

Information paper

Quality and Methodology Information

General details

Title of output:	Annual Mid-Year Population Estimates
Abbreviated title:	MYE
Designation:	National Statistics
Geographic coverage:	UK
Date of last QMI*:	January 2015
Contact details:	Population Estimates Unit, 01329 444661, pop.info@ons.gov.uk

Executive summary

The mid-year estimates refer to the population on 30 June of the reference year and are published annually. They are the official set of population estimates for the UK and its constituent countries, the regions of England and Wales and local authorities. The Office for National Statistics (ONS) compile and publish population estimates for the UK using estimates for England & Wales (also produced by [ONS](#)), estimates for Scotland produced by [National Records of Scotland \(NRS\)](#) and estimates for Northern Ireland produced by the [Northern Ireland Statistics & Research Agency \(NISRA\)](#). With the exception of the description of the published tables in the about the output section, this document relates to the estimates for England and Wales only.

Mid-year population estimates relate to the usually resident population. They account for long-term international migrants (people who change their country of usual residence for a period of 12 months or more) but do not account for short-term migrants (people who come to or leave the country for a period of less than 12 months). A combination of registration, survey and administrative data are used to estimate the different components of population change.

The mid-year population estimates are essential building blocks for a wide range of National Statistics. They are used directly as a base for other secondary population statistics, such as population projections, population estimates for the very old and population estimates for small geographical areas. They are used for weighting survey estimates such as the Labour Force Survey and other social surveys to ensure that they are representative of the total population, and they are used as denominators for rates or ratios, for example in health and economic indicators.

They are an important input for a wide number of economic and social statistics. Main users include central and local government and the health sector, where they are used for planning and monitoring service delivery, resource allocation and managing the economy. Additionally, they are used by a wider range of organisations such as commercial companies (for market research), special interest groups and academia as well as being of interest to the general public.

Further information on population estimates across the UK including methodology, quality and data sources is available in an [information note](#).

This document contains the following sections:

- Output quality
- About the output
- How the output is created
- Validation and quality assurance

* Quality and Methodology Information' (QMI) replaced 'Summary Quality Reports' (SQR) from 04/11

- Concepts and definitions
- Other information, relating to quality trade-offs and user needs
- Sources for further information or advice

Output quality

This document provides a range of information that describes the quality of the data and details any points that should be noted when using the output.

ONS has developed [Guidelines for Measuring Statistical Quality](#); these are based upon the 5 European Statistical System (ESS) Quality Dimensions. This document addresses these quality dimensions and other important quality characteristics, which are:

- Relevance
- Timeliness and punctuality
- Coherence and comparability
- Accuracy
- Output quality trade-offs
- Assessment of user needs and perceptions
- Accessibility and clarity

More information is provided about these quality dimensions in the sections below.

About the output

Relevance

(The degree to which statistical outputs meet users' needs.)

This product is the official set of population estimates for the UK and constituent countries, consisting of annual published estimates from 1981 onwards. The published estimates meet the known users' needs as described below. The accuracy of the estimates is limited to the quality of the data sources used to compile the estimates, as discussed in the Accuracy section.

The estimates refer to the mid-year (30 June), usually resident population and are available at the following geographies and population subgroups:

- UK, Great Britain, England, Wales, Scotland and Northern Ireland
- regions, counties, unitary authorities and local government districts in England; council areas in Scotland, unitary authorities in Wales and district council areas in Northern Ireland

The standard tables are published using unformatted data which provide unrounded data to aid further analysis for users. However, the unrounded estimates cannot be guaranteed to be as exact as the level of detail implied by unit-level data. This is due to levels of uncertainty around the unrounded estimates (also see the Accuracy section).

Additional supporting data published with the population estimates comprises components of population change which provides information on population events (births, deaths, internal migration within the UK, international migration, and other changes) between the reference year and previous mid-year population estimate. The components of population change are available as totals for the following geographies:

- UK, Great Britain, England, Wales, Scotland and Northern Ireland
- regions, counties, unitary authorities and local government districts in England; council areas in Scotland, unitary authorities in Wales; and district council areas in Northern Ireland

The components of population change are available by sex and single year of age for the following geographies:

- England and Wales
- regions, counties, unitary authorities and local government districts in England; and unitary authorities in Wales

The published Mid-Year Population Estimates data tables and supporting documentation can be found on the [Population Theme Page](#) on the ONS website.

For geographical levels that are smaller than local authority district, estimates are published as a separate output and have their own specific quality information. The [Quality and Methodology Information for Small Area Population Estimates](#) is available from the [Quality](#) section of the ONS website.

Mid-Year Population Estimates have a wide variety of uses within central government as well as being used by local authorities and health bodies, other public bodies, commercial companies and individuals in the private and academic sector (see the Assessment of user needs and perceptions section). These uses can be categorised into 2 broad groups:

- uses where the absolute numbers are important. This may be in terms of allocating financial resources from central government, planning services or grossing up survey results. Some of the main central government uses are concerned with resource allocation and are carried out by the [Department for Communities and Local Government \(DCLG\)](#) for England and the [Welsh Government \(WG\)](#)
- uses where the population figures are used as denominators, for example in the calculation of social and economic indicators

The main data sources used in the compilation of the Mid-Year Population Estimates down to local authority level are:

- Birth and death registrations from the General Register Office (GRO)
- [International Passenger Survey \(IPS\)](#) data, [Higher Education Statistics Agency \(HESA\)](#) data, [Migrant Worker Scan \(MWS\)](#) data, GP Patient Register Data System (PRDS) data, [Home Office Visa](#) data, [Labour Force Survey \(LFS\)](#) data used to estimate international migration moves
- National Health Service Central Register (NHSCR), the GP Patient Register Data System (PRDS) and [Higher Education Statistics Agency \(HESA\)](#) data used to estimate internal migration moves
- [Ministry of Defence](#) data and [United States Air Force \(USAF\)](#) data used to estimate the change in the home and foreign armed forces population
- [Ministry of Justice](#) data used to estimate the number of prisoners

Timeliness and punctuality

(Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the gap between planned and actual publication dates.)

Population estimates for the UK and for England and Wales are normally published annually in June. For a particular mid-year (30 June) they are available about 12 months after the reference date. This time lag reflects the availability of the data sources which measure the components of population change over the year preceding the estimate, and the time required to process the data and calculate the estimates.

The publication of Mid-Year Population Estimates would be later than the planned date only if essential data used to calculate the estimates were not available, for example if estimates of international migration were not received or delays were encountered in the supply of administrative data from third parties. In previous years the planned publication date, as entered into the [Release Calendar](#), has always been met, though in 2013 the UK estimates were published 6 weeks after the estimates for England and Wales due to the timetable for the publication of the estimates for Scotland.

For more details on related releases, the [UK National Statistics Publication Hub](#) is available online and provides 12 months' advance notice of release dates. In the unlikely event of a change to the pre-announced release schedule, public attention will be drawn to the change and the reasons for the change will be explained fully at the same time, as set out in the [Code of Practice for Official Statistics](#).

How the output is created

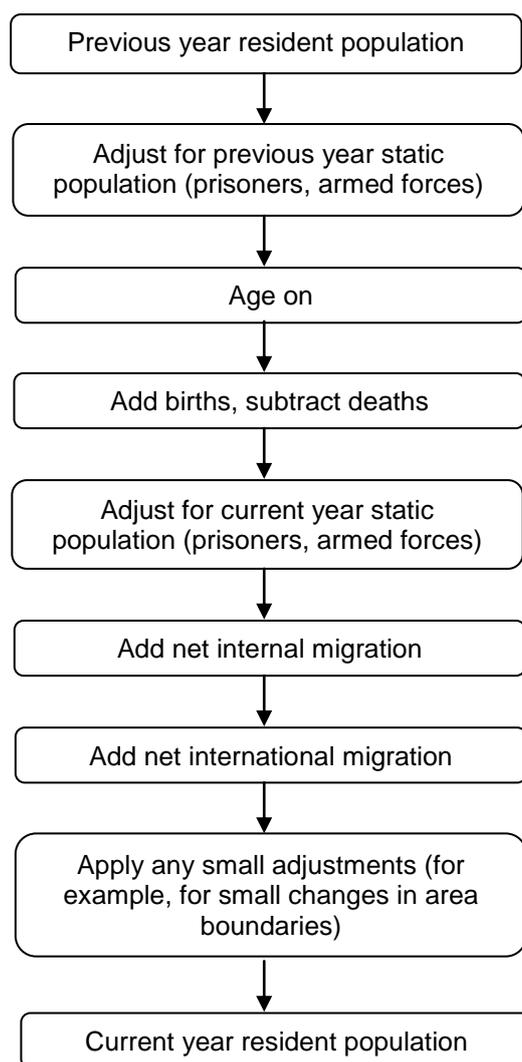
Population estimates down to local authority level are calculated using the cohort component method. This is a standard demographic method which uses information on the components of population change to update a population base such as the census estimate. The resident population, by single year of age, on 30 June of the year prior to the reference year is aged by 1

year, those born during the 12 month period prior to the mid-year point are added on to the population and those who have died during the 12 month period are removed.

Other factors taken into account are the movement of people into and out of the UK (international migration) and, for estimating the population for different areas within the UK, movements between areas of the UK (internal migration). Internal migration includes both cross-border moves between the 4 constituent countries of the UK and moves between local areas within each part of the UK.

Some population subgroups such as prisoners and armed forces (UK and foreign) are estimated separately from the rest of the population (this is because internal or international migration moves of these groups are not captured using the standard data sources). Figures for the previous year are removed from the population prior to the estimation process and then figures for the current year are added back in for the final compilation. The cohort component method used for the Mid-Year Population Estimates is illustrated in figure 1.

Figure 1: Cohort component method



For census years the population is aged by the period of time between the census and 30 June (in 2001 this was 9 weeks and in 2011 it was 14 weeks). Similarly, the components only need account for change during this period. For each component, this is established by the availability of data for the period between census day and 30 June and the amount of change expected. Further details of how this was done in 2001 can be found in [Population Trends 109](#). Details of the methods used in 2011 can be found in [Methods Guide for census-based Mid-2011 Population Estimates](#).

After the results of a new Census are known, the population estimates over the previous decade are subsequently revised to ensure a consistent time series. In light of the 2011 Census results, the mid-2002 to mid-2010 population estimates were revised at national and subnational level. The methodology for revising the population estimates involved identifying parts of the population estimates that were under or over-estimated between 2002 and 2010, using 2011 Census data and

other sources. Further details of the methods used to revise the mid-2002 to mid-2010 population estimates at national level can be found in the [methodology guide for the national back series](#) and at subnational level in the [methodology guide for the subnational back series](#).

The Mid-Year Population Estimates are calculated using a "top down" approach. The national estimates for England and Wales are produced first; estimates for subnational areas (local authorities) are then produced and constrained to the national estimates. A different method is used to produce population estimates for smaller areas, for example National Parks and wards. Details of the methods used to produce population estimates for small areas are available from the [Population estimates methodology](#) section of the ONS website.

A number of data sources are used to compile the population estimates. Where possible, ONS ensures that definitions are consistent between data sources. For example, following the 2011 Census, the population estimates definition for prisoners has been changed from those having served 6 months or more in prison to those who have been sentenced to serve 6 months or more, to be as consistent as possible with the 2011 Census prisoners definition.

The estimates are produced using a variety of data sources and statistical models, including some statistical disclosure control methods, and small estimates should not be taken to refer to particular individuals.

Full details of the methodology used to produce the population estimates can be found in the [Population estimates methodology](#) section of the ONS website.

Validation and quality assurance

Accuracy

(The degree of closeness between an estimate and the true value.)

Population estimates are produced using a well established demographic approach called the cohort component method (refer to the How the output is created section). This involves combining information from a number of data sources including the previous census, survey data and administrative registers. The data sources used are the best that are available on a nationally consistent basis down to local authority level, but the estimates are subject to the coverage and error associated with these sources. Information from administrative registers such as the numbers of births and deaths are considered to be very reliable.

Several products providing information on the likely accuracy of the estimates are planned or already available:

- a set of Quality Indicators which provide a high level indication of the likely reliability of the estimates for each Local Authority are published alongside each release (from the estimates for 2013 onwards)
- a Data Comparator tool, allowing easy comparison of the population estimates with counts from administrative sources, is also published alongside each release (again from the estimates for 2013 onwards)
- statistical measures of the reliability of the 2011 Census estimates - on which the population estimates are based - are published in the [Confidence Intervals for the 2011 Census report](#)
- further products are being developed for publication to help users understand the reliability of the estimates
- information is also available, as described below, on the likely accuracy of the migration estimates which are used in updating the population estimates each year

One source of potential inaccuracy in the estimates is the use of sample surveys in the derivation of the 2011 Census estimates (where the Census Coverage Survey is used to adjust for estimated non-response) used as the base population, and the IPS-based estimates of international migration. Sampling error from those sources allows the derivation of an estimated confidence interval of +/- 0.2%. This means that if the Census and IPS were repeated many times, with a new sample for the related surveys selected each time, we would expect the true value to be within 0.2% of the estimated value 95% of the time. Note that this confidence interval does not include error arising from other components, nor does it provide a measure of bias in either the census, mid-year estimates or other components. This confidence interval has been derived from published information available from the [Confidence Intervals for the 2011 Census report](#) for the England and

Wales Census, [Confidence Intervals for Scotland's Census](#) and the [2011 Census for Northern Ireland Quality Assurance Report](#) and from the [Migration Statistics Quarterly Report](#).

Estimates of international migration are obtained from the [International Passenger Survey \(IPS\)](#) and are therefore subject to sampling and other types of error. Although national figures have relatively small levels of uncertainty, at local levels the sample counts in the IPS are small and it is necessary to combine data across years and distribute figures using other administrative data sources. Further information on how ONS estimates international immigration to local level is available on the [Improved Methodology for Estimating Immigration to Local Authorities in England and Wales](#) section of the ONS website.

At this level, individual migration estimates are subject to greater levels of uncertainty. However, the impact of uncertainty associated with net migration flows is small as a percentage of the local authority mid-year estimate. ONS is currently undertaking research to investigate the feasibility of providing specific measures of uncertainty for the population estimates at local authority level. Measures of uncertainty for the Mid-2013 and Mid-2014 Population Estimates are planned for publication later in 2015.

Further information on estimates of international migration is available on the [International Migration](#) section of the ONS website and a detailed description of the quality associated with international migration estimates for national, UK constituent country and the regions of England is provided in the [Quality and Methodology Information for Long-term International Migration](#).

At the level of geographic detail at which population estimates are required, the use of administrative registers is essential to account for internal migration. Although NHS patient registers provide the best fit to usually resident populations, they have recognised limitations in relation to their timeliness and coverage, and methods have been improved by combining patient register data with [HESA](#) data. Delays in re-registering with a GP when moving between local authorities are prevalent amongst young men for example. These delays can cause inaccuracies when estimating internal migration for these young men. An example of this is Oadby and Wigston, where the detailed age distribution for males is likely to underestimate the number of 23-27 year olds and overestimate the number of 21-22 year olds. Further information on estimates of internal migration can be found on the [Migration within the UK](#) section of the ONS website and a detailed description of the quality associated with the estimates of internal migration is provided in the [Quality and Methodology Information for Internal Migration Estimates](#).

ONS has undertaken a substantial and long-term programme of work to improve the population and migration statistics that it produces. The scope for improving migration and population statistics was addressed in the conclusions and recommendations of the National Statistician's Task Force on Migration Statistics. The [Task Force report](#) was published in December 2006 and made recommendations for improvements between 2008 and 2012. These recommendations were taken forward as part of the [Migration Statistics Improvement Programme \(MSIP\)](#) of work in conjunction with other Government departments.

Further work undertaken as part of Phase Two of the [MSIP](#) included using administrative data sources in the development of plausibility ranges around population estimates, quality indicators and measures of uncertainty in the population estimates (as described above), and delivering potential statistical benefits of e-borders on the estimation of international migration. The [MSIP](#) delivered Phase Two in March 2012, completing the programme a year ahead of schedule.

Following the publication of results from the 2011 Census, work has been undertaken to understand the reasons for the difference between the population estimates rolled forward from 2001 and those based on the 2011 data. The results of this reconciliation exercise have been used to inform revisions to the population estimates for mid-2002 to mid-2010 to ensure the availability of a consistent time series of population estimates. ONS will also continue research to make further improvements to population statistics. This includes work on the internal migration estimates, emigration estimates and the quality assurance of population estimates.

ONS had expected to take on new methods for estimating (at the LA level) emigration and internal migration in autumn 2015. However, it is now our intention to continue to develop these new methods to include them in the production of the mid-2016 estimates in June 2017. We would revise the back series of estimates from 2012 at the same time. This will be followed by a similar revision to the Small Area estimates. We are considering the appropriate user consultation on this

proposal and would welcome comments on both the approach to consultation and the proposed publication plan itself.

The strategy for population statistics is available on the [Improving our Population and Migration Statistics](#) part of the ONS website.

Note about revised mid-2013 estimates

The data presented in the [Population Estimates for UK, England and Wales, Scotland and Northern Ireland, Mid -2013 and Mid-2014](#) release published on 25 June 2015 include corrected 2013 estimates that address the previously announced error in the distribution of the foreign armed forces (FAF) special population presented in the previous release of 26 June 2014. The original error had the largest impact on the estimate for Forest Heath, with smaller impacts in other affected local authorities in England. The existing 2013 estimates remain on the ONS website but are superseded by the new release. Note that the national population estimates of the UK and its constituent countries have not been revised and remain valid.

The following table presents those local authorities and higher geographies that have revised estimates for mid-2013 that are in the absolute range of 50 or above:

Code	Name	Error (Published 26 June 2014 - Correct)	Corrected 2013 Estimate (published 25 June 2015)	Error as % of Correct Estimate
E07000201	Forest Heath	2,000	61,200	3.3
E07000155	South Northamptonshire	200	87,200	0.2
E10000029	Suffolk	1,400	734,500	0.2
E07000139	North Kesteven	100	109,800	0.1
E07000011	Huntingdonshire	100	172,000	0.1
E10000021	Northamptonshire	200	706,400	0.0
E10000019	Lincolnshire	100	724,400	0.0
E12000004	EAST MIDLANDS	300	4,598,400	0.0
E12000008	SOUTH EAST	-100	8,792,800	0.0
E12000006	EAST	-100	5,954,300	0.0
E10000025	Oxfordshire	-100	666,200	0.0
E07000177	Cherwell	-100	143,800	-0.1
E10000020	Norfolk	-900	871,000	-0.1
E10000003	Cambridgeshire	-700	632,800	-0.1
E07000008	Cambridge	-200	126,700	-0.2
E07000143	Breckland	-400	132,900	-0.3
E07000146	King's Lynn and West Norfolk	-500	149,300	-0.3
E07000204	St Edmundsbury	-500	111,800	-0.4
E07000009	East Cambridgeshire	-500	85,900	-0.6

Note: Data provided to nearest 100. Local authorities and higher geographies with estimates revised by less than 50 not shown.

Of the other affected local authorities and higher geographies that have revised estimates for mid-2013, 7 local authorities and one county have absolute revisions in the range 10-49, with 28 local authorities and 4 counties having absolute revisions in the range 1-9. The remaining 304 local authorities in England and Wales (and all local authorities elsewhere in the UK) are unaffected by this revision. The full list of affected geographies is available on request.

The revised estimates relate to a special population and as such have been restricted to ages in the range 18-59 with the great majority of revision being for Males rather than Females.

When we identified the error we sought users' views on the preferred approach to correcting the estimates. We did this through direct contact with the most affected users, through Local Insight Reference Panel events, through posts on Stats Usernet and by publicising the error in our published outputs.

Taking into account the responses we received we have:

- kept the affected 2013 estimates on the website but marked them as superseded
- published the corrected 2013 estimates alongside the 2014 estimates released on 25 June 2015.

We will adopt a similar approach to the Small Area Population Estimates, with corrected 2013 estimates being released alongside the 2014 estimates in autumn 2015. This means that there will be some inconsistency between the 2 products until this time.

Coherence and comparability

(Coherence is the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar. Comparability is the degree to which data can be compared over time and domain for example, geographic level.)

ONS compile and publish population estimates for the UK using estimates for England & Wales (also produced by ONS), estimates for Scotland produced by [NRS](#) and estimates for Northern Ireland produced by the [NISRA](#). Population estimates for each of the UK constituent countries are compiled using a common methodological approach and aim to be as consistent as possible. More information on comparisons between UK constituent countries can be found in [Population estimates for local authorities across UK constituent countries: a comparison of data sources and methods](#).

Where very substantial changes in methods are implemented, ONS seeks to publish a consistent back series of estimates to the year of the previous census. So, the rebasing of estimates to the results of the 2011 Census was accompanied by the publication of a full set of comparable estimates back to 2002. The methods used to produce the [national](#) and [subnational](#) revised back-series for mid-2002 to mid-2010 following the 2011 Census are available on the ONS website. Further information about recent changes to methodology for local authority population estimates can be found on the [MSIP](#) section of the ONS website. As noted in the previous section, the next substantial change in methods is provisionally scheduled for implementation in 2017, at which point a back-series to 2011 would be expected to be produced. This provisional plan will be the subject of consultation with users before finalising.

The Mid-Year Population Estimates provide data on components of population change that have overlap with other ONS topic outputs. The coherence of these data can be affected by both reporting periods and context.

The comparability of migration statistics used to calculate the population estimates are described in the [Quality and Methodology Information for Long-term International Migration \(LTIM\)](#) and the [Quality and Methodology Information for Internal Migration Estimates](#) which can be found on the ONS website. The LTIM estimates cited for a year may be different to the international migration component of change in the population estimates for 2 reasons. Firstly, the LTIM estimates are available on a quarterly rolling-year basis and the estimates for, say, 2014, would conventionally be taken as relating to the calendar year whilst the population estimates component of change necessarily relates to the period between mid-years. Secondly, even when comparing estimates for the same period; the estimates used to calculate the population estimates are based partly on provisional LTIM data rather than final (also see the Other Information section), and will therefore not tally exactly with the final year-to-end-June figures published in the Long-Term International Migration series.

Estimates of births and deaths used to calculate the population estimates are based on births and deaths that occur during the year to the mid-year reference point, irrespective of when registered. This definition is different to that used in other ONS outputs on births and deaths that use alternative reporting periods (for example, calendar year) and measure birth and death registrations rather than occurrences, and figures quoted from the components of change in the population estimates will therefore be slightly different from the standard ONS outputs related to these events.

The Mid-Year Population Estimates are used both within and outside Government as the definitive set of population figures for the UK, constituent countries and sub-national geographies to local authority level. They are used for calculating other official population statistics such as population projections, small area population estimates, population estimates by marital status and estimates of the very old population. These outputs are consistent with the current series of Mid-Year

Population Estimates, though there is inevitably a lag between population estimates for a particular year being published and this being reflected in the derived products.

In addition to the official Mid-year Population Estimates, alternative population estimates are supplied to [Eurostat](#) that are produced using different methods and reference dates. These estimates are produced for the UK and sub-national Nomenclature of Territorial Units for Statistics (NUTS) geographies. They are used by Eurostat for calculating European demographic indicators. These estimates are not consistent with the current series of Mid-Year Population Estimates given the alternative methods used in their production and dissimilar reference dates.

Users often compare population estimates for individual local authorities to other data sources, for example administrative records or anecdotal evidence. Comparisons between datasets should be treated with caution, as there are always definitional differences in the data collected (for example, whether the data differentiate between long-term or short-term migration, or whether they account for individuals who have left the country or authority). Also, other data sources may cover only a subset of the population.

Concepts and definitions

(Concepts and definitions describe the legislation governing the output and a description of the classifications used in the output.)

Although the population estimates are not explicitly required by law, they would seem to be consistent with ONS's duty under Section 5 of the Census Act 1920 to collect and publish "any available statistical information" with respect to the number and condition of the population between censuses.

A [conceptual framework for population and migration statistics](#) (including the population estimates) is available on the ONS website.

The Mid-Year Population Estimates are consistent with the standard UN definition for population estimates which is based upon the concept of usual residence and includes people who reside, or intend to reside, in the country for at least 12 months, whatever their nationality. Visitors and short-term migrants (who enter or leave the UK for less than 12 months) are not included. Members of Her Majesty's armed forces stationed in England and Wales are included at their place of residence but those stationed outside England and Wales are excluded. Members of the US armed forces stationed in England and Wales are included. Students are taken to be resident at their term time address. Prior to 2011, prisoners had been regarded as usually resident at an institution if they have served 6 months or more of a custodial sentence; however, from 2011 onwards this definition has changed to those who have been sentenced to serve 6 months or more, which is consistent with the definition used in the 2011 Census. The figures for the UK do not include the population of the Channel Islands or the Isle of Man, which are Crown Dependencies rather than part of the UK.

For some people, the concept of usual residence is more complicated. People with no usual residence are counted in the Census as being usually resident in the area in which they were staying on Census day.

"Visitor switchers" (people who enter a country intending to visit but end up staying and becoming a usual resident) and "migrant switchers" (people who enter a country intending to become a usual resident but leave before that happens) are adjusted for at the time of their move into/out of the country rather than the precise point that they change their intentions or reach the 12 month threshold. This adjustment is made by applying multiplying factors to the estimates of visitors and migrants as described in the [Long-Term Migration Estimates Methodology](#) document.

Although usual residence is the recognised definition for population estimates, use of a single definitional base does not meet the needs of all users. The usually resident population does not always coincide with the number of persons to be found in an area at a particular time of day or year. The daytime populations of cities and the summer time populations of holiday resorts, for example, will normally be larger than their usually resident populations.

ONS has developed and published national estimates of short-term migrants to supplement the Mid-Year Population Estimates. These estimates refer to the flows of short-term migrants to and from England & Wales for each year since Mid-2004. As part of the [MSIP](#), methods for producing short-term migration estimates at local authority level have been developed. Further information about these estimates can be found on the [Short-term Migration Estimates](#) section of the ONS website.

Population estimates are produced with a standard reference date of 30 June - that is, mid-year. This is consistent with previous releases and with other statistics, such as the population projections, and also provides a simple estimate of the “population at risk” for data collected on a calendar year basis.

Other information

Output quality trade-offs

(Trade-offs are the extent to which different dimensions of quality are balanced against each other.)

In order to maintain the timeliness of the publication of the population estimates at national and local authority level, the data sources used are the best available at the time of production. However, these may not be final or published sources. Some provisional IPS data are used in the international migration component and information on the differences between these and final data are reported in [Background notes and guidelines for long-term international migration estimates](#) which is available on the ONS website.

Assessment of user needs and perceptions

(The processes for finding out about uses and users, and their views on the statistical products.)

Information on users’ needs for, and perceptions of, the population estimates is collected in a number of ways:

- user groups, for example, the [Central and Local Information Partnership](#); and the [Population and Migration Statistics Inter-Departmental Strategy Group](#) - allowing key users to comment on existing plans and to put forward changes in their requirements
- user events, such as the [Local Insight Reference Panels](#): open to a range of users, and held in different parts of the country to encourage discussion on plans and existing products
- contact with individual users - drawing on the evidence provided by the thousands of users who contact the Population Estimates Unit each year with requests for, or queries on, the estimates

Evidence existing in 2013 was combined with existing ONS research on user personas to produce a User Requirements Report, setting out the priorities for outputs and the requirements to meet the needs of each type of user.

From 2014 onwards, evidence collected through these methods is brought together in November of each year to inform an update of the Population Estimates User Requirements report, with a view to implementing any required changes in the following year’s release, where possible.

Sources for further information or advice

Accessibility and clarity

(Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the release details, illustrations and accompanying advice.)

ONS’s recommended format for accessible content is a combination of HTML web pages for narrative, charts and graphs, with data being provided in usable formats such as CSV and Excel. The ONS website also offers users the option to download the narrative in PDF format. In some instances other software may be used, or may be available on request. Available formats for content published on the ONS website but not produced by the ONS, or referenced on the ONS website but stored elsewhere, may vary. For further information please refer to the contact details at the beginning of this document.

For information regarding conditions of access to data, please refer to the links below:

- [Terms and conditions \(for data on the website\)](#)
- [Copyright and reuse of published data](#)
- [Pre-release access \(including conditions of access\)](#)
- [Accessibility](#)

In addition to this Quality and Methodology Information, Basic Quality Information relevant to each release is available in the background notes of the relevant [Statistical Bulletin](#).

The Population Estimates release consists of a combination of HTML web pages for narrative, charts and graphs (brought together in a Statistical Bulletin), with data being provided in usable

formats such as CSV and Excel. The Bulletin can also be downloaded in PDF format. In 2014, for the first time, an infographic was included in the release to help explain the main points from the data.

As statistical disclosure control methods are applied to each component of the estimates, the standard outputs now include the most detailed (single year of age and sex) estimates at the local authority level and there is no requirement for Data Access agreements to use the estimates at any level of detail. Alternative presentations of the data - in response to an [ad hoc query](#) or a [Freedom of Information request](#) - are made available on the ONS website simultaneously with provision to the requester under the principle of equal access.

A list of those people having pre-release access to the estimates for briefing purposes is linked in to the main release page for each set of estimates.

In addition to a summary table, providing the main results on one page, detailed unformatted tables can be downloaded free of charge in Microsoft Excel format. These provide unrounded data which are published to promote further analysis for users. A note provided with these detailed tables states that the estimates should not be taken to be accurate to the level of detail provided. An Analysis Tool (in Excel) is also published to help users easily manipulate the data.

Answers to Frequently Asked Questions are available as part of each release. Any additional enquires regarding the Mid-Year Population Estimates can be made via email pop.info@ons.gov.uk or telephone on 01329 444661.

Advance notice of any forthcoming major changes in methodology will be announced on the ONS website.

Useful links

[Mid-Year Population Estimates Short Methods Guide](#)

[Interactive population pyramid](#)

[Further research on population statistics](#)

[Population Estimates by Ethnic Group webpage](#)

[Population Estimates by Marital Status webpage](#)

[National Population Projections webpage](#)

[Local area migration indicators webpage](#)

[Neighbourhood Statistics \(NESS\) webpage](#)

[Quality and Methodology Information webpage](#)

[2011 Census webpage](#)

[ONS YouTube Channel](#)