



ONS(ONC(SC))97/17

ONE NUMBER CENSUS STEERING COMMITTEE

Demographic based estimates for 2001

1. Attached is a short paper about the production and release of demographic population estimates for 2001. The paper raises some issues and options and is being presented to Steering Committee members for information. ONS will consult customers about their requirements and this will aid decision making about the release of demographic estimates for 2001.
2. **Members of the steering committee are asked to:**
 - a) **note the paper**
 - b) **provide any comments (at the forthcoming meeting or in writing by 10 December 1997) on the proposed plans for further research.**

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Demographic based population estimates for 2001

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The demographic based population estimates are the annual mid-year population estimates which are produced by the ONS Population and Vital Statistics Division. These estimates are usually published in the year following the year to which they relate, i.e. mid-1996 population estimates were published on 28 August 1997. This paper raises some questions which need to be addressed, in deciding the strategy for a One Number Census and about the release of demographic based estimates for the 2001 population.

The Timetable for Compiling a Demographic Based Population Estimate

A high level timetable for the production of the mid-year population estimates is attached at Annex A. The population estimates are compiled using data from a number of sources. The main determinant of whether the timetable is achieved is the date by which these input data are received and prepared for use. The suppliers of source data, and the date by which their data might be expected to be received, is given in Annex B.

The Population Estimates Unit (PEU) are investigating the date by which data can be provided from our sources and, critically, the date at which the last data are expected to be received, as this date may have implications for the data that are being used in other components of the population estimates. The main use of the population estimates is by the Department of the Environment, Transport and the Regions to allocate resources to local authorities. If the population estimates are to be fit for this purpose they must be produced using the best data which are available at the time of production. Any data received very early may be subject to revisions before the estimates are compiled.

The mid-year population estimates for Scotland and Northern Ireland are usually published before those for England and Wales and the difference reflects the relative amount of data that has to be processed for England and Wales.

In conclusion, it seems reasonable to expect that a final demographic-based population estimate at the national level for 2001 would be ready by the beginning of July 2002. The July date is a cautious estimate and it may well be possible to provide a national level estimate earlier. Once the national level estimate is ready, the sub-national estimates take a further four weeks to produce, assuming that the extra data required at the sub-national level are available.

The Needs for population estimates in 2001

There is a question as to whether the mid-year population estimate for 2001 would be adequate for the One Number Census strategy. Ideally, the demographic estimates which will be used to measure the success of the One Number Census strategy will be based around 29 April 2001. If the 2001 demographic estimates were to be based around Census day then a second question to be addressed is whether there would also be a need for a mid-year population estimate. Customers will be consulted about their requirements, for instance the Department of the Environment, Transport and the Regions may have a need for a 2001 mid-year population estimates in time for the 2003-2004 Standard Spending Assessment round.

It is likely that the timetable for the production of a Census day population estimate would be similar to that for the annual mid-year estimates. It is not yet certain how this timetable would fit in with the processing timetables for the Census and the Census Coverage Survey, although it does not seem likely that the Census timetables would give rise to a need for an earlier demographic estimate than would usually be available. On the other hand, if the Census timetables were compressed to an extent that early demographic estimates were needed, then a provisional demographic estimate could be produced by extrapolating from the mid-2000 population estimates. An extrapolated estimate could be produced by the beginning of 2002. However, it needs to be stressed that this type of provisional population estimate is not usually produced and, if this were required as a one-off for 2001, then this would need to be built in to the planning of resources.

Once there is an agreed 2001 One Number Census population estimate, the population estimates for 1982-2000 will be rebased. The rebased estimates will be available later than the 2001 population estimate.

The Options for 2001

There are four broad options for the release of demographic based 2001 population estimates and these are summarised:

- the demographic estimate is based around April 29 2001 and this is used by all customers for population estimates
- the demographic estimate is based on the mid-year in 2001 and this is used for the One Number Census as well as other customers for population estimates
- two sets of demographic estimates are produced, one based on 29 April 2001 and the other for the mid-year.

- a provisional Census day or mid-year 2001 population estimate is produced by extrapolating from the mid-2000 population estimates. This final option does not preclude the previous options but would only be considered if there was a need for a 2001 population estimate earlier than the usual timetable would allow.

Conclusion

This short paper raises some issues and sets out broad options for the release of demographic population estimates for 2001. The paper is presented to the Steering Committee for information. ONS will need to consult customers about these issues and the available options so that a decision can be made. The decision will allow ONS to plan the resources that will be required for 2001/2.

ANNEX A

PLANNED TIMETABLE FOR THE PRODUCTION OF POPULATION ESTIMATES ROLLED FORWARD FROM 1991 CENSUS*

<u>Activity</u>	<u>Dates</u>
Data Collection	Jan-end April/May
Data Cleaning and preparation	Feb- end May
Compilation	
i) National level estimate	During June
ii) sub-national level estimates	Mid-June- beginning August
Preparation of publication material	First week of August
Preparation of data and disks for customers	August
Customer Queries and requests	September- June of following year

Notes

This timetable is based on the planning for the production of the mid-1996 population estimates and, therefore, assumes a publication date at the end of August. PEU are reviewing the timetable. However, this is mainly in order to reduce the risk of errors occurring as a result of the pressure that there tends to be within the unit as delays in the early part of the process squeeze the work that has to be done in order to meet the publication deadline into an unreasonably short space of time.

The range of dates given reflects a start and end date for the whole activity and takes account of the fact that, in order to meet the overall deadline, the phases will run in parallel where possible. However, all the work is done by 4-5 PEU staff overseen by a statistician.

* The mid year estimates are produced by rolling forward from the 1991 Census with an allowance for underenumeration in that Census. As this allowance is based on the 1981 Census the estimates are in effect rolled forward from the 1981 Census.

ANNEX B

DATA SUPPLY FOR ANNUAL MID YEAR ESTIMATES ROLLED FORWARD FROM 1991 CENSUS*

<u>SUPPLIER</u>	<u>Estimated DATE of supply</u>
<i>Data needed for national level estimates</i>	
ONS Population and Vital Statistics (birth and death data)	End December (births) End February (deaths)
ONS, Migration Statistics Unit	April
Home Office for asylum seeker data	April/May
Defence Analytical Services Agency UK armed forces data	end April (these data are circulated to local authorities for comments prior to their use in the estimates)
US Army, US Navy, US Air Force	end April
<i>Additional Data needed only for sub-national level estimates</i>	
Electoral Registration Officers	end Feb (these data tend to be queried by PEU before use in the estimates and final data are usually available by May)
ONS Geographic Support Services	Jan-Feb
Department for Education and Employment (boarding school pupils)	end March
Home Office (prisoners)	April

* The mid year estimates are produced by rolling forward from the 1991 Census including allowances for underenumeration in that Census. As these allowances are based on the 1981 Census the estimates are rolled forward from the 1981 Census.