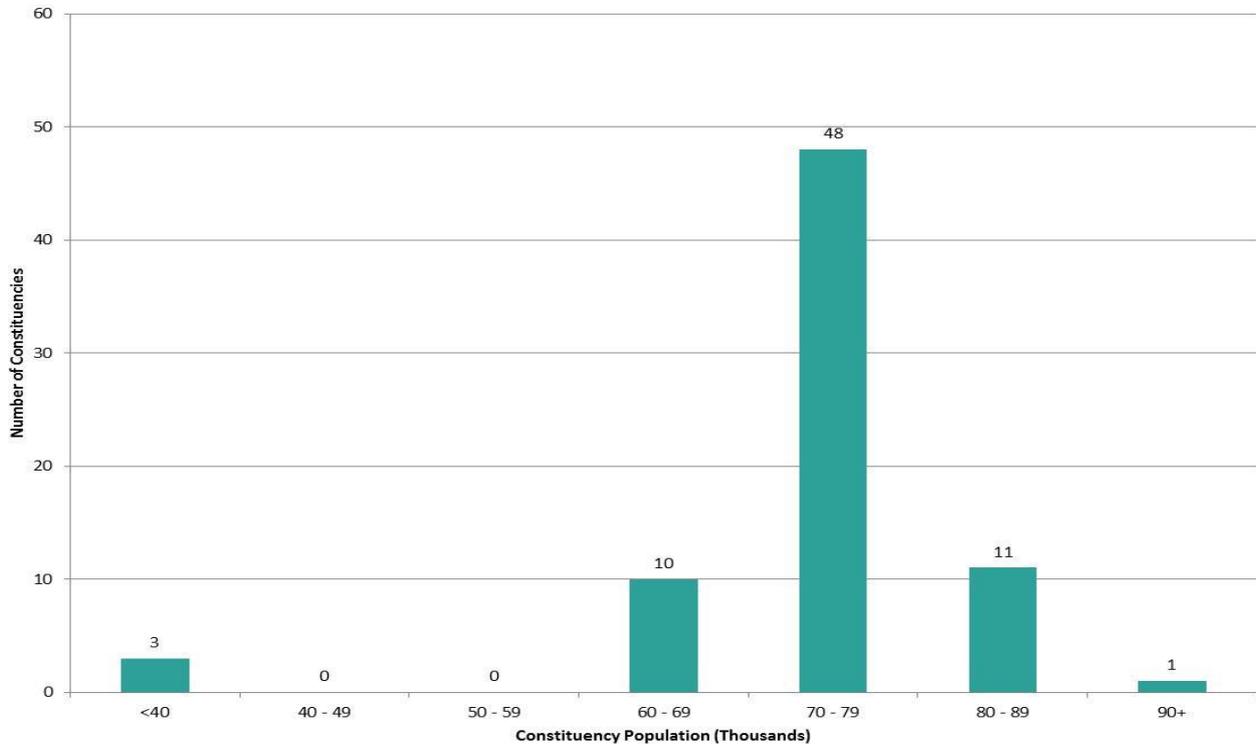
The Members of the Scottish Parliament (MSPs) at Holyrood represent 73 constituencies. The constituency boundaries were re-drawn for the 2011 election. The population estimates reported here relate to the 2011 boundaries.

Constituency population estimates were derived by aggregating data zone population estimates. However, data zones do not always fit the constituency boundaries exactly and those that cross a constituency boundary are allocated to the constituency that contains the population-weighted centroid of the data zone. Previous research showed that the 2011 Data Zone to constituency fit was good in all constituencies except Glasgow Maryhill and Springburn and Glasgow Kelvin. Based on this research an adjustment of +3.4 per cent has been made to the population of Glasgow Maryhill and Springburn each year, spread equally across the age/ sex distribution. A corresponding adjustment of -3.4 per cent has been made to Glasgow Kelvin.

Scottish Parliamentary Constituency Population Estimates by single year of age and sex are available on the NRS website. The constituency population estimates for 2014 ranged

from 21,590 (Orkney Islands) to 91,769 (Linlithgow). [Figure 4.3](#) shows the distribution of constituency populations, with the majority between 70,000 and 80,000. The proportion of people aged 18 and over⁸ ranged from 76.9 per cent in Eastwood to 90.4 per cent in Glasgow Kelvin.

Figure 4.3: Population Frequency count by 2011 Scottish Parliamentary Constituency, 2014

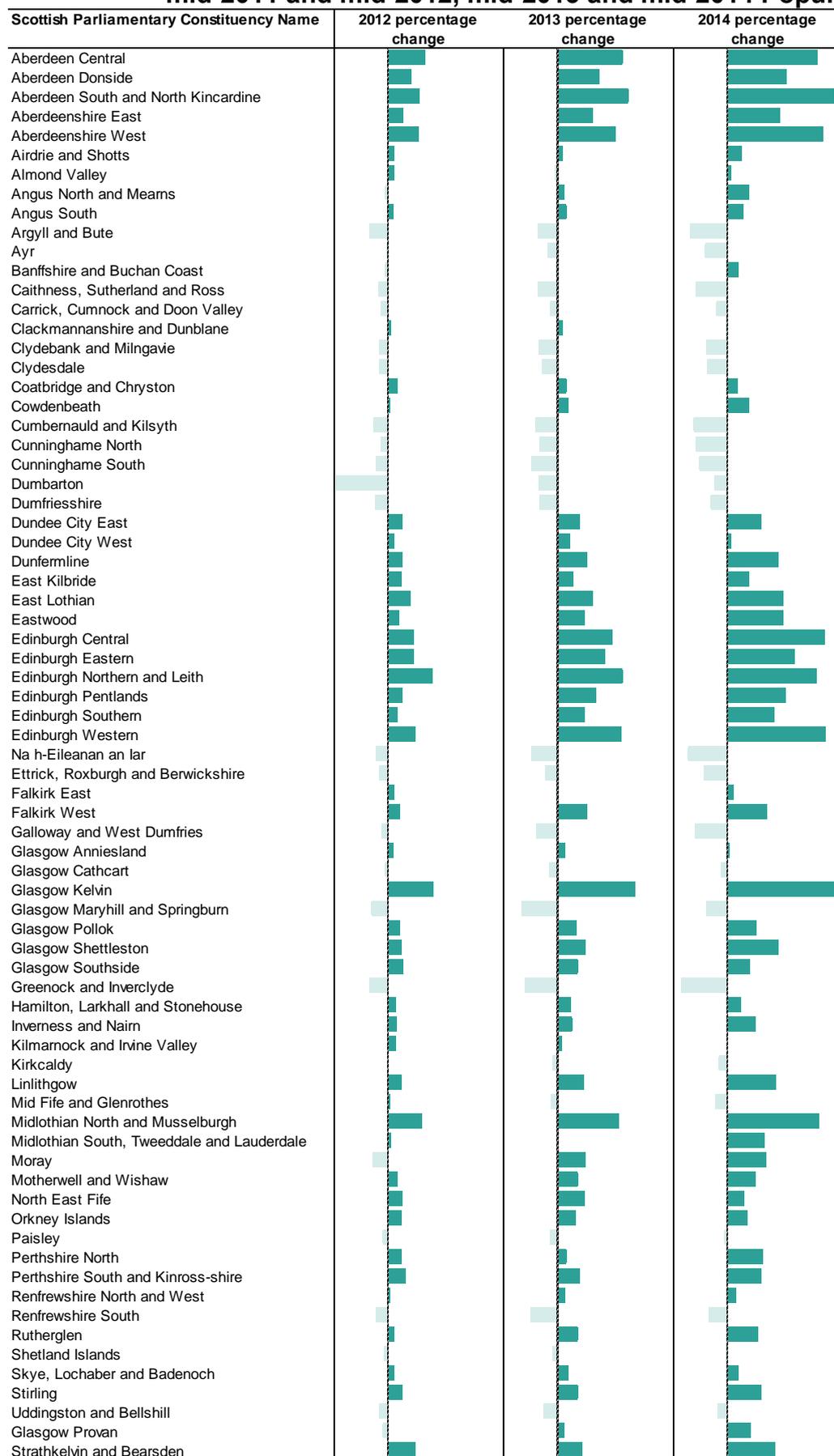


[Figure 4.4](#) shows the percentage change between the mid-2011 and mid-2014 population estimates. The longer the bars to the right of the dotted line the greater the percentage increase, the longer the bars to the left of the dotted line the greater the percentage decrease since 2011. Glasgow Kelvin has seen the greatest percentage increase in population since 2011 at 4.6 per cent, compared with Greenock and Inverclyde which has seen a 1.9 per cent decrease in the population since 2011. Of the 73 constituencies, 25 (34.2 per cent) have seen a decrease in population between 2011 and 2014.

Footnote

8) Not necessarily the same as those registered to vote in the constituency, but a reasonable indicator in most cases.

Figure 4.4: 2011 Scottish Parliamentary Constituency, percentage change between mid-2011 and mid-2012, mid-2013 and mid-2014 Population Estimates



Note: Column 2014 population shows the percentage change between the 2011 and 2014 populations.

UK Parliamentary Constituency Populations

The Members of Parliament (MPs) at Westminster represent 59 Scottish constituencies. The population estimates reported here relate to the boundaries used in the 2010 general election. Constituency population estimates were derived by aggregating data zone population estimates. However, data zones do not always fit the constituency boundaries exactly and those that cross a constituency boundary are allocated to the constituency that contains the population-weighted centroid of the data zone. Previous research showed that the data zone to constituency fit was good in all constituencies except Glasgow North and Glasgow North West. Based on this research an adjustment of +2.3 per cent has been made to the population of Glasgow North West each year, spread equally across the age/sex distribution. A corresponding adjustment of -2.3 per cent has been made to Glasgow North.

UK Parliamentary Constituency Population Estimates by single year of age and sex are available on the NRS website. The constituency population estimates for 2014 ranged from 27,250 (Na h-Eileanan an Iar) to 115,361 (Linlithgow and East Falkirk). Figure 4.5 shows the distribution of constituency populations, with the majority between 80,000 and 99,000. The proportion of people age 18 and over ranged from 77.5 per cent in Livingston to 86.5 per cent in Glasgow North.

Figure 4.5: Population frequency count by UK Parliamentary Constituency, 2014

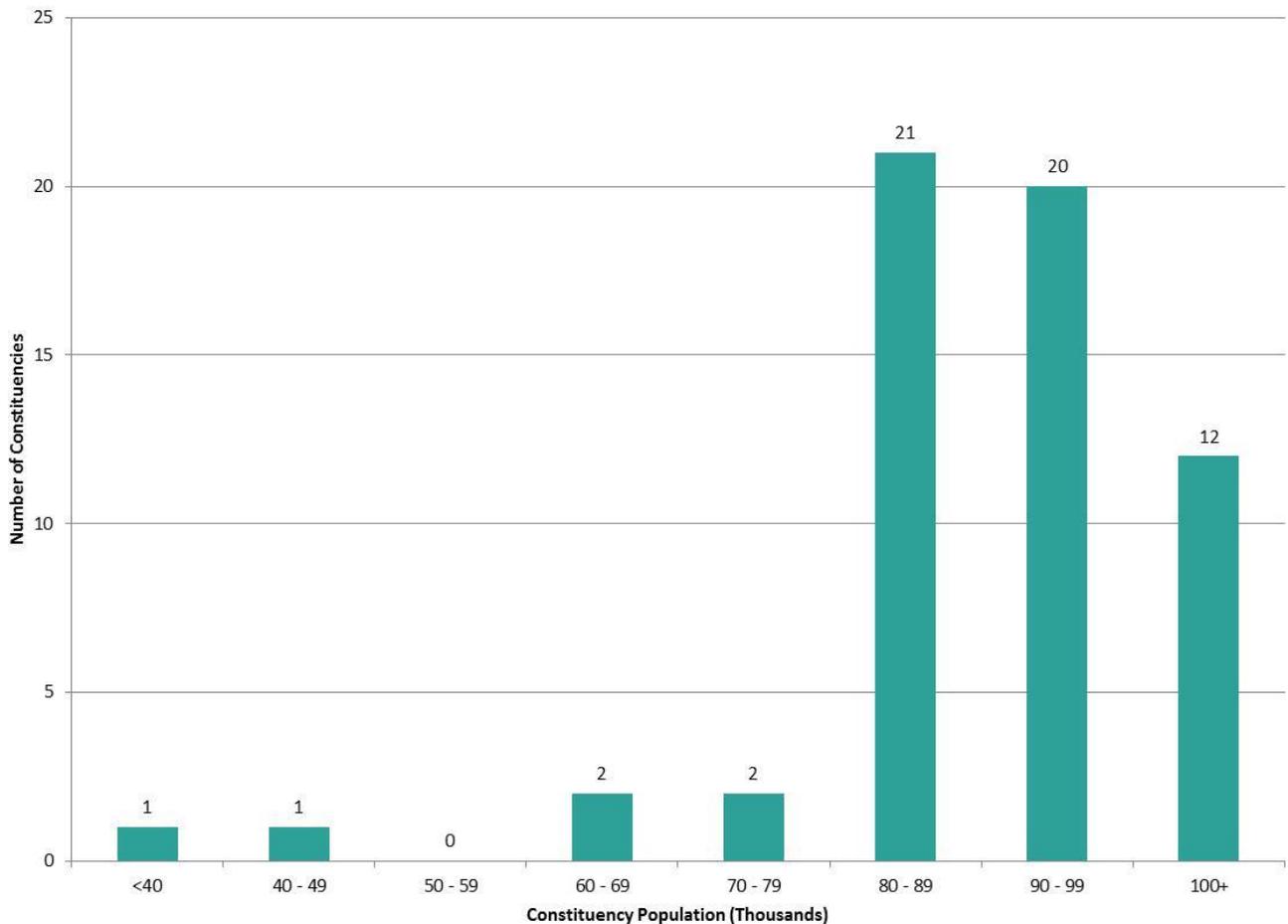


Figure 4.6 shows the percentage change between mid-2011 and mid-2014 estimates. The longer the bars to the right of the dotted line the greater the percentage increase, the longer the bars to the left of the dotted line the greater the percentage decrease since 2011. West Aberdeenshire and Kincardine shows the greatest percentage increase in

population since 2011 at 4.6 per cent, compared with Inverclyde which has seen a 1.7 per cent decrease in the population since 2011. Of the 59 constituencies, 18 (30.5 per cent) have seen a decrease in population between 2011 and 2014.

Figure 4.6: UK Parliamentary Constituency, percentage change between mid-2011 and mid-2012, mid-2013 and mid-2014 Population Estimates



Note: Column 2014 population shows the percentage change between the 2011 and 2014 populations.

Population estimates for constituencies in England and Wales are produced by the Office for National Statistics (ONS) using a similar method – but using a postcode best-fit methodology rather than a data zone best-fit methodology.

The constituency population estimates for both the Holyrood and UK parliaments are useful in providing an age and sex breakdown of the people living in each constituency.

5. Notes and Definitions

This section gives brief definitions of statistical and other terms used in this report.

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 10 per cent of the values.

Best-fit

Aggregating 2011 Data Zones to higher-level geography does not always give an exact match. In these cases, 2011 Data Zones are allocated on a 'best-fit' basis to give the best possible match. The paper 'Evaluation of Non Standard Geography Population Estimates' on the National Records of Scotland website assesses the accuracy of population estimates built up from 2011 Data Zones.

Population-weighted centroid

This identifies the centre of a 2011 Data Zone by taking into account the size and location of the population, as well as the physical characteristics of the 2011 Data Zone. More information is available in the paper 'Data Zone Centroids Methodology'⁹ on the SG website.

2011 Data Zone lookup tables

The 2011 Data Zone lookup tables used to derive the population estimates for the areas in Section 4 can be found in the [reference section](#) on the SG website.

Urban Rural Classification

The 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 less than 3,000 people and within 30 minutes' drive of a settlement of 10,000 or more
6. Remote rural areas	Settlements of less than 3,000 people and with a drive time of over 30 minutes to a settlement of 10,000 or more

Footnote

9) Although this paper is based on 2001 data zone boundaries the methodology is the same for 2011 Data Zone boundaries.

The 8-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 between 30 and 60 minutes to a settlement of 10,000 or more
5. Very remote small towns	Settlements of between 3,000 and 10,000 people and with a drive time of over 60 minutes to a settlement of 10,000 or more
6. Accessible rural areas	Settlements of less than 3,000 people and within 30 minutes' drive of a settlement of 10,000 or more
7. Remote rural areas*	Settlements of less than 3,000 people and with a drive time of between 30 and 60 minutes to a settlement of 10,000 or more
8. Very remote rural areas	Settlements of less than 3,000 people and with a drive time of over 60 minutes to a settlement of 10,000 or more

* the remote small towns and remote rural categories in the 8-fold classification should not be confused with the similarly labelled categories in the 6-fold classification.

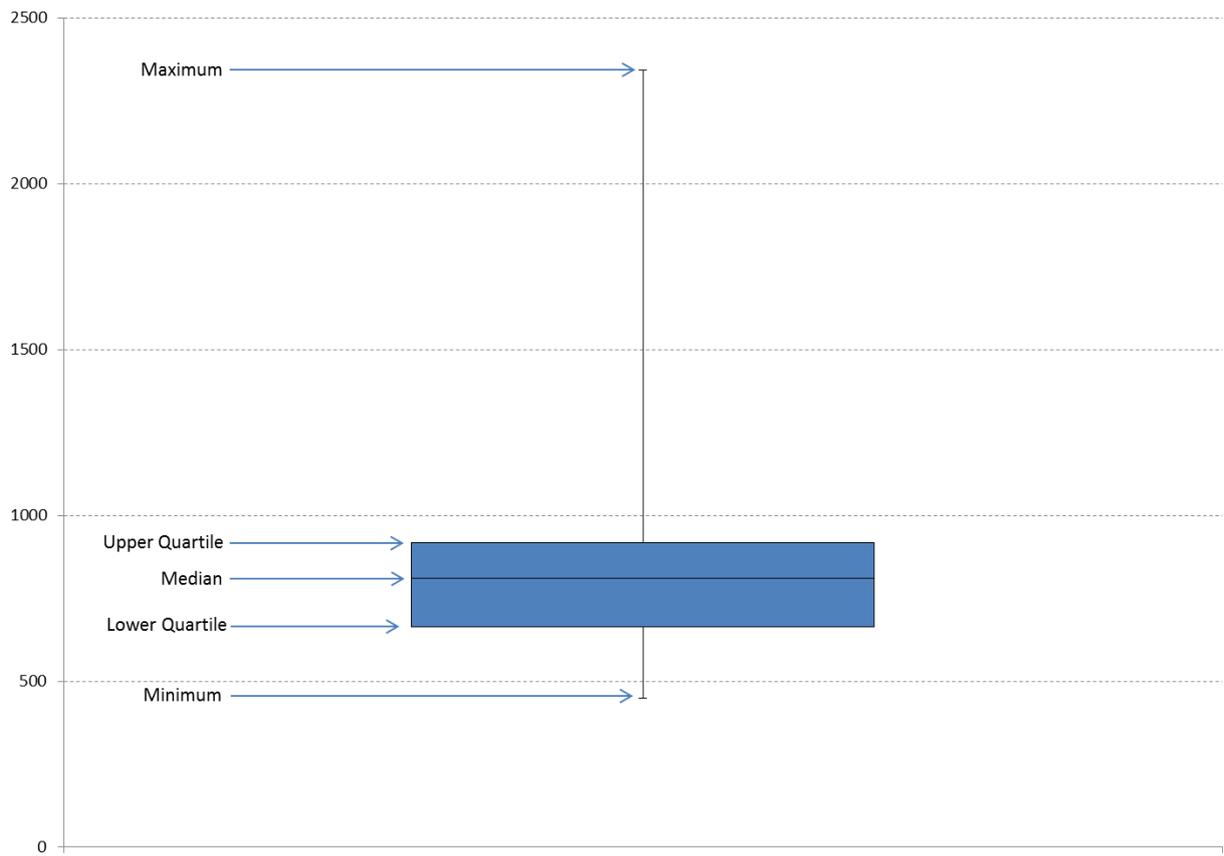
Boxplots

A box plot is sometimes used to visually represent data. It usually shows where the quartiles of the data lie as well as selected percentiles. In this publication all box plots show the minimum value, lower quartile, median, upper quartile and maximum value for a selection of data.

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. The split may not be exactly 50/50 depending on how many values in the group have the median value.

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 per cent 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.

A sample box-plot is shown below:



Example Box Plot

6. 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).

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods; and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

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](#).

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We, the National Records of Scotland, also label the any revisions and corrections that have applied to any of our statistics. These revisions or corrections are clearly marked on the webpage of the publication as well on our revisions and corrections page located on the [NRS website](#).

Enquiries and suggestions

Please contact our Statistics Customer Services if you need any further information.

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

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7. Related organisations

Organisation	Contact
<p>The Scottish Government (SG) forms the bulk of the devolved Scottish Administration. The aim of the statistical service in the SG is to provide relevant and reliable statistical information, analysis and advice that meets the needs of government, business and the people of Scotland.</p>	<p>Office of the Chief Statistician Scottish Government 3WR, St Andrews House Edinburgh EH1 3DG</p> <p>Phone: 0131 244 0442</p> <p>Email: statistics.enquiries@scotland.gsi.gov.uk</p> <p>Website: www.scotland.gov.uk/Topics/Statistics</p>
<p>The Office for National Statistics (ONS) is responsible for producing a wide range of economic and social statistics. It also carries out the Census of Population for England and Wales</p>	<p>Customer Contact Centre Office for National Statistics Room 1.101 Government Buildings Cardiff Road Newport NP10 8XG</p> <p>Phone: 0845 601 3034 Minicom: 01633 815044</p> <p>Email: info@statistics.gsi.gov.uk</p> <p>Website: www.ons.gov.uk/</p>
<p>The Northern Ireland Statistics and Research Agency (NISRA) is Northern Ireland's official statistics organisation. The agency is also responsible for registering births, marriages, adoptions and deaths in Northern Ireland, and the Census of Population.</p>	<p>Northern Ireland Statistics and Research Agency McAuley House 2-14 Castle Street Belfast BT1 1SA</p> <p>Phone: 028 9034 8100</p> <p>Email: info.nisra@dfpni.gov.uk</p> <p>Website: www.nisra.gov.uk</p>

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