

Mid-year population estimates – age distribution errors

We have recently been made aware of errors mainly affecting the age distribution of the mid-year population estimates for Scotland for the years 2002 to 2014. These errors only affect areas within Scotland; population estimates for England, Wales and Northern Ireland are unaffected. Whilst the estimated age distribution of the UK population is affected for the period, the total estimates of the UK population remain valid.

Do the errors change the total estimated UK population?

No. At UK level the total estimated populations for each year 2002 to 2014 are unaffected and all current estimates remain valid; the errors do not change the estimated UK population.

Do the errors change the total estimated population of England, Scotland, Wales or Northern Ireland?

No. The total estimated populations for the constituent countries of the UK (England, Scotland, Wales, and Northern Ireland) over the period are also unaffected. Subnational areas of England, Wales, and Northern Ireland are similarly unaffected. For subnational areas of Scotland the errors have only a very small effect on the total population estimates for council and NHS board areas.

How do the errors affect the total population estimates for areas within Scotland?

The errors in the (total) council area populations in Scotland are less than 0.10 per cent in all council areas. In percentage terms, the largest underestimate is 0.06 per cent in Angus and the largest overestimate is 0.10 per cent in Dundee City. In absolute terms, all errors are generally very small; the largest is an overestimate of 143 people for Dundee City.

Do the errors change the age distribution of the estimated population?

Yes. The errors affect the age distribution of the estimated population in Scotland, and thus also the age distribution of estimates provided for Great Britain and UK populations. This means however that the age distribution of the estimated populations of England, Wales, and Northern Ireland are not affected and remain valid.

What is the effect of the errors on the the age distribution of the affected areas?

The errors affect the age distribution of the population, particularly in the age range 17 to 25. In percentage terms the largest underestimate in the total estimated population of Scotland for mid-2014 is 1.30 per cent at age 21 and the largest overestimate is 2.23 per cent at age 18. At UK level in percentage terms these result in a largest underestimate in the total estimated population for mid-2014 of 0.11 per cent at age 21 and a largest overestimate of 0.18 per cent at age 18.

Is there an impact on my analysis performed using the published estimated population data?

It depends. If you are carrying out analysis particularly by different age cohorts, or comparative analysis across different local areas of the UK you are encouraged to check to see whether these errors will change how you use the population estimates.

Can I find out more about the cause of the errors and the impact on the already published estimated population?

Yes. The [Population](#) section of the National Records Scotland (NRS) website has further information on the causes of the errors. This includes a table showing the cumulative net impact of the errors for the 2014 mid-year estimates at Scotland, Council and NHS Board area level by sex and age.

Do you have plans to publish corrected population estimates data?

Yes. We aim to correct the 2012, 2013 and 2014 mid-year population estimates for the UK in April 2016, when NRS publish the 2015 mid-year population estimates for Scotland.

Can I contact someone if I have difficulties or concerns with the errors and your plans to correct them?

Yes. We welcome you to contact us if the plan to correct next year will cause you difficulties, if you have questions on how the error may affect your analysis, or if you have any other concerns. Our contact email address is pop.info@ons.gsi.gov.uk and our telephone number is +44 (0)1329 444661.