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Projected Population of Scotland (2012-based)

Population and Migration Statistics Branch

The Population and Migration Statistics Committee (Scotland) - (PAMS) conference – 28 November 2013

Presentation overview

- Projection results for Scotland
- Comparison with the rest of the UK
- Variant projections
- Assumptions
- 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

2012-based National Population Projections results

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The estimated population of Scotland on 30 June 2012 was

5,313,600

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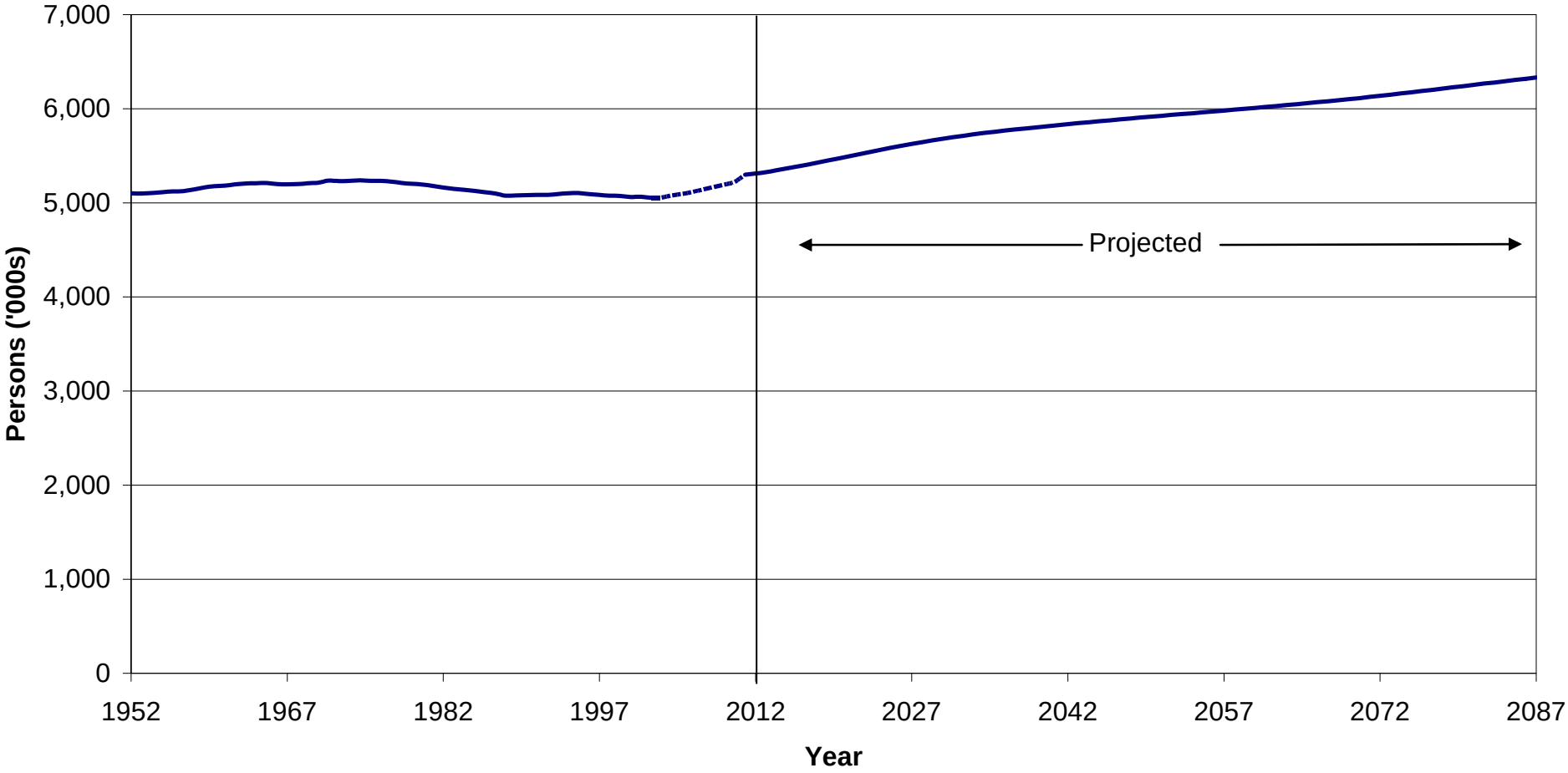
Estimated population of Scotland, actual and projected, 1952-2087



Footnotes

1) Continuous line shows final population estimates and the broken line (2002 to 2010) shows those years which will be rebased using information from the 2011 Census.

2) 2012 based projection.

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Key points: 2012-2022

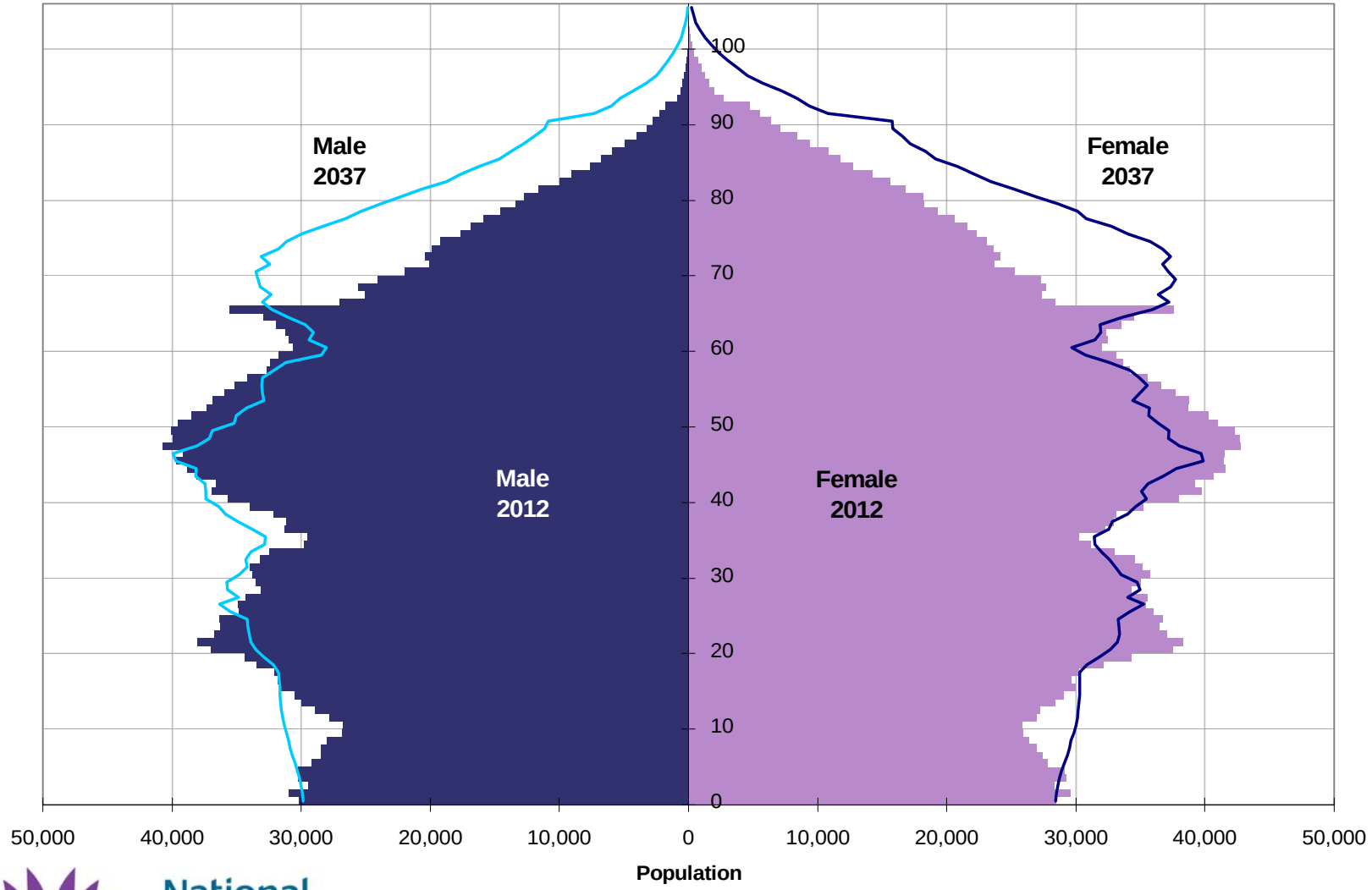
- The population of Scotland is projected to increase from an estimated 5.31 million in 2012 to 5.52 million over the ten year period to 2022
- Over the next decade, 28 per cent of the projected increase in Scotland's population can be attributed to natural increase (more births than deaths) while 72 per cent of the increase is due to assuming continuing inward net migration to Scotland

Reasons for increase

- Inward net migration assumed to continue to be the key contributor to population growth
- Births are projected to increase
- Mortality rate to continue to decrease
- Natural change is projected to stay positive (more births than deaths) till early 2030’s

As well as showing trends in the total population, the projections also show that Scotland's population is projected to age

Age structure of Scotland in 2012-2037, 0-105+



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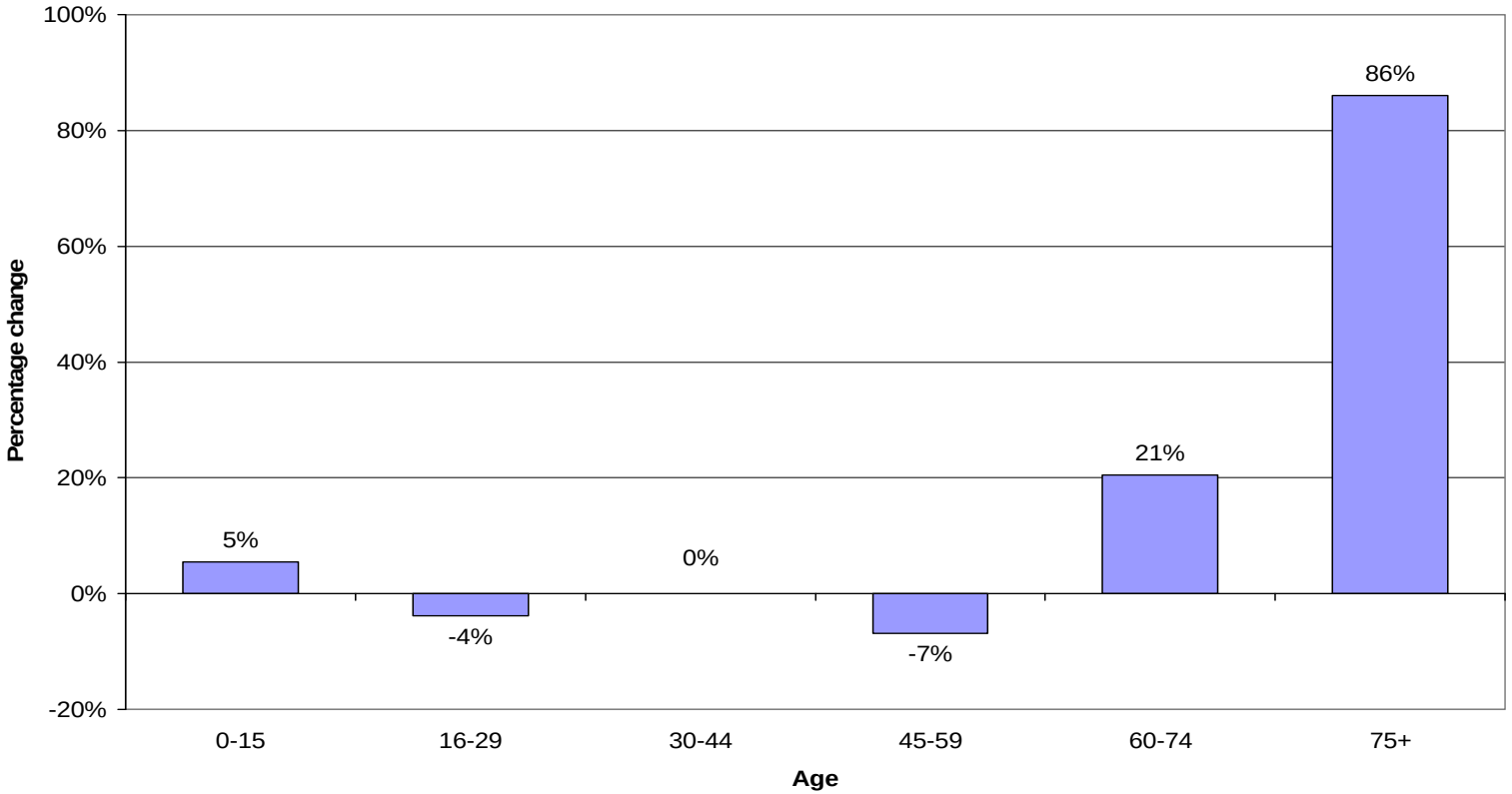
Projected percentage change in the age structure of Scotland between 2012-2037



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Over next 25 years (2012-2037)

- Number of children (those under 16) projected to increase by 5 per cent by 2037
- Working age to increase by 4 per cent
- Number of pensioners projected to increase by 27 per cent
- Takes into account future changes in state pension age from the 2011 State Pension Act

Dependency Ratios

As the age structure of Scotland's population changes, the dependency ratio – the ratio of people aged under 16 and those of pensionable age per 100 people of working age – is set to change as well

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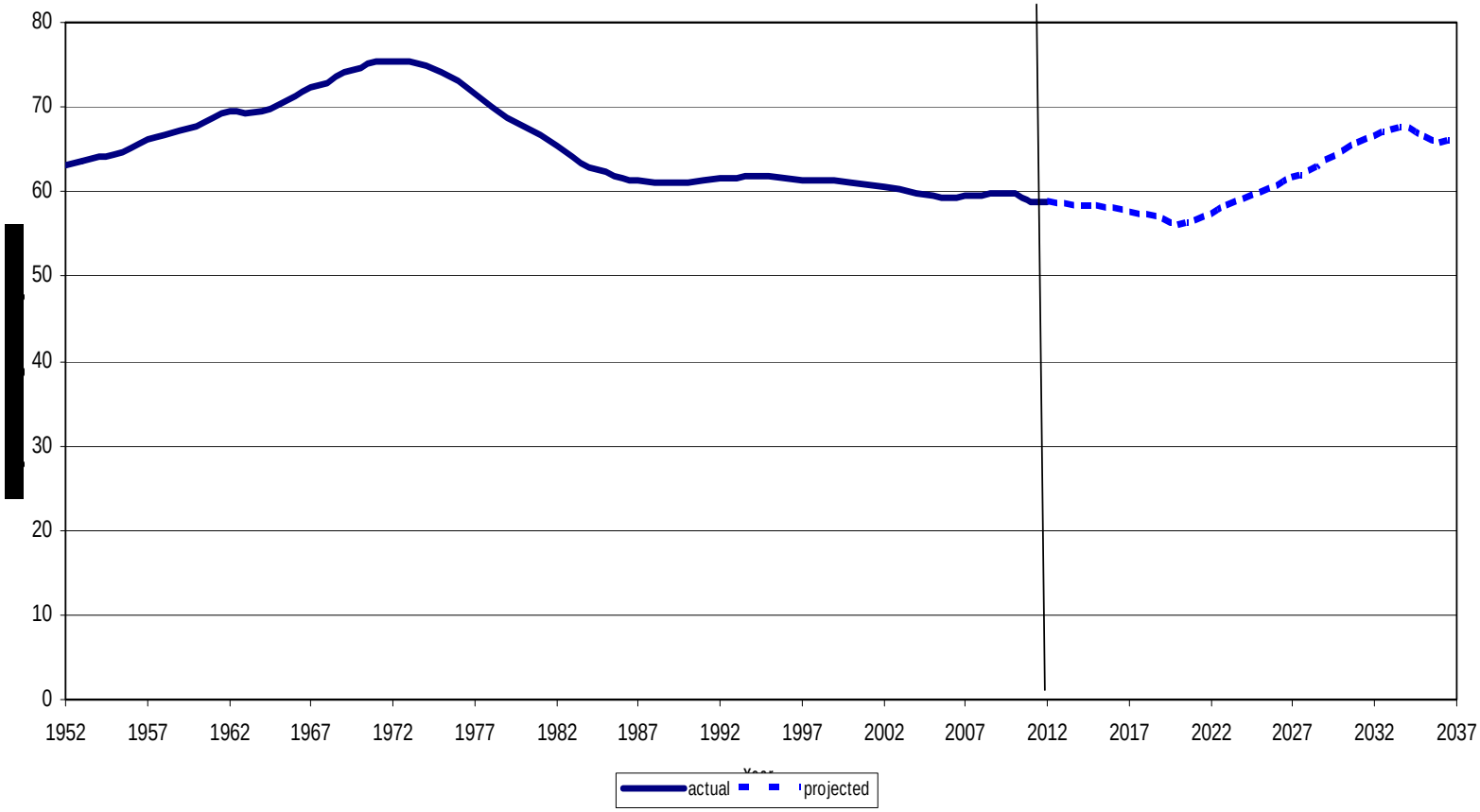
Dependency ratio 1951-2037



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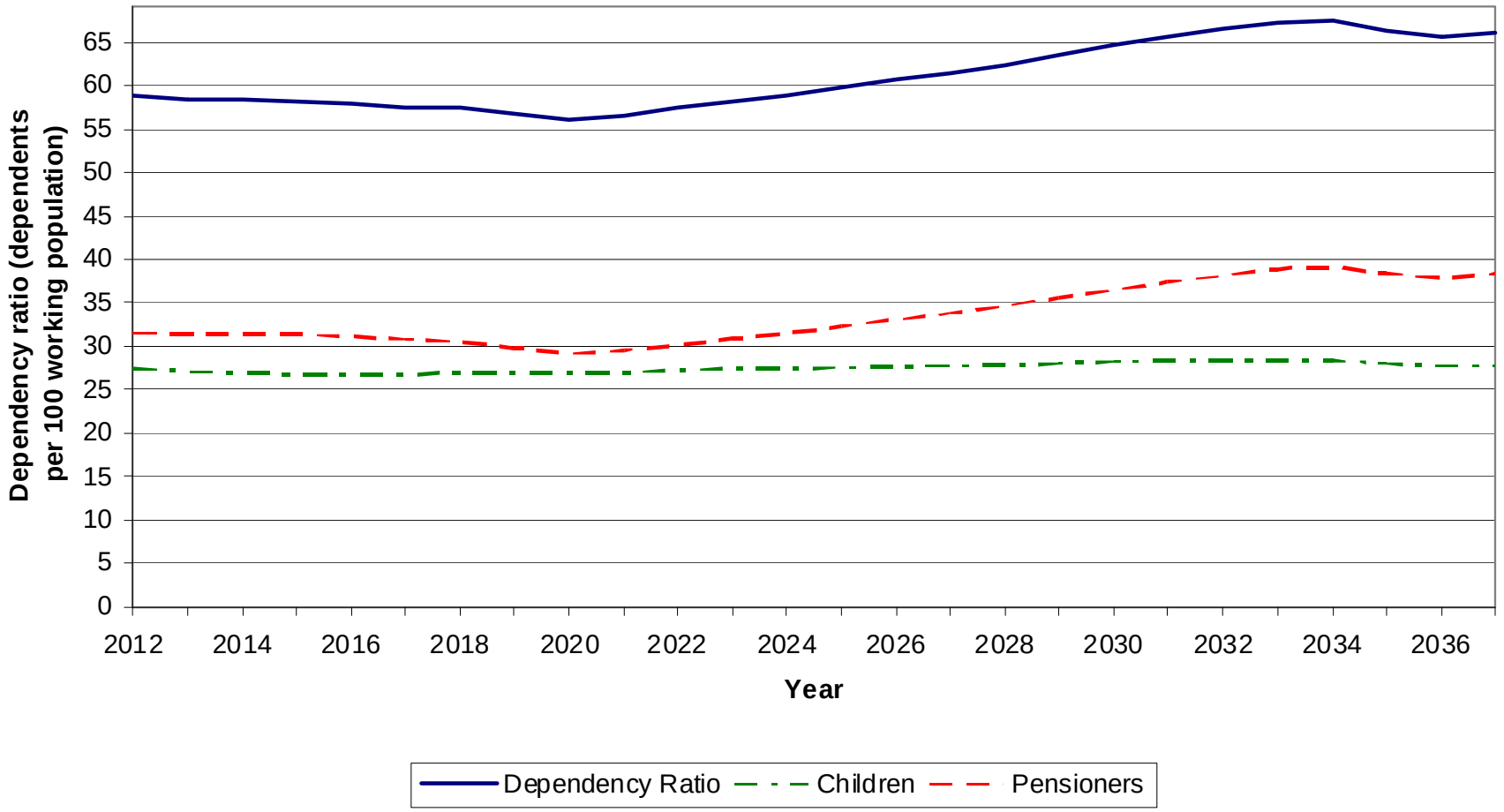
Dependency ratios

- Useful tool to examine the relative age structure of the population, but should be interpreted with caution
- Scotland's Dependency ratio is expected to increase to 66 dependents per 100 working age population by 2037
- This is the same as the projected figure for the UK as a whole (66 per 100 working age) by 2037.

Projected Dependency ratio 2012-2037



Footnotes

1) Dependency ratios can be defined in different ways, but here are defined as the number of children aged under 16 and the number of people of state pension age per 100 people of working age. These ratios should be interpreted with care.

2) Continuous line shows dependency ratio and the broken line shows the number of children and pensioners per 100 working age population repectively

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Comparisons with other UK countries

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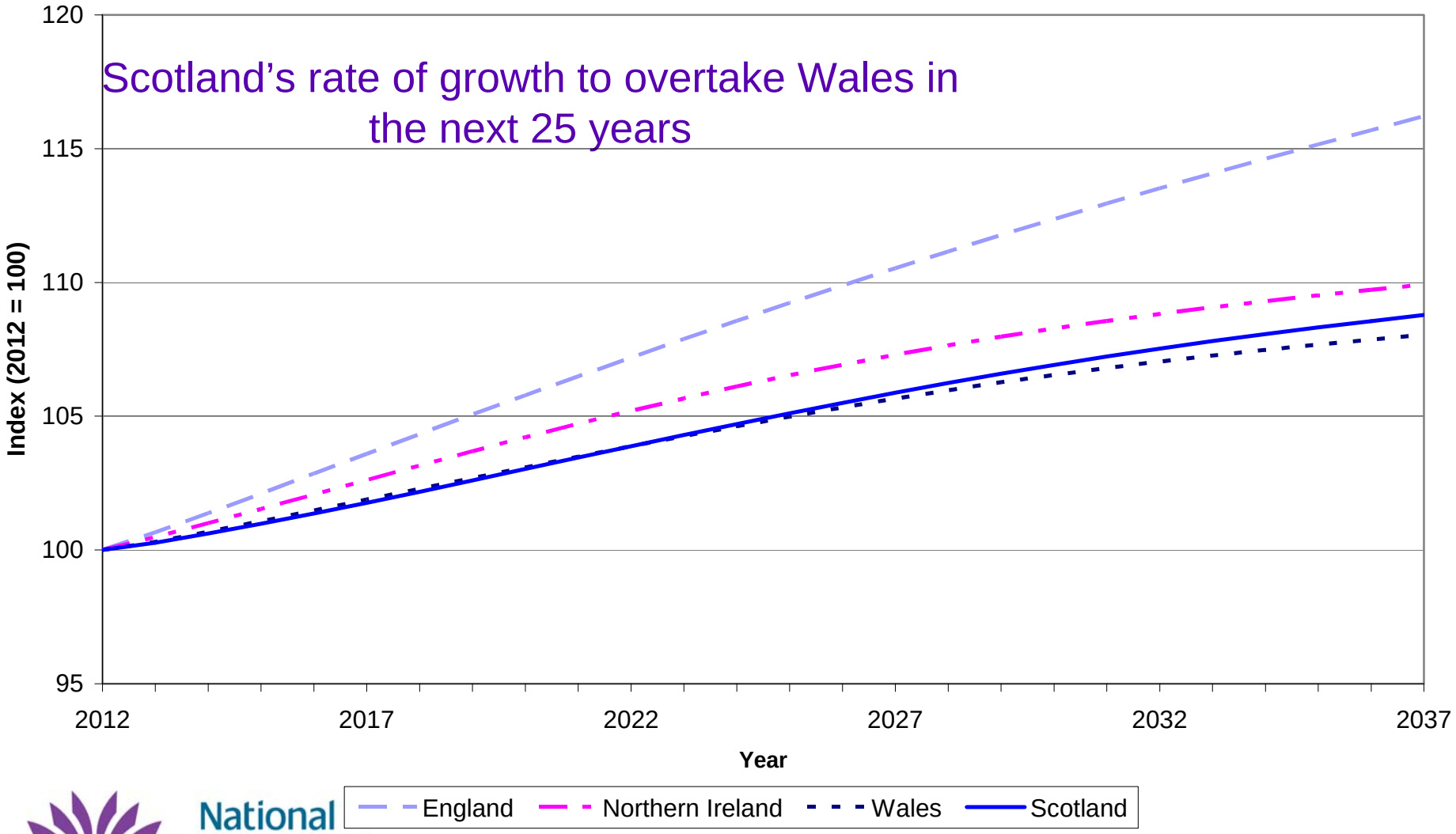
Comparisons with other UK countries by 2037

The populations of the other countries in the UK are also projected to increase between 2012 and 2037 :

- England's increase by 16 per cent
- Northern Ireland's by 10 per cent
- Wales's population by 8 per cent.
- This compares with 9 per cent for Scotland.

Comparison of population change for UK countries, 2012-2037



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Scotland UK comparisons

- Over the next decade, 28 per cent of the projected increase in Scotland's population can be attributed to natural increase (more births than deaths) while 72 per cent of the increase is due to assuming continuing inward net migration to Scotland.
- For the UK as a whole the picture is different, 61 per cent of the projected growth over the next 10 years comes from a projected natural increase.

Variant Projections results

As well as producing the principal projections, which you have seen already, Office for National Statistics also produce a series of variant projections.

These are based on different plausible assumptions about fertility, mortality and migration giving a more complete picture of what we might expect to see 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
- Low population

Special component variant

Zero net migration

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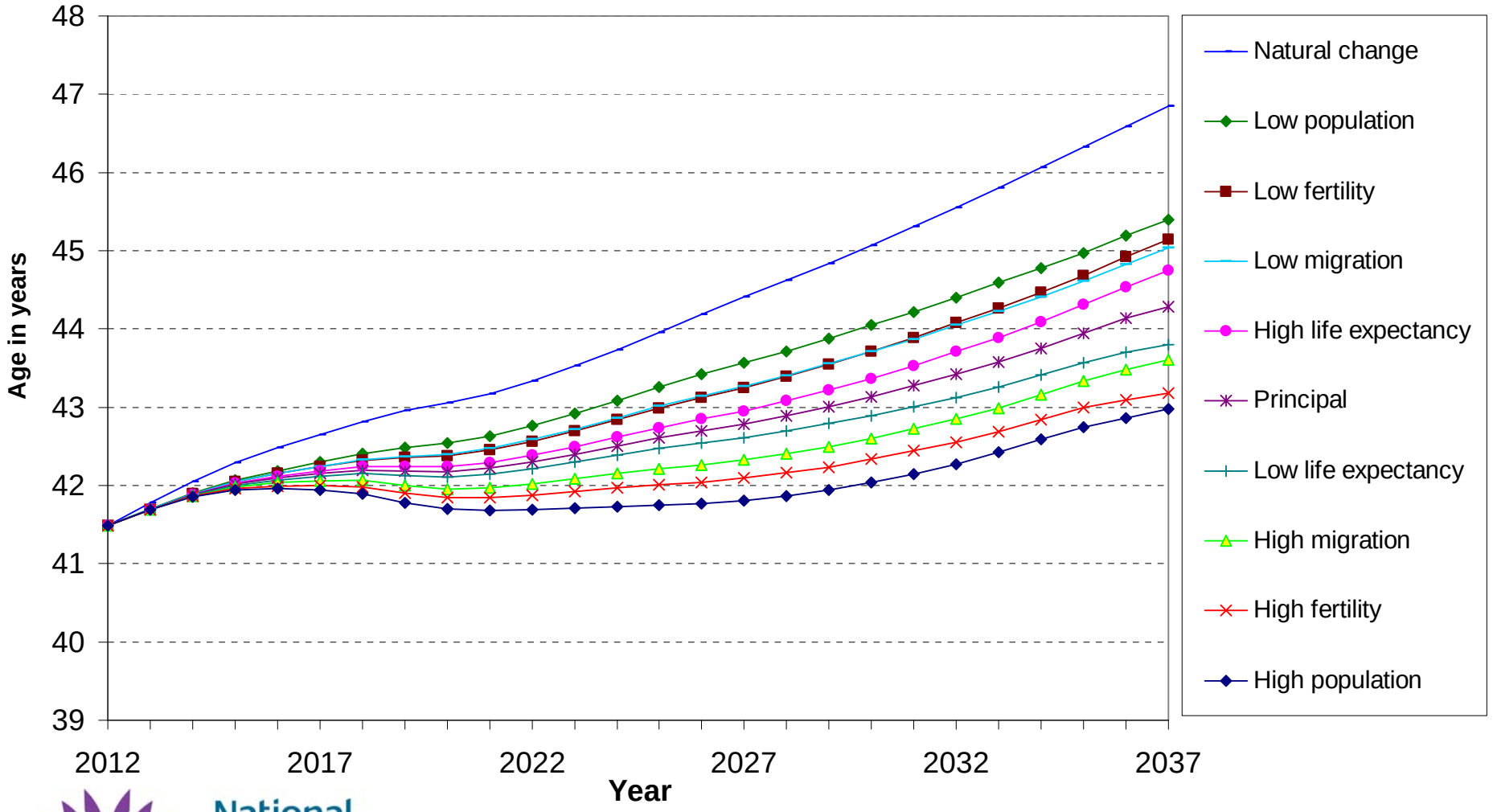
Change in average (median) age 2012-2037 (variant projections)



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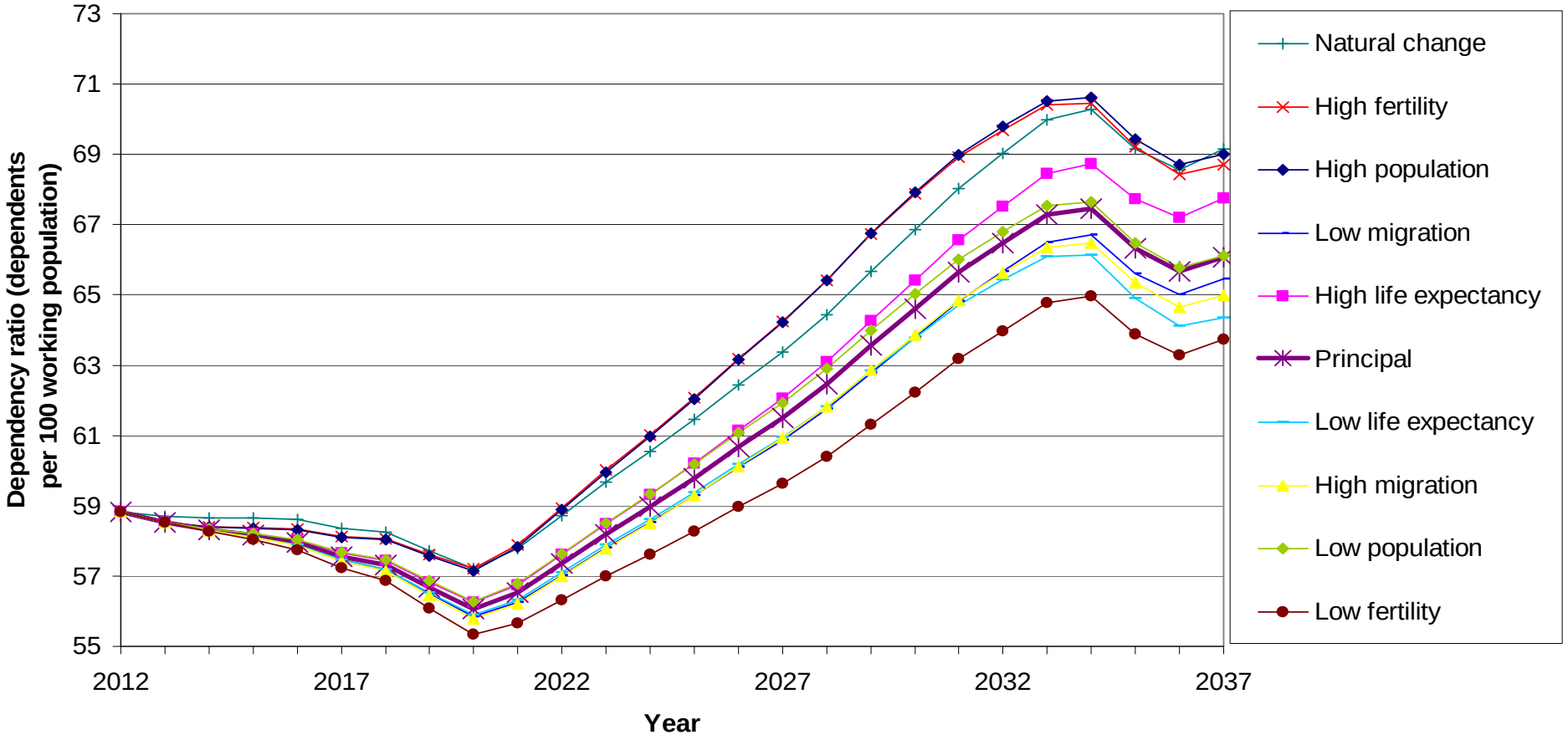
Dependency ratio (variant projections)



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National Population Projections Assumptions

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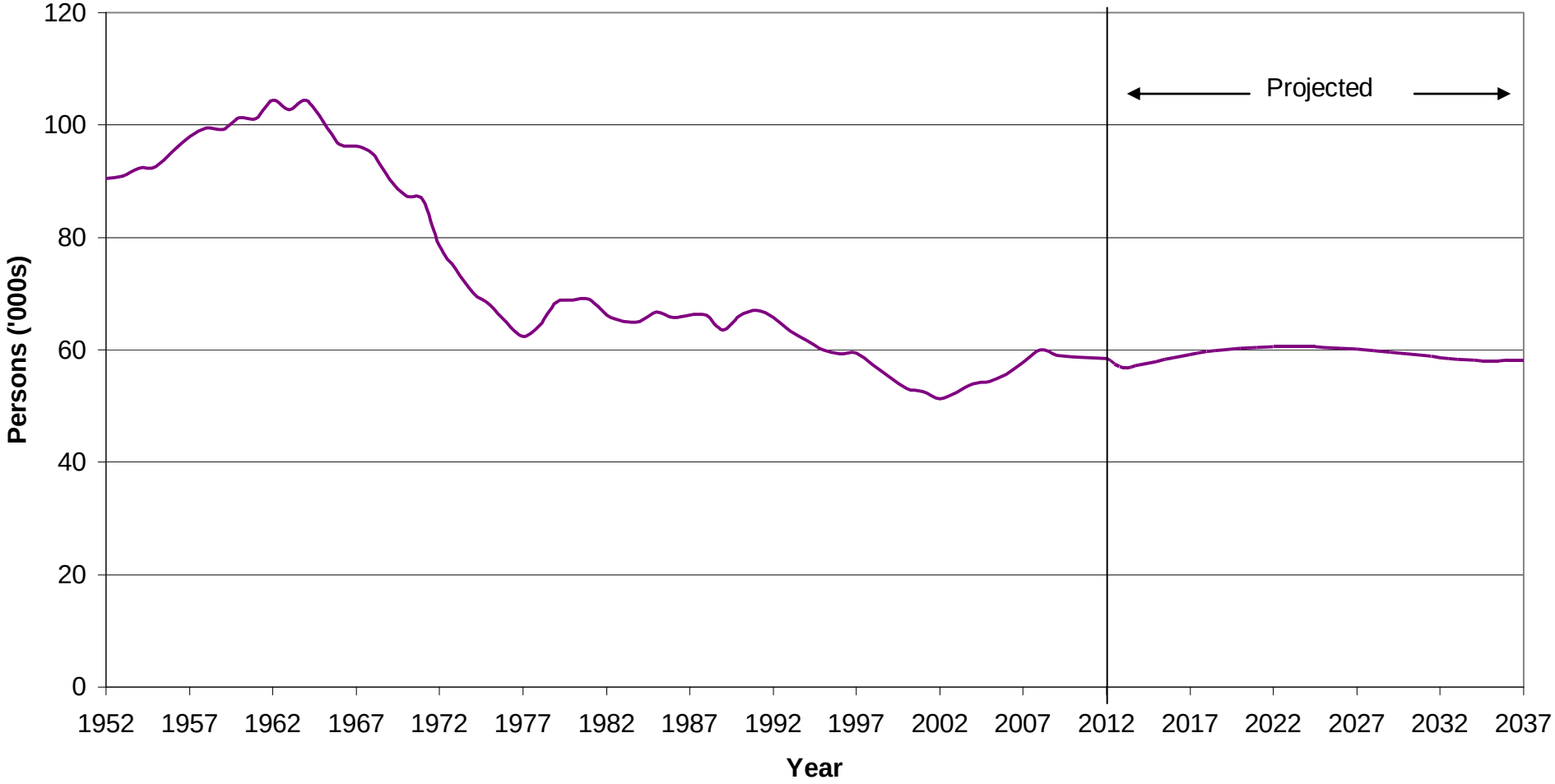
Assumption setting process

- Led by Office for National Statistics (ONS) and by National Records of Scotland (NRS) in Scotland
- Based on past trends
- Expert users are consulted
- Assumptions finalised by ONS and the devolved administrations

Births, Scotland, 1952-2037



Footnotes
1) Calendar year.
2) 2012-based mid-year projections.

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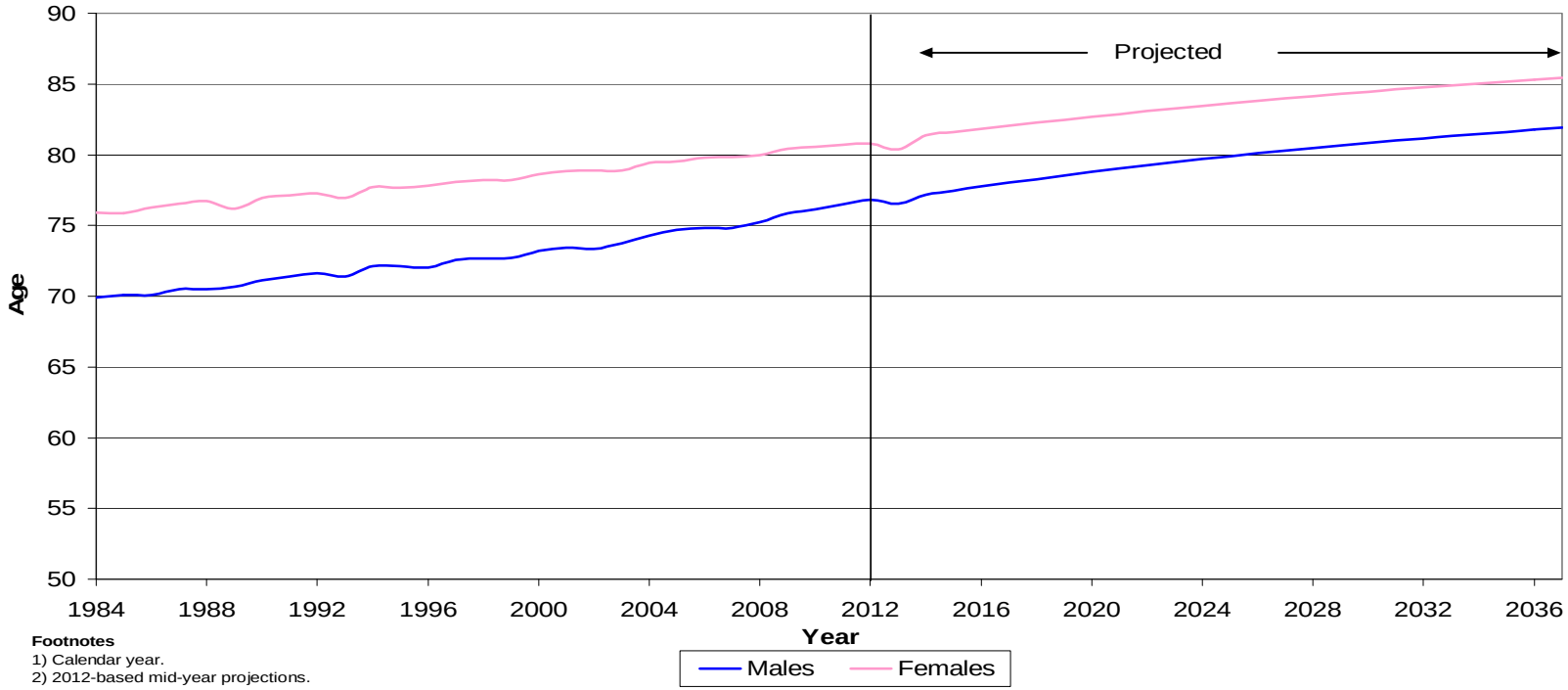
Mortality assumptions

- Death rates will continue to decrease but Scotland will continue to have higher rates than the rest of the UK.
- Life expectancy at birth is projected to increase
  - Males: 76.5 years in 2013 to 81.9 years in 2037
  - Females: 80.4 years in 2013 to 85.4 years in 2037
- Number of Deaths projected to increase as the population at older ages increases.

Expectation of life (Eol) at birth over the next 25 year period



Footnotes
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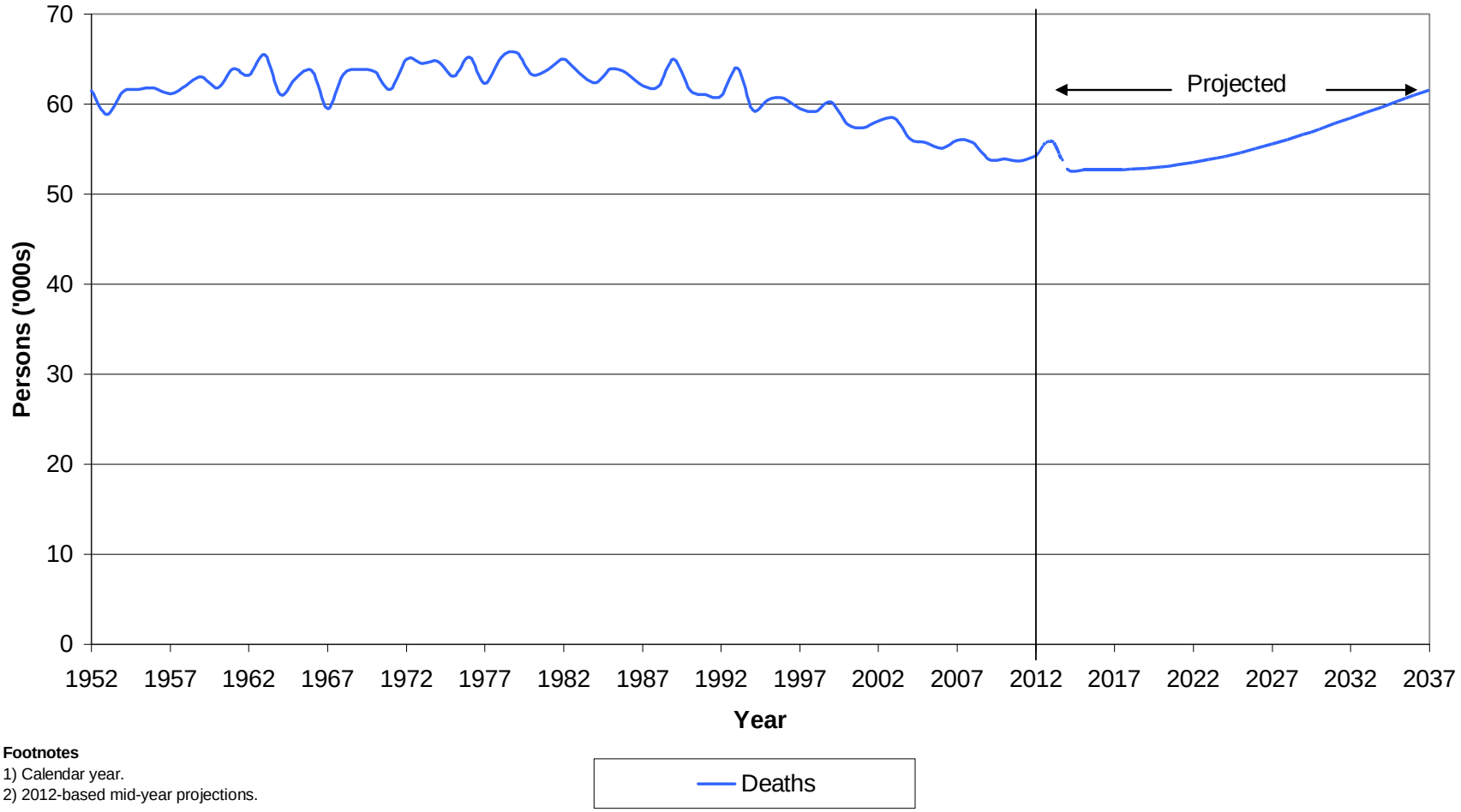
- It is projected that people will live longer, the mortality improvement rate is projected to increase at a constant rate.

Deaths, Scotland, 2012-2037



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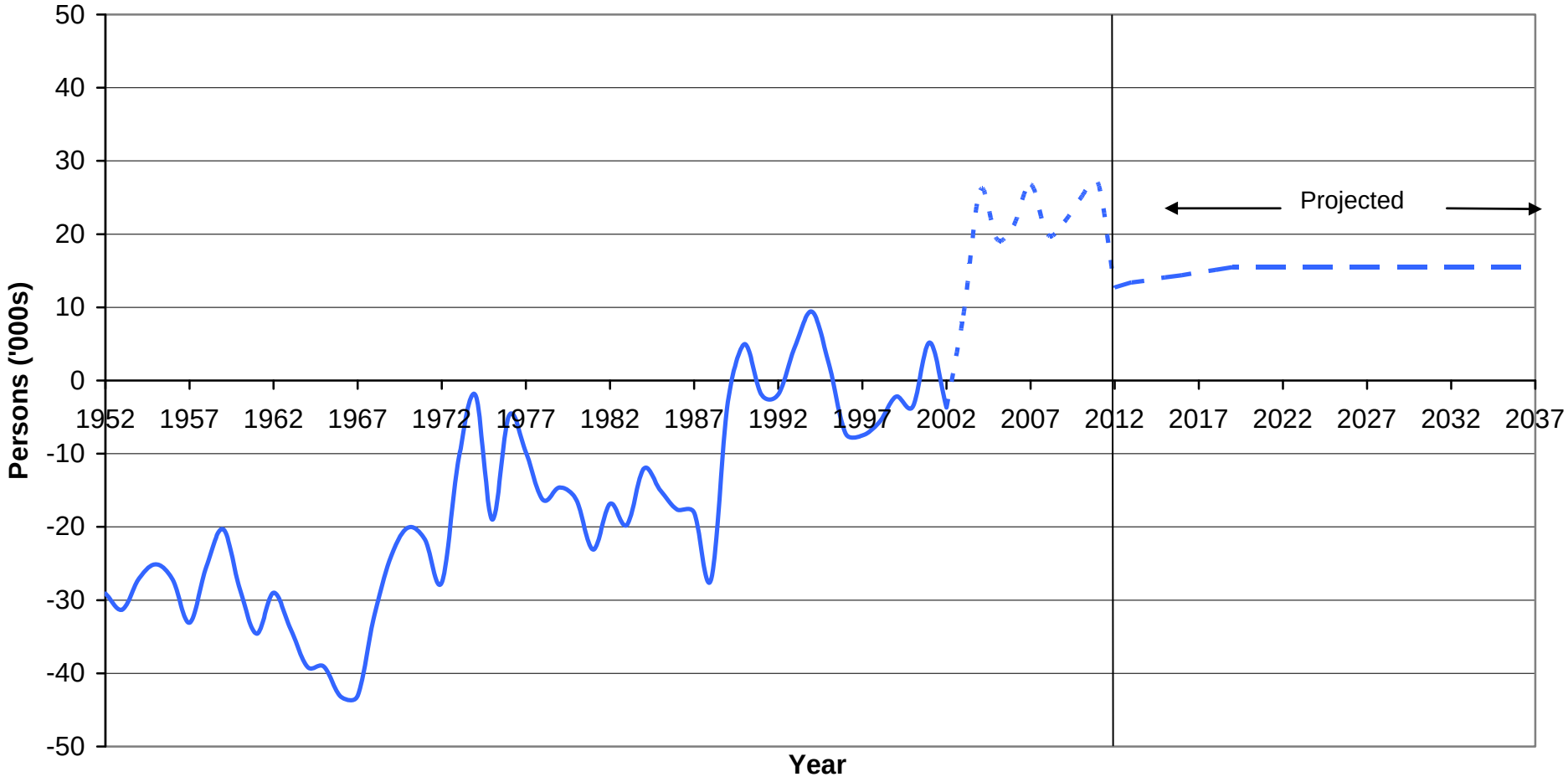
Migration assumptions

- From 2018-19 onwards, it is assumed that there will be a net inflow of 15,500 people per year to the end of the projection period

  – +12,000 net international flows

  – +3,500 net cross-border flows

Net migration, actual and projected, Scotland, 1952-2037



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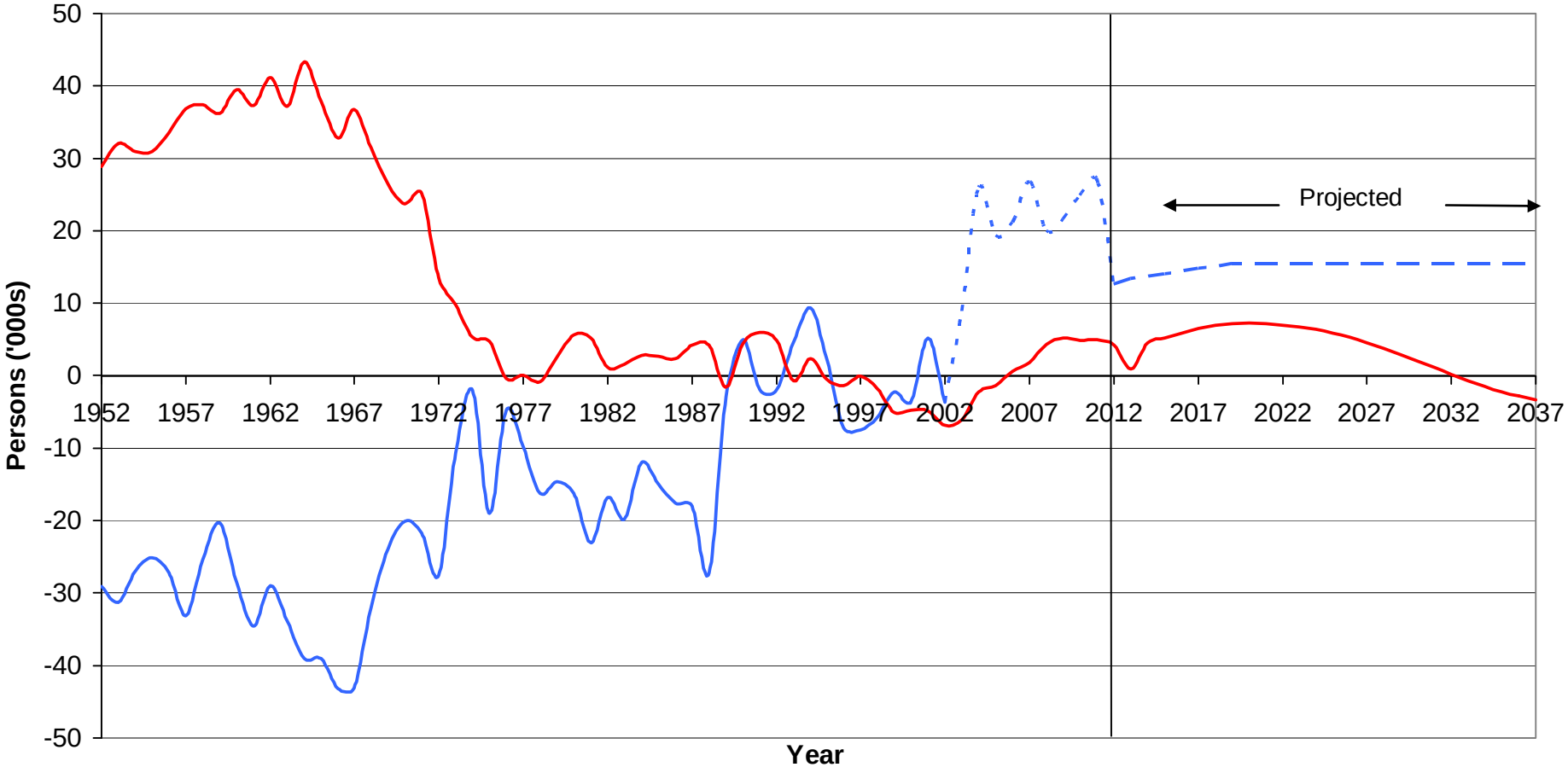
Net-migration and Natural change



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Summary

- Scotland's population to continue to increase
- Age structure of Scotland's population projected to change
- Scotland's population to age over the next 25 years
- Net migration assumed to be the main contributor to population growth

What's next?

2012-based:

- Office for National Statistics to publish additional variant projections in December.
- Council and NHS Board area
  – Spring 2014
- National Park and Strategic Development Plan areas
  – Summer 2014
- Continue to produce National population projections every two years.
- The rebased mid year estimates which will take account information from the 2011 Census results are due to be published in December.

For more information and data concerning the projections please contact:

National Records of Scotland (NRS)
Statistics Customer Services

email: customer@gro-scotland.gov.uk

Tel: 0131 314 4299

Or in the 'Population Projections Scotland' section of the NRS website.