Population change by area

Change in population by NUTS2 area, 2003 - 2013

Population Index (2003 = 100)

- NE (North Eastern Scotland)
- H&I (Highlands and Islands)
- E (Eastern Scotland)
- SW (South Western Scotland)

Preserving the past | Recording the present | Informing the future
Q. The most common names of babies now are Jack and Sophie. What were the most common names of babies in the late 1850s?

A: John and Mary
B: Edward and Victoria
C: William and Maud
### A typical Scot

<table>
<thead>
<tr>
<th></th>
<th>Late 1850s</th>
<th>Present Day</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td>John Smith or Mary Macdonald</td>
<td>Jack Smith or Sophie Brown</td>
</tr>
<tr>
<td><strong>Chance of dying before 1(^{st}) birthday</strong></td>
<td>1 in 8</td>
<td>1 in 267</td>
</tr>
<tr>
<td><strong>No of people to a room</strong></td>
<td>Almost 2 to a room</td>
<td>Each has 2 rooms to live in</td>
</tr>
<tr>
<td><strong>Chance of being married in 20s</strong></td>
<td>1 in 3</td>
<td>1 in 8</td>
</tr>
<tr>
<td><strong>Life expectancy at birth</strong></td>
<td>40 (John) and 44 (Mary)</td>
<td>77 (Jack) and 81 (Sophie)</td>
</tr>
</tbody>
</table>
Average achieved family size

Women born in 1948 had an average of 2.1 children by age 40

Women born in 1973 had an average of 1.7 children by age 40
Q. What proportion of Scotland’s population is aged 60 or over?

A. 14%
B. 24%
C. 34%
Population aged 60+

Percentage of population aged 60+ in 2013: country ranking

1. Japan (32%)
2. Italy (27%)
3. Germany (27%)
22. UK (23%)
201. United Arab Emirates (1%)
Deaths

The ‘Three big killers’: cause of just under half of all deaths in 2014

- Cancer – 29% of all deaths
- Coronary Heart Disease – 13% of all deaths
- Stroke – 8% of all deaths
- Respiratory – 12% of all deaths
Life Expectancy

Life expectancy at birth, 95 per cent confidence intervals for council areas, 2012-2014 (males and females)
Q. What was reported at the census as the most common type of household in Scotland?

A : One person
B : Three people
C : Five people
Types of household

Change in household types in Scotland, 1961 to 2011

People are living in smaller households than in the past...

1-person households are the most common nowadays, whereas they used to be the least common, 50 years ago.

Source: Scotland's census data

National Records of Scotland

Preserving the past | Recording the present | Informing the future
Number of households

17 per cent increase in households in Scotland from 2012 to 2037

Existing households in 2012

New households formed by 2037
Q. There are 910 people aged 100 years or more just now. How many are there projected to be in 25 years’ time?

A : 2 times as many
B : 4 times as many
C : 6 times as many
Projected Population of Scotland (2014-based)

Esta Clark, Head of Population and Migration Statistics Branch
Population and Migration Statistics Conference
Edinburgh Zoo
1 December 2015
Number of elderly Scots 'to increase by 85% by 2039'

The number of Scots aged 75 or over is predicted to increase by 85% by 2039.

Scotland set for 100,000 immigrants over next decade

Scotland’s population is set to soar to record levels over the next decade as tens of thousands of immigrants arrive in the country.

Migration is biggest factor in Scotland’s rising population

The National Records of Scotland have issued figures today which show that the country’s population is set to rise by 7% over the next 25 years.
Presentation overview

• Projection results for Scotland
• Comparison with the rest of the UK
• Variant projections
• Update on Sub-National Population Projection plans
• Questions?
Population projections: how do we do them?

- Start with mid-year estimate of population (rolled forward from the 2011 Census)
- Identify trends
  - Births
  - Deaths
  - Migration
- Project these trends forwards
- Take no account of policy changes until they affect trends
2014-based population projection results
Scotland’s population is projected to increase

- **2014**: 5.35 million
- **2024**: 5.51 million
- **2039**: 5.70 million

Over the next 10 years Scotland's population is projected to rise by 3% (170,000 people). Over the next 25 years it is projected to rise by 7% (350,000 people).
Why is Scotland’s population projected to rise?

2014-2024

Over the next decade, 90% of the projected population change is due to migration into Scotland.

57% from international migration and 32% from the rest of the UK.

10% of the projected change is due to natural increase (more births than deaths).
Misinterpretation by press

Migrants to outstrip Scottish births by nine to one

Scotland can expect more migrants like Miroslava Karchanova, 7, seen here at Cuthbertson Primary School in Govanhill Glasgow which has been commended for the good work it does in integrating and educating the children of migrant workers.

Jody Harrison, Reporter / Friday 30 October 2015 / News

10% natural change

90% migration to Scotland
Why is Scotland’s population projected to rise?

The population of Scotland is projected to rise mostly due to continuing net in-migration.

Scotland has historically experienced net out-migration.

Natural change (births minus deaths)

Net migration (in minus out)

Source: National Records of Scotland (NRS)
Estimated and projected net migration with the rest of the UK and overseas, 1994-2039

- Estimated migration:
  - 1994: -10,000
  - 1996: -5,000
  - 2001: 20,000
  - 2008: 25,000
  - 2011: 30,000
  - 2014: 25,000
  - Projected to 2039: 5,300-5,800

- Projected migration:
  - 2023: 9,500

Note: The graph shows the net migration trend from 1994 to 2039, with projected figures from 2023 onwards.
As well as showing trends in the total population, the projections also show that Scotland’s population is projected to age
Scotland’s population is ageing

The number of people aged 75 and over is projected to increase by 85% (370,000 people) over 25 years. Meanwhile, the population of working age is projected to increase by 1% (40,000 people) over this period.
The elderly population is growing

Most of the projected change in the **age structure** of Scotland over the next 25 years is due to the **rise in the elderly population**.
Projected change in life expectancy at birth, 2013-2039

Life expectancy at birth

**Male**
- 77.1 born around 2013
- 82.3 born around 2039

**Female**
- 81.1 born around 2013
- 85.0 born around 2039

Source: National Records of Scotland (NRS)
Dependency ratio

The projected increase in the number of dependants (per 100 working age population) over the next 25 years is mostly due to the **rise in the number of pensioners**

- **All dependants** 2014: 58
- **All dependants** 2039: 67
- **Pensionable age and over** 2014: 31
- **Pensionable age and over** 2039: 40
- **Children** 2014: 27
- **Children** 2039: 27

2014 ——— Scotland ——— 2039

**Note**
These ratios should be interpreted with care. A simple interpretation is the number of persons "dependent" on the working age population, assuming that most older people and children are not economically active. The reality is of course much more complex.

Source: National Records of Scotland (NRS)
Comparisons with other UK countries by 2039

The projected percentage population increase in the UK and constituent countries between 2014 and 2039

- Wales: +6%
- SCOTLAND: +7%
- Northern Ireland: +10%
- United Kingdom: +15%
- England: +17%
Projected percentage change 2014 to 2039

Children

Working age

Pension age

Total population

Preserving the past | Recording the present | Informing the future
Median age

- Scotland: 45.2 years
- UK: 42.9 years

The graph shows a steady increase in median age from 2014 to 2038, with Scotland consistently having a higher median age than the UK.
# Dependency ratios per 100 working age population

<table>
<thead>
<tr>
<th>Year</th>
<th>UK</th>
<th>Scotland</th>
<th>England</th>
<th>N.Ireland</th>
<th>Wales</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Overall</td>
<td>61</td>
<td>58</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Pensioner</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Children</td>
<td>30</td>
<td>27</td>
<td>31</td>
<td>34</td>
</tr>
<tr>
<td>2039</td>
<td>Overall</td>
<td>67</td>
<td>67</td>
<td>66</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>Pensioner</td>
<td>37</td>
<td>40</td>
<td>36</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Children</td>
<td>30</td>
<td>27</td>
<td>30</td>
<td>31</td>
</tr>
</tbody>
</table>
Different plausible assumptions about fertility, mortality and migration giving a more complete picture of what may happen in the future
Variant projections

Single component variants

• High migration
• High life expectancy
  • High fertility

• Low migration
• Low Life expectancy
  • Low fertility

Combination component variants

• High population

Special component variant

Zero net migration
**Assumptions for the 2014-based population projections**

<table>
<thead>
<tr>
<th>Standard variants</th>
<th>Assumptions</th>
<th>Long-term Fertility (Total Fertility Rate - TFR)</th>
<th>Life Expectancy Males (2039)</th>
<th>Life Expectancy Females (2039)</th>
<th>Net Migration (2039) (rounded to the nearest 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High variant</td>
<td>1.90</td>
<td>84.3</td>
<td>86.8</td>
<td>24,100</td>
</tr>
<tr>
<td></td>
<td>Principal</td>
<td>1.70</td>
<td>82.3</td>
<td>85.0</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>Low variant</td>
<td>1.50</td>
<td>80.2</td>
<td>83.1</td>
<td>5,900</td>
</tr>
<tr>
<td>Special case scenario</td>
<td>Zero migration</td>
<td>1.70</td>
<td>82.3</td>
<td>85.0</td>
<td>0</td>
</tr>
</tbody>
</table>
Actual and projected total population of Scotland, under the 2014-based principal and selected variant projections, 2004-2039.
Change in average (median) age 2014-2039 (variant projections)
Dependency ratio (variant projections)

Change in state pension age from 65 to 66

Change in state pension age from 66 to 67
Summary

- Scotland’s population to continue to increase
- Scotland’s population to age over the next 25 years
- Net migration assumed to be the main contributor to population growth
Sub National Population Projections review

- Using new methodology based on recommendations from academics
  - Moving from a single region model to a multi region model
  - Moving from using net migration assumptions to flows for international migration and applying rates for cross border and within Scotland migration
- Changes are being taken forward in consultation with the PAMS Projections Sub Group (PSG)
International Migration

• International migration will be projected by performing time series analysis on historic totals to project future totals.

• A 5-year average of international migration estimates will be constrained to the projected totals to create age and sex distributions.

• The age and sex distributions will be constrained to the international migration for Scotland.
Implications for the Consultation

- Modelling international migration and constraining to the national totals means:
  - The projected migration is more detailed than previous projections.
  - If we make changes as a result of the consultation then it will be to review the final model selected, not to adjust the numbers.
  - This is because any changes suggested by a Council have a knock-on effect for all other Councils.
Proposed Outputs

• The new methodology allows for more detailed outputs.
• The ‘Outputs Phase’ will produce over 58,000 tables in 960 workbooks.
• We are currently considering the best way to disseminate these tables.
Timescales

- Completion of the new system by the end of January 2016.
- Comparison paper of new and old system using 2012 data by the end of February 2016.
- PSG Subgroup meeting in February/March 2016.
- Consultation on international migration in February/March 2016.
- Publish new sub-national projections in June 2016.
Sub-Council Area Population and Household Projections

• One-off project to develop methods and processes for producing small area projections for areas within Scotland’s 32 council areas

• Consistent with NRS 2012-based council area projections

• Good progress being made, but more work than we expected

• Still aiming to publish March 2016
Questions!

2014: 5.35 million
2024: 5.51 million
2039: 5.70 million
Further information

• NRS website: www.nrscotland.gov.uk

• Census data: www.scotlandsccensus.gov.uk
  
  Sign up there for our e-newsletter

• Enquiries: statisticcustomerservices@nrscotland.gov.uk

• Twitter: @NatRecordsScot