

2006-based Subnational population projections: Frequently Asked Questions (FAQ)

General Questions

Q1. What is included in these projections?

A: These projections include population by age (5 year age groups) and sex for a twenty-five year period from the 2006 base to 2031. They give projections down to Government Office Region, Strategic Health Authority, Primary Care Organisation, County, Unitary Authority, London borough, and metropolitan and non-metropolitan district level. As well as population totals, components of change (births, deaths, migration) are also shown. The projections use the distribution of population by district level local authority implied in the 2006 Mid-Year Estimates published in August 2007 and are constrained to be consistent with the 2006-based National Population Projections produced by ONSCD on 23 October 2007.

Q2. How have these projections been produced?

A: They take the 2006 mid-year population estimates as a starting point, age the population on (apart from the armed forces population), add on a projected number of births, subtract a projected number of deaths and make an adjustment for net migration. This is carried out at the local level, and the total over all areas is constrained to the 2006-based National Population Projections published by ONSCD on 23 October 2007. More information is available in the methodology document that can be found at www.statistics.gov.uk/snpp

Q3. What's changed from the consultation data?

A: These projections are produced using our definitive projection system whereas consultation projections were produced on our backup system. In addition we have made a small number of changes.

- We have changed the way we average the international migration data.
- We have applied capped rates to internal migration propensity to migrate rates.
- The international migration projected for Forest Heath has been amended.

Full details are published in *2006 based Subnational Population Projections: Summary of Part One Consultation Response Analysis and Changes Implemented in the Projections* available from www.statistics.gov.uk/snpp

Q4. What level of detail do the projections go down to?

A: The projections are available for quinary age groups by gender for Government Office Regions, Strategic Health Authorities (SHAs), Primary Care Organisations

(PCOs), counties and local authorities in England. More detailed commissioned tables can be obtained on request from snpp@ons.gsi.gov.uk

Q5. What about the Isles of Scilly and the City of London?

A: Estimates for the Isles of Scilly in particular and to a certain extent the City of London are considered to be less reliable and consequently estimates for these areas do not appear in our published tables.

Q6. Are the projections broken down by ethnicity or any other unprovided dimension?

A: No. The projections are produced using data that splits the population only by age and sex. There are no official projections of the population by ethnic group or country of birth, or any other possible splits. Currently the University of Leeds is undertaking a study, funded by the ESRC, looking at population projections by ethnic group.

Q7. What about projections for other countries in the UK?

A: Projections published today are for England only. Subnational projections for other UK countries are the responsibility of respective devolved administrations. Subnational projections for Scotland were published on 22 January 2008 and for Northern Ireland on 6 March 2008. Subnational projections for Wales will be published on 30 June.

Q8. When will the next set of projections be produced?

A: The next set planned will be 2008-based, to be published for national projections in September/October 2009 and for subnational in early 2010.

Q9. Are the projections fit for purpose?

A: These data provide a set of demographic trend based projections. They are based on the assumption that recent trends in fertility, mortality and migration will continue. They provide the best available estimate of future population levels that would result from these trends. They take no account of local development policy, economic factors or capacity of areas to accommodate population. Their aim is simply to provide an indication of future population size and structure in any year should the assumptions used be realised.

These projections provide a wealth on information and are suitable for a range of purposes. It is inevitable that they will differ from actual future populations to some degree.

The projections are based on the best available data on births, deaths, and migration. Nevertheless ONS, in cooperation with Government Departments, is undertaking a major improvement programme.

The cross-Government programme to improve migration and population statistics was announced to the House on 4 February 2008 by John Healey, Minister for Local Government.

The senior Programme Board of officials will help steer the work on migration improvements and advise on priorities. A Ministerial Group will support the National Statistician and help drive forward the changes. This latter group is to be chaired jointly by John Healey and Liam Byrne for the Government. The UK Statistics Authority will ensure the quality of the statistics that are produced. Experts and Users will be engaged throughout the process.

A key objective of the new ministerial group is to ensure future needs for population and migration statistics are clearly articulated. These will include requirements for the next government CSR, in particular the local government settlement and NHS resource allocation.

This will enable the National Statistician and the Programme Board to make progress in their work to make migration statistics trusted, authoritative and fit for the purposes for which they are to be used by Government and more widely.

Several Departments have agreed to share in the funding of the work programme. ONS, CLG, Health, Home Office and Her Majesty's Treasury are to provide additional cash funding, totalling £12m over the next three years.

Comparison with Other Data

Q10. The 2007 Mid-Year Estimates are soon to be published. Why don't these projections take these data into account?

A: The projections are dependent on the availability of National Projections and these are produced every two years, the last set being 2006-based. It takes some time to produce and consult upon subnational projections. Nevertheless these projections have been published four months earlier in the year than the previous equivalent set of projections (based on data up to 2004), and we hope to publish 2008-based projections even earlier.

Q11. Will the 2007 projected figures differ from the Mid-Year Estimates?

A: Yes. The 2007 mid-year estimates will take account of the recorded number of births and deaths, and the estimated amount of migration, in the year to mid-2007. The projections do not use any data more recent than that for the year to mid-2006.

Q12. How do these projections tie in with the national projections produced by ONSCD?

A: These projections are fully consistent with the 2006-based ONSCD national projections. Across all subnational areas they sum to the ONSCD 2006¹ national

¹ These were the first national projections to be produced by ONSCD. On 31 January 2006, responsibility for the production of national projections was transferred to the Office for National Statistics Centre for Demography (ONS CD) from the Government Actuary's Department (GAD). Future national projections (usually every two years) will be produced by ONS in consultation with the General Register Office for Scotland, the Northern Ireland Statistics and Research Agency and the Welsh Assembly Government Statistical Directorate.

population projections in terms of population (by single year of age and sex) and components of change (births, deaths and international migration).

Setting Assumptions

Q13. What assumptions have been made in these projections?

A: Assumptions on future local levels of internal migration (inflows and outflows) by age and sex, international migration (inflows and outflows) by age and sex, fertility by age of mother, male/female birth ratio, and deaths by age and sex have all been derived using historic data at the local level over a reference period leading to the base year (2006). Note that these assumptions relate to the differentials in these measures between local areas – at national level all components of change remain consistent with the assumptions used in the National Population Projections as described in Population Trends 131 (Spring 2008)².

Details on the assumed values and rates for the components of change for specific areas can be supplied on request (write to snpp@ons.gsi.gov.uk).

Q14. What data sources are used to set assumptions for migration?

A: Subnational population projections use local data on population, births and deaths data to calculate local fertility and mortality rates. Internal migration estimates are based on Patient Register Data System (PRDS) data which is available at LA level. International migration consists of a combination of data from the PRDS (for cross border flows)³, International Passenger Survey and the Labour Force Survey, together with data from the Home Office and National Asylum Support Service on asylum seekers. Where necessary, Census and other data are used to disaggregate these data down to the geographic level needed for the projections.

Previous research has shown that using a time-series of five years for all elements produces the best balance and gives more robust assumptions and better quality projections than other periods. This projection therefore mainly uses an average of five years of historic data and this is thought to give the best representation of likely future trends.

The methodology for projecting international migration has been revised as a result of the Improving Migration and Population Statistics project and is comparable with that used in the Mid-Year Estimates.

Full details are available in the methodology guide available from www.statistics.gov.uk/snpp

² http://www.statistics.gov.uk/downloads/theme_population/Population_Trends_131_web.pdf

³ That is flows between areas in England and the other UK countries, Wales, Scotland, and Northern Ireland.

Migration

Q15. Are the projections reliable if measurements of migration are flawed?

A: The projections use the best available information on migration. However, we do acknowledge that migration is the most difficult component of population change to estimate and project.

The cross-Government programme to improve migration and population statistics was announced to the House on 4 February 2008 by John Healey, Minister for Local Government.

The senior Programme Board of officials will help steer the work on migration improvements and advise on priorities. A Ministerial Group will support the National Statistician and help drive forward the changes. This latter group is to be chaired jointly by John Healey and Liam Byrne for the Government. The UK Statistics Authority will ensure the quality of the statistics that are produced. Experts and Users will be engaged throughout the process.

Q16. Why can't you provide migration flows for every year of the projected period?

A: Due to data constraints, involving vast amounts of data, and the IT systems currently available to us, we are only able to store specific years of internal migration matrices during the modelling process. These selected years cover the first few years of the projection and every five years thereafter.

Q17. What about illegal migration and those who overstay?

A: The projections use the latest mid-year population estimates as their starting point. These are, in turn, based on the 2001 Census results. There is no empirical data on the coverage of the unauthorised foreign-born population in the 2001 Census. In the absence of any such empirical data, ONS advised the Home Office in the course of work on sizing the unauthorized population that it was reasonable to take evidence from the US (that 10% of the unauthorised foreign-born population were excluded from the US Census), and use that 10 per cent assumption in the Home Office calculation of the central estimate of the unauthorised foreign-born population. (NB: it is likely that more than 10% of the unauthorised foreign-born population were not enumerated by the 2001 Census, but the One Number Census procedure was designed to correct for non-response.)

The international migration estimates on which the projected migration is based do not explicitly include estimates of the number of people entering or staying on in the UK illegally. However:

- They do include estimates of the number claiming asylum and remaining in the country for more than twelve months. Therefore anyone who enters the country illegally, claims asylum, and remains in the country for more

than twelve months will be included in the international migration and population estimates. Hence, overstaying asylum seekers are implicitly included in the estimates. Allowance is made for those who depart voluntarily, and also for removals.

- The IPS is based on stated intentions of survey contacts, not on actual visa or immigration status. People entering legally on a visitor visa but who subsequently overstay and remain in the country for more than 12 months may be included in the international migration estimates as either long term migrants or visitor switchers. Their inclusion in international migration estimates is dependent on their response to the intended length of stay question, on arrival to the country.
- Anyone who enters the UK clandestinely and does not go on to apply for asylum will not be included in TIM estimates

Q18. What is the definition of a long-term international migrant?

A: Someone who changes their country of residence for at least twelve months.

Q19. What about extra migration from A8 Accession?

A. On 1 May 2004, ten countries joined the European Union (EU): Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia. On 1 January 2007 Bulgaria and Romania joined the EU. At the time the 2006-based national population projections were produced there was evidence of increased immigration from these countries, and this was used in the setting of migration assumptions for the national population projections⁴. Since the 2006-based subnational population projections are constrained to the national population projections, these migration assumptions at national level will be reflected in the subnational projections (when they are summed across all the local authorities). An allowance has been made for additional net migration totalling +150,000 over the five years from 2007-08 to 2011-12 from the accession countries which joined the European Union in May 2004 and January 2007.

Migration data that include post-accession migrants have started to feed into the mid-year population estimates. Because the subnational population projections are mainly based on average migration figures over a five year period, any new migration patterns will take time to be fully reflected in projections and will only be partially reflected in the 2006-based subnational population projections. So, to some extent, the geographical distribution of additional migrants due to the accession of the A8 countries will be based upon the distribution of international migrants prior to A8 accession.

No additional adjustment is made for subnational population projections.

⁴ see the annual reference volume available here:

<http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=4611&Pos=&ColRank=1&Rank=272>

Q20. What about short term migrants?

A: Short term migrants do not fall under the definition of usually resident population that forms the basis of mid-year population estimates and consistent population projections. As part of the ONSCD IMPS project we have produced experimental estimates of short-term migrants, but these are not yet available at the subnational level.

Methodology**Q21. How are special population groups treated?**

A: The only special population group within the projections are home armed forces and foreign armed forces and their dependants. These people are treated as a 'static population' that retain the same age structure and level throughout the period of the projections.

Q22. What about planned housing growth or economic regeneration?

A: The migration assumptions are based on recently observed patterns in demographic behaviour, and assume that such patterns will continue into the future for the twenty five year period covered. They do not reflect any events that have not yet occurred, and do not take any account of the capacity of an area to accommodate changes in population, developmental policies or economic factors. However, the effect of implementing structure plans on migration will be reflected in future sets of projections as they feed into the mid year estimates series.

The advantage of this approach is that the method used is fully consistent across all local authorities. This is important as the projections are used for resource allocation and consistent data are needed for this. Knowing that the data is prepared on a consistent method across England, users can interpret the trend-based projections and take account of any local information on development when using them for planning.

In our recent consultation we asked whether we should produce a projection variant that takes into account housing plans. We are currently considering the responses to that consultation.

Accuracy and Improvements**Q23. How accurate are the projections?**

A: At small area level the projections are subject to greater uncertainty, given the smaller population numbers involved. Care should be taken in interpreting these data, particularly where broken down by age and gender.

Accuracy assessments have been made comparing the early years of the projected period in previous sets of projections with corresponding mid-year estimates. These comparisons show a good relationship between the two. However, it should be noted

that the projections are not economic or policy-based forecasts of what the population will be. They are simply illustrating likely population levels arising should a set of given assumptions be realised.

We intend to publish an accuracy report on subnational population projections on August 21 2008.

Q24. What is the ONS doing to improve the projections?

A: In addition to the migration statistics improvement programme referred to above, other proposed improvements include research into providing more robust projections of international and internal migration and the implementation of a new, more transparent, system to produce the projections.

Uses

Q25. What are these projections being used for?

A: The projections form a "baseline" view of what the population dynamics would be in the given areas if recent demographic trends were to continue into the future. It is important to note that these projections are consistent across all local authorities in England. They are used by other Government Departments as inputs into calculations for household projections, and for health and transport planning. They are also used by local authorities (together with other factors) to produce their own projections for local planning and recently by the Department of Health and Department for Communities and Local Government (CLG) for funding allocation to PCOs and local authorities. (2004-based projections are currently used by CLG for funding allocation to local authorities. It is not currently planned to use 2006-based projections for this purpose because of the three year funding settlement cycle.)

Q26. Why are DH/CLG using these data?

Q27. Should CLG update their allocations?

A: Questions relating to the allocations made by CLG or DH on the basis of these projections should be addressed to the CLG or DH.

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