

2001 Census

Improving access to census information

Introduction

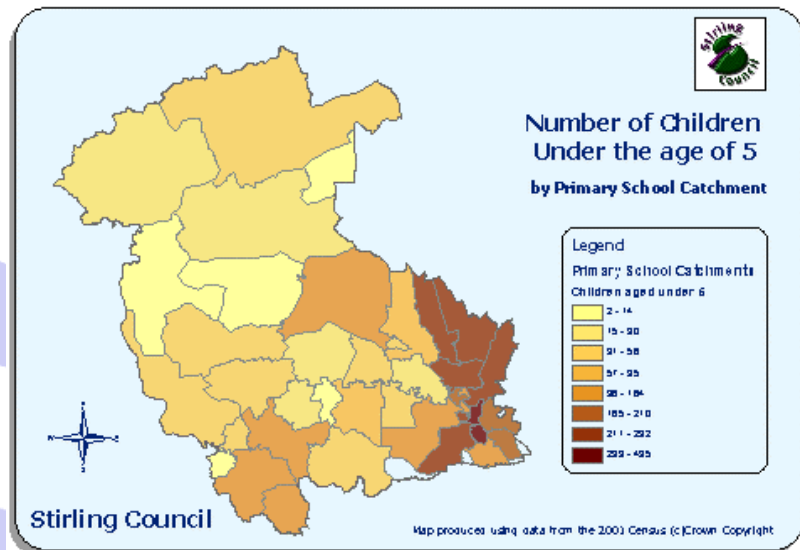
From June 2003, organisations have been able to purchase 2001 census data from the General Registry Office for Scotland (GROS). The Census results provide a wealth of social, economic and demographic information about Scotland's population. The way this information has been gathered and supplied means there are endless possibilities for using this information within local authorities to assist with policy decisions and service planning.

Requirement

The census data is provided as a collection of over 350 files that present the information in different ways. In order to protect the privacy of individuals, the information is reported using three standard geographical units:

- Census Output Area (COA) – A combination of postcodes, and comprising around 50 households. The smallest area for which census data is available.
- Ward – A version of Council Electoral ward boundaries, modified to ensure confidentiality.
- Sector – Based on postcode sectors, but split at council boundaries. Joined with neighbouring sectors where there are not enough households to protect confidentiality.

This is all very well, but much of the time an organisation wants to find out information about the population within a geographic area that is not



made up of whole COAs – for example, the number of under-5 year olds in each primary school catchment area.

It is difficult to adjust the results when a COA falls over the boundary of the reporting area. Previously this has been a manual process involving subjective judgements, even when following the most stringent rules. The more COAs that are split, the less confidence there is in the results. It is also an extremely time-consuming task that can take several days for more complex analyses.

Solution

Forth Valley GIS have worked in conjunction with Stirling, Clackmannanshire and Falkirk Councils to develop a solution. This uses ESRI's ArcView 8 software to automatically aggregate census

information for any specified geographic area. This ensures all results are calculated using a consistent, easily reproduced method

Data Management

Data was received from General Register Office Scotland (GROS) as text files, and imported into a database. Because of the way the data was supplied, a number of data formatting issues had to be overcome before all the data could be loaded into the database.

Benefits

Stirling Council have been using the application with the census data, and quickly realised a number of benefits:

- **Speed:** Census tables can be produced for non-standard geographies such as School Catchments in a matter of minutes, freeing more time for analysing the data.
- **Confidence:** The automated process removes subjectivity, minimising human error and improving confidence in the accuracy of the data produced.

- **Consistency:** The application means the same methodology is applied for all analyses, making the results repeatable.

“We can now make more use of more of the Census data for profiling non-standard geographies with confidence”

- Caroline Moore, Research Officer, Stirling Council

Project type:	Data Management, Application Development
Software Platform:	ArcView 8 & SQL Server
Customers:	Stirling, Clackmannanshire & Falkirk Councils

For further information, visit our web site where you can fill in an on-line request for further information:

www.forthvalleygis.gov.uk

**Forth Valley GIS
Viewforth
Stirling
FK8 2ET**

Telephone: **01786 442976**
Fax: **01786 442818**
Email: **fvadmin@forthvalleygis.gov.uk**