

2006 Census Meshblock Dataset Guide

The Meshblock Dataset is available on either CD with MS Excel or DVD with MS Access files. The dataset contains counts starting at the meshblock level for selected variables from the 2006, 2001 and 1996 Censuses of Population and Dwellings. These counts are at the highest level of each variable's classification. The dataset also contains counts for area units, wards, territorial authorities and regional council areas. The dataset is used mainly with analytical or mapping systems, and enables further analysis of the census data.

Confidentiality

Section 37 of the Statistics Act 1975 requires that published statistical information be arranged in such a manner as to prevent any particulars from a respondent being identified.

Confidentiality rules for the release of census data

The general confidentiality principle is that any output that might identify the characteristics of a particular person or undertaking will not be released. There are five confidentiality rules pertaining to the release of 2006 Census data that cover meshblock data, income data, mean cell size, random rounding and derivations. These are explained below.

Meshblock data

Meshblock data may be disaggregated (broken down) by only one variable. The categories displayed must be at the highest level of aggregation (least detailed) for that classification.

Income data

No income data can be released for any geographic area if the total unrounded subject population¹ is 40 or fewer individuals for personal income, or 20 or fewer families, or households for family and household income.

The grouped income classification is used for the Meshblock Dataset in accordance with the confidentiality rules (see link at the end of this guide). The five new grouped income classifications are personal, household, family, extended family and parental income (see Variables of the Meshblock Database section).

Median income has been calculated using the grouped income classification.

¹ The subject population for individuals refers to individuals aged 15 years or over, while households and families refers to all households and families in private occupied dwellings.

Mean cell size

Mean cell size for individual geographic areas must be greater than two. (Income information is still subject to the income data rule.)

Mean cell size =

$$\frac{\text{total unrounded subject population in a geographic area}}{\text{number of categories (excluding totals) for that same geographic area}}$$

When the mean cell size rule suppresses large cells, or the rule cannot be applied to output, a threshold rule may be applied instead. Cells at or below the threshold value of 5 are suppressed, and higher counts are released.

The threshold rule was not applied to the meshblock dataset as it would have created only a minimal improvement in data utility.

Random rounding

All counts for individuals, families, households and dwellings must be randomly rounded to base 3. Totals are randomly rounded separately to base 3.

Derivations

All derivations from counts (percentages and ratios, for example) must be derived from the randomly rounded counts. This excludes totals and subtotals, as these are randomly rounded independently. Once a derivation has been calculated, there will be no further random rounding applied to the derived data.

Further details on these confidentiality rules and how they are applied to the data can be found on our website at <http://www.stats.govt.nz/census/about-2006-census/methodology-papers/confidentiality-rules.htm>

Data quality

We would like to remind users working with meshblock data that low level geographical data may have errors. While Statistics New Zealand puts in place checks and balances to minimise errors, they do still occur.

The Quality Management Strategy in place for the 2006 Census that can be found on our website at <http://www.stats.govt.nz/census/about-2006-census/methodology-papers/quality-management-strategy-report.htm>. Please note that the Quality Management Strategy assigns different statuses to variables, these being foremost, defining and supplementary. 'Workplace Address' is an example of a supplementary variable which has a lower priority and therefore receives less effort and resource. Detailed information about data by variable is available on our website at <http://www.stats.govt.nz/census/2006-census-information-about-data/information-by-variable/default.htm>

Variables of the Meshblock Dataset

The most recent version of classification for each variable (those used in the 2006 Census), has been used in the dataset.

Geographies

- Meshblock
- Area unit
- Ward (where applicable)
- Territorial authority
- Regional council

About people

- Census usually resident population count
- Census night population count

Based on census usually resident population count:

- Sex
- Age in 5-year age groups
- Median age
- Years at usual residence
- Usual residence 5 years ago indicator
- Birthplace
- Years since arrival in New Zealand
- Ethnic groups – grouped total responses
- Languages spoken
- Māori descent
- Religious affiliation

Based on census usually resident population count aged 15 years and over:

- Cigarette smoking behaviour
- Legal marital status
- Social marital status
- Tenure holder
- Number of children born
- Highest qualification
- Study participation
- Sources of personal income – total responses
- Total personal income
- Median personal income
- Work and labour force status
- Unpaid activities – total responses

Based on census usually resident population count aged 15 years and over and employed:

- Status in employment
- Occupation – ANZSCO major group
- Occupation – ANZSCO² major group, workplace address
- Occupation – NZSCO99³ major group
- Occupation – NZSCO99 major group, workplace address
- Industry – ANZSIC06⁴ division
- Industry – ANZSIC06 division
- Industry – ANZSIC96⁵ v4.1 division industry – ANZSIC06 division

² Australian and New Zealand Standard Classification of Occupations

³ New Zealand Standard Classification of Occupations 1999

⁴ Australian New Zealand Standard Industrial Classification 2006

- Industry – ANZSIC96 v4.1 division
- Hours worked in employment per week
- Main means of travel to work

About families

- Total families (in private occupied dwellings)

Families in private occupied dwellings:

- Family type
- Total family income
- Median family income
- Sources of family income – total responses

About households

- Number of usual residents in household
- Mean number of usual household members

Households in private occupied dwellings:

- Total households
- Household composition
- Total household income
- Median household income
- Sources of household income – total responses
- Tenure of household
- Number of motor vehicles to which the household has access
- Access to telecommunications – total responses

Households in rented private occupied dwellings:

- Sector of landlord
- Weekly rent paid
- Mean weekly rent paid
- Median weekly rent paid

About dwellings

- Total private occupied dwellings
- Dwelling record type (for occupied dwellings)

Private occupied dwellings:

- Number of rooms
- Number of bedrooms
- Mean number of bedrooms
- Median number of bedrooms
- Fuel types used to heat dwelling – total responses

Note: Users should be aware that the meshblock dataset is not intended to facilitate the cross-tabulation of data. Cross-tabulation of the information in the various fields will lead to inaccurate results.

⁵ Australian New Zealand Standard Industrial Classification 1996, New Zealand use

Further information

Mapping and Digital Boundaries

The meshblock dataset can be used with the 2006 Census digital boundaries in geographic information systems (GIS).

The 2006 Census digital boundaries are generalised to a 20-metre tunnel (level two), are now free and available on request from Statistics NZ.

Further information on digital boundaries can be found on our website at <http://www.stats.govt.nz/statistics-by-area/regional-statistics/geography-mapping/digital-boundaries.htm>

Database users

Database users can use StreetLink to geocode their client's addresses to meshblock and other administrative areas (eg area units and territorial authorities). StreetLink is free and comprised of:

- Streets file, an electronic list of address range and street names that fall within meshblocks.
- Areas files, a concordance linking meshblocks to administrative areas that align to meshblocks.

Further information on StreetLink and how to order can be found on our website at <http://www.stats.govt.nz/statistics-by-area/regional-statistics/geography-mapping/streetlink.htm>

Metadata about the 2006 Census

Various sources of metadata (information) about the 2006 Census and the census variables are available:

- *2006 Census: Introduction to the Census* – a publication that provides information on the phases of the census cycle
- *Definitions and Questionnaires* – contains definitions of variables used in the 2006 Census and questionnaire forms from 1906 to 2006
- *Data Dictionary: 2006 Census of Population and Dwellings* – provides a list of the variables that are available from the 2006 Census
- *Information About Data* – provides key metadata about each of the variables output from the 2006 Census, including quality issues and advice to help people use and interpret the data.

These are all available on our website.

Liability statement

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