

A guide to using data from the New Zealand Census: 1981–2006

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1. Introduction

1.1 Overview of the Family and Whānau Wellbeing Project and the New Zealand Census of Population and Dwellings

1.1.1 Research aim

The Family and Whānau Wellbeing Project (FWWP) is a five-year research programme supported from the Social Science funding pool of the Foundation for Research, Science and Technology. The principal goal of this programme is to develop ways to examine and monitor social and economic determinants of family and whānau wellbeing and how these determinants have changed over the 1981–2006 period.

1.1.2 Defining family and wellbeing

Individuals in a familial relationship are defined by Statistics New Zealand as people in a relationship in which ‘a person is related to another person by blood, registered marriage, civil union, consensual union, fostering or adoption.’ (Statistics New Zealand 2006). Family can be further defined as a group of people where resources are shared, including personal, social and material resources, and interdependency exists between the family members.

A full discussion on the definition of wellbeing is available in another publication of this project: *Family Wellbeing Indicators from the 1981–2001 New Zealand Censuses*, (Milligan, Fabian et al. 2006). In summary, however, wellbeing is linked to quality of life and according to Hird (Hird 2003), can be broken down into two types, subjective and objective wellbeing, which affect each other.

Objective wellbeing is the focus of this project and includes factors such as physical, developmental and activity-based, material, social and emotional wellbeing. All these types of wellbeing have tangible outputs that can be measured, for example, income, access to telecommunications, heating of dwellings, educational qualifications, etc. This report looks at some of the variables that are available from the New Zealand Census of Population and Dwellings that can be used to measure wellbeing.

1.1.3 The New Zealand Census of Population and Dwellings

The New Zealand Census of Population and Dwellings is a self-administered repeated cross-sectional survey of the entire population of New Zealand. The Statistics Act 1975 prescribes that a census be conducted every five years, and provides an outline of census content (Statistics New Zealand 1998).

Purpose and use in time series analysis

The primary purpose of the census is to provide social, economic and demographic information on the people of New Zealand at a given point in time. This information is used by a variety of organisations to describe the present, to analyse trends and to plan for the future. The census has been described as ‘a primary source of information on the size, composition, distribution, economic activities and state of wellbeing of the population’ (Statistics New Zealand 1998). Respondents are required by law to respond to the census.

The New Zealand census also aims to provide data on a consistent number of measures so that social change may be monitored (Statistics New Zealand 1998; Statistics New Zealand 2003). Utilising census data enables us to create a historical time series for people living in New Zealand at the time of each census. It also allows us to construct benchmarks of family and household wellbeing and to compare levels of wellbeing across time.

The census has dual aims (providing relevant information and historical continuity) that can be in conflict with each other, and these aims need to be balanced when deciding upon the specific content of each census. This is because as society changes, data needs also change. Some topics become less relevant to society and other areas become more important. Similarly, things that were considered important to the quality of life twenty years ago may no longer be considered as important today. The census needs to keep pace with social change, but also provide the tools to monitor social change. This tension has been acknowledged by Statistics New Zealand (Statistics New Zealand 1998; Statistics New Zealand 2003) and referred to in depth by Morrison (Morrison 1991).

In determining the content of the census a number of factors have to be kept in mind. The topic needs to be publicly acceptable and have significant community value, the census has to be the most appropriate information source, and inclusion of the topic has to produce high quality information (Statistics New Zealand 2003). For these reasons, census questions (and the variables subsequently constructed from them) may change from census to census, limiting comparability of information between various census years.

Advantages of using the census

- The census achieves broad (almost universal) coverage.
- The census is unique in its ability to provide information on a variety of small groups within the population and small area data (Statistics New Zealand 1997).
- The census is not subject to sampling error. Sampling error is the measure of the variability that occurs because a sample, rather than the entire population, is surveyed.
- Census information is available for a wide variety of topics, spanning many different areas of social concern (for example, income, education, work, housing, assets and health). Other surveys (such as the Household Economic Survey and the Household Labour Force Survey) have a more narrow focus.
- A lot of contextual information is available from census data.
- Information is collected from the entire household, rather than just particular individuals (as is often the case in sample surveys).
- Family and household identifiers are attached to unit records, making it easy to collate information at both the household and family levels.
- Compared with other sources (such as ad hoc surveys, or using data from multiple sources) there is considerable consistency in the information sought between censuses. Statutory requirements ensure certain information must be collected in each census. A major emphasis within Statistics New Zealand is on continuity and consistency of data, making it easier to construct, analyse and interpret time series information.
- Compared with using multiple sources of data, there is reasonable consistency in the type of survey and method of collection. This makes comparing results from period to period easier, as the same potential biases occur within each census dataset. This means the researcher does not have to try to evaluate how other types of biases resulting from different research methods have affected variable measurement.
- A considerable body of metadata surrounds the census, which aids in the analysis and interpretation of variables and data.
- Census data are available over a long time period, which allows analysis of the effects of social and economic change.

- The census provides good quality data. Statistics New Zealand has quality management processes in place. Compared with other data sources (and providing the security conditions are met) census data are easily accessible in a readily utilisable form.

Limitations of using census data

- There are limits on the nature, quantity and detail of census questions. In order to maximise the response rate, the census seeks to minimise the burden on the respondent (Statistics New Zealand 2003). This means asking a limited number of quick, simple questions. The information generated is not detailed or complex and does not indicate causal links (Statistics New Zealand 2003).
- Sources of miscount: undercounting – The census achieves around 98 percent coverage. Some dwellings and people may not be enumerated. Some dwellings may be missed entirely, some people may deliberately avoid answering the census or occupied dwellings may be classified as vacant. For example, it is generally acknowledged that temporary private dwellings will be undercounted, due to difficulties in locating these dwellings. For further reasons for non-enumeration see the post-enumeration survey (Statistics New Zealand 2002), which is conducted in order to ascertain the extent of miscounting in the census.
- Sources of miscount: double counting – A person may inadvertently be counted more than once during the census. For example children in shared custody situations may mistakenly be counted in both residences. Double counting is discussed further in the post-enumeration survey (Statistics New Zealand 2002).
- Individual census questions are subject to non-response. This is known as item non-response, and occurs when the respondent returns the questionnaire but has not responded to all of the questions that were relevant to them. Response rates for specific questions vary. High non-response rates may have an impact on the usefulness of data, and mean that results need to be interpreted with caution, as data may not be as reflective of the population as data from questions with low non-response rates. In some cases, when no response is given, a value for a variable is imputed. This method could introduce bias if the imputed response is very different to the (unknown) actual value.
- The census is subject to forms of non-sampling error. These include errors arising from questionnaire wording and question positions, respondent error (which may result from respondent misunderstanding, mechanical error, or purposeful distortion of information), and errors in the coding and processing of forms. Some respondent error has been mitigated by the introduction of electronic census forms on the Internet, for example multiple responses when only one is allowed.
- Although there are many consistencies in census variables between the census years, there are also some differences in the ways variables are constructed, defined and classified. These differences may impact upon data interpretation and analysis. Such intercensal variation can come from a number of sources, as outlined in Table 2.2. The comparability of each census variable used in the construction of wellbeing indicators needs to be assessed.
- The data generated are constrained by the census definitions and classifications. For example, when using family-level census data, it is important to remember that data only exist for families and extended families whose members all live within the one household.

The advantages and disadvantages of using census data need to be evaluated in light of the other data sources available. In general, it should be noted that although the best source of time series information is generally longitudinal studies, such studies are extremely rare. These studies are usually geographically based (such as the Christchurch Health and Development Study and the Dunedin Multidisciplinary Study) and may only provide information on a particular group of people (for example, a certain age cohort).

1.2 Outline of this report

1.2.1 Report purpose and overview

The purpose of this report is to explore the availability, measurement and comparability of key variables from the 1981–2006 Censuses. The report draws on the experiences of the Family and Whānau Wellbeing Project team, and aims to ease the way for future researchers and technical users of census data, especially those using the data for time series analysis or intercensal comparisons.

The report summarises the most relevant information from the report *Family Wellbeing Indicators from the 1981–2001 New Zealand Censuses* (Milligan, et al. 2006), with a focus on a unique time series examination of key census variables. The method used there and here for assessing variable comparability is described in detail in section 2.7. In sum, it involves identifying sources of intercensal variation, assessing their impact on the data in terms of magnitude and effect, seeing if there are any ways of increasing the comparability and then applying a consistent scale of terminology to arrive at an overall comparability assessment.

1.2.2 Interpreting tables and appendices within the report

Appendix 7.1

Appendix 7.1 contains names of rebased variables that are available as output variables from Statistics New Zealand. These are variables whose source data has been reclassified according to classifications and definitions of other census years. For example, the variable `labour_force_status91` has reclassified information from the 1981 Census so that the definitions of part-time and full-time labour force match the 1991 definitions for these concepts.

We have not named all the area variables, which are always available rebased to the most recent census.

Appendix 7.2

Some variables are not generally released by Statistics New Zealand. Appendix 7.2 lists these variables, along with the reasons for non-release.

Appendix 7.3

Appendix 7.3 contains the output variables available from Statistics New Zealand for each census year. The names and descriptions of variables in this appendix are taken directly from the data dictionaries produced by Statistics New Zealand. In 2001 and 2006, there were no abbreviated variable names in the data dictionary, so this field has been left blank. In order to show similarities between what has been asked across time, these variables have been grouped under general headings, e.g. the heading Age, followed by entries for each year describing the particular variables available. In most cases, this indicates that the variable provides the same information in different census years, but as there are many sources of

intercensal variation this does not necessarily mean that the variables under these headings are comparable. On occasion, the heading in the appendix is more general, and a variety of related variables (almost subcategories of the heading) appear underneath.¹ For example, the different benefit receipt variables are all listed under the heading ‘sources of personal income’.

Appendix 7.4

Appendix 7.4 contains the output categories that can be used when comparing variables across the 1981–2006 Censuses.

Appendix 7.5

Appendix 7.5 gives the variable names and SAS codes associated with key variable classifications for the 1981–2006 censuses. The aim of doing this is to make the data much more accessible, not only for the purposes of our analyses but also for external researchers who may wish to use time series census data for comparative purposes in the future. At times, this has involved utilising different variables for different census years, in order to reconstruct a variable classification that is similar to that produced for other census years. At other times, it involves aggregating or collapsing down categories for some years. The names for the variables and the codes associated with them have been taken from the Statistics New Zealand data dictionaries pertaining to each census year (1981–2006). Researchers should be aware that the names of the variables contained in the data dictionaries are not necessarily the same as the SAS names that appear in the census datasets. However, the codes for each classification category are the same as those that appear in the census datasets.

1.2.3 Information regarding the ‘variable definitions and variable information’ sections

The information in these sections has been sourced from the 2001 census glossary definitions (Statistics New Zealand 2001) and other Statistics New Zealand classifications and definitions documents. This section of the report is extremely information- and fact-intensive and unless the information emanated from a different source, references have not been given.

The exception to this is the comparability assessment of each variable (described below), which was developed as part of the FWWP, rather than from information provided by Statistics New Zealand.

Derivation tables

Some variables are derived from more than one question on the census form. For key derived variables, the report provides a derivation table which shows the census questions or variables used in the derivation for the 1981–2006 census years. At this stage of the project, we have confirmation of the content of these tables for the 1991 and 2001 Census years. Information on the other years has sometimes been obtained from ancillary documentation (such as glossary publications and classification documents), and by applying a consistent template across the other census years. Therefore, tables showing the derivation of variables should be interpreted with caution for 1981, 1986 and 1996 Census years.

¹ In particular, this applies to situations when separate variables (usually indicating possession, or lack thereof) have been created for what may otherwise have been one variable with many classification categories.

Interpreting non-response rates

Where non-response rates are available, these will be provided and interpreted. Unless otherwise stated, non-response rates provided are calculated by working out the number of responses set to ‘not stated’ (for 1981–1996 Censuses this was called ‘not specified’) as a proportion of the subject population for that question. In this report, the interpretations of non-response rates apply as shown in table 1.1.

Table 1.1 – Non-response rate interpretation scale

| Non-response rate | Interpretation |
|--------------------------|-----------------------|
| <3.0% | low |
| 3.0–4.9% | relatively low |
| 5.0–6.9% | moderate |
| 7.0–8.9% | relatively high |
| 9.0%+ | high |

Comparability assessments

In this report, comparability assessments have been made in accordance with the method outlined in section 2.6. Potential sources of intercensal variation and their likely impacts on the data are contained throughout the various sections for each domain. The sources of intercensal variation that are deemed to impact upon the analysis are then summarised for each indicator under the section ‘Limitations of the data’. It should be noted that in all cases intercensal comparability should not be taken as a stand-alone judgement, but that the limitations of the data should be borne in mind.

For this project, the following scale has been used to summarise the impact of intercensal variation on the comparability of Statistics New Zealand census variables between the census years. For further discussion on intercensal comparability, see section 2.6, ‘Assessing the intercensal comparability of variables’.

Table 1.2 – Variable comparability scale

| Terminology | Interpretation |
|-----------------------|---|
| Totally comparable | No intercensal variation |
| Highly comparable | Very little intercensal variation. Any variations are likely to have only a minor impact upon data |
| Broadly comparable | Some intercensal variation exists, although basic definitions of the variable are the same. Sometimes there may be differences in some of the classifications, or in the way a particular variable is derived |
| Limited comparability | Enough intercensal variation exists (usually in definition, the concept being measured, or in variable derivations) that comparability of data is severely curtailed. |

2. Understanding and using census data

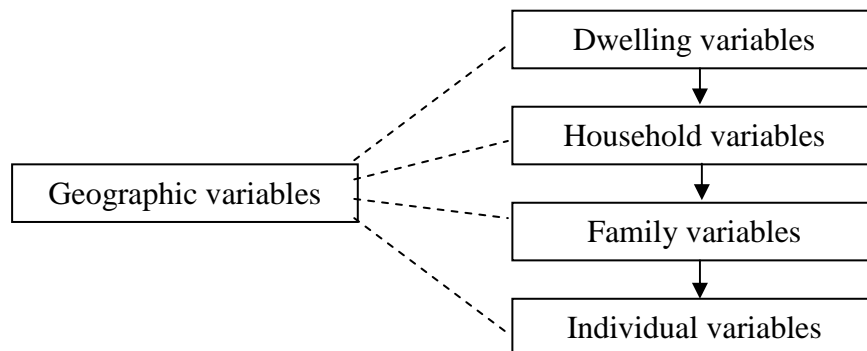
2.1 Levels of aggregation and analysis: census statistical units

Four different levels of aggregation of information used by Statistics New Zealand are important to understand for research; these are the dwelling, household, family, and individual levels.² Each specific variable will be associated with one of these levels of aggregation; the level of a particular variable can be ascertained from Statistics New Zealand data dictionaries.

Figure 2.1 shows the levels of aggregation of census information. Geographic information can relate to any of the levels of aggregation and is itself available at various levels of aggregation. It should be noted that for private occupied dwellings, the dwelling and the household are basically interchangeable levels of analysis because each private occupied dwelling contains a (that is, *one*) household within it. The sole exception to this is private occupied dwellings that contain visitors only. However, the dwelling refers to the physical structure (that is, the building), and the household refers to the group of people who live within the dwelling.

The Family and Whānau Wellbeing Project (FWWP) looks at wellbeing indicators at the family and household levels and how these can be used to understand changes in society over time. The interrelationships between the four levels of analysis and key related variables are explained in more depth in Figure 2.2.

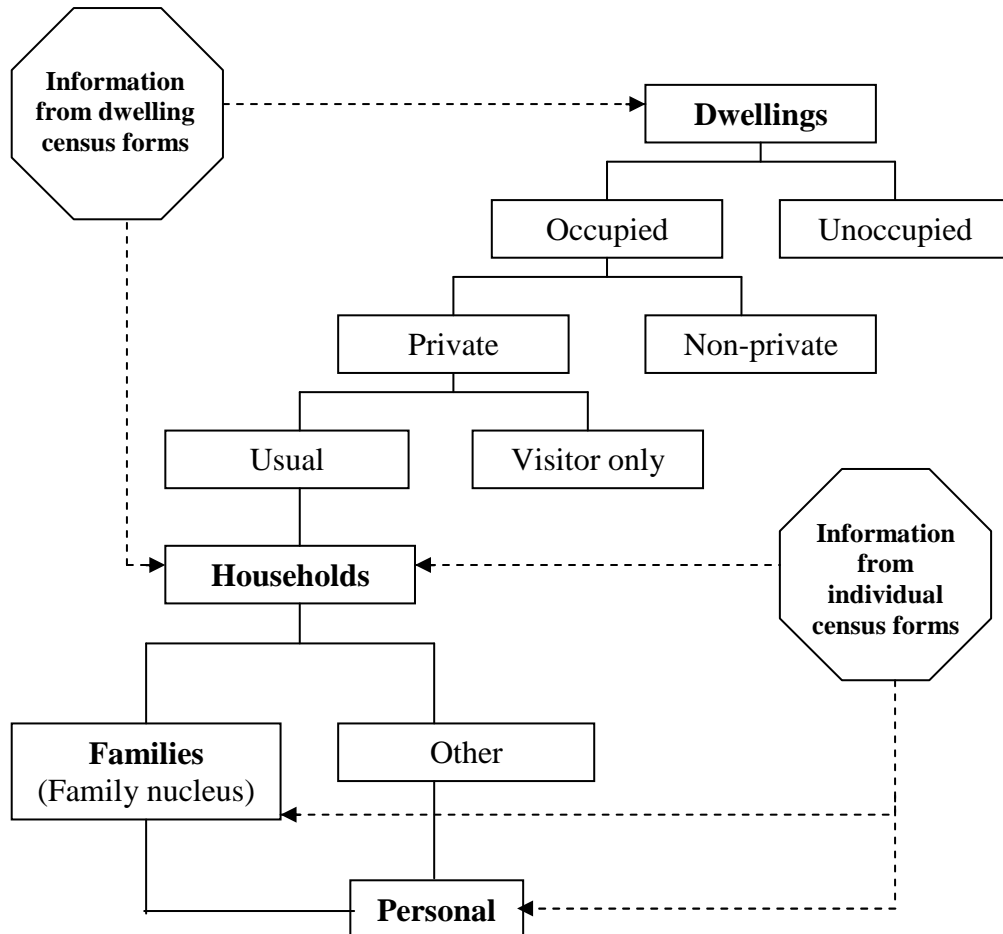
Figure 2.1 – Levels of aggregation of census variables



² The individual has sometimes been referred to as the personal level in Statistics New Zealand publications.

2.2 Relationships between key variables

Figure 2.2 – Key variables and their relationships to the levels of variable aggregation



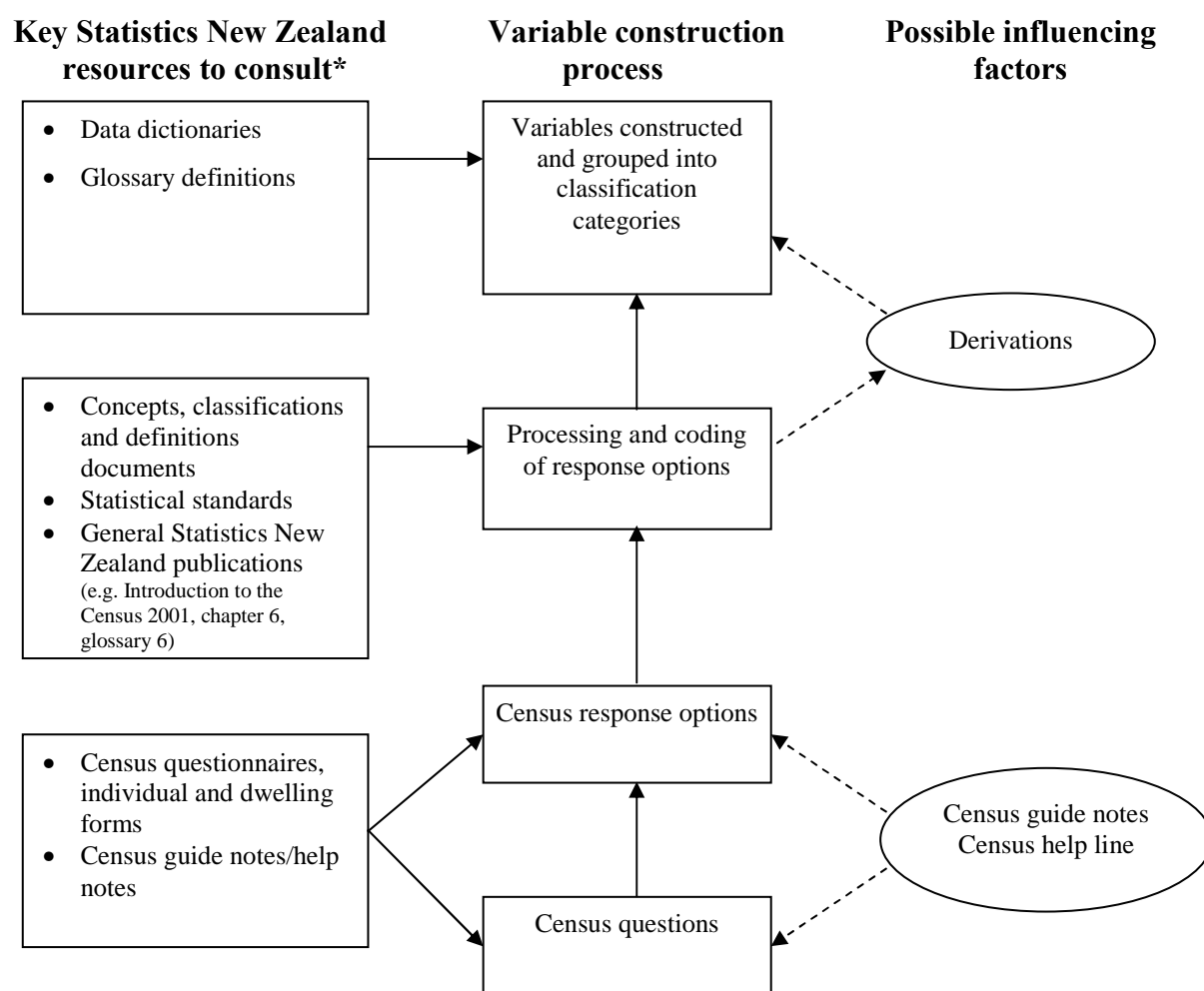
Source: The basis of this diagram was sourced from Statistics New Zealand (Statistics New Zealand 1999), standard terms for dwellings, households and families.

2.3 How variables are constructed using census data

The variable construction process is integral to the output data generated for each census and consequently affects intercensal comparability.

Figure 2.3 shows the process of variable construction using census information. Respondents answer questions on the individual and dwelling forms. These responses are then processed, and in some instances edited. When no answer is given to certain questions, a value for that variable may be imputed.

Figure 2.3 – Variable construction process and relevant Statistics New Zealand resources

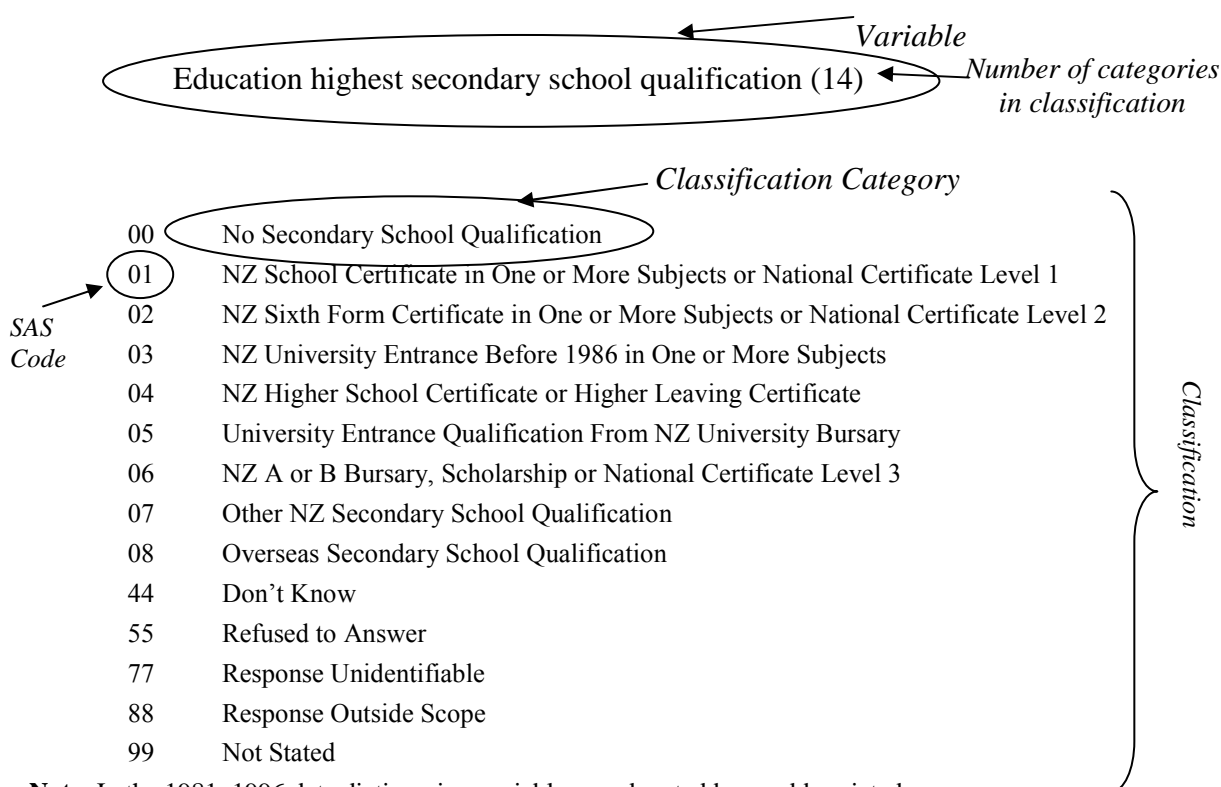


* It should be noted that 'Key Statistics New Zealand resources to consult' is not an exhaustive list.

The responses are coded into classification categories according to the classification relevant to each variable. A classification assigns data reported for a particular variable into categories according to shared characteristics. This facilitates the accurate and systematic arrangement of data according to common properties, so that the resulting statistics are reproducible, comparable with data from other sources and comparable over time. In some instances, variables take into account answers to more than one census question. In these cases, answers are combined to form a derived variable. Each classification category has an associated 'SAS code', a value used in the statistical software package SAS to keep track of variable formats. The classification categories of each output variable and their associated codes are outlined in the relevant data dictionary for each census year.

An example of a variable classification from the 2001 data dictionary is shown below to familiarise the reader with the terminology and format.

Figure 2.4 – Sample classification from the 2001 Data Dictionary



Note: In the 1981–1996 data dictionaries, variables are denoted by an abbreviated name.

The concepts and definitions relevant to the classification for each variable are outlined in concepts, classifications and definitions documentation (see section 2.8.3 for available references).

In some instances (usually when multiple response options are possible), multiple variables are constructed from respondents' answers to one census question. The income source data from 1986 are an example of this. Other constructed variables take into account respondents' answers to more than one census question – these are called derived variables. For example in 1991, labour force status was ascertained from responses to five different census questions. The process used to derive variables is sometimes outlined in concepts and classifications documentation, and for 2001 it is also outlined in the census glossary sheets available on the Statistics New Zealand website.

2.4 Factors that may affect variable values

2.4.1 Editing

As collector and custodian of census data, Statistics New Zealand conducts various internal checks on the quality of the data. These checks may also be relevant to our data analysis. Before 2001, there were more consistency edits and Statistics New Zealand had 'tried to tidy the data by editing every variable to eliminate inconsistency' (Statistics New Zealand).³ In 2001, a different approach was taken, and the level of editing regarding a variable was dependent on the level of importance of the variable (foremost, defining or supplementary).

³ For further explanation of the quality of census variables and the distinctions between the levels of variables for editing purposes, refer to section 7 of the *2001 Introduction to the Census*.

The effect of such changes in editing over time or between censuses is hard to quantify.⁴ However, it does mean that small changes in movement of a variable need to be interpreted with caution.

2.4.2 Substitute forms

Substitute forms are created by Statistics New Zealand where there is sufficient evidence that either a person or an occupied dwelling exists, but no census form has been submitted for it (Statistics New Zealand 2001). Substitute forms make up about 2 percent of all census forms. These forms affect non-response rates because information not gained on substitute forms is generally set to ‘not stated’.

2.4.3 Imputation

Imputation is the process by which Statistics New Zealand allocates a value to a variable where no value has been stated by the respondent. Values for variables have been imputed by Statistics New Zealand in the stated census years as shown in table 2.1.

Table 2.1 – Variable imputation by census year

| Imputable variable | Census year | | | | | |
|------------------------------|-------------|------|------|------|------|------|
| | 1981 | 1986 | 1991 | 1996 | 2001 | 2006 |
| Age | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Sex | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Work and labour force status | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Usual residence | | | * | | ✓ | |

* Indicates that this variable was only imputed for the rebased dataset for this year.

The value allocated by Statistics New Zealand is ascertained through a variety of methods. Imputation requires thorough testing before implementation. The following list outlines the process involved for the imputable variables listed in Table 2.1 (taken from the Statistics New Zealand website at: www.stats.govt.nz/census/).

Age: Age imputation supplies an age in years where this value is missing for an individual. This means that age will be imputed if it cannot be calculated from the response to date of birth. Age is imputed using various other responses from the individual; for example, whether they are legally married, responses supplied on the dwelling form, and the known distribution of ages in the population.

Sex: Sex imputation supplies a value of male or female where the response for the sex variable is missing. If they are available, the name of the person or their relationship to others in the household may be used to impute a value. Otherwise a value is assigned randomly, with 49 percent being imputed as male.

Work and labour force status: Work and labour force status imputation supplies a value for labour force status where this cannot be derived from the labour force information supplied by the respondent. The labour force status imputation uses whatever labour force information has

⁴ In some cases, the effect of consistency edits may be to increase the number of responses that go into residual categories.

been given, and various other responses from the individual (for example, age and income). A labour force status is then imputed to equal the known labour force status of a similar person.

Usual residence: Usual residence imputation supplies a value for the usual residence meshblock where a meshblock cannot be coded from the address information supplied by the respondent. The usual residence meshblock imputation uses whatever level of geographic information has been given and various other responses from the individual. A usual residence meshblock is then imputed based on the distribution of known usual residence meshblocks for similar people.

2.5 Other factors affecting census data interpretation

2.5.1 Non-response rates

Non-response rates provided by Statistics New Zealand are generally the percentage of respondents in the ‘not stated’ category for each variable. Before 2001, this residual category was called ‘not specified’. Non-response rates for 1996 and 2001 variables can be found in the census glossary publications.

2.5.2 Rebased datasets

Electronic data from previous censuses (1981–1996) has been rebased according to the current meshblock pattern to allow geography-based comparisons over time. The variables that are altered according to current patterns are usual residence, census night address and workplace address. This allows the different levels of aggregation of geographic variables (meshblock, area unit, territorial authority, regional council and national) to be held constant, so that meshblocks in 1981 and 2001 are defined by the same boundaries.

2.6 Assessing intercensal consistency of variables

As outlined in table 2.2, the information generated from census data may vary from census to census for a number of reasons. In order to accurately monitor and establish empirical relationships, researchers need to establish that any effect is a real effect, rather than one that has been caused by changes in the process of extracting and measuring the information provided. To do so, it is necessary to examine a variety of Statistics New Zealand publications in order to get a thorough understanding of census data and the changes that have taken place across the different census years.

2.6.1 Sources of intercensal variation

Table 2.2 – Summary of sources of intercensal variation

| Sources of intercensal variation |
|---|
| 1) Removal or inclusion of the actual census question |
| 2) Changes in the subject population for a question |
| 3) Differences in the wording of the census questions asked |
| 4) Changes in the layout of the census form |
| 5) Changes in the format of the census question, e.g. single or multiple response, tick box or written response format |
| 6) Differences in the guide note instructions that accompany the census question, although the impact of this is unknown as the number of respondents who read the guide notes is undetermined |
| 7) Differences in the response options used in the census question |
| 8) Changes in the way the data are collected. These changes are reasonably infrequent but do occur. The two major changes recently were in 1996 when the dwelling type variable was ascertained from responses from enumerators rather than respondents and in 2006 when it was possible to complete census forms online. |
| 9) Changes in the classifications and definitions for a variable, which describe variable construction |
| 10) Changes in the instructions given to enumerators, such as which dwellings to give forms to, and enumerator doorstop checks. For example in 1996, enumerators were required to check the whole form for completeness, whereas in 2001 they were only required to check the front page of the individual form. |
| 11) Changes in processing practices, e.g. scanning, recognition and operator instructions |
| 12) Changes in the way a particular variable is edited |
| 13) Changes in the general editing practices from census to census |
| 14) Changes in the variables for which responses are imputed, and changes in the way variables are imputed |
| 15) Changes in the name of a variable |
| 16) Changes in the number of variables constructed from responses to a census question |
| 17) Changes in the way a variable has been derived: <ul style="list-style-type: none"> • alterations in the variables used to derive it • changes in the derivation process, e.g. what is done if information from one variable is missing |
| 18) Changes in the classification of a variable: <ul style="list-style-type: none"> • the addition of extra classification categories • the deletion of previous classification categories • changes in the content of classification categories • differences in the way a classification groups things together or splits them up |

In New Zealand, very few researchers have looked at intercensal variation. In 1991, Philip Morrison wrote an article entitled *Change or Continuity in the Census: Problems of comparability in the New Zealand Census* (Morrison 1991). This article provides an overview of the changes in census content and format on the personal form between the 1951 and 1991 Censuses. It also provides a detailed discussion of changes to census questions dealing with employment and work. A more up-to-date source that can be used for an overview of changes

in census topics is the *Historical Summary of the Scope of the Census* (Statistics New Zealand 2001). This provides a basic overview of the different census topics that have been covered on both dwelling and individual forms, from the inception of the census up to (and including) the 2001 Census.

2.6.2 Assessing the impact of intercensal variation

When using census data for time series analysis, all sources of intercensal variation need to be considered, and, where possible, evaluated as to their likely impact on the data.⁵ A good method for assessing the impact of intercensal variation is to use the following steps:

Identify the source of the variation

If there has been a change in instructions given to the respondent, it is necessary to note where this change occurred (i.e. in the guide notes or on the census form itself). Statistics New Zealand acknowledges that instructions in the guide notes are often not read and therefore not followed (Department of Statistics 1991). This report discusses all census instructions (including guide note instructions) as if they are followed by the respondent. However, it must be remembered when reading this document that guide note instructions appear not to be followed as often as instructions on the actual census form. Therefore, when evaluating the impact of changes on intercensal comparability, it will be assumed that changes in the guide notes will probably have had less impact on the data than changes to the questionnaire.

Estimate the magnitude (impact) of the effect

Estimate to what degree census data will be affected as a result of the variation. The impact of intercensal variation may, in many instances, be difficult to assess and quantify. While every attempt is made to minimise errors due to systems and processes, as with any survey it is not possible to know or eliminate all non-sampling error. That said, the impact of changes is often relatively minor.

For the sake of simplicity, it is best to use a binary scale, and assess the impact as either major or minor. The impact may depend on exactly what the source of the variation was. For example, a change in the availability of a variable, the underlying concept being measured, or the variable derivation will generally be assessed as major, whereas a change in the editing process or instructions given to respondents would generally be seen as minor.

Assess the effect of the variation on census data (direction of the effect)

Identify the likely outcome of the variation on the actual data collected. Make judgements as to whether data for a particular year will be overestimated or underestimated relative to other census years. If there is a best practice method, take this into account.

Identify if any manipulations can be made to increase variable comparability

Sometimes when a variable is not comparable across different census years there are ways in which the comparability of variable information can be increased.

Make an overall assessment of the comparability of each variable

The final comparability assessment of key variables across the 1981–2006 Censuses can be made in accordance with the criteria listed in the comparability assessment method (outlined in Table 2.3). This method takes into account the findings from the steps above and applies the variable comparability scale outlined in table 1.2.

⁵ Establishing the time series comparability of variables is a key aspect of this report.

Table 2.3 – Comparability assessment method

| Magnitude and number of variations | Manipulation available | Comparability assessment |
|---|-------------------------------|---------------------------------|
| Major | None | Limited comparability |
| Major | Available | Broadly comparable |
| Minor – many | None | Broadly comparable |
| Minor – many | Available | Highly comparable |
| Minor – few | None | Broadly comparable |
| Minor – one or two | None | Highly comparable |

2.6.3 Methods to deal with intercensal variation

When a variable is assessed as being either broadly comparable or of limited comparability, time series analysis of this variable will be affected. As Morrison has pointed out, these changes can sometimes be rectified during analysis of the data (Morrison 1991). This means that, depending on the type of intercensal variation, there may be methods that can be used to make the data more comparable.

When a variable is missing for a particular census year, it may be possible to extract comparable information from a variable of another name. An example of this is tenure of household information, which can be gained from the nature of occupancy variable in earlier censuses.

If multiple variables have been constructed from responses to a question for one census year, but not others, then comparability may be increased by comparing multiple variables from one census year with one variable from another census year. For the 1981 post-school qualifications data, four variables need to be accessed in order to create categories that are comparable with other census years.

If the way in which a variable is derived has changed, this can sometimes be rectified by accessing the variables used to derive it, then re-deriving it according to a consistent method, usually the method used most recently. For example, the highest qualification variable was derived differently in 1996 than in 2001. In 1996, respondents who did not answer at least one of the component questions (on school or post-school qualifications) were put in the ‘not stated’ category. In 2001, if a response was given to either of these two questions, then respondents were allocated that value as their highest qualification. Using these different derivation methods led to an apparent decrease in the non-response rate of the highest qualification variable. In order to make information comparable over time, researchers can access the two component variables and use a consistent derivation process for all the censuses being investigated.

On occasion, Statistics New Zealand has re-derived a variable according to subsequent classifications in order to make time series information more comparable. One example of this is the labour force status variable for 1981. The 1981 variable pertaining to this information had different definitions of part-time and full-time work to subsequent censuses. In 1991, a labour force status variable for the 1981 dataset was re-derived according to subsequent definitions. This variable `labour_force_status91` is available from the 1991

rebased dataset. Another variable on this rebased dataset for 1981 (`highest_level_educ_attend`) is also available.

When there is a change in the definition of a variable, it may be possible to make information more comparable by excluding particular classification categories from the analysis of previous census years. For example, for the 2001 Census, households were defined to exclude visitor-only dwellings. As this was previously a distinct category of the household composition classification, information can be made comparable by excluding this category from the analysis when using household-level information from census years before 2001.

When trying to compare information across time, it is essential to devise comparable classification categories for the concept involved, rather than the exact output names attributed to categories for each year. For example, the school qualification variable can be classified according to year of schooling, rather than the exact names of the qualification gained for each year (which, like benefit income source categories, are subject to change).

Similarly, if a variable contains information on a variety of aspects related to the topic, it is possible that some types of information are comparable, while others are not. For example, although the post-school qualification variables do not provide comparable time series data on field of study, they can provide broadly comparable information on level of attainment.

When the number of classification categories for a particular variable changes for different census years, some categories may need to be aggregated to ascertain comparable time series information. This is illustrated in table 1 of appendix 7.3, which shows that in 1991, two classification categories need to be aggregated to ascertain the number of unemployed from the labour force status variable, whereas in 1996 and 2001, comparable information comes from just one classification category.

At times, there may be instances where the definition does not appear to accurately reflect the information that the data contains. For example, the definitions of cigarette smoking in 1981 and 1996 both include cigarettes and roll-your-owns, and exclude pipes and cigars and so appear to be comparable.⁶ However, examining the census questionnaire forms and guide notes alerts us to the issue that cigarettes were never specifically defined on the census form or guide notes in 1981. Therefore, people who smoked roll-your-owns may not have counted themselves as smokers, and people who smoked cigars may have counted themselves as smokers. Although both definitions include roll-your-owns, neither the 1981 nor the 1996 question says to include them, so some people who smoked roll-your-owns may not have counted themselves as smokers; therefore, the data obtained may not exactly fit with the definition associated with that data. The effect of this wording difference may be quite minimal, but it is difficult to quantify exactly. No action can be taken to make the information more comparable.

Other changes, such as in the wording, subject population, guide note instructions, format of the questionnaire and data collection and processing, are irreversible (Morrison 1991). For

⁶ Variable definition of cigarette smoking from Statistics New Zealand *Concepts classifications and definitions* documents:

1981 'A regular smoker was defined as a person who currently smokes one or more cigarettes per day, including roll-your-own, but excluding pipe or cigar smokers'.

1996 'Cigarette smoking refers to the active smoking of any tobacco products including manufactured and hand-rolled cigarettes (excluding cigars, pipe tobacco and cigarillos). It does not include the smoking of any other substances, for example herbal cigarettes or marijuana, but does include the smoking of home grown tobacco'.

The main difference in these definitions lies in the exclusion of marijuana and passive smokers in the 1996 document (both of which may not count themselves as cigarette smokers anyway).

example, before 1981 the subject population for most census questions was the ‘de facto’ population, which included overseas visitors and temporary residents. In the 1981 Census and all subsequent censuses, the population was divided into two groups: the ‘de jure’ population, or census night usually resident population count, which excludes overseas visitors and the ‘de facto’ population, which is everyone in New Zealand on census night.

2.7 Questions in 1981–2006 Censuses

Tables 2.4, 2.5, 2.6 and 2.7 provide a list of the questions asked in the 1981–2006 Censuses that relate to the variables examined in this report. In order to ascertain comparability, these are grouped according to the type of information they seek to extract, rather than according to the exact wording of the question. Grouping census questions according to exact wording would result in a large number of questions that were only asked in one census.

Table 2.4 – Socio-demographic questions asked in the 1981–2006 Censuses, from individual forms

| Census question | Census year | | | | | |
|---|-------------|------|------|---------------------|------|-----------|
| | 1981 | 1986 | 1991 | 1996 | 2001 | 2006 |
| Name | q1 | + | + | q1 | q2 | q2 |
| Sex | q2 | q4 | q4 | q6 | q3 | q3 |
| Date of birth | q 3 &4 | q5 | q5 | q7 | q4 | q4 |
| Census night address | q6 | + | + | q5 | q8 | q8 |
| Usual residential address | q7 | q1 | q1 | q2 | q5 | q5 |
| Usual residential address at previous census / five years ago | q9 | q3 | q3 | q4 | q7 | q7 |
| Years at usual residence | | q2 | q2 | q3 | q6 | q6 |
| Country of birth | q10 | q7 | q10 | q8 | q9 | q9 |
| Number of years in New Zealand* | q10 | q8 | | q9 | q10 | q10 |
| Religion | q11 | q10 | q12 | q15 | q18 | q18 |
| Ethnic origin/group | q12 | q9 | q7 | q10 | q11 | q11 |
| Māori ancestry/Māori descent | | | q8 | q13 | q16 | q14 |
| Iwi | | | q9 | q14 | q17 | q15 |
| Marital status (legal) | q14 | q12 | q13 | q16, q17, q18 & q19 | q21 | q23 |
| De facto status | q14 | q11 | q11 | | | |
| Social marital status | | | | q16 | q19 | q19 |
| Number of children born | q15 | | | q29 | | q25 |
| Ability to converse in certain languages | | | | q12 | q13 | q13 |
| Highest secondary qualification | | | | | | q26 |
| Highest post-school qualification | | | | | | q27 & q28 |
| Unpaid activities | | | | | | q46 |

* In 1996, this question was changed to the month and year that the person first arrived to live in New Zealand, and the number of years in New Zealand was derived from this.

+ Unnumbered questions asked at the beginning of the personal or dwelling questionnaire forms.

Table 2.5 – Income and employment related questions in the 1981–2006 Censuses

| Census Question | Census year | | | | | |
|------------------------------|----------------|----------------|----------------|-----------|-----------|-----------|
| | 1981 | 1986 | 1991 | 1996 | 2001 | 2006 |
| Availability for work | | | q24 | q53 | q40 | q45 |
| Hours worked | q16 | q22 | q26 | q48 | q35 | q40 |
| Industry | q19, q20 & q21 | q24, q25 & q26 | q28, q29 & q30 | q45 & q46 | q32 & q33 | q37 & q38 |
| Job search methods | | | q23 | q52 | q39 | q44 |
| Main means of travel to work | q22 | q27 | q31 | q49 | q36 | q41 |
| Occupation | q18 | q23 | q27 | q43 & q44 | q30 & q31 | q35 & q36 |
| Seeking work | | q19 | q22 | q51 | q38 | q43 |
| Sources of personal income | q23 | q13 | q14 & q21 | q35 | q25 | q30 |
| Status in employment | q17 | q21 | q25 | q42 | q29 | q34 |
| Total personal income | q24 & q25 | q14 | q15 | q36 | q26 | q31 |

Table 2.6 – Family and household related questions in the 1981–2006 Censuses

| Census question | Census year | | | | | |
|--|--------------------------|---------------------------|------------------------------|--|------------------------------|------------------------------------|
| | 1981 | 1986 | 1991 | 1996 | 2001 | 2006 |
| Number of occupants in the dwelling on census night | q3 | q1 | q1 | q2 | q2 | |
| Persons absent on census night | q18 | q9 | q8 | q19 | q20 | |
| Household composition | q2, q3, q4, q5, q7 & q14 | q1, q4, q5, q6, q11 & q12 | q1, q4, q5, q6, q11 & q13 | q2, q3DF, q6, q7, q16, q17, q18, q20, q21, q22 & q23 | q4DF, q3, q4, q5, q19 & q21 | q6DF, q21DF, q3, q4, q5, q19 & q23 |
| Household composition with child dependency status (uses the household composition variable already derived and age and labour force status) | q4, q16 & q17 | q5, q16, q19, q20 & q22 | q5, q21, q22, q23, q24 & q26 | q7, q40, q48, q51, q52 & q53 | q4, q27, q35, q38, q39 & q40 | q4, q32, q40, q43, q44 & q45 |
| Living arrangements (including de facto status) | | q11 | q11 | q16, q20, q21, q22 & q23 | q19 | q19 |
| Relationship to reference person* | q5 | q6 | q6 | q 3 DF | q4 DF | q6 DF |

Table 2.7 – Dwelling related questions in the 1981–2006 Censuses

| Census Question | Census Year | | | | | |
|-------------------------------|-------------|---------|---------|-----------------|-------------------|----------------------------|
| | 1981 | 1986 | 1991 | 1996 | 2001 | 2006 |
| Access to Telecommunications | q15 | | | q16 | q16 | q17 |
| Dwelling Type | q4 | q2 | q2 | | q5 | q4 & q5 |
| Heating Fuels Used | q8 | q6 | q6 | q15 | q15 | q16 |
| Mortgage Payments | q9 | q4 | q4 | q9 | q8 | q13 |
| Motor Vehicles | q17 | q8 | q7 | q10 | q17 | q18 |
| Number of Bedrooms | q13 | q3 | | q11 | q13 | q14 |
| Number of Heating Fuels | q8 | q6 | q6 | q15 | q15 | q16 |
| Sector of Landlord | q10 | q5 | q5 | q5 | q10 | q10 |
| Tenure of Household | q9 & q10 | q4 & q5 | q4 & q5 | q4, q7, q8 & q9 | q8, q9, q11 & q12 | q7, q8, q9, q11, q12 & q13 |
| Weekly Rent Paid by Household | q10 | q5 | q5 | q8 | q12 | q12 |

2.8 Accessing Statistics New Zealand census resources

Although all reasonable steps have been taken to ensure that web addresses in this report are up-to-date and accurate, they are subject to change, and at the time of writing Statistics New Zealand was in the process of structural change. All Statistics New Zealand links should be available through the Statistics New Zealand website at www.stats.govt.nz.

Statistics New Zealand has a large variety of metadata surrounding the creation, definition, interpretation and comparability of census variables, especially for recent census years. Metadata is data about data and is used to gain an understanding about data, and to ascertain the most appropriate ways to use it (Statistics New Zealand 2004), but much of the Statistics New Zealand metadata is spread across many different documents, and contained in publications specific to the census year being covered by the metadata. This metadata is also presented in a variety of formats, with little longitudinal analysis of it. This report intends to make a contribution towards a longitudinal understanding of variables, using the metadata available from Statistics New Zealand.

Metadata for recent censuses is generally available electronically. For less recent censuses, publications can often be accessed through public or university libraries. Statistics New Zealand has its own library, and if certain publications cannot be obtained elsewhere, it is possible to request a copy of the required documentation from Statistics New Zealand – there may be a fee for this service. In order to progress this project and contribute towards ease of use for future researchers, we have compiled a list of some of the resources available surrounding the census, and where these resources can be accessed.

2.8.1 Census questionnaires

All New Zealand census forms from 1906 onwards (both dwelling and individual) can be found in the 2006 Statistics New Zealand publication, *Definitions and Questionnaires*. This is available in hard copy or on the Statistics New Zealand website at www.stats.govt.nz/census/2006-census-information-about-data/2006-definitions-questionnaires/default.htm. Accessed 6 August 2008.

The census forms referred to in this report can also be found online, on the web pages listed in table 2.8.

Table 2.8 – How to access Statistics New Zealand census forms for 1981–2006 Censuses

| Year | Resource |
|------|--|
| 1981 | Individual form: www.stats.govt.nz/NR/rdonlyres/1E9C46EC-E7AA-4F64-BF4D-9D10240E0810/0/1981persscheduleform.pdf . Accessed 14 July 2008. Dwelling form: www.stats.govt.nz/NR/rdonlyres/D67FBEC0-C464-478D-B2F6-5D079F1C9998/0/1981dwellform.pdf . Accessed 14 July 2008. |
| 1986 | Individual form: www.stats.govt.nz/NR/rdonlyres/8A118A19-8CF4-4847-8540-D5AA7B254BD7/0/1986persscheduleform.pdf . Accessed 14 July 2008. Dwelling form: www.stats.govt.nz/NR/rdonlyres/DDCB7B50-784E-4CF8-8FCD-C756FF5514F3/0/1986dwellform.pdf . Accessed 14 July 2008. |
| 1991 | Individual form: www.stats.govt.nz/NR/rdonlyres/5A47C43F-07FE-48E4-8A35-BDB26232E8EB/0/1991persscheduleform.pdf . Accessed 14 July 2008. Dwelling form: www.stats.govt.nz/NR/rdonlyres/81A8CFE1-A790-4488-A79C-1E46DD1D909C/0/1991dwellform.pdf . Accessed 14 July 2008. |

| Year | Resource |
|------|--|
| 1996 | Individual form: www.stats.govt.nz/NR/rdonlyres/24DCC89E-ADC6-4E2F-B913-A6400410D65C/0/1996individualform.pdf . Accessed 14 July 2008. Dwelling form: www.stats.govt.nz/NR/rdonlyres/418F1906-83E6-4712-BA41-3345AEB00DB6/0/1996dwellform.pdf . Accessed 14 July 2008. |
| 2001 | Individual form: www.stats.govt.nz/NR/rdonlyres/E6A2CF4B-69D5-494A-813E-CC671BD004FE/0/2001individualform.pdf (bilingual version). Accessed 14 July 2008. Dwelling form: www.stats.govt.nz/NR/rdonlyres/E6A2CF4B-69D5-494A-813E-CC671BD004FE/0/2001individualform.pdf (bilingual version). Accessed 14 July 2008. |
| 2006 | Individual and Dwelling Forms www.stats.govt.nz/census/2006-census-information-about-data/2006-definitions-questionnaires/forms.htm . Accessed 14 July 2008. |

2.8.2 Census guide notes/help notes

Census guide notes accompany the census forms that are delivered to every dwelling. They provide extra information for respondents on how to fill out the questionnaire. There are guide notes for both individual and dwelling forms. In 2001, the guide notes were called help notes.

Table 2.9 – Where to access Statistics New Zealand guide notes/help notes for 1981–2006 Censuses

| Year | Resource |
|------|--|
| 1981 | Refer to the back of hard copy publications from the 1981 Census – <i>Volume 12 Population Perspectives 81: General Report</i> (page 162 for the individual form guide notes, page 169 for the dwelling form guide notes). |
| 1986 | Refer to <i>1986 Census of Population and Dwellings: Questionnaire Contents and Submissions Report</i> , Department of Statistics (1985), Wellington. |
| 1991 | Refer to the back of hard copy publications from the 1991 Census, for example, <i>Range and Availability of Statistics</i> (page 110 for the individual form guide notes, page 116 for the dwelling form guide notes) and <i>National Summary</i> (page 55 for the individual form guide notes, page 61 for the dwelling form guide notes). |
| 1996 | Individual form help notes: www2.stats.govt.nz/domino/external/quest/sddquest.nsf/54c8cdbd113793d54c2563aa0073758f/4998fa5bdc8bb75d4c2564d5007d3d1c?OpenDocument . Accessed 14 July 2008. Dwelling form help notes: www2.stats.govt.nz/domino/external/quest/sddquest.nsf/54c8cdbd113793d54c2563aa0073758f/162c506e36ac2e694c256492000b6ce6?OpenDocument . Accessed 14 July 2008. |
| 2001 | Individual and dwelling forms help notes: www.stats.govt.nz/census/2006-census-information-about-data/2001-census-information-about-data/2001-definitions-questionnaires/chapter-10.htm . Accessed 6 August 2008. |
| 2006 | The individual and dwelling forms help notes are at the end of the questionnaires, available at www.stats.govt.nz/census/2006-census-information-about-data/2006-definitions-questionnaires/forms.htm . Accessed 14 July 2008. |

2.8.3 Concepts, definitions and classifications documentation

In the census variable definitions and classifications sections of this report, the text quoted for definitional purposes is sourced from the 2001 Census definitions. This is then compared to previous definitions in order to highlight similarities and differences. Table 2.10 indicates where to access Statistics New Zealand information on the definitions of variables.

Table 2.10 – Where to access Statistics New Zealand classifications and definitions for 1981–2006 Censuses

| Year | Resource |
|-------------|---|
| 1981 | <i>New Zealand Census of Population and Dwellings 1981 – Range and Availability of Statistics</i> (see pages 9–15). |
| 1986 | <i>New Zealand Census of Population and Dwellings 1986 – General Information</i> (refer to section 2, pages 23–74. Please note that these definitions also contain retrospective information for the 1981 Census). |
| 1991 | <i>Concepts, Definitions and Classifications</i> (entire document). |
| 1996 | <i>An Introduction to the Census</i> (refer to section 12). |
| 2001 | <i>Definitions and Questionnaires</i> available in hard copy or via the Statistics New Zealand website at: www.stats.govt.nz/census/2006-census-information-about-data/2001-census-information-about-data/2001-definitions-questionnaires/default.htm . Accessed 6 August 2008. |
| 2006 | <i>Information by variable</i> available online (accessed 14 July 2008) at: www.stats.govt.nz/census/2006-census-information-about-data/information-by-variable/default.htm . |

2.8.4 Other information on census questions, content and processes

Prior to the census, discussion documents are circulated, and end users and interested parties are consulted about the contents of the census. An interim report (preliminary views on content) is then published. The 2001 and 2006 preliminary views on content publications are available from the Statistics New Zealand website. The preliminary reports form the basis for broad discussion about the content of the upcoming census. The exact content of this report varies from census to census, but it always covers criteria for determining census content, a brief overview of the main topics covered in the census, and the submissions made that relate to each of these. The 2001 report also provides a brief history of some variables. The 2006 preliminary views on content contain two appendices that are particularly useful to external researchers. These entail: a survey information table (outlining other surveys conducted by various organisations, including type, frequency and available related products or services), and a series of additional data source tables.

The final report on content outlines Statistics New Zealand’s final decisions on content for the next census, that is, which topics and variables will be included, along with the rationale behind these decisions. Sometimes the final report on content provides useful information as to how and why a variable may have changed between censuses.

2.8.5 Data dictionaries

Data dictionaries contain a not necessarily exhaustive list of variables generated from each census and the coded classification categories for each variable. The 2006 data dictionary is available electronically from the Statistics New Zealand website (accessed 14 July 2008) at: www.stats.govt.nz/census/2006-census-information-about-data/data-dictionary.htm.

The 1996 data dictionary is also available in electronic form. The 1981, 1986 and 1991 data dictionaries are available in hard copy, and information on certain variables is also available electronically. Any request for data dictionaries should be made to Statistics New Zealand, customer services.

2.8.6 Factual output information from previous censuses

A range of Statistics New Zealand products and services, including Table Builder and Table Finder, can be found at www.stats.govt.nz/products-and-services. Accessed 14 July 2008.

Some of the resources that may be of use to researchers include:

Statistics New Zealand tabular and analytic reports

Statistics New Zealand produces several reports that can be generally described as either analytical or tabular. Tabular reports contain very little text and predominantly consist of tables. Prior to 2001, these were available in printed form only; for 2001 the tables are also accessible online. Analytical reports contain more description, discussion, graphical presentation and analysis of the data, and often incorporate information from other data sources. A series of analytical reports aimed at a wide general readership, called *New Zealand Now*, were produced following the 1991 and 1996 Censuses. The 1996 series is available in printed form and many of the component reports are available on the Statistics New Zealand website under the description 'New Zealand Stories', accessed 14 July 2008 at: www2.stats.govt.nz/domino/external/web/nzstories.nsf/NZ%20Story%20Title?openview.

There were no analytical reports produced directly from the 2001 Census, but a series of reference reports, also called topic-based reports, on various topics (for example, ethnic groups, housing) is available for download from the Statistics New Zealand website. These are predominantly tabular reports, but do also contain some pages of highlights. A similar set of reports is available for the 1996 Census.

Table Builder

Table Builder enables the user to access aggregated information in the form of tables and is available on the Statistics New Zealand website. It is a product for building tables not only for population census data, but also for income, injury, agriculture, business and import/export statistics. Tables are interactively built by the user from a selection of variables. For the population census, these include census year (1991, 1996 and 2001), geographic area (regional council, territorial authority and area unit) and a range of output census variables. The tables can be downloaded from the website in several different formats (e.g. Excel). Table Builder is online (accessed 14 July 2008) at: www.stats.govt.nz/products-and-services/table-builder.

Help notes on how to use Table Builder are available at: www.stats.govt.nz/NR/rdonlyres/F3FC3899-3FF5-41A2-9321-7737C18393CF/0/UsingTableBuilder.pdf. Accessed 14 July 2008.

Access to unit record data through the data lab facility

Access to anonymised unit record statistical data is currently managed through Statistics New Zealand's data laboratory (data lab). There is a data lab in each of Statistics New Zealand's Auckland, Wellington and Christchurch offices. Access to unit record data may be obtained by submitting a proposal outlining details of the proposed research. Applicants need to provide specific information on the researchers' backgrounds, the dataset(s) and variables required, methods of analysis and intended outputs. The proposal is then considered by Statistics New Zealand and access is provided at the discretion of the Government Statistician. If the proposal is approved, costs are estimated and conditions of access are negotiated. All researchers are required to sign a declaration of secrecy as specified in the Statistics Act 1975.

2001 Census output information

Information pertaining to 2001 Census outputs can be accessed at: www.stats.govt.nz/census/2001-census-data. Accessed 14 July 2008.

The 2001 Census snapshots are particularly useful for a quick broad overview of factual information on particular topics. These documents provide information about different topics from the 2001 Census, and overview indicator and variable context, allowing the user to explore associations, trends and patterns in different variables. These documents are available as separate downloadable PDF files for each topic, at:

www2.stats.govt.nz/domino/external/web/prod_serv.nsf/b9e2b9a56bf2820bcc256b3b000bbd7c/c68ef0a2fa520b27cc256ba500129c51?OpenDocument. Accessed 14 July 2008.

2.8.7 New Statistics New Zealand initiatives currently under development

Statistics New Zealand continues to provide new initiatives and services for interested external researchers and users of their data. The three recent schemes presented provide useful ways for researchers to access Statistics New Zealand data and expertise. The source of information for this section of the report is a communication with the expert data users group, which external researchers and interested parties may join.⁷

The Official Statistics Research and Data Archive Centre (OSRDAC)

OSRDAC will provide a single access point for all Tier 1 unit record data and administrative data for use by government, university and other researchers.⁸ Preliminary work has begun on the design of this facility and the process for lodging and processing unit record data.

Official statistics portal

Users will be able to access a full list of the statistics produced by government agencies through an official statistics portal, currently being designed.

Confidentialised Unit Record Files (CURFs)

CURFs are datasets that contain individual-level data arranged in a way that does not identify any individual's identity (Statistics New Zealand). This enables external researchers outside Statistics New Zealand to access individual-level data for research purposes.

The data provided differ from the unit-level data accessible in the data lab; some modifications will be made to the data and it is likely that there will be restrictions on the level to which data are available (Statistics New Zealand). The dataset provided is therefore 'perturbed' slightly from the real data gained from the census, in order to ensure confidentiality. However, unlike with current census datasets, researchers will be able to analyse data at their own workplace, rather than at the Statistics New Zealand data lab. For authorisation to access CURFs, researchers must comply with the ethical and security obligations set out by Statistics New Zealand.

2.8.8 Further information on variables

Other research tools that provide useful information about census variables are:

Statistical standards – These documents contain guidelines on how to collect and categorise information on a particular topic. They cover aspects such as questionnaire requirements, definitions and classifications. Statistical standards are designed for use in various data collections, including surveys and administrative collections. These standards are guidelines

⁷ To subscribe to this newsletter, send an email to listserv@stats.govt.nz with 'subscribe expert user' in the subject line.

⁸ Tier 1 statistics will be determined primarily by their purpose, not their producer. These statistics will have most of the following attributes: essential to central government decision making, high public interest, meet public expectations of impartiality and statistical quality, require long-term continuity of the data, provide international comparability or meet international statistical obligations.

only and lack of data or other complexities associated with the census may mean they are not strictly followed in constructing census variables (or other datasets). The purpose of these standards is to facilitate consistency in the way variables are collected and classified across several surveys and across time. Such consistency enhances comparability, enriching the body of data available for analysis.

Statistical standards are available online (accessed 14 July 2008) at:

www.stats.govt.nz/statistical-methods/classifications-standards.

Summary profiles – Another rich source of variable information is the *Information about the Census of Population and Dwellings* for each census year. This information is particularly useful for the 1981 and 1986 Censuses, as documentation surrounding these earlier census years is scarce, and also generally difficult to access. These documents for earlier census years (1981 and 1986) contain information such as lists of output variables that are available, a description of what output variables entail, and in some instances, whether variables are derived and if so, how. They also contain references to the census questions that variables are constructed from, and in some instances, reprints of the questions and/or classification categories. Summary profiles are available online at:

www2.stats.govt.nz/domino/external/omni/omni.nsf/outputs/22F50867BD37700BCC256BA000113E04. Accessed 14 July 2008.

Census classifications for 1996 – This resource consists of a set of documents that provide classifications and standards used in the 1996 Census of population and dwellings. It features a mix of introduction, structure, definition and code descriptor sections. These documents can be assessed online at:

www2.stats.govt.nz/domino/external/pasfull/pasfull.nsf/web/Guidelines+Census+Classifications+1996+Census+of+Population+and+Dwellings?open. Accessed 14 July 2008.

Variable glossary definitions for the 2001 Census – These are a rich source of information about the main variables used in the 2001 Census. They contain a definition of each variable, a description of the question number and which questionnaire form the question was asked on, and the relevant subject population. Furthermore, they comment on non-response rates to census questions (in 1996 and 2001), the quality level of variables, their comparability with previous censuses, and things to be aware of when using the variables. These documents also note whether variables have been derived, and if so, from what. It should be noted that this list is not exhaustive for all variables and all years, but it does provide a good starting point for thinking about consistency and comparability. It must also be borne in mind that comparability of the 2001 variables is discussed with reference to the 1996 and 1991 variables only, not to variables constructed from any earlier censuses. These documents can be accessed online at:

www2.stats.govt.nz/domino/external/omni/omni.nsf/a6736a486081eac4cc256c19007ee29d?OpenView. Accessed 14 July 2008.

3. Socio-demographic variables

3.1 Age

3.1.1 Variable type

Age is a categorical variable. It has been captured in all six censuses between 1981 and 2006.

3.1.2 Subject population

The subject population for age includes all census respondents, that is, the census night population, but data on age can also be output (and usually is) for the census usually resident population.

3.1.3 Non-response

Where there is non-response or the response is unidentifiable, 'age' is imputed from the year of birth question. If this is not possible then age is imputed using various other responses from the individual, for example, legal marital status, education, and work status; and from the known distribution of ages in the population.

3.1.4 Questions and response options

Age data are captured from the personal questionnaire – age is measured as the difference between 'date of birth' and the census date.

In the 1981 Census, two questions were asked. The first question asked for 'date of birthday' with space for day of month and month of year. A second question asked for year born or age at last birthday with a write-in space provided for each. The 1986 Census question asked the respondent for their date of birth and provided a write-in space for day, month and year. A similar question was asked in 1991. For the 1996 Census the question wording was changed to ask 'when were you born', with the same question being asked in 2001 and 2006.

3.1.5 Definition and classification

Age is the length of time a person has been alive measured in complete, elapsed years. It is measured as the difference between 'date of birth' and 'data collection date'.

The criterion used to place a person into the classification is the elapsed time between birth and data collection, calculated in whole years.

Age is a flat (single level) classification. It consists of single-year categories from 0 years to 119 years inclusive, plus a category for 120 years or over.

000 Less than 1 year

001 1 year

002 2 years

::

::

119 119 years

120 120 years and over

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/age. Accessed 11 January 2008.

3.1.6 Comparability assessment

| Age: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|-------------------------|----------------|-----------------------------------|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Change in way question asked between 1981 and 1986 | None expected | Nil | None required |
| Final Comparability Assessment: <i>Totally comparable.</i> | | | |

3.2 Arrival in New Zealand

3.2.1 Variable type

Arrival in New Zealand is a derived numerical variable. It is derived from the year of arrival recorded by the respondent. It was captured for the 1981, 1986, 1996, 2001 and 2006 Censuses.

3.2.2 Subject population

The subject population for this variable is the overseas born census usually resident population.

3.2.3 Non-response

In 2006, 3.8 percent of the subject population did not state their year of arrival in New Zealand. The non-response rate in 2001 was 5.2 percent.

3.2.4 Questions and response options

A question of this type was asked on the individual form of all censuses from 1981 to 2006 except for in 1991. In the 1981 and 1986 Censuses the question applied to all people in New Zealand who were born overseas. For the 1996 and 2001 Censuses it applied to people who were living in New Zealand and had been born overseas.

The type of question used has changed over time. In earlier censuses – 1981 and 1986 – respondents were asked to give the number of years they had been in New Zealand. If it was less than a year they were instructed to write zero. The question wording used in 1986 was a little more specific in that it asked for the number of years ‘lived’ in New Zealand, whereas the 1981 question asked for the ‘number of years in NZ’. It is not expected that this change would have had a major impact upon data comparability, as it seems likely that most respondents answering the 1981 Census question would have interpreted it as referring to living in New Zealand.

In the 1996, 2001 and 2006 Censuses a different approach was taken whereby respondents were instead asked to give the date when they first arrived to live in New Zealand rather than the number of years they had lived here. The same question wording was used for the 1996 and 2001 censuses: ‘If you live in New Zealand, answer this question. When did you first arrive to live in New Zealand?’ with a clarification added in 2006: ‘If you live in New Zealand but were not born here, answer...’.

There were help notes for this question in the 1981, 1986 and 1996 Censuses, but none for the 2001 Census. Those for the 1981 and 1986 Censuses instructed respondents to disregard any temporary absences. No criteria were given to help respondents determine what counted as a

temporary absence but, as already noted, it seems likely that they would not have thought of relatively long absences of a year or more as temporary, and so would have subtracted these when calculating the number of years they had lived in New Zealand.

The 1996 Census help notes contained a different type of clarification, which related to the new type of question used – respondents who had been to New Zealand several times were instructed to give the date when they first arrived to live in New Zealand long-term. The 1986 and 1996 Census help notes also contained an instruction that New Zealand-born people should not answer this question.

3.2.5 Definition and classification

‘Years since arrival in New Zealand is the length of time up to census day in completed elapsed years (including any intervening absences, whether temporary or long term) since a respondent who was born outside of New Zealand, first arrived to live in New Zealand as a permanent or long-term resident’.

The Statistics New Zealand classification is given:

The criterion used to place a person, born outside of New Zealand, into the classification for Year since Arrival in New Zealand is the time elapsed in completed years (including any intervening absences whether short term or long term) between arrival in New Zealand and the data collection.

Years since Arrival in New Zealand is a flat classification with 103 categories.

000 Less Than One Year

001 1 Year

002 2 Years

:: ::

:: ::

096 96 Years

097 97 Years or More

444 Don't Know

555 Refused to Answer

777 Response Unidentifiable

888 Response Outside Scope

999 Not Stated

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/years-of-arrival-years-since-arrival-in-newzealand. Accessed 11 January 2008.

3.2.6 Variable-specific issues

As noted earlier, the 1981 question asked about the number of years while the 1986 question asked how many years have you lived in NZ, which is a more specific question than that used in 1981. However, it is not expected that this change would have had a major impact upon data comparability, as it seems likely that most respondents answering the 1981 Census question would have interpreted it as referring to living in New Zealand.

The change in the type of question and underlying concept used will have had some impact on the comparability of the 1981 and 1986 Census data with those of the 1996, 2001 and 2006 Censuses. This is because for some respondents, the different questions would produce different data. When answering a question about the number of years lived in New Zealand, some respondents might subtract any relatively long periods of absence, such as those of a year or longer. This would not happen, however, when answering a question about the month

and year when they first arrived to live in New Zealand. Therefore, the data derived from a year of arrival question will include any periods of absence from New Zealand that had occurred after first arriving, whereas data from a number of years in New Zealand question will exclude such absences.

The change in question type may have affected data comparability between the 1981 and 1986 Censuses and the 1996, 2001 and 2006 Censuses because the respondents to the former two had to calculate the number of years themselves, whereas the type of question used in the latter three censuses did not require any calculation on the part of respondents. Thus the type of question used in the 1996, 2001 and 2006 Censuses was probably easier to answer, and so likely to result in higher quality data.

3.2.7 Comparability assessment

| Arrival in New Zealand: Available for 1981, 1986, 1996, 2001, 2006 | | | |
|---|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes in question wording between 1986 and 1996/2001/2006 – how many years lived to when did you arrive | Minor | Not known | None available |
| Change in way number of years in NZ calculated | Minor | Not known | None available |
| Final Comparability Assessment: <i>Highly comparable.</i> | | | |

3.3 Census night address

3.3.1 Variable type

Census night address is a categorical variable. The data is captured directly from the free-text answers to the census question. Census night address was captured in all six censuses between 1981 and 2006.

3.3.2 Subject population

Every respondent is required to provide this information (census night population count).

3.3.3 Non-response

Census night address does not have a non-response rate, as all forms received have a meshblock code. When the respondent did not answer the question, the census night address is taken to be the meshblock code filled in by the collector. This includes situations in which an entire individual form for a person within a household was not answered, and situations in which an entire household did not respond.

3.3.4 Questions and response options

A question asking for the respondent's census night address was asked in all six censuses between 1981 and 2006. In the 1981 Census, respondents were asked to state their 'Full address on census night' in Question Six and were given three write-in spaces to enter their street number and name, name of suburb or rural locality and the name of a city, town or county. They were requested not to give a PO Box or rural delivery number.

For the 1986 Census the question order was changed and respondents were asked to record the ‘Address of where you are on census night’ prior to answering question one of the census. The write-in spaces and information asked for were the same as in 1981. The question location, write-in spaces and instructions were the same for the 1991 Census as for the 1986 Census, but the question wording was amended to read ‘What address are you at on the night of Tuesday, 5 March 1991?’.

Along with a significant change in wording, the question location was changed in the 1996 Census. Question Five asked first whether the respondent was at the address they gave in question Two – which had asked ‘Where do you live – give the full address’. If the respondent answered ‘Yes’, they were directed to the next question. If they answered ‘No’ they were asked to ‘Give the address where you are on census night’, with a request to provide if possible the flat number (if a flat), street number and name, suburb or rural locality and city, town or district.

For the 2001 Census the question was moved to question eight, but the question wording and directions were the same as those for the 1996 Census. In 2006 the question wording was the same but the layout of the responses was made clearer and may have lowered the number of ‘Response unidentifiable’ responses.

3.3.5 Definition and classification

‘Census night address’ is the meshblock of the dwelling where a respondent is located on census night. For passengers on overnight trains and buses, the destination of the passenger is deemed to be the census night address

There is no Statistics New Zealand classification for census night address.

3.3.6 Variable-specific issues

There are no known issues specific to this variable.

3.3.7 Comparability assessment

| Census night address: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes in question wording between 1981 and 1986 | Minor | Minor | None |
| Changes in question wording between 1986 and 1991 | Minor | Minor | None |
| Changes in question wording between 1991 and 1996 | Minor | Minor | None |
| Final Comparability Assessment: <i>Highly comparable.</i> | | | |

3.4 Country of birth

3.4.1 Variable type

Country of birth is a categorical variable, which is coded directly from the answers to the census question. Country of birth information was obtained from the 1981, 1986, 1991, 1996, 2001 and 2006 Censuses.

3.4.2 Subject population

The subject population for this variable is all those persons in New Zealand on census night (census night population count).

3.4.3 Non-response

Non-response was a relatively low 4.5 percent in 1996, reduced to 3.9 percent in 2001 then increased back up to 4.5 percent in 2006.

3.4.4 Questions and response options

A question asking for country of birth information was asked on the Individual Form of all censuses from 1981 to 2006. The same amount of detail was collected over all six censuses in this period, with written responses required of respondents whose country of birth did not appear in a response category on the form.

In the 1981 Census, the country of birth question had just two response tick boxes of ‘New Zealand’ and ‘other country’, requiring a written response of all respondents born overseas. From the 1986 Census onwards, however, a wider range of tick box response options were provided. Response tick boxes for Australia, England, Scotland, The Netherlands, the Cook Islands and either Western Samoa (1986, 1991, and 1996) or Samoa (2001, 2006) were consistently included in the 1986 to 2006 Censuses. A tick box for Fiji was added in the 1996 and 2001 Censuses. In 2006 The Netherlands was dropped and China (People’s Republic of) and South Africa were added.

Instructions relating to this question were included in the help notes for the 1981 to 1991 Censuses. There were no help notes relating to the country of birth question for the 1996 and 2001 Censuses. All three sets of help notes asked respondents to give the present name of the country in which their birthplace was situated. The 1981 help notes for this question also contained an instruction that respondents born in the British Isles should give the specific country in which they were born. The 1991 Census help notes contained an instruction that respondents whose country of birth was not listed should tick the ‘other country’ box and give the name of the country in the space provided.

3.4.5 Definition and classification

The definition of ‘Country of Birth’ given on the Statistics New Zealand website is:

‘A country is the current name, either short or official of a country, dependency or other area of particular geopolitical interest.

The term country is defined to include:

- independent countries recognised by the New Zealand Government;
- units which are recognised geographic areas;
- administrative subdivisions of Australia and the United Kingdom;
- overseas dependencies, external territories of independent countries.’

Statistics New Zealand notes that the principal criterion used to classify a country is the country name or title stated by the survey respondent. Countries are grouped by geographic proximity and into progressively broader geographic areas on the basis of their similarity in terms of social, cultural, economic and political characteristics. The classification is a flat (non-hierarchical) one, containing 243 countries.

An example of the classification structure is given below:

AU Australia
 JP Japan
 NZ New Zealand
 US United States of America

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/country. Accessed 14 January 2008.

For comparable classifications, the countries have been given at the 2006 classification level-1, which has 10 categories:

- 0 Supplementary codes
- 1 Oceania and Antarctica
- 2 North West Europe
- 3 Southern and Eastern Europe
- 4 North Africa and the Middle East
- 5 South-East Asia
- 6 North-East Asia
- 7 Southern and Central Asia
- 8 The Americas
- 9 Sub-Saharan Africa.

3.4.6 Variable-specific issues

For respondents giving a written response in the 1981, 1996, 2001 and 2006 Censuses, there was an instruction in the question to provide the present name of the country. The 1986 and 1991 Census questions did not include this instruction. The effect of this on the data depends on whether previous country names can still be classified into specific categories according to the current names. In instances where a country has been split into several new countries (for example, Yugoslavia) this will not be possible, and could have resulted in some loss of detail and affected data comparability, but this effect is expected to have been only minor.

The changes in response options are not seen as having a significant impact on comparability over time.

3.4.7 Comparability assessment

| Country of Birth: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes in response option wording in 1986 and 1991 | Minor | Minor | None available |
| Final Comparability Assessment: <i>Highly comparable.</i> | | | |

3.5 Date of birth

3.5.1 Variable type

Date of birth is a categorical variable, and is coded in date format directly from the question(s) asked. This information was sought on all six censuses between 1981 and 2006.

3.5.2 Subject population

The subject population for this variable is the census night population, as this question applies to all people in New Zealand on census night.

3.5.3 Non-response

There is no non-response category for age, as a response is imputed if the question was not answered. This includes situations in which an entire individual form for a person within a household was not answered, and situations in which an entire household did not respond.

3.5.4 Questions and response options

A question seeking information on the respondents' date of birth was asked in all six censuses from 1981 to 2006. In the 1981 Census, the information was obtained by asking two questions. The first of these, Question Three, asked for 'Date of Birthday' and provided space for 'Day of Month' and 'Month of Year'. It was followed by Question Four which asked 'Year born, or age last birthday' with a space provided for the respondent to specify either 'Year Born' or 'Age last Birthday' in years.

The question was simplified for the 1986 Census and simply asked in question five as 'Date of Birth', with a space provided to write the day, month and year. In the 1991 Census, respondents were asked in Question Five, 'What is your date of birth?', to be answered in a day/month/year format.

For the 1996, 2001 and 2006 Censuses the question was changed slightly and asked as 'When were you born?' in a day/month/year format with examples given for each of day, month and year.

The help notes for the 1996 Census advised respondents to provide the year of their birth if they did not know the exact date. No guidance was provided for this question in the 2001 Census help notes.

It is not expected that these relatively minor changes to question format have impacted on the consistency of the data gathered.

3.5.5 Definition and classification

The classifications for date of birth are needed because age is derived from the information collected by the date of birth question. Date of birth is derived from three flat classifications; date of birth day, date of birth month and date of birth year. Day has single categories 01 to 31 (representing the days of the month), month has single categories 01 to 12 (representing the months of the year), and year has single categories (representing 120 years back from the current year). For example the 2007 code structure for the year classification ranges from 1887 to 2007. All three classifications also have residual categories.

Source: www.stats.govt.nz/NR/rdonlyres/4E5E3269-0E5C-4221-9C14-C340F790231D/0/AGE.pdf. Accessed 22 April 2008.

Statistics New Zealand defines age as 'the length of time a person has been alive measured in complete, elapsed years.' It is measured as the difference between 'date of birth' and 'data

collection date'. The criterion used to place a person into the classification is the elapsed time between birth and data collection, calculated in whole years.

Age is a flat classification. It consists of single-year categories from 0 years to 119 years inclusive, plus a category for 120 years or over.

- 000 Less than 1 year
- 001 1 year
- 002 2 years
- ::
- 119 119 years
- 120 120 years and over

No provision is made for residual categories as, in line with international practice, it is Statistics New Zealand policy to impute missing values for age data.

3.5.6 Variable-specific issues

There are no known issues with this variable.

3.5.7 Comparability assessment

| Date of Birth: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes in question wording between 1981 and 1986 | None | None | Not required |
| Final Comparability Assessment: <i>Totally comparable.</i> | | | |

3.6 Ethnicity

3.6.1 Variable type

Ethnicity is a categorical variable, and is coded from responses to the question. Ethnicity data were collected in all six censuses from 1981 to 2006.

3.6.2 Subject population

The subject population for this variable is the census night population, as this question applies to all people in New Zealand on census night. However, data on ethnicity is output for the census usually resident population.

3.6.3 Non-response

In 2001, non-response to this question was 3.9 percent; it did not alter significantly in 2006 where it was a relatively low 4.0 percent.

3.6.4 Questions and response options

There was considerable variation in the way Statistics New Zealand collected ethnicity data over the period 1981–2006, causing problems for data consistency. The variation arises from the use of different conceptual frameworks and hence differently worded questions.

For the 1981 and 1986 Censuses, the term 'ethnic origin' was used, while the more recent censuses used 'ethnic group'. The concept 'ethnic origin' is different to that of 'ethnicity', as

it puts the emphasis on ancestry rather than current cultural affiliation, and so is essentially the same as ‘race’. The change to asking for ethnic group represented the use of a much broader concept of ethnicity, one incorporating aspects of cultural identity, ancestry, race, etc.

In the 1981 Census, respondents were asked to indicate their ethnic origins either in terms of full origin or fractions of different origins. This was changed for the 1986 Census as a result of pre-testing and respondent feedback indicating that the need to quantify the extent of ethnic origin was a major cause of negative response (DOS 1988). In the 1986 Census the question asked ‘what is your ethnic origin?’ and the fractional responses were replaced with the possibility of ticking multiple boxes. This enabled a multiple response without having to quantify the proportion of each response.

The measurement of ethnicity was reviewed by the Department of Statistics, and the resulting report noted that the 1986 Census question was not a good statistical measure of ethnicity as it was not clear whether it was measuring ancestry or cultural affiliation. Recognising that information on two conceptually different characteristics such as self-determined ethnicity and biological ancestry could not be obtained in a single question, the Department of Statistics asked two questions in the 1991 Census to obtain this information. These were:

- What ethnic group do you belong to?
- Have you any New Zealand Māori ancestry?

The ethnicity question in 1991 asked ‘Which ethnic group do you belong to?’, where previously ethnic origin had been asked for.

Further changes were made to the ethnicity question for the 1996 Census. While the 1991 ethnicity concepts and definitions were retained, the question was worded differently. The differences included:

- The response category ‘NZ Māori’ was moved to the top of the list of categories;
- The wording of the 1996 question made it more explicit that respondents could tick more than one ethnic group;
- There was a new tick box category ‘Other European’, which included six sub-groups (English, Dutch, Australian, Scottish, Irish, Other).

These changes had a significant impact on the ethnicity data, and comparisons of 1991 and 1996 ethnicity data show that there was a large increase in the number of multiple responses recorded. There was a greater-than-expected increase in the Māori ethnic group population and an unexpected drop in the sole Māori population. Studies carried out by Statistics New Zealand suggest that the differences in the wording of the census questions on ethnicity in the 1991 and 1996 Censuses led to variations in the way people answered the question.

For the 2001 Census the ethnicity question used was very similar to that used in the 1991 Census. Changes included the removal of ‘New Zealand’ from in front of the Māori response option, the dropping of the word ‘Pakeha’ from the category ‘NZ European or Pakeha’ and the deletion of the ‘Other European’ option. The 2006 question was identical to the 2001 format.

In each census from 1981 to 2006, the question on this topic included some tick boxes for particular groups and write-in boxes for groups that did not have a tick box. In all instances tick boxes were provided for the majority group, for Māori, and for some Pacific Peoples and Asian groups. There have been various changes, however, in the total number, order, and labels of the tick boxes.

In the 1981 Census the tick boxes provided were for respondents of one (full) origin, and all had ‘full’ as part of the label e.g. ‘Full Chinese’. Respondents of more than one origin were asked to give a written response indicating a fraction for each of their groups, e.g. $\frac{1}{2}$ Chinese, $\frac{1}{4}$ European and $\frac{1}{4}$ Samoan. From the 1986 Census onwards there has been no reference to ‘full’ origin in the question wording or in the tick boxes and no requirement to give a fraction for each group where multiple responses was applicable.

The term used in the census to describe the majority group in the population has changed considerably over the period 1981 to 2006. In the 1981 Census, this was ‘(Full) European, or (full) Caucasian’. In the 1986 Census, ‘European’ was used, before the introduction of ‘New Zealand European’ in 1991. For the 1996 Census this became ‘NZ European or Pakeha’, but 2001 and 2006 reverted to simply ‘New Zealand European’. This is consistent with the change in the conceptual basis of the question, and probably also reflects changes in the terms that have been regarded as most appropriate to describe this group at different times.

There were two changes to the census tick box for Māori over the period of study. From 1981 to 1996 it was prefixed with the words ‘New Zealand’ or ‘NZ’, but for the 2001 and 2006 Censuses it was labelled simply ‘Māori’. Another change occurred in 1996, when the category appeared first in the list of tick boxes, whereas for other censuses in this period it was second in the list.

The tick boxes provided for Pacific Peoples have remained the same throughout the 1981 to 2006 Censuses. Although there were some variations in the order, each of these censuses included tick boxes for ‘Samoan’, ‘Cook Island Maori’, ‘Niuean’ and ‘Tongan’. Similarly, there was consistency in the provision of tick boxes for Asian groups, with all six censuses including tick boxes for ‘Chinese’ and ‘Indian’.

Perhaps the most significant change in the tick boxes for this question was the use of additional tick boxes for ‘Other European’ groups (English, Dutch, Australian, Scottish, Irish, Other) in the 1996 Census. Although this might not necessarily be expected to affect the responses given, as the information requested was the same as in previous and subsequent censuses (that is, ethnic group), it did have a significant impact on the data. This suggests that respondents look to the tick boxes for guidance on the type of response required. The 1996 Census data show increased counts for ‘Other European’ groups, compared to those for 1991, 2001 and 2006. There was also a decrease in the count for ‘NZ European or Pakeha’ in 1996 compared with the equivalent option for 1991, 2001 and 2006, and there was more multiple response, which affects the comparability of data for single ethnic groups, such as sole Māori. To measure real population change, comparisons need to be made among 1991, 2001 and 2006 Census data (Statistics New Zealand 2002).

The help notes provided for the questions on ethnic origin and ethnic group have variously aimed to explain: what the question is about, that a written response may be necessary and that a multiple response can be given. The 1981 Census help notes explained that the ethnic origin question was referring to the ‘blood mixture of races within a person’ and contained detailed examples of how to work out the fraction applying to each group. It seems likely that this calculation would have been difficult for some respondents. The help notes for this census also contained a definition of the term Caucasian: ‘(member) of the ‘white’ or light-skinned division of mankind’ and said that it included the more common term ‘European’.

For the 1986 Census, the help notes were restricted to an instruction that people with more than one origin should tick as many boxes as necessary to describe their ethnic origin. A similar note appeared in the help notes for the 1991 Census, which also explained that respondents belonging to ethnic groups that were not listed should tick ‘other’ and write the

group in the space provided, and contained a more specific instruction that people belonging to European groups other than New Zealand European (for example, English, Dutch, or Australian) should tick ‘other’ and write the group in the space provided.

The help notes relating to the ethnicity question in the 1996 and 2001 Censuses aimed to clarify what the question was asking (that is, cultural groups) and to distinguish it from other concepts such as nationality or citizenship. In 2006 this concept was taken a step further by showing what attributes made up an ethnic group including:

- A shared culture, such as traditions or ways of doing things, customs, beliefs or language;
- A common ancestry or history;
- A similar geographic, tribal or clan origin.

These were presented along with examples of ethnic groups, such as Māori, Samoan, Kiribati, Afrikaner, Chinese New Zealander.

These changes in the content of the help notes reflect changes in the underlying concept, style of question used and type of response required. In general it is expected that these help notes and the changes in them will not have had as much impact on the responses received – and thus on data comparability – as the changes in the questionnaire module. The inclusion of information explaining what the question is asking for reflects its relatively complex nature, compared to other census questions, and the potential for misinterpretation or uncertainty about how to answer it.

3.6.5 Definition and classification

The guide that accompanied the 1981 Census defined Ethnic Origin as ‘...the blood mixture of races within a person and is calculated by adding one half of the mother’s ethnic origin and one half of the father’s ethnic origin.’ (Statistics New Zealand 1999, 11). Therefore, ethnic origin was defined in the same way that race or descent had been previously – it was a biological concept that was measured in terms of whole or partial (fractions). In the 1986 Census the definition changed, removing all reference to degree of blood and referring only to ethnic origin.

The term ‘Ethnic Origin’ embodies two distinct concepts – ethnicity, which is self-identity based upon cultural affiliation, and origin, which is indicative of descent or homeland. When combined, the two concepts create a term that defines identity in terms of historic affiliation or ancestry rather than contemporary self-perception. The term ethnic origin ceased to be used in NZ Censuses after 1986 following the 1988 report of the Review Committee on Ethnic Statistics.

Statistics New Zealand has adopted the following definition of ethnicity and ethnic group.

‘Ethnicity is the ethnic group or groups that people identify with or feel they belong to. Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality or citizenship. Ethnicity is self perceived and people can belong to more than one ethnic group.

An ethnic group is made up of people who have some or all of the following characteristics:

- a common proper name;
- one or more elements of common culture which need not be specified, but may include religion, customs, or language;
- unique community of interests, feelings and actions;
- a shared sense of common origins or ancestry; and
- a common geographic origin.’ (Statistics New Zealand 2004).

The Statistics New Zealand ethnicity classification, released in 2005, is given below.

‘The criterion for classification of ethnic groups is self-identification with one or more ethnicities. Detailed ethnic group information is collected so that responses can be coded to specific ethnic group categories at the most detailed level of the classification, level four. Where this is not possible, information may be coded to level two or level three. Level one is used solely for output.

Individual ethnic groups are aggregated into progressively broader ethnic groups from level three up to level one, according to geographical location or origin, or cultural similarities.

Ethnicity is a hierarchical classification with four levels.

Level one has six categories and a residual category.

Level two has 21 categories and six residual categories.

Level three has 36 categories and six residual categories.

Level four has 233 categories and six residual categories.

Level one categories are:

- 1 European
- 2 Māori
- 3 Pacific Peoples
- 4 Asian
- 5 Middle Eastern/Latin American/African
- 6 Other Ethnicity
- 9 Residual Categories’.

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/ethnicity. Accessed 15 January 2008.

3.6.6 Variable-specific issues

There are a number of background issues related to the measurement of ethnicity that need to be understood by analysts – these are briefly discussed below. (For a more detailed discussion see ‘Understanding and Working with Ethnicity data’, online at www.stats.govt.nz/NR/rdonlyres/F9967810-E15B-4D28-A8E3-DBAD6B80954C/0/UnderstandingWorkingEthnicityData.pdf. Accessed 14 July 2008).

Ethnic mobility and contextual effects

A person’s ethnicity or ethnic identity is not necessarily fixed, with the two main reasons for this being ethnic mobility and contextual effects. Ethnic mobility refers to situations where a person may choose to identify differently over time. Contextual effects exist when a person chooses to identify with a different ethnic group depending upon the context or circumstances in which they are asked about their ethnicity identification.

Multiple meanings of ethnicity

The term ethnicity means different things to different people. For some people ethnicity is a ‘marker’ of their cultural affiliation, for others it is closely linked to their country of origin, while for others it may be a combination of these factors or a combination of other factors identified in the definition above.

3.6.7 Comparability assessment

| Ethnicity: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes in questionnaire wording | High | | |
| Changes in concept – from ethnic origin to ethnic group | High | Data measures two different but overlapping concepts | |
| Changes in response options in 1996 | High | Over counts multiple response | Use 1991, 2001 and 2006 data were possible |
| Final Comparability Assessment: 1991, 2001 and 2006 data are broadly comparable. 1996 data should be used with caution. | | | |

3.7 Highest secondary school qualification

3.7.1 Variable type

Highest secondary school qualification is a categorical variable, and is coded directly from the census question.

3.7.2 Subject population

The subject population for this variable is the census usually resident population count aged 15 years and over.

3.7.3 Non-response

Non-response to the school qualification question in 2001 and 2006 was at a relatively high 7.4 percent.

3.7.4 Questions and response options

The Highest School Qualification gained question in the 1981 Census started with an instruction for respondents to answer only if they had not ticked response options one to four in the previous question (these response options indicated that the respondent had either no primary or secondary schooling, or had only attended primary or intermediate, or form 3 or 4 as their highest level at school). If the respondent had not ticked any of these boxes they were asked to tick the box indicating their highest qualification gained. The response options were:

- No school qualification
- University Scholarship or ‘A’ or ‘B’ Bursary
- Higher School Certificate, Higher Leaving Certificate
- University Entrance, matriculation
- Endorsed School Certificate, Sixth Form Certificate in 4 or more subjects
- Sixth Form Certificate in 1, 2 or 3 subjects
- School Certificate or 3 or more subject passes in School Cert.
- 1 or 2 subject passes in School Certificate
- Other – with a Specify instruction and a write-in space.

The question wording was simplified for the 1986 Census and asked as ‘What is your highest school qualification?’ The response options were similar to those for the 1981 Census, but were ordered in terms of the level of qualification, starting with no qualification and ending

with ‘other school qualification’. The wording for the 1991 question was identical to that in the 1986 Census but the response options were changed.

For all six of the censuses analysed, responses to the highest school qualification gained question were in tick box format, with an ‘other, please state’ category for qualifications not covered by any of the tick boxes. Lack of consistent categories in the number of subjects passed means that only the ‘qualifications obtained’ information, rather than the ‘number of subjects passed’, has consistent time series data available. Changes in the names and nature of qualifications obtained from 1981 to 2006 mean that response options and classification categories have also changed across this time period.

In 2006 NCEA was added to the response options available. The latest census shows the following response options:

- None
- NZ School Certificate in one or more subjects or National Certificate level 1 or NCEA Level 1
- NZ Sixth Form Certificate in one or more subjects or National Certificate Level 2 or NZ UE before 1986 in one or more subjects or NCEA level 2
- NZ Higher School Certificate or Higher Leaving Certificate or NZ University Bursary/Scholarship or National Certificate level 3 or NCEA level 3 or NZ Scholarship level 4
- Other secondary school qualification gained in NZ. Print what it is
- Other secondary school qualification gained overseas.

3.7.5 Definition

For the 2006 Census, highest secondary school qualification is defined as ‘the highest secondary school qualification gained, by category of attainment’, and there is a separate definition for ‘qualification’. In 2006, a qualification was defined by Statistics New Zealand as ‘a formally recognised award for attainment resulting from a full-time (20 hours per week) learning course of at least three months, or from part-time study for an equivalent period of time or from on-the-job training’. It is further specified from whom a qualification can be awarded.⁹ In 1996, ‘highest secondary school qualification’ was classified as ‘highest school qualification’, and the definition was comparable with those used in 2001 and 2006. It was noted that the qualification would be awarded by a secondary school or educational institution (as defined by the Education Act) or by any other organisation providing a qualification assessed under the auspices of the NZQA. In 1981, 1986 and 1991, this variable was defined as ‘highest school qualification gained’ and the definition of the variable was comparable for these years, although no mention was made of where the qualification could be obtained from.

Comparable classifications for the six census years under study are shown in Appendix 7.4.1, while Appendix 7.5.1 shows the breakdown of variables for each census year.

3.7.6 Variable-specific issues

The main comparability issue associated with this question (what constitutes a qualification) is clear-cut, because it is defined by the limited number of standard qualifications that New Zealand secondary schools offer. Although the names (and content) of some of the qualifications obtained have changed between censuses, grouping qualifications by year of obtainment enables comparable categories to be created.

⁹ Qualifications in themselves were not specifically defined in Statistics New Zealand concepts, classifications and definitions documents prior to 1996. However, usage of this term and references to it in census forms and guide notes seem consistent with the 2001 definition.

Another comparability issue centres on secondary qualifications obtained overseas. In the 1981 and 1986 Census guide notes, respondents were instructed to tick the New Zealand equivalents of their overseas qualifications. In 1991, 1996, 2001 and 2006 there was a separate response option and classification category for secondary qualifications gained overseas. This means that in 1981 and 1986, counts of New Zealand high school qualifications may be inflated compared with counts in 1991, 1996, 2001 and 2006.

3.7.7 Comparability assessment

| School Qualification: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|--|--|---|---|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Names of qualifications, and how they are achieved have changed over time | Major | Makes it more difficult to create comparable classification categories, but basic levels of attainment are similar across years | To create comparable categories group qualifications according to year of schooling they pertain to (for example, 5th form or year 11 qualification) rather than name |
| 1981 and 1986: people with secondary qualifications from overseas required to tick NZ equivalent, and in 1996 responses were coded into categories that indicate NZ equivalent level of attainment. In 1991, 2001 and 2006 there was a separate tick box category for overseas qualifications and levels of qualification were not collected | Major | In 1991, 2001 and 2006 there is no information on the level of school qualification for people who gained them overseas. This will deflate the numbers of specific types of qualifications for 1991, 2001 and 2006 relative to other census years | Restrict our analysis to whether people have a school qualification or not, rather than comparing proportions of people obtaining a certain level of attainment |
| Lack of consistent information on number of subjects passed (1981 and 1986 had some separate categories according to number of subjects passed, 1991 to 2006 had one category for one or more subjects) | Minor | Affects availability of comparable response categories | Aggregate categories together for 1981 and 1986, to produce data comparable with subsequent census years |
| Statistics New Zealand note that in 1996 people too young to have University Entrance were added into the category of 'Sixth Form Certificate' | Minor – this would not apply to a large number of people | Possibly in 1996 a slight increase in numbers in the Sixth Form Certificate category and a slight decrease in the numbers in the UE category | Aggregate categories by year of schooling they pertain to rather than qualification name (the UE and Sixth Form Certificate are the same category) |
| Final Comparability Assessment: <i>Broadly comparable for presence/absence of a qualification. Limited comparability of 1991, 2001 and 2006 data on level of attainment.</i> | | | |

3.8 Highest post-school qualification

3.8.1 Variable type

Highest post-school qualification is a categorical variable, and is coded directly from the census question.

3.8.2 Subject population

The subject population for this variable is the census usually resident population count, aged 15 years and over.

3.8.3 Non-response

Non-response was a moderate 6 percent in 2006, although another 4.3 percent of responses were unidentifiable. In 1996 there was a high level of non-response with 9 percent of respondents failing to answer, a figure that fell to 6.5 percent in 2001.

3.8.4 Questions and response options

This question was in tick box format with an ‘other, please state’ category for qualifications not covered by any of the tick boxes for the 1986 and 1991 Censuses, but required a written response in the 1981, 1996, 2001 and 2006 Censuses. These written responses were then coded according to the relevant classification and grouped into output categories.

For all censuses, respondents were instructed to include qualifications obtained from completed courses only.¹⁰ Prior to 1996 there was no specified minimum duration for courses to be counted. In 1996, 2001 and 2006, it was stated on the census form that the qualification had to be obtained from a course that was at least three months full-time equivalent in duration. This may mean that prior to 1996, qualifications were included that would not be included in 1996–2006. However, the effect of this is likely to be minimal as short courses leading to formal qualifications were not common prior to 1996.

One of the areas for potential inconsistency with this question arises over the definition of a qualification. In 1981, qualifications were described on the census form as ‘academic, vocational, or professional qualifications gained through prescribed courses of study since leaving school’ and respondents were instructed (also on the form) to exclude recreational qualifications. In 1991, respondents were similarly instructed in the guide notes to exclude certificates obtained at hobby classes, unless they were related to their job. In 1986 and 1996–2001 there were no explicit instructions to exclude these types of courses, which may have led to an underreporting of qualifications in 1981 and 1991 when compared with other census years. This effect would have been mitigated by the implied exclusion of these courses as respondents were instructed to only include courses which were three months full time equivalent – the notes used terms such as ‘Trade certificates, degrees or diplomas’ to describe the type of qualification.

Information about the number of qualifications that the respondent possesses has not been sought consistently in the census. In the 2001 and 2006 Censuses, respondents were only asked to provide information on their highest post-school qualification, where previous censuses asked for information on either all (1986 and 1991), two (1996) or four (1981) qualifications.

¹⁰ For the 1981, 1996 and 2001 Censuses these instructions were on the census form itself; for the 1986 and 1991 Censuses these instructions were contained in the help notes.

Information about the field of study and year of conferment is also incomplete. In 1981, 1996, 2001 and 2006, information was elicited on main field/subject of qualification, and in 1981 and 1996, information was also sought on the year the qualification was conferred.

Another difference between the census years concerns overseas qualifications. For all years apart from 1986,¹¹ there were no specific instructions regarding overseas qualifications. The 1986 help notes instructed the respondent to ‘tick the New Zealand equivalent’ if they had an overseas qualification. If no New Zealand equivalent was provided, they were to respond in the ‘other, please state’ category. This may mean that in 1986, the New Zealand-based qualification counts were deflated, and the ‘other’ qualifications category inflated compared to other census years.

3.8.5 Definition and classification

The 2001 variable is called ‘post-school qualifications’. ‘Highest post-secondary qualification gained’ is defined as ‘the highest qualification gained, apart from secondary school qualifications’.

As seen from the response options, qualifications include those awarded by training and educational institutions as well as those gained by formal on-the-job training. The definition of qualifications has already been covered in discussion about the ‘highest school qualification’ variable. Again, as part of the variable definitions, a ‘qualification’ is defined as an award for educational attainment which is the result of formally recognised learning, and stipulations are made on who the qualification can be awarded by. In 2006 the classifications were changed to also include National Certificate of Educational Achievement (NCEA) qualifications. There were instructions about the duration requirements of courses (three months full time (20 hours per week) equivalent) in order for them to be included on the census form in 1996, 2001 and 2006.

In 1996, this variable was also named ‘post-school qualifications’. In 1981, 1986 and 1991, the post-school qualifications variable was called ‘tertiary qualifications gained’, and it was noted that this ‘includes all completed certificates, degrees or diplomas regardless of the nature of the qualification, that is, educational, vocational, or personal interest’. This is not in keeping with instructions on the 1981 Census form, which instructed respondents to exclude ‘recreational qualifications’, and the 1991 guide notes, which instructed respondents not to include hobby classes, unless they were related to their job. There is no definition of ‘qualification’ for 1991, and no stipulation in the classifications and definitions documents about the length of the course studies, part-time or full-time, or who may confer a qualification.

3.8.6 Variable-specific issues

Statistics New Zealand warns that there have been changes in the census question on post-school qualifications and the associated classification for each of the last four census years (that is, 1991, 1996, 2001 and 2006). These particularly concern the category of attainment and field of study data, which were coded separately in 2006 but together in 2001. It is likely that this change in the coding process in 2006 meant that some qualifications were given a different classification in 2006.

Certain qualifications were treated differently in 2006, particularly historical teaching and nursing qualifications, to align with the newly introduced New Zealand Register of Quality Assured Qualifications. This contributed to the decrease between 2001 and 2006 in level six

¹¹ The instructions for 1986 were in the help notes.

qualifications and the increase for the same period in level seven (bachelor level) qualifications. Other qualification levels are likely to have been affected to a lesser extent.

The inclusion of the example of a trade certificate on the 2006 Census questionnaire seems to be the main driver behind the increase in level four and level five vocational qualifications between 2001 and 2006. Care should be taken not to interpret the large increase in these categories as being entirely due to a real-world increase in trade qualifications since 2001.

The changes outlined above reduce the time series comparability between 2001 and 2006 of post-school qualification field of study at the most detailed level of classifications. This is in addition to the inherent difficulties in coding field of study at the most detailed level from a self-completed questionnaire, which can also affect time series comparability. Cross-tabulations with industry and occupation in particular will highlight time series inconsistencies between 2001 and 2006.

3.8.7 Comparability assessment

| Post-school Qualification: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Lack of consistent information on the number of qualifications – 2001 and 2006 only sought information on the highest post-school qualification (1986 and 1991 asked for all and 1996 asked for 2 and 1981 asked for 4) | Major | Will affect the total numbers of qualifications of different types, meaning the overall number of qualifications gained by the population will vary partially according to census year | Only produce information whether people had a qualification or not. Alternatively, use data on the highest post-school qualification |
| Definition of a qualification – recreational and hobby type courses excluded in 1981 and 1991 Census guide notes, (unless the course was related to their job), but not other census years, where all certificates, degrees or diplomas were included | Minor | May be undercounting of qualifications in 1981 and 1991 compared with other census years | None |
| In 1996, 2001 and 2006 courses had to be three months full time equivalent to be counted as a qualification whereas previously no length criteria specified | Minor – as short courses leading to qualifications not very prevalent in 1981–1991 | May be over counting of qualifications in 1981 to 1991 compared with 1996 and 2001. Some types of qualifications included in 1981–1991 will have been excluded in 1996 and 2001 | None |
| Change in census question format. In 1981, 1996, 2001 and 2006 the question required a written response. In 1986 and 1991 it was in tick box format | Unknown | May affect the types of responses received. May be related to an increase in no-response in 1996 and 2001, compared with previous censuses. This may increase non-response bias | None |
| Final Comparability Assessment: <i>Broadly comparable for presence/absence of a qualification, level of attainment. Limited comparability for field of study data and data on overall numbers of qualifications of the population.</i> | | | |

3.9 Iwi

3.9.1 Variable type

Iwi is a categorical variable, and is coded directly from the census question. Iwi data were collected in the four censuses from 1991 to 2006.

3.9.2 Subject population

The subject population for this variable is the census usually resident population who are of Māori descent.

3.9.3 Non-response

Non-response has continued to decrease for this variable with a relatively low rate of 4.3 percent in 2006 (increases to 4.6 percent when unidentifiable and outside of scope responses are included). In 2001 there was a non-response rate of 5.4 percent from the total responses to the Iwi question for those of Māori Descent, and in 1996 it was 5.3 percent.

3.9.4 Questions and response options

A question on iwi was included in the 1991, 1996, 2001 and 2006 Censuses. The 1991 Census question was in two parts. Respondents were first asked to give the main iwi to which they belonged, and then to give no more than two other iwi with which they had strong ties. Thus, the maximum number of responses that could be given was three.

The questions used in the 1996, 2001 and 2006 Censuses were different, with the most significant change being that no distinction between ‘main’ and ‘other’ iwi was required. The other changes were that respondents were first asked whether they knew the names of their iwi, and then to give the regions (home area or rohe) as well as the iwi names. In the 1996 Census, there was space for up to six responses, this reducing to five for the 2001 and 2006 Censuses.

These changes will have had some effect on data comparability. The lack of region information in the 1991 Census will have affected the classification of some iwi responses as some iwi share names, but belong to different regions, and it is not possible to distinguish between them without region information. The increased number of responses possible in the 1996–2006 Censuses will also have affected data comparability, because it is likely to have resulted in changes in the numbers of people belonging to particular iwi.

In most cases, iwi questions have required written responses of the iwi names and regions. The 1991 Census question on iwi also had tick box response options of ‘don’t know’ and ‘don’t belong to any iwi (tribe)’. The 1996 and 2001 Census iwi questions had ‘yes’ and ‘no’ tick box response options for people to indicate whether they knew the names of their iwi.

The additional information given in the accompanying help notes was different for each of the 1991, 1996, 2001 and 2006 Censuses. For 1991 they said that ‘main iwi’ referred to a person’s main ancestral tribe or iwi, and ‘other iwi’ referred to other iwi that were important.

The 1996 Census help notes for iwi explained that the region asked for was the region where a respondent’s iwi was the tangata whenua. An example was given showing that the iwi name does not necessarily indicate the region. In other words, that iwi of the same name can have different regions.

The 2001 Census help notes explained that rohe is the home area of the iwi and included a list of iwi and, in 2006, only the list of iwi was included with no extra notes on the question. The list of iwi covered all of New Zealand and was organised according to region, with iwi names listed under each region. Providing a list that respondents could refer to may have resulted in higher quality data than those obtained previously.

3.9.5 Definition and classification

The Statistics New Zealand definition of iwi notes that:

‘The concept of Iwi has changed over time. Today it is the focal economic and political unit of the traditional Māori descent and kinship based hierarchy of:

Waka (founding canoe)

Iwi (tribe)

Hapū (sub-tribe)

Whānau (family).’

Statistics New Zealand notes that the classification of Iwi has been prepared for statistical purposes only and it is not designed to be taken as a complete list of Iwi. The Statistics New Zealand classification is given below.

‘In deciding whether or not a tribal group will be classified as an Iwi the criteria are:

- whether the group has been separately categorised in earlier Iwi or tribal classifications;
- whether the group has been identified by respondents in previous surveys or censuses;
- whether there is a history of the group operating as a separate Iwi in a business or resource management capacity, with legal and/or administrative recognition as such;
- whether historical and genealogical tradition identify the group as distinctive;
- whether the group (as Hapū of a larger Iwi) is moving to acquire or petition for Iwi status.

Population size is not a major determinant in deciding whether to treat a group as a separate category in the classification of Iwi.’

The New Zealand Standard Classification of Iwi (V5.0) is a hierarchical classification with two levels. The first level groups Iwi by rohe (region) and is to be used for summary purposes only, and does not imply any future or present confederation of Iwi. Level 2 shows individual Iwi. Level 1 has 14 categories and level 2 has 129 categories (Appendix 7.4.1 Iwi shows the level 1 categories).

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/iwi. Accessed 15 January 2008.

3.9.6 Variable-specific issues

An important measurement issue for this variable is that some people who are of Māori descent/ancestry may not know the name of their iwi. This does not reflect on the quality of the data as ‘don’t know’ is a valid response. However, education campaigns undertaken by particular iwi and tribes are likely to have lessened this number over time.

Respondents who did not answer ‘yes’ to the Māori descent question but gave a valid iwi response are not included in the iwi counts. In 1996, iwi information was only collected when the respondent had given a positive response to the Māori descent question. The Māori descent question design is intended to route people with no Māori descent to the question following after iwi, so that they do not answer the iwi question. However, in 2006,

approximately 20,000 people gave a valid iwi but did not respond to the Māori descent question, compared with almost 17,000 people in 2001. There were also just under 2,000 respondents who ticked ‘no’ for the Māori descent question but who gave a valid iwi response, compared with just over 1,000 in 2001. Although all iwi responses have been collected since 2001, the subject population is defined as those who said ‘yes’ to the Māori descent question. The iwi responses of those who did not answer the Māori descent question, or said ‘no’ or ‘don’t know’, are therefore not included in the output data.

The 1991 classification is different from the classifications used from 1996 to 2006. After 1991, the classification became hierarchical (was previously flat), there were new iwi, ‘area outside’, and ‘hapū affiliated to more than one iwi’ categories added. The classifications used in 1996 and 2001 were different to that used in 2006. For the 2001 Census, new categories were introduced for ‘iwi not named but waka or iwi confederation known’. In 2006, the following changes were made to the iwi categories that were used in the classification:

Name changes:

- 0209 Ngāi Tai (Hauraki) previously Ngāti Tai
- 0412 Ngāti Tahu-Ngāti Whaoa (Te Arawa) previously Ngāti Tahu (Te Arawa)
- 0506 Ngāi Tai (Tauranga Moana/Mātaatua) previously Ngāi Tai
- 1113 Ngāti Apa ki Te Rā Tō previously Ngāti Apa ki te Waipounamu

New categories:

- 0710 Ngāti Pāhauwera previously coded to Ngāti Kahungunu ki Te Wairoa
- 0711 Ngāti Rākaipaaka previously coded to Ngāti Kahungunu ki Te Wairoa
- 1007 Ngāti Tama ki Te Upoko o Te Ika (Te Whanganui-a-Tara/Wellington) previously coded to Ngāti Tama (Taranaki).

Source: www.stats.govt.nz/census/2006-census-information-about-data/information-by-variable/iwi. Accessed 15 January 2008.

3.9.7 Comparability assessment

| Iwi: Available for 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Lack of region information in responses in the 1991 Census | Minor | Not easily comparable to later years as need geographical information to distinguish different iwi of the same name | |
| Question changes between 1991 and 1996/2001 | Minor | Underreporting of secondary iwi in 1991 as only three response options available compared to 6 and 5 in 1996 and 2001 respectively | |
| Response category changes between 1996 and 2001 | Minor | | |
| Final Comparability Assessment: <i>Broadly comparable across the three years but highly comparable between 1996 and 2006.</i> | | | |

3.10 Languages spoken

3.10.1 Variable type

This variable is a categorical variable and is coded straight from the question on the census form. This information was sought in the 1996, 2001 and 2006 Censuses.

3.10.2 Subject population

The subject population for this variable is the census usually resident population. The question provides an option described as ‘none (for example, too young to talk)’.

3.10.3 Non-response

There was very little change in the non-response rates between 1996, 2001 and 2006, and they were relatively low in each of these years, ranging from 4.5 percent in 1996 to 4.9 percent in 2006.

3.10.4 Questions and response options

A question asking for a person’s ability to have a conversation in different languages was first asked in the 1996 Census. Respondents were asked to tick as many circles as they needed to answer the question ‘In which language(s) could you have a conversation about a lot of everyday things?’ The response options were: ‘English’, ‘Māori’, ‘Samoan’, ‘NZ sign language’ and then respondents were asked to name any other languages they spoke. The options given as examples were ‘Gujarati’, ‘Cantonese’ and ‘Greek’. An option labelled ‘None’ was also provided with the suggestion that it be used for those too young to talk.

In the 2001 and 2006 Censuses the language ability questions used identical wording to that used in the 1996 Census. In addition the response options were identical and the only difference was the addition, in 2001 and 2006, of a reminder to the respondent to ‘mark English if you can have a conversation in English’. The help notes supplied for the language question in 1996 and 2001 used very similar wording, and there were no help notes for the 2006 census.

The questions, response options and help notes for the languages question are broadly comparable among the 1996, 2001 and 2006 Censuses, with the exception of the ‘mark English’ reminder in 2001 and 2006. This is likely to have resulted in an increase in those ticking English, as it is possible that in answering the 1996 Census question people may have forgotten to tick English even though they could hold a conversation in that language.

3.10.5 Definition and classification

There is no formal Statistics New Zealand definition for the variable ‘Language spoken’. In 2006 Statistics New Zealand stated that ‘Language spoken’ provides information on whether a person can speak and understand spoken or sign language.

Language is a hierarchical classification with three levels. Level 1 has 30 categories, level 2 has 47 categories and level 3 has 194 categories.

Level 1 of the classification is:

- 01 Germanic
- 02 Romance
- 03 Greek
- 04 Balto-Slavic
- 05 Albanian
- 06 Armenian

- 07 Indo-Aryan
- 08 Celtic
- 09 Iranian
- 10 Turko-Altaic
- 11 Uralic
- 12 Dravidian
- 13 Sino-Tibeto-Burman
- 14 Austroasiatic
- 15 Tai-Kadai
- 16 Central-Eastern Malayo-Polynesian
- 17 Western Malayo-Polynesian
- 18 Afro-Asiatic
- 19 Niger-Congo (Congo-Kordafanian)
- 20 Pidgins and Creoles
- 21 Language Isolates
- 22 Miscellaneous Language Groupings
- 23 Artificial Languages
- 24 Sign Language
- 44 Don't Know
- 55 Refused to answer
- 66 None (e.g. too young to talk)
- 77 Response Unidentifiable
- 88 Response Outside Scope
- 99 Not Stated.

3.10.6 Variable specific issues

There are issues affecting the comparability of the 1996 and 2001 Censuses with the 2006 data. New Zealand Sign Language became New Zealand's third official language in April 2006. As a result, the 'official language indicator' variable for 2006 will include data on New Zealand Sign Language, whereas previously it did not include this information.

In the 2001 and 2006 Censuses, there was a reminder to respondents to mark English included on the English language form, and a reminder to mark Māori on the Māori-English language form. These reminders were not included in 1996.

3.10.7 Comparability assessment

| Ability to converse in certain languages: Available for 1996, 2001, 2006 | | | |
|---|--------------------------------|---|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| The addition of a reminder to tick 'English' in the 2001 and 2006 Censuses | Minor | Minor may be under reporting of 'English' language spoken in 1996 compared to later years | None |
| Final Comparability Assessment: <i>Highly comparable.</i> | | | |

3.11 Legal marital status

3.11.1 Variable type

Legal marital status is a categorical variable, which is coded directly from the census question asked. This information was collected in all six censuses between 1981 and 2006.

3.11.2 Subject population

The census usually resident population aged 15 years and over.

3.11.3 Non-response

There was a small increase in non-response in 2006 compared to 2001 with a rate of 7.3 percent recorded. In 2001, 197,145 (response unidentifiable plus not stated – 189,513 were not stated only) of the census night population aged 15 and over did not respond to this question. The percentage of ‘not stated’ and ‘unidentifiable responses’ in 2001, 6.8 percent, was slightly higher than in 1996, 6.7 percent, and markedly higher than the 1.4 percent found in 1991.

Note that in 1991 and 1996 only not stated was coded. For these census years, response unidentifiable was not derived.

3.11.4 Questions and response options

Questions on legal marital status are asked on the Individual Form. The people to whom the question applies have varied from census to census. Most recently, for the 2001 and 2006 Censuses, the question applied to people living in New Zealand who were aged 15 and over. Prior to this, however, the question was sometimes asked of people of all ages (1991 and 1996 Censuses), of overseas visitors working in New Zealand (1981, 1991 and 1996 Censuses) and of family members of overseas visitors working in New Zealand (1981). When information on legal marital status is output, however, it generally relates to usual residents aged 15 and over, so the data are comparable in this respect.

A single question about legal marital status was asked in all but the 1996 Census. The wording has varied but in all cases the information collected related to current marital status. In the 1996, 2001 and 2006 Censuses, there was additional wording instructing respondents who had been married more than once to answer according to their most recent marriage. The 1981 Census question also enquired about whether people were living in a de facto relationship.

In the 1996 Census, a different approach was taken whereby some legal marital status information was collected as part of a living arrangements question, with more being gathered through several further questions relating to legal marital status. Respondents were first asked whether they lived with a legal husband or wife. People who lived with a legal husband or wife were then asked if it was their first legal marriage or a subsequent marriage. Those who did not live with a legal spouse were asked whether they had ever been married, and what their status was with respect to that marriage. Although a different approach was used for this census, the type of information collected was still the same as, and so comparable with that from other censuses in the period from 1981 to 2006.

The legal marital status questions have consistently used a tick box format. The categories used in these questions from 1981 to 2001 remained fairly similar, as might be expected given that the types of responses possible over this period remained the same. A major change occurred in the 2006 Census with the addition of civil unions. However, to maintain comparability, these were included under some options such as ‘...never been legally married

and I have never been legally joined in a civil union’, ‘...widower/bereaved civil union partner’ and ‘permanently separated’. There have been some changes, however, in the wording used and the amount of detail collected.

A ‘never married’ category was consistently included for those censuses in which just one legal marital status question was asked (that is, all but the 1996 Census), and this information was also collected in the 1996 Census. A category for people who were ‘widowed’ was also consistently included in all six censuses from 1981 to 2006, although different wording was used in the 2001 Census: ‘I am a widow or widower’, and in 2006, where the same phrasing was used with ‘bereaved civil union partner’ added to the response option.

In the 1986 and 1991 Censuses, there were separate response categories for people who were married for the first time and people who were in a subsequent marriage. This information was also collected in the 1996 Census via a specific question, as indicated above. In the 1981, 2001 and 2006 Censuses, however, the sole question on this topic contained one response category for all people who were ‘married’, so data on first and subsequent marriages are not available from these three censuses. The types of questions used in the 1996 Census meant that an additional response option was required for people who were not separated from their spouse but were living in a separate household.

The category wording for people who were separated or divorced from their legal spouse has varied over time. In the 1981, 1996, 2001 and 2006 Censuses the wording for the ‘separated’ category specified that it had to be a permanent separation, but the 1986 and 1991 Census questions did not contain such a specification. This variation in wording may have had some impact on the way respondents answered this question and therefore on the comparability of the data collected. In the 1981 and 1986 Censuses a category labelled ‘divorced’ was used, but from the 1991 Census onwards, the wording of this category changed to divorced or marriage dissolved.

There were no help notes relating to legal marital status in the 1981 Census, but these were included in the five subsequent censuses. Two sets of help notes (1986 and 1991 Censuses) included a definition of legal marriage – signing of a marriage certificate. The help notes for the 1991, 2001 and 2006 Censuses noted that this question was about legal marital status only, and so people living with a partner they were not married to should each answer according to their own legal marital status. In the 1986 and 1991 Census help notes, people who were single and had never been married were instructed to tick the ‘never married’ category. All help notes from the 1986 to the 2006 Census instructed respondents to tick ‘separated’ regardless of whether they had a legal separation agreement or order. The 1986 help notes also instructed respondents whose marriage had been dissolved to tick the ‘divorced’ category. The help notes for 1996 were designed to assist respondents with the questionnaire routing and due to the different approach taken in this census, also contained a note that people whose husband or wife was temporarily absent should answer as if they were at home. The 2006 help notes also provided a definition of what a civil union was. It is not expected that these variations in help note instructions will have had any significant effect on data comparability.

3.11.5 Definition and classification

Statistics New Zealand defines marital status as ‘a person’s reported status with respect to the marriage laws or customs of the country. There are two types of marital status: legal marital status and social marital status’.

Legal marital status is a person’s status with respect to registered marriage or civil union.

There are three levels to the Legal Marital Status classification. The criteria used to place people into level one of the classification is whether they a) are currently married (not separated), b) have never been in a registered marriage (never married), or c) are Separated/Divorced/Widowed (combined). Level two classifies those who are Separated, Divorced and Widowed separately. At level three, married people are classified according to whether their current marriage is their first marriage or a subsequent marriage (remarried).

Legal Marital Status is a hierarchical classification with three levels. Level one has eight categories, level two has ten categories and level three has twelve categories. The level one categories are:

- 1 Never married
- 2 Married or joined in a civil union (not separated)
- 3 Separated/Divorced/Widowed or bereaved civil union partner
- 4 Don't know
- 5 Refused to answer
- 7 Response unidentifiable
- 8 Response outside scope
- 9 Not stated.

3.11.6 Variable-specific issues

In general then, the type of information collected on legal marital status from the 1981 to 2006 Censuses has remained mostly the same, and therefore the data produced are generally comparable. The exceptions to this are that information on first and subsequent marriages is only available for the 1986 to 1996 Censuses, and that variations in questionnaire wording may have affected whether some respondents regarded themselves as 'separated' or not, thus affecting the comparability of this aspect of the data.

There are significant data quality issues regarding the civil unions data. Civil unions data for both legal marital status and social marital status are not fit for use. The rest of the marital status data is not affected by this quality problem and shows the expected distributions.

Statistics on registered civil unions collated by Statistics New Zealand, from registrations supplied by the Department of Internal Affairs, show that 766 people in civil unions were registered in New Zealand up to 7 March 2006. The 2006 Census data for legal marital status shows that 7,905 people reported that they were 'legally joined in a civil union'. These figures are significantly higher than was expected and are believed to be due to respondent misinterpretation regarding what a civil union is.

The 'joined in a civil union' and 'civil union partner' categories from the legal marital status and social marital status classifications, respectively, will not be available in published or customised outputs. Published or customised tables on legal marital status will include the data from the 'joined in a civil union' category in the 'not elsewhere included' category for tables that have 'not elsewhere included', or in the 'response unidentifiable' category for tables that have 'response unidentifiable'. Published or customised tables on social marital status will include the data from 'civil union partner' in the 'partnered, not further defined' category.

3.11.7 Comparability assessment

| Legal Marital Status: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|---|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Information on more than one marriage only available in 1986, 1991 and 1996 | Major | Unable to compare more detailed information about marriages over all censuses | Only look at level one information |
| Changes in questionnaire wording re separation for 1986, 1991 and 1996 | Minor | Minor | None |
| Misinterpretation of what a civil union is | Minor | Increase in unidentifiable responses in 2006 | None |
| Final Comparability Assessment: <i>Broadly comparable over all six census years at level one classification.</i> | | | |

3.12 Māori descent

The use of ancestry as the basis of defining the Māori population is consistent with a Māori basis of identity that is based on whakapapa or collective genealogy. Traditional Māori social collectives (whānau, hapū, iwi) are based on kin relationships, with the identification and recognition of such relationships being integral to formal and informal ‘rituals of encounter’ (Salmond 1975) that continue to underpin Māori social interaction. Whakapapa links individuals to kin groups and consequently to the physical and meta-physical environment (Barlow 2001). An individual is part of an iwi, hapū or whānau and has tangata whenua status in a particular geographical area because of that shared whakapapa. Multiple affiliations are routine, with individuals being able to affiliate with more than one hapū or iwi.

Māori Ancestry/Descent information from the census is used to determine the number and boundaries of Māori electorates as outlined in the Electoral Act 1993 (Part 1, Section 1 and Part 3, Section 35, Clause 6); there is no legal requirement for the census to collect Māori Ancestry/Descent information under the Statistics Act 1975. The Māori ancestry/descent question has been used in each census since 1991 as a filter for a subsequent iwi affiliation question. The resulting combination of ancestry and iwi information can also be used to monitor various statutory Treaty of Waitangi obligations.

3.12.1 Variable type

Māori descent/ancestry is a categorical variable coded from yes/no responses to the census question.

3.12.2 Subject population

The subject population for this variable is the census usually resident population count.

3.12.3 Non-response

Non-response was high at 10.3 percent in 2001 and decreased slightly to 9.6 percent in 2006.

3.12.4 Questions and response options

Information on Māori ancestry/descent has been collected on the individual form in all censuses from 1981 to 2006, but it has not always been treated as a separate variable. In the 1981 and 1986 Censuses information on Māori descent was collected as part of the ethnic

origin question. The definitions applied to these censuses indicated that people of Māori descent included all people who had specified that they were of Māori origin, irrespective of the fraction of Māori origin specified (1981 Census) or of whether they had stated Māori as their only ethnic origin or as one of their several ethnic origins (1986 Census).

A separate question on Māori descent was asked in the 1991 to 2006 Censuses. In the 1991 Census, respondents were asked: ‘Have you any New Zealand Māori ancestry?’ For the 1996 Census the wording was changed to: ‘Are you descended from a NZ Māori (that is, did you have a NZ Māori birth parent, grandparent, or great-grandparent, etc.)?’ The wording used in the 2001 and 2006 Censuses was almost the same as that for 1996. The only change was that the word ‘NZ’ was removed, so that the question read: ‘Are you descended from a Māori ... did you have a Māori birth parent, grandparent or great-grandparent, etc.)?’ The wording used for the 1996–2006 Censuses can be taken to indicate that even if the person’s Māori ancestry was many generations ago, they should still consider themselves to be of Māori descent. Likewise, the wording used in 1991 can be taken to indicate that a ‘yes’ response should be given if a person had any Māori ancestry at all, even if it was just one ancestor some generations ago.

For the 1981 Census, respondents of Māori descent would have either ticked the ‘Full NZ Māori’ box provided, or given a written response indicating what fraction of Māori ethnic origin they were. In the 1986 Census a ‘New Zealand Māori’ ethnic origin tick box was provided and information about fractions was no longer required.

With the change to asking a specific question about Māori descent, the relevant response options also changed. In all four censuses from 1991 to 2006, response options of ‘yes’, ‘no’, and ‘don’t know’ were used.

In the 1981 and 1986 Censuses, there were help notes related to the ethnic origin question in general, but none related specifically to Māori descent. The 1991 and 1996 Census help notes for this question instructed respondents to tick yes if they had any Māori ancestors, no matter how many generations ago. For the 2001 and 2006 Censuses, the help notes contained a clarification that people of Cook Island Maori descent should not mark yes unless they were also of Māori descent.

Although the issue of how far back a person’s Māori ancestors were did not receive quite the same emphasis via question wording or help notes in the earlier censuses in this period, it is not expected that this would have had a significant effect on the way in which respondents answered the question. In light of this, and given the consistency in the underlying concept used, the data on Māori descent are generally comparable across the 1981–2006 Censuses.

3.12.5 Definition and classification

The Statistics New Zealand definition and classification for ancestry/descent states that ‘A person has Māori descent if they are of the Māori race of New Zealand; this includes any descendant of such a person’. This definition requires people to know their biological ancestry. Therefore, Māori descent is quite different to ethnicity. For ethnicity, the emphasis is on cultural affiliation and although a person’s ancestry may often have a significant influence on their ethnic identity, it does not necessarily determine it. Māori descent, on the other hand, is a biological concept.

This classification is designed to obtain information about people of ‘New Zealand’ Māori descent. However, the words ‘New Zealand’ have been omitted from the categories as they are seen by many as offensive to the tangata whenua.

The classification criterion is a person’s genealogical descent. Māori Descent is a flat classification with seven categories.

- 1 Māori Descent
- 2 No Māori Descent
- 4 Don’t Know
- 5 Refused to Answer
- 7 Response Unidentifiable
- 8 Response Outside Scope
- 9 Not Stated

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/maori-descent. Accessed 16 January 2008.

3.12.6 Variable-specific issues

The Māori ancestry/descent questions and definitions were consistent 1991–2006. There were changes in the classifications as outlined above, but these can be overcome by aggregating the responses into four categories (Māori Ancestry/Descent, No Māori Descent, Don’t Know, Not Elsewhere Included or Specified). This structure of three key categories and one residual category is commonly used in Statistics New Zealand reports. If some of the response categories are aggregated into a ‘Not Elsewhere Stated’ category then the composition of this should be described in a footnote.

The changes in question and definition from 1991 onwards make it difficult to use the Māori ancestry/descent concept for the 1981 and 1986 Census datasets. It is possible to generate a Māori ancestry variable for these earlier datasets by removing any threshold level of descent in the responses to the 1981 and 1986 ethnicity questions. However, this does not produce directly comparable information as the requirement to quantify extent of Māori ancestry in the pre-1991 Census questions may have discouraged responses where the fraction was small.

The census datasets from 1981 and 1986 do contain a ‘Māori Descent’ variable, which has been derived from the ‘Ethnic Origin’ responses. However, this does not provide for the ‘Don’t know’ and ‘Not Elsewhere Specified’ categories that appear in later census datasets. The ‘Not Specified’ category can be obtained by using the Ethnic Origin responses directly, but it is not possible to generate a ‘don’t know’ category for either census as the census forms did not provide for that response option.

3.12.7 Comparability assessment

| Māori Ancestry/descent: Available for 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|---|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes in classification | Minor | Potential Underreporting of Māori descent | Aggregate responses into four categories |
| Change to separate question in 1991–2006 | Major | Extra response option of ‘don’t know’ | |
| Final Comparability Assessment: 1981 and 1986 are highly comparable and 1991–2006 are also highly comparable, but the full six censuses are only broadly comparable. | | | |

3.13 Religious affiliation

3.13.1 Variable type

Religion is a categorical variable.

3.13.2 Subject population

The whole census usually resident population.

3.13.3 Non-response

Non-response has increased slightly with each of the last three censuses. In 1996 it was at a moderate level of 5.2 percent, with increases to 5.7 percent in 2001 and 6.2 percent in 2006.

3.13.4 Questions and response options

Question 11 in 1981 asked respondents to write in their religious denomination. An instruction was provided which noted 'There is a statutory right to object to stating religious denomination, providing the word 'OBJECT' is entered'. The structure of the questionnaire and its wording was significantly amended in 1986 and respondents were asked 'What is your religion?' and provided with a series of tick boxes. The response options included tick boxes for Anglican, Presbyterian, Catholic, Methodist, Baptist, No religion and other religion. A space was provided for respondents to write their religion if they had ticked other. Examples of Ratana and Hindu were provided. In addition, a tick box was provided for anyone who objected to answering the question.

The religion question in the 1991 Census (question 12) again asked 'What is your religion?' but provided an expanded range of tick box options. There were: Anglican, Presbyterian, Catholic, Methodist, Baptist, Ratana, Latter Day Saints/Mormon, No religion and other religion. For this last category, options of Salvation Army and Hindu were provided. A tick box was also provided for those who wished to indicate that they objected to answering this question.

The 1996 Census question was worded identically to the 1991 question but the layout of the question and the response options provided were changed. The response options were listed in two columns. In the left hand columns tick boxes were provided for 'No religion', 'Christian', 'Hindu', 'Muslim', 'Buddhist', 'Jewish' and 'other religion' (with a write in space provided for those who ticked this option). For those who ticked the 'Christian' option an instruction led them to a series of tick boxes on the right hand side of the question where they were asked to tick which of the more specific religions they were. The options provided were 'Anglican', 'Presbyterian', 'Catholic', 'Methodist' and other – with a write in space provided for those who ticked other.

As with the 1986 and 1991 Censuses, a tick box was provided for those who wished to indicate that they objected to answering this question.

The religion questions for 2001 and 2006 (question 18) were worded identically to those of 1986, 1991 and 1996, but the response options were changed once again. As with 1996 the response options were formatted in two columns. In the left hand column, tick box options were provided for 'no religion', 'Christian', 'Buddhist', 'Hindu', 'Muslim', 'Jewish' and 'other religion' (with a write in space to specify this). For those who ticked the 'Christian' option, a list of tick box options was specified in the right hand column. These were 'Anglican', 'Catholic', 'Presbyterian', 'Methodist', 'Ratana', 'Ringatu' and 'other'. A write in space was provided for those who ticked 'other'. In addition a tick box was provided for those who objected to answering the question.

3.13.5 Definition and classification

Religious affiliation is the self-identified association of a person with a religion, denomination or sub-denominational religious group. A denomination is the church or religious sect that forms a subgroup of a religion. Denominations of a particular religion share the same principles, but differ from each other in aspects, such as the form of worship used and the way in which they are governed.

In the classification, religions are grouped into progressively broader categories on the basis of similarity in terms of religious beliefs, religious practices and the cultural heritage of adherents. This results in those religions and religious groups that are closely related in terms of their intrinsic characteristics being closely aligned in the structure of the classification. The number of adherents of a particular religious group has been a significant factor in developing the classification structure. Thus, Christian denominations are extensively identified. However, the identification of individual religions or denominations in the classification, and the way in which they are grouped, does not imply the expression of any opinion on the part of Statistics New Zealand concerning the relative merit or importance of particular religions or the people who practice them.

The classification also includes a 'No Religion' category, which could be considered to be inconsistent with the basis of the classification as described above and perhaps lies outside the scope of the religion topic. It has been included for practical reasons and to make the classification more useful.

In general, level one consists of world religions, level two is denominations, and level three is sub-denominations. However, when these classification criteria are not appropriate (for example there are no 'denominations' for Hinduism), religious affiliations are broadly grouped at level one and repeated at level two. The most detailed responses are classified at level three.

In 2006, religious affiliation was a hierarchical classification with 190 categories. Level one had a one-digit code structure with 10 categories, level two had a three-digit code structure with 50 categories and level three a five-digit code structure with 130 categories.

- 0 No Religion
- 1 Buddhist
- 2 Christian
- 3 Hindu
- 4 Islam/Muslim
- 5 Judaism/Jewish
- 6 Māori Christian
- 7 Spiritualism and New Age Religions
- 8 Other Religions
- 9 Residual Categories

Source: www.stats.govt.nz/census/2006-census-information-about-data/2006-definitions-questionnaires/definitions/personal-definitions. Accessed 16 January 2008.

3.13.6 Variable-specific issues

Statistics New Zealand states that there are issues affecting the comparability of these data for the 1996 and 2001 Censuses. Up to four responses were coded in 2001 and 2006, whereas in 1996 only one response was coded. This makes it difficult to compare the 1996 and 2006 data, and the 1996 and 2001 data.

3.13.7 Comparability assessment

| Religion: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|---|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes in response options most years | Minor | Minor or none | None |
| Removal of OBJECT option in 1996 | Minor | Over representation in residual categories in 1981, 1986 and 1991 | None |
| Change in coding from one response in 1996 to up to 4 in 2001 and 2006 | Minor | | |
| Final Comparability Assessment: <i>Highly comparable across all censuses.</i> | | | |

3.14 Sex

3.14.1 Variable type

Sex is a categorical variable coded directly from the census question.

3.14.2 Subject population

The whole census night population, although data on sex can also be output for the census usually resident population, and often is.

3.14.3 Non-response

There is no non-response for this variable as it is imputed where the question is not answered on the form. The name of the person and/or their relationship to other household members may be used to impute a value but, if there is no relevant information available, a value is assigned randomly with 49 percent being imputed as male (Statistics New Zealand 2001). In 2006 sex was imputed for 4.0 percent of the usually resident population. In 2001 it was imputed for 4.1 percent of respondents.

3.14.4 Questions and response options

The 1981 Census question asked for the respondent to tick which box applied, with response options of 'male' and 'female' provided. The question in the 1986 Census simply stated 'Sex' and gave response options of 'male' and 'female'. The wording differed for the 1991 Census with the question asking 'What sex are you?' and giving response options of 'male' and 'female'. The wording for the question was changed again in 1996 and it asked 'Are you:' with spaces for ticking either 'male' or 'female'. No further changes were made for 2001 and 2006.

3.14.5 Definition and classification

Sex is the distinction between males and females based on the biological differences in sexual characteristics.

The criteria used to place a person into the classification are the biological characteristics of people.

Classification

Sex is a flat classification with two categories.

1 Male

2 Female

No provision is made for residual categories as, in line with international practice, it is Statistics New Zealand policy to impute missing values for sex data.

3.14.6 Variable-specific issues

There are no specific issues with this variable.

3.14.7 Comparability assessment

| Sex: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| None | | | |
| Final Comparability Assessment: <i>Totally comparable.</i> | | | |

3.15 Social marital status

3.15.1 Variable type

In 1996, 2001 and 2006 this variable was derived from responses to the legal marital status and living arrangements questions.

3.15.2 Subject population

The subject population is the census usually resident population count aged 15 years and over.

3.15.3 Non-response

Non-response in 2006 was a moderate 6.6 percent; in 2001 the rate was 6.4 percent and in 1996, 7.3 percent.

3.15.4 Questions and response options

Information used to derive social marital status was included in the living arrangements questions and the legal marital status questions were asked on the individual form in 1996, 2001 and 2006. In 1996, the living arrangements question used a tick box format with three options for who lived in the same household as the respondent: 'legal husband or wife', 'your partner or de facto girlfriend or boyfriend' or 'none of these'. Other living arrangements were asked in separate questions but in 2001 they were combined so that respondents were asked to mark as many spaces as applied including: 'my legal husband or wife', 'my partner or de facto, boyfriend or girlfriend', 'my son(s) and/or daughter(s)', 'my mother and/or father', 'my sister(s) and/or brother(s)', 'my flatmate(s)'. There was also write in space for other relationships with examples of 'grandmother, my mother-in-law, my partner's father, etc., or boarder, etc.'.

With the introduction of civil unions, more categories were added in the living arrangements and legal marital status questions in 2006 while retaining those previously used. De facto partners/boyfriends/girlfriends were divided into same sex and opposite sex response options

and there were also ‘my opposite sex civil union partner’ and ‘my same sex civil union partner’ options.

3.15.5 Definition and classification

Marital status is a person’s reported status with respect to the marriage laws or customs of the country. There are two types of marital status: legal marital status and social marital status.

Social marital status is a person’s reported status with respect to consensual union. Persons who are in a consensual union are partnered; persons who are not in a consensual union are non-partnered.

There are four levels to the Social Marital Status classification. The criterion used to place people into level one of the classification is whether they are living with a partner or not, i.e. whether they are living in a consensual union with another person, or are living with their legal spouse.

For partnered people, the criterion used at level two and three of the classification is whether the partnership is legal (that is, married) or social (that is, other partnership). If the partnership is legal, the criterion used at level four is whether people are married for the first time or are remarried. For other partnerships, the classification criterion used at level four is the sexes of the partners.

People who are not partnered are classified at level two and three according to whether they have ever been married. If married previously, the criterion used at levels two and three is current legal marital status: separated, divorced or widowed.

Social Marital Status is a hierarchical classification with four levels. Level one has 7 categories, level two 11, level three 13 and level four 16. The level one categories are:

- 1 Partnered
- 2 Non-partnered
- 4 Don’t know
- 5 Refused to answer
- 7 Response unidentifiable
- 8 Response outside scope
- 9 Not stated

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/marital-status. Accessed 20 June 2008.

3.15.6 Variable-specific issues

The social marital status data from the 2006 Census indicate that 3,264 people reported that they lived with a civil union partner. These figures are significantly higher than was expected and are believed to be due to respondent misinterpretation regarding what a civil union is. As stated under legal marital status, only 766 civil unions had been registered at the time of the 2006 Census.

3.15.7 Comparability assessment

| Social Marital Status: Available for 1996, 2001, 2006 | | | |
|--|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes from two questions to one in 2001 for living arrangements | Minor | None | None |
| New output category in 2001 to include 'non-partnered, not further defined' | Minor | None at highest level | None |
| Misinterpretation of Civil Union by respondents | Minor | None at level 1 | Statistics New Zealand has addressed this by including all those who answered civil union partnered into partnered not further defined |
| Final Comparability Assessment: <i>Highly comparable, future comparisons at more in-depth level are not available for civil union data.</i> | | | |

3.16 Unpaid activities

3.16.1 Variable type

Unpaid activities is a categorical variable.

3.16.2 Subject population

The subject population was the census usually resident population, aged 15 years and over.

3.16.3 Non-response

Non-response in 2001 and 2006 was 8.7 percent. In 1996, two questions were asked for this topic, with response rates of 7.5 percent and 9.8 percent.

3.16.4 Questions and response options

There were several changes to what was asked about unpaid activities over the six censuses under consideration. In 1981 and 1986, respondents were asked about their household duties as part of employment questions, giving a very limited view of voluntary work. In 1986 there was a separate question asking 'How many hours of voluntary work do you do on a regular weekly basis?' This is only broadly comparable to 1991 and 1996, which also asked about the number of voluntary hours, but actually asked slightly different things. In 1991, respondents were asked how many hours of voluntary work they did in the last week, and in 1996 they were asked how many hours in total had been spent on voluntary work in the last 4 weeks.

In 1991, respondents were asked to state what type of voluntary work they spent the most time on. In 1996, questions 37 (in respondent's own household) and 38 (outside respondent's own household) provided tick boxes with examples of voluntary work, and respondents were asked to tick as many as applied. Question 37, however, only referred to the last 7 days, while question 38 referred to the last 4 weeks. In 2001, these two questions were amalgamated and respondents were asked to tick as many spaces as they needed to answer the question 'In the last 4 weeks, which of these have you done, without pay'. In 2006, the unpaid activities

responses changed with both responses about studying being removed and asked in a separate question (question 29).

3.16.5 Definition and classification

In 1996, Statistics New Zealand defined unpaid work as ‘any productive activity identified by the respondent that is undertaken without financial reward’.

The different information gathered about unpaid activities or voluntary work provides two variables for comparison across the different censuses. The first variable is the number of hours of unpaid work, which is broadly comparable for 1986, 1991 and 1996. The categories include:

- Nil hours
- 1–4 hours per week
- 5–14 hours per week
- 15+ hours per week.

The second variable under consideration is the type of unpaid activity undertaken by the respondents. These variables are comparable in 1996, 2001 and 2006 when classified as:

- Unpaid work in same household
- Unpaid work in different household
- Other voluntary work.

3.16.6 Variable-specific issues

There are no known specific issues with this variable.

3.16.7 Comparability assessment

| Unpaid activities: Available for 1986, 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|---|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Different time periods asked about in different years, for example, last 7 days, last 4 weeks | Major | Limits ability for more in-depth research | None |
| Final Comparability Assessment: <i>Broadly comparable for the presence/absence of volunteer work across the five census years 1986–2006, but limited value for more in-depth analysis. Highly comparable between 2001 and 2006.</i> | | | |

3.17 Usual residence

3.17.1 Variable type

Usual residential address is a categorical variable.

3.17.2 Subject population

The census night population count. Data on Usual Residence are output for the census usually resident population.

3.17.3 Non-response

This is an imputed variable at the mesh block level. After using whatever level of geographic information is supplied along with any other responses from the individual that are useful, a usual residence meshblock is imputed based on the distribution of known meshblocks for similar people. In 2001, usual residence was imputed for 0.7 percent of the usually resident population and in 2006 for 0.5 percent.

3.17.4 Questions and response options

In the 1981 Census, question seven asked respondents to specify their 'Usual residential address'. Respondents were provided with a range of tick box options and asked to tick which box applied. The response options were:

- 'Same address given in question six above' (Question six asked for the full address on census night);
- 'NZ resident with no fixed residential address in NZ';
- 'Usually resident overseas' (respondents were asked to write in the name of the country); and
- 'Other fixed residential address in NZ (respondents were asked to supply a full address if they ticked this response).

The usual address question (question one) in the 1986 Census asked respondents 'Where do you usually live?' Four response options were provided:

- 'Usually live at the above address';
- 'Usually live elsewhere in New Zealand at the address below (a space was provided to write this in full);
- 'New Zealand resident with no fixed address'; and
- 'usually live overseas' (with a space to write in the country in which they usually lived).

The question in the 1991 Census (question one) was the same as that used in 1986, except for the removal of the 'NZ resident with no fixed address' option. Wording was changed in question 2 of the 1996 Census, which read: 'Where do you live – give the full address including, if possible, all of these:

- Flat number (if it is a flat);
- Street number and street name;
- Suburb or rural locality;
- City, town or district;
- Country.'

Another small change came with question five in the 2001 Census. The opening part of the question asked 'Where do you usually live?', but the rest of the question remained the same. The question in 2006 was identical in wording to that of 2001, but gave a direction to students and overseas residents to see the guide notes at the back of the form for further instructions.

3.17.5 Definition and classification

The usual residence indicator describes the relationship between a respondent's usual residence and their census night address.

Usual Residence Indicator is a flat classification with four categories:

- 1 Same as Census Night Address
- 2 Elsewhere in New Zealand
- 3 Overseas
- 4 No Fixed Abode.

‘Elsewhere in New Zealand’ includes responses that were coded to ‘New Zealand not further defined’ in the usual residence classification and may therefore include cases where the respondent’s usual residence was in fact the same as their census night address but it was not possible to determine this (for example, vague or non-response).

‘No fixed abode’ is a category for respondents who indicate that they have no usual residence.

3.17.6 Variable-specific issues

Guide notes instruct tertiary students to put their term-time address as their usual address. In 2001 a significant number of tertiary students reported a usual address that differed from their census night address. Consequently, the 1996 and 2006 data is of better quality than the 2001 data for some geographic areas.

3.17.7 Comparability assessment

| Usual residential Address: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|--|-------------------------|----------------|-----------------------------------|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes in response options | Minor | None | None |
| Final Comparability Assessment: <i>Highly comparable across all census years under study.</i> | | | |

3.18 Usual residence five years ago

3.18.1 Variable type

Usual residential address five years ago is a categorical variable.

3.18.2 Subject population

The whole census population.

3.18.3 Non-response

In 2001, non-response was a moderate 5.5 percent, and it dropped to a low 2.9 percent in 2006.

3.18.4 Questions and response options

The 1981 Census asked for respondents’ ‘Usual address at previous census (23 March 1976)’ and then asked them to tick one of the following options:

- ‘Same address as Question 7 on Page One’ (which asked their usual residential address);
- ‘Same address written in Question 8 above’ (address one year ago);
- ‘Not applicable (born since 23 March 1976)’;
- ‘Living in an overseas country on 23 March 1976’ (with a space to write in a country); and

- ‘Other’ (where they were asked to provide a full address).

The 1986 Census question had a wording change and the question was amended to ask ‘Where did you usually live five years ago? (at the last Census on 24 March 1981)’. The response options were:

- ‘Same as usual address now’;
- ‘Lived elsewhere in New Zealand at the address below (with write in space provided for full address);
- ‘Not alive 5 years ago’; and
- ‘Lived overseas in March 1981 (with a request to please state which country and space to write in a response).

The question wording for 1991 was very similar to that used in 1986 with slight changes being made to two response categories. The first response category was changed to read ‘Same as usual address (as given in Question 1)’, while the last response option was amended to read ‘Overseas in March 1986 in the country below’.

The usual residence five years ago question in the 1996 Census was amended and changes were made to the question and the order of the response options was altered. The question wording was slightly changed to ‘Where did you live 5 years ago, on 5 March 1991?’ The response options were moved so that the first response read ‘Not born 5 years ago’, followed by ‘at the same address you gave in question 2 (which asked where do you live)’, then ‘living in NZ at another address’ (with a space for the full address to be written) and last ‘not living in NZ (with a write in space and prompt for country).

For the 1996 Census, the only change from 1991 was the removal of the word ‘usually’. There were some small amendments to the response options but these were not significant in terms of their impact on data. The 2001 and 2006 Census question and response options were identical and almost the same as those used in 1996. The only differences were in the wording of the response option ‘in New Zealand at another address. Print that address as fully as you can’ as opposed to: ‘living in NZ at another address – Give that address as fully as you can’.

3.18.5 Definition and classification

The usual residence 5 years ago indicator is a respondent’s usual residence 5 years ago in relation to their usual residence on the date that the data were collected.

The criterion used to place a person into the classification for usual residence 5 years ago indicator is the relationship between a respondent’s usual residence 5 years ago, and their usual residence on the date that the data are collected.

Usual Residence 5 Years Ago Indicator is a flat classification with five categories.

- 1 Same as Usual Residence
- 2 Elsewhere in New Zealand
- 3 Not Born 5 Years Ago
- 4 Overseas
- 5 No Fixed Abode 5 Years Ago.

‘Elsewhere in New Zealand’ includes responses that were coded to ‘New Zealand not further defined’ in the usual residence 5 years ago classification, and may therefore include cases where the respondent’s usual residence 5 years ago was in fact the same as their usual residence but it was not possible to determine this (for example, vague or non-response).

‘No fixed abode 5 years ago’ is a category for respondents who indicate that they had no usual residence 5 years ago.

3.18.6 Variable-specific issues

There are no known specific issues with this variable.

3.18.7 Comparability assessment

| Usual residential address five years ago: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Slight change in question wording | None | None | None |
| Final Comparability Assessment: <i>Highly comparable.</i> | | | |

3.19 Years at usual residence

3.19.1 Variable type

Years at usual residence is a numerical variable.

3.19.2 Subject population

The census night population count is the subject population.

3.19.3 Non-response

Non-response was 5.4 percent in 2006 and 4.4 percent in 2001, which was down slightly on the 1996 non-response rate of 5.1 percent.

3.19.4 Questions and response options

In 1996, 2001 and 2006, respondents were asked how long they had lived at their address. They were given a tick box for less than a year, and otherwise asked to state the number of years. The only change from previous years was the addition of the tick box. In 1991 and 1986, respondents were only given the option of stating the number of years they had been at their current address and were instructed in the question to put 0 if under 1 year. The 1981 Census did not ask this question but rather asked for the respondent’s address one year ago and their address at the last census, so the 1981 information on years at usual residence is not available.

3.19.5 Definition and classification

Years at Usual Residence is the length of time up to the date of data collection, expressed in completed years (including short-term absences, but excluding long-term absences), that a respondent has lived at their usual residence.

Note: A long-term absence refers to any absence of one year or more. A short-term absence refers to any absence of less than one year.

The criterion used to place a person into the classification is the number of completed years at usual residence as stated by the respondent.

Years at Usual Residence is a flat classification with 105 categories.

000 0 Years
001 1 Year
002 2 Years
::
::
097 97 Years
098 98 Years or more
444 Don't Know
555 Refused to Answer
666 Repeated Value
777 Response Unidentifiable
888 Response Outside Scope
999 Not Stated

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/years-at-usual-residence. Accessed 17 January 2008.

3.19.6 Variable-specific issues

There are some inconsistencies between this variable and others such as Age, Usual Residence Five Years Ago and Years Since Arrival in New Zealand, as there were no consistency edits applied to the data. The main cause of these inconsistencies is respondent error. There have also been cases where rounding discrepancies led to a difference of one year between the responses for the years at usual residence and years since arrival variables.

All census data are subject to considerable checks (including edits) during processing and evaluation, to ensure that they meet quality standards and are suitable for use. These checks are applied to data supplied on both paper and Internet forms. In addition to these quality checks, the Internet form used in 2006 had built-in editing functionality that directed respondents to the appropriate questions and ensured that their responses were valid. As a result of this, data from Internet forms may be of higher overall quality than data from paper forms. The significance of this will depend on the particular type of analysis being done.

There were differences between how the forms were completed on the Internet and on paper for this variable:

The Internet form allowed only one response to be selected for the years at usual residence question. If a further response was selected, the response given previously disappeared. Multiple responses to this question were possible when forms were completed on paper.

On the Internet, there were two options available: 'less than 1 year', and 'greater than 1 year'. If the latter was selected, a text box was available for respondents to enter a numeric response. Decimal points could not be entered on the Internet form, but responses including decimals were possible when forms were completed on paper.

3.19.7 Comparability assessment

| Years at Usual Residence: Available for 1986, 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|---|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Change in 1996 with tick box for <1 year added | Minor | Possible underreporting in 1981, 1986 and 1991 for those less than a year at usual residence with respondents possibly marking one year or non-response when less than a year | None |
| Final Comparability Assessment: <i>Highly comparable across all censuses.</i> | | | |

4. Income- and employment-related variables

4.1 Availability for work

4.1.1 Variable type

Availability for work is a categorical variable.

4.1.2 Subject population

The not employed census night usually resident population count.

4.1.3 Non-response

The non-response rates for this variable are unknown at this time.

4.1.4 Questions and response options

A question seeking information on respondents' availability for work was asked in the 1991, 1996, 2001 and 2006 Censuses.

This question was designed to help further divide the labour force into employed and unemployed categories, together with other questions such as methods of job seeking. In order to be classified as unemployed, an individual must be available for work. The only variation in census wording regarding this question was in 1991 when respondents were asked about their availability if a job was available; the 1996, 2001 and 2006 Censuses asked about respondents' availability if a paid job was available. The impact of this difference is probably negligible, as two filter questions were asked just prior to this question in the 1991 Census, and both of these referred to paid work, so respondents would likely have inferred that this question was also about paid work. The guide notes for 1991, 2001 and 2006 contained no instructions, but the guide notes for 1996 instructed respondents who were to start work within the next four weeks (with a definite start date) to tick other methods. This may have resulted in a larger number of respondents being in the 'other' group for 1996 compared with other census years.

There was a difference in the guide notes accompanying the census forms in 1991: respondents were instructed that if they were not working but had been hired, they should tick the box that they were available to start work last week. Subsequent census guide notes have had no instructions for this question. The impact of this difference is probably minor (as it only applies to that proportion of people who had been hired and not yet started employment), but it is hard to quantify. The instructions may have resulted in a larger proportion of the target population being classified as available for work in 1991 than in other census years.

4.1.5 Definition and classification

Availability for work refers to whether the respondent could have started a paid job in the week of the census, had one been available. Availability for work is one of the variables that contributes to the derivation of work and labour force status.

The classification categories for the 'availability for work' variable from the 1991, 1996, 2001 and 2006 Censuses are:

Available for work

Not available for work

Residual categories.

4.1.6 Variable-specific issues

There are no known specific issues with this variable.

4.1.7 Comparability assessment

| Availability for work: Available for 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|---|---|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes in guide notes in 1991 included those with a job but not yet working | Minor | larger number of people classified as available to work than other census | Minor very small number of respondents affected |
| Change in question wording between 1991 and 1996 | Minor | Negligible | None |
| Final Comparability Assessment: <i>Highly comparable for 1991, 1996, 2001 and 2006.</i> | | | |

4.2 Hours worked

4.2.1 Variable type

Hours worked is usually a categorical variable but was imputed for 1991.

4.2.2 Subject population

The subject population for output from employment questions in the census is the employed census usually resident population count, aged 15 years and over.

4.2.3 Non-response

Non-response in 2006 was 5.1 percent, marginally higher than the 4.5 percent in 2001. In 2001, part-time workers had a higher non-response of 8.4 percent, than full-time workers with 5.5 percent.

4.2.4 Questions and response options

The 1981 Census question asked the respondent to write in the hours worked per week and provided a set of instructions to guide the response. The notes indicated that the question was seeking information on the usual hours at present worked for wages, salary, other financial reward, or as an unpaid relative assisting in business (farm, shop, etc.), including part-time and overtime hours. Respondents were instructed to exclude any hours they worked in other unpaid jobs.

There was a significant change in wording and structure for the 1986 Census. The question was amended to read ‘How many hours did you work last week?’ with an instruction that ‘if on holiday, sick or absent for other reasons, state usual hours’. The structure was also amended to include write in boxes for the ‘main’ job and another for all other jobs. This structure was retained for the following censuses. Another significant difference was that the 1981, 1996, 2001 and 2006 Censuses asked people about the total number of hours they usually worked, whereas the 1986 and 1991 Censuses asked about the actual hours respondents had worked over the last week. However, numerous workers, in particular casual and seasonal ones, have rosters or hours of work that vary from week to week. For these people, there may be a large variation in the hours they work from one week to the next, and consequently the hours they worked over the last week may either over or underestimate their ‘usual’ hours worked.

4.2.5 Definition and classification

Hours worked in employment is the total number of hours worked in employment per week by all people meeting the definition of employed given in the Standard for Labour Force Status, that is, all people aged 15 and over who during the survey reference period:

- a) worked for one hour or more for pay, profit or payment in kind in a job, business, farm or professional practice or;
- b) worked without pay for one hour or more in work which contributed directly to the operation of a farm, business or professional practice operated by a relative; or
- c) had a job or business they were temporarily absent from.

A whole number of hours (that is, 0, 1, 2, etc.) should be collected and available in output.

Hours Worked in Employment is a flat classification with 173 categories.

001 01 Hour Worked

002 02 Hours Worked

003 03 Hours Worked

::

::

166 166 Hours Worked

167 167 Hours Worked

168 168 Hours Worked

777 Response Unidentifiable

999 Not Stated

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/hours-worked-in-employment. Accessed 17 January 2008.

4.2.6 Variable-specific issues

In 1986 and 1991 there was a change in the concept used, resulting in a major difference in question wording: ‘actual’ hours worked was used where ‘usual’ hours worked was in other census years.

4.2.7 Comparability assessment

| Hours worked: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|--|---|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| In 1986 and 1991 there was a change in the concept used resulting in a major difference in question wording in 1986 and 1991 ('actual' hours worked) as opposed to 1981, 1996, 2001 and 2006 (usual hours worked) | Major | Data in 1986 and 1991 may not be reflective of usual hours worked | None, but can compare data with other sources (for example, time use survey) to see if it fits with expected pattern (need to do this for 2 or 3 census years to see pattern) |
| Imputed in 1991 | Minor | Every person in the subject population will have hours worked data in 1991 | None, but imputation rates can be documented and commented on in the analysis |
| In 1981 the subject population was the census usually resident population count, aged 15 and over, in 1986–2006 Censuses it was the employed census usually resident population aged 15 and over | Major | Data includes a zero classification category | Apply subject population used for 1986–2006 to get comparable data – that is, exclude the zero category |
| Final Comparability Assessment: 1981, 1996, 2001 and 2006 data are highly comparable. 1986 and 1991 data are highly comparable, but of limited comparability with other census years. | | | |

4.3 Industry

4.3.1 Variable type

Industry is a categorical variable.

4.3.2 Subject population

The subject population for industry of employment questions in the census is the employed usually resident population count, aged 15 years and over.

4.3.3 Non-response

In 2006 non-response was a relatively low 3.7 percent, slightly lower than the 2001 rate of 4.1 percent of respondents who did not state their industry.

4.3.4 Questions and response options

The questions relating to industry have changed little in the last six censuses. In 1981, the respondent was asked the 'type of work carried out by employing organisation', and from 1986–2006, what was 'the main activity at your place of work'. This slight change in wording is not expected to have had any effect on the responses. The information supplied in these questions was also supported by the information given when respondents were asked for the full name of the business or employer that they worked for in their main job.

4.3.5 Definition and classification

‘Industry is the type of activity undertaken by the organisation, enterprise, business or unit of economic activity within which a person aged 15 years or over is employed.’

Source: www.stats.govt.nz/census/2006-census-information-about-data/2006-definitions-questionnaires/definitions/personal-definitions. Accessed 17 January 2008.

The 1996 Census Classification document states that ‘ANZSIC is used for the collection, compilation and publication of statistics relating to industry’. This is a classification standard that was developed cooperatively between the Australian Bureau of Statistics and Statistics New Zealand, and it is closely based on the international classification ISIC Revision 3. The 2001 Data Dictionary lists 5 levels of industry: level 1 ANZSIC96 v4.0 with 18 values, Level 2 with 54, level 3 with 16, level 4 with 460 and level 6 with 481 (there is no level 5 listed). The 2006 data were dual coded using the ANZSIC96 and ANZSIC06 coding, to make them comparable with the earlier censuses.

The Level 1 values are:

- Agriculture, Forestry and Fishing
- Mining
- Manufacturing
- Electricity, Gas and Water Supply
- Construction
- Wholesale Trade
- Retail Trade
- Accommodation, Cafes and Restaurants
- Transport and Storage
- Communication Services
- Finance and Insurance
- Property and Business Services
- Government Administration and Defence
- Education
- Health and Community Services
- Cultural and Recreational Services
- Personal and Other Services
- Not Elsewhere Included (NEI).

4.3.6 Variable-specific issues

Data from the 2006 Census were dual coded to the 1996 and 2006 Australian and New Zealand Standard Industrial Classifications (ANZSIC). Data have been output for all time series data (that is, including data from 2001 and/or 1996) using the ANZSIC 96 classification. For cross-sectional data (that is, 2006 only) ANZSIC 06 classifications are predominantly used.

4.3.7 Comparability assessment

| Industry: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|---|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Small change in wording of question 1981–1986 | None | None | None |
| Different ANZSIC groupings used | Major | Changes the way industries are classified | Use a common ANZSIC where possible |
| Final Comparability Assessment: <i>Highly comparable across 1996–2006, broadly comparable across all six censuses.</i> | | | |

4.4 Job search methods

4.4.1 Variable type

Job Search Methods is a categorical variable.

4.4.2 Subject population

The subject population was the unemployed census usually resident population count, aged 15 years and over.

4.4.3 Non-response

In 2001, 8.3 percent of unemployed respondents did not state their job search methods.

4.4.4 Questions and response options

Questions asking what methods respondents used to look for paid work were asked in the 1991, 1996, 2001 and 2006 Censuses. The 1991 Census question asked ‘What methods did you use to look for paid work?’ and then asked the respondent to ‘tick the box or boxes which apply to you’. The response options were:

- Looked at job advertisements in newspapers;
- Contacted the Department of Labour’s NZ Employment Service;
- Wrote, phoned or applied in person to an employer;
- Contacted friends or relatives for help in looking for a job;
- Other methods (such as contacted a private employment agency, took steps to set up own business).

The question wording was changed for the 1996 Census and additional response options were offered. The question asked the respondent to ‘tick as many circles as you need to show all the ways you looked for paid work in the last 4 weeks’. The response options were:

- Looked at job advertisements in the newspapers;
- Wrote, phoned or applied in person to an employer
- Contacted the Department of Labour’s NZ Employment Service to look for a job;
- Contacted friends or relatives for help in looking for a job;
- Contacted career advisers of vocational guidance officers;
- Other method(s), for instance:
 - Contacted other employment agency
 - Placed an ad about a job

- Took steps to set up own business.

For the 2001 and 2006 Censuses, very minor changes in the name of the government employment agency ('Department of Labour's NZ Employment Service', 1996, 'Department of Work and Income NZ', 2001, 'Work and Income', 2006) were made to the question and response options.

4.4.5 Definition and classification

The 2001 Statistics New Zealand definition of the variable states that 'Job search methods determines all the ways the respondent looked for paid work in the four weeks prior to the census'.

The comparable classification categories (as shown in appendix 7.4.2) across the 1991–2006 censuses can be broken down to:

Looking at job advertisements

Writing, phoning or applying in person to an employer

Contacting Government Employment Services

Contacting friends or relatives

Other job search methods

Residual Categories.

4.4.6 Variable-specific issues

This question was asked to supplement information on job seeking, so that respondents could be classified into those actively seeking work and those not. This distinction was then used in the derivation of work and labour force status. According to census classifications, respondents who are not actively looking for work cannot be classified as unemployed.

This question was not asked in the 1981 or 1986 Censuses. In the 1981 Census, there were no instructions as to what 'seeking work' (looking for a job) entailed. This was left up to respondents' subjective interpretations, and it is possible that some respondents ticked 'unemployed and seeking work' if they had looked at job advertisements in the paper. The likelihood of this is increased as the response option was double-barrelled – this was the only explicit response option for unemployed people. Therefore, it is possible that all not employed people ticked this response option, regardless of whether they were actively seeking work (and despite guide note instructions to the contrary).

Although methods of job seeking were not asked about in 1986, intercensal comparability is partially mitigated by the inclusion of a definition of 'looking' in the 1986 guide notes, which concerned the job seeking question. This definition was quite specific. It noted that looking for work must mean at least one of the following: 'applying for a job, contacting an employment agency, placing an advertisement in the paper looking for work, or asking friends or relatives for a job'.

In 1991, 1996, 2001 and 2006, rather than having a definition of 'looking' in the guide notes, a specific census question about 'methods of job seeking' was added. The response options included the activities that defined 'looking' in the 1986 Census. These activities constitute an 'active' definition of looking, which is used in the derivation of work and labour force status to exclude people whose sole means of job search is looking at advertisements from being classified as unemployed. Thus, the 1986 definition of 'looking for work' contained in the guide notes is commensurate with the 1991–2006 definition of actively looking for work. However, as has been previously mentioned, instructions on the guide notes were often not followed. This has been noted by Statistics New Zealand with specific reference to this

particular question (Statistics New Zealand 1997). Therefore, the guide note instructions may have done little to increase the comparability of 1986 data with the 1991–2006 data.

It is difficult to ascertain the effect that different wording and instructions had on measuring unemployment. Unemployment may have been overstated in 1981 and 1986 in comparison with subsequent census years as people not actively seeking work may have been classified as unemployed. What can be clearly stated is that 1991–2001 data are comparable. Data from 1986 are less comparable with subsequent censuses, and 1981 data are even less comparable, as there was no information on methods of job seeking to compare to subsequent instructions on actively looking for work.

4.4.7 Comparability assessment

| Job Search Methods: Available for 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Increase in number of response options in 1996 | Minor | Negligible | None |
| Final Comparability Assessment: 1991–2006 data are highly comparable. | | | |

4.5 Main means of travel to work

4.5.1 Variable type

Main means of travel to work is a categorical variable.

4.5.2 Subject population

The subject population was the employed census usually resident population count, aged 15 years and over.

4.5.3 Non-response

In 2006, non-response was 3.7 percent of the employed usually resident population count, which was only 0.2 percent higher than in 2001.

4.5.4 Questions and response options

The 1981 Census question asked the respondent to provide details of their main means of travel to work. They were asked to tick which box applied and the response options given were:

- public bus
- train
- passenger in car, truck, van, or firm's bus
- drive car, truck, or van
- motorcycle, power cycle
- bicycle
- walk
- other means
- work at home
- not applicable.

In 1986, a similar question was asked with a slight change to the response categories, wherein a distinction between driving a private car and a company car was made with separate response categories, and the not applicable option was removed.

In the 1991 Census, response categories were changed again. A new option ‘did not go to work today’ was added, and an option labelled ‘other’ was added with write-in space to specify that.

For the 1996 Census, the question wording was changed to read ‘What was the ONE main way you travelled to your work – that is, the one you used for the greatest distance’. The order of the response options was slightly changed. In the 2001 Census, the question and response options were very similar to those used in 1996 (aeroplane was changed to plane in the examples given for other). The wording of the 2006 question was identical to that of 2001 except that ‘or power cycle’ was removed from the ‘motorbike or power cycle’ response option.

Guide notes were given in 1981, 1986, 1991 and 1996. Except for in 1996, the guide notes stated that respondents should state their main means of travel to work most often used, or usually used, for the greatest distance if they had more than one. This was later added to the question, but the guide note instruction increases the comparability across the six censuses.

1981 and 1986 also stated that those with no fixed work place should indicate the method they used most often to travel to work. 1986 and 1991 made it explicit that farmers should tick ‘work at home’, and 1991 and 1996 had information for taxi drivers that they should choose ‘drive a company car’.

4.5.5 Definition and classification

1. Work refers to a person’s main employment on a specified day, where:

(a) Employment is defined as: all people in the working age population who during the reference period:

Worked for one hour or more for pay, profit, or payment in kind in a job, business, farm or professional practice or,

Worked without pay for one hour or more in work which contributed to the operation of a farm, business or professional practice operated by a relative or, had a job or business they were temporarily absent from.

(b) Main refers to the greatest hours employed on the specified day.

(c) Day refers to midnight to midnight.

2. Main means is the method by which the respondent travelled the longest distance to their main employment.

The criterion used to classify a response into the classification is the main means of travel taken by the respondent on the collection date.

Comparable classifications for the six censuses are:

Public Bus

Driver of Private Vehicle

Passenger

Bicycle

Other

Residual Categories

Train

Driver of Company Vehicle

Motorcycle

Walk

Work at Home

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/main-means-of-travel-to-work. Accessed 17 January 2008.

4.5.6 Variable-specific issues

There are no known specific issues with this variable.

4.5.7 Comparability assessment

| Main means of travel to work: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Change in response options between 1981 and 1986 | Little expected | Minor | None |
| Change in question wording between 1991 and 1996 | Little expected | Minor | None |
| 1991 – Wording changed from usual means on census day to main means on census day | Little expected | Minor | None |
| Final Comparability Assessment: <i>Highly comparable.</i> | | | |

4.6 Occupation

4.6.1 Variable type

Occupation is a supplementary variable that was asked in all six censuses between 1981 and 2006.

4.6.2 Subject population

The subject population was the employed census night usually resident population count, aged 15 years and over.

4.6.3 Non-response

In 1996, around 80,800 (5.0 percent) of the subject population did not state their occupation. In 2001 this dropped to around 60,561 or 3.5 percent, which was little different from the latest (2006) census rate of 3.8 percent.

4.6.4 Questions and response options

From 1986 to 2006 little changed in the way respondents were asked about their occupation. In 1996, 2001 and 2006, the question read ‘In that job, what was your occupation?’, and the following question asked ‘What tasks and duties did you spend the most time on?’. In 1991, respondents were asked ‘In your main job, what is your occupation?’ and then ‘What tasks and duties do you spend the most time on?’ and in 1986, ‘What is your present occupation?’ and ‘In your work what are your main tasks or duties?’.

Although there were slight variations in the wording of the questions over these five censuses, it is safe to assume that these would have had little effect on the responses given. 1981 was different in that question 18 merely had the heading ‘Occupation’ then text stating ‘Job, profession, trade or type of work in which you now work full-time or part-time for financial

reward or as an unpaid relative assisting’. In 1981, respondents were also instructed to state their previous occupation, if they were unemployed. In the following censuses, unemployed respondents were filtered out through earlier questions on employment status.

The guide notes were quite involved for this question in 1981: besides instructing respondents to reply for their main job (as was done in 1986, 1991, 1996), they also gave 65 examples of occupations to aid respondents. With the change to asking for the tasks completed in the job as well as the occupation, the 1986 guide notes gave only 14 occupation examples but included task and duty descriptions. Respondents were again directed to answer for their main job, and trainees and apprentices were instructed to include that they were such in their answers.

In 1991, respondents were encouraged to be specific when stating their occupation: five examples were given of occupations and of tasks or duties. The 1996 guide notes also encouraged respondents to be specific, with three examples given that were also used to show examples of tasks or duties. There were no guide notes for this question in 2001 or 2006.

4.6.5 Definition and classification

Occupation is defined as a set of jobs that involve the performance of a common set of tasks. This is further clarified by stating that ‘A job is a set of tasks performed or designed to be performed by one individual. Two jobs are similar if they require the performance of a similar set of tasks to fulfil the technical requirements of an occupation.’ (Statistics New Zealand 2001).

All six censuses used the New Zealand Standard Classification of Occupations (NZSCO), which is based on the International Standard Classification of Occupations produced by the International Labour Office. In 1981, NZSCO68 was used; in 1986 and 1991 this was updated to NZSCO90; 1996 used NZSCO95; and the 2001 Census used NZSCO99. For the 2006 Census, occupations were dual coded to NZSCO99 and the 2006 Australian and New Zealand Standard Classification of Occupations (ANZSCO). NZSCO99 is a skills-based occupation classification applicable to New Zealand labour force conditions. It groups occupations together by similar skill requirements rather than similarities in the type of work performed.

To classify an occupation within the classification structure, it is necessary to consider all available information obtained from a survey respondent.

A respondent’s occupation, and if necessary for clarification, their tasks and duties, are used to code their responses at the lowest level of the classification.

The classification structure has five levels, divided into major group (nine categories), sub-major group (25 categories), minor group (99 categories), unit group (260 categories), and occupations (565 categories). The nine NZSCO99 census classification categories at the major group level are:

- 1 Legislators, Administrators and Managers
- 2 Professionals
- 3 Technicians and Associate Professionals
- 4 Clerks
- 5 Service and Sales Workers
- 6 Agriculture and Fishery Workers
- 7 Trades Workers
- 8 Plant and Machine Operators and Assemblers
- 9 Elementary Occupations (including residuals).

4.6.6 Variable-specific issues

Statistics New Zealand declares that there have been some cases where people were coded to an occupation even though they were not meant to be in the labour force, because occupation is coded independently of work and labour force or employment status. Therefore, it is important to ensure that only the employed population is selected when producing output tables.

Care should also be taken when comparing this variable to income and other labour market variables such as status in employment or hours worked, as different time frames have been used for different variables (e.g. census day, last four weeks, previous week, previous year).

In 2006, occupation data at the most detailed level of the classification was affected by a problem with the automatic allocation of codes during processing. However, most data output on occupation are not at the most detailed level of the classification and thus not affected by this problem. About six percent of occupations at the most detailed level of the classification are believed to have been classified incorrectly due to this coding problem. The error was not evenly distributed across occupational categories, so care should be taken when analysing occupation data at the most detailed level.

Another issue with data from the 2006 Census was that they were dual coded to both the 1999 New Zealand Standard Classification of Occupations (NZSCO99) and the 2006 Australian and New Zealand Standard Classification of Occupations (ANZSCO), and both classifications are used in output. Cross-sectional tables (i.e. 2006 only) are primarily presented using ANZSCO, and time series tables (i.e. those that include data from 2001) are primarily presented using NZSCO99.

4.6.7 Comparability assessment

| Occupation: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|---|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Small variations in wording between 1986 and 2001 | Minor | Minor to none | None |
| Inclusion of unemployed respondents in 1981 | Minor | Over reporting of occupations as previously employed included in sample | Select only the employed population for output |
| Changes in classification | Minor | As jobs are reclassified into different occupations slight differences at higher levels | None |
| Final Comparability Assessment: 1986–2006 highly comparable, 1981 broadly comparable with other census years. | | | |

4.7 Seeking work

4.7.1 Variable type

Seeking work is a categorical variable, available for five of the census years under study, 1986 to 2006.

4.7.2 Subject population

The subject population for this variable is the not employed census usually resident population count, aged 15 years and over.

4.7.3 Non-response

Non-response rates were not available for this variable.

4.7.4 Questions and response options

In all five censuses that asked about job seeking behaviour the question remained the same: ‘Did you look for paid work in the last 4 weeks?’. The only changes were in the response options available to respondents – in 1986 and 1991 they were asked to break their answer down to ‘yes – seeking full-time work’ or ‘yes – seeking part-time work’ or ‘no’, but in subsequent censuses a simple yes/no tick box format was used.

The guide notes, however, were quite different over the years. In 1991, 2001 and 2006 no notes were given. In 1996, it was stated that those with a definite start date for a new job within the next four weeks should tick ‘yes’ to the question. In 1986, a definition was given for what seeking work entailed, e.g. applying for a job, asking friends, going to an employment agency, as well as a definition of part-time (<30 hours per week) and full-time (30 hours or more) hours.

4.7.5 Definition and classification

To be actively seeking work a person must use job search methods other than reading job advertisements. This includes writing, phoning or applying in person to an employer, contacting Government Employment Services, contacting friends or relatives, contacting a private employment agency or taking steps to set up a business.

The classification categories useable for comparing the five census years are:

- Looked for work
- Did not look for work
- Residual categories

Source: www.stats.govt.nz/census/2006-census-information-about-data/2006-definitions-questionnaires/definitions/s.htm#seekingwork. Accessed 25 February 2008.

4.7.6 Variable-specific issues

There are no known specific issues with this variable.

4.7.7 Comparability assessment

| Seeking Work: Available for 1986, 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Change in response options in 1996 | None | None as we are only looking at yes/no answers | None |
| Changes in Guide notes to include unemployed but about to start work within 4 weeks | Minor | Minor increase in respondents seeking work when already have a start date but very small numbers | None |
| Final Comparability Assessment: <i>Highly comparable across all five census years when comparing yes/no answers.</i> | | | |

4.8 Sources of personal income

4.8.1 Variable type

From 1981 to 1991, this variable was output directly from census response options stated in types of social security benefit/social welfare/income support received. In 1996, 2001 and 2006, the variable was output from census responses stated in all types of income source.

4.8.2 Subject population

The subject population was the census night usually resident population count, aged 15 years and over.

4.8.3 Non-response

Whilst the overall non-response rate to the income source question was reasonable (6.3 percent in 2006, 6.2 percent in 2001 and 5.6 percent in 1996), it varied substantially among different ethnic groups. For example, in 2001 the non-response rate for Pacific peoples was 8.8 percent, compared with the European non-response rate of 1.8 percent. These high levels of non-response in some ethnic groups, age groups and regions could lead to bias (Statistics New Zealand 2001).

4.8.4 Questions and response options

Table 4.1 indicates income source response options for each census year. Prior to 1991, receipt of income support payments from ex-partners was not included in the response options for the income source question. As this precedes the income amount question, inclusion of this as an income source category from 1991 may have prompted respondents to remember to include child support payments received in their total income amount. Therefore, for people in this situation (that is, one-parent families), total income figures for 1991–2006 may be higher in comparison with those in the 1981 and 1986 Censuses. Therefore, small changes in the real equivalised total household income for this group need to be interpreted with caution.

Prior to 1996, the income source question only had categories for forms of government transfer, so information about income from other sources is not available for these censuses. In 1996, 2001 and 2006, the income source questions included all sources of income, such as income gained through wages or self-employment, as well as interest, dividends and rent. These categories cannot be re-created for the censuses prior to 1996. However, although it is not possible to re-create a ‘salary/waged’ category prior to 1996, it is possible to re-create a beneficiary ‘flag’, thereby separating groups for analysis into families with one or more beneficiaries and families without beneficiaries.

Table 4.1 – Income source response options for each census year.

| Income source response option | 1981 | 1986 | 1991 | 1996 | 2001 | 2006 |
|---|------|----------------|----------------|------|-----------------|-----------------|
| Domestic purposes benefit | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Orphan's benefit | ✓ | | | | | |
| Family benefit | ✓ | ✓ | ✓ | | | |
| Widow's benefit | ✓ | | | | | |
| National superannuation | ✓ | ✓ | ✓ | ✓ | ✓ ⁺ | ✓ ⁺ |
| Invalid's benefit | ✓ | ✓ [*] | ✓ [*] | ✓ | ✓ | ✓ |
| Unemployment | ✓ | ✓ | ✓ | ✓ | | ✓ |
| War pension | ✓ | ✓ | ✓ | | ✓ ⁺ | ✓ ⁺ |
| Sickness benefit | ✓ | ✓ [*] | ✓ [*] | ✓ | | ✓ |
| Miners benefit | ✓ | | | | | |
| Family care | | ✓ | | | | |
| Other, please specify | ✓ | ✓ | ✓ | | | |
| Family support | | | ✓ | | | |
| Regular ACC payments | | | ✓ | ✓ | ✓ ⁺⁺ | ✓ ⁺⁺ |
| Youth or student allowance | | | ✓ | ✓ | ✓ | ✓ |
| Wages, salary, commissions, bonuses, etc. paid by employer | | | | ✓ | ✓ | ✓ |
| Self employment or business you work in | | | | ✓ | ✓ | ✓ |
| Interest dividends, rent or other investments | | | | ✓ | ✓ | ✓ |
| Other superannuation, pensions, annuities | | | | ✓ | ✓ | ✓ |
| Community wage – job seeker | | | | | ✓ ^{**} | |
| Community wage – sickness beneficiary | | | | | ✓ ^{**} | |
| Other government benefits | | | | ✓ | ✓ | ✓ |
| Other sources of income, counting support payments from non-household members | | | | ✓ | ✓ | ✓ |
| No benefits | ✓ | ✓ | ✓ | | | |
| No source of income | | | | ✓ | ✓ | ✓ |

Notes:

+ In 2001 and 2006, the New Zealand superannuation and war pension categories were combined.

* Sickness and invalids categories were combined in 1986 and 1991.

++ In 2001 and 2006, the wording for the ACC question included private work accident insurer.

** The 2001 community wage-job seeker category is equivalent to the unemployment benefit, and the community wage/sickness beneficiary category is equivalent to the previous sickness beneficiary category.

4.8.5 Definition and classification

In 2001, this variable was defined as ‘identifying the various sources from which an individual receives their total personal income’. It was noted that ‘it is generally only realistic to collect information on money income’, which ‘is money flow from the deployment of one’s labour, entrepreneurial skills and assets, and transfers received’. ‘Excluded is income in kind, unrealised and contingent’. ‘Money received by borrowing, making withdrawals from savings and receiving repayments of loan principal are excluded. Tax credits and reimbursements of expenses are also excluded’. Personal income source was not specifically defined in any of the classifications and definitions documents for 1981–1996.

4.8.6 Variable-specific issues

Statistics New Zealand points out that income data generated from the census cover a different time span than work data, and that confusion may arise due to changes in the names of different benefits. They also note that, as income data cover a 12-month time span,

seemingly inconsistent data (for example, high income together with benefit receipt) can coexist.

4.8.7 Comparability assessment

| Income Source: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| 1981 Census form emphasised that benefits received for part of the year should also be included | Minor – implicit in 'all sources received in the last 12 months' | May be slight underreporting of benefit sources from 1986 on in comparison to 1981 | None |
| Different instructions about benefits received on behalf of another (1981, 1986 and 1991 compared with 1996, 2001 and 2006) | Minor – instructions on guide notes only, and Family benefit abolished in 1991, so may no longer be relevant | May be slight underreporting of benefit sources in 1981, 1986 and 1991 in comparison to other census years | None |
| Different instructions re emergency benefits in 1981, 1986 and 1991 compared with 1996, 2001 and 2006 | Minor | May be slight underreporting of benefit sources in 1981, 1986 and 1991 in comparison to other census years (more 'other' responses in 1981, 1986 and 1991) | None |
| 1981 and 1986 people receiving benefits from overseas instructed to tick 'other' response | Minor – number of people receiving overseas benefits low, instructions only on guide notes | May have increased the number of 'other' responses and decreased the number of those reporting a specific benefit source in 1981 and 1986 | None |
| 1986 if unsure of benefit sources respondents instructed to tick 'other' | Minor – guide notes only | May have increased the number of 'other' responses and decreased the number of those reporting a specific benefit source in 1986 | None |
| No info on private sources of income (that is, those sources other than benefits) prior to 1996 | Major | Affects availability of comparable response categories | Only use response categories for which data are consistently available (that is, benefit source data, see table 4.1) |
| Final Comparability Assessment: Broadly comparable across 1981–2006 for benefit source data. Information about private income sources only available in 1996–2006. | | | |

4.9 Status in employment

4.9.1 Variable type

Status in employment is a defining categorical variable available for all census years.

4.9.2 Subject population

The subject population included the employed census usually resident population count aged 15 years and over.

4.9.3 Non-response

In 1991, 1.2 percent of the subject population did not state their employment status. This rose in 1996 to around 56,000 respondents or 3.4 percent. However, the non-response rate dropped again in 2001 to around 48,300 respondents or 2.8 percent and remained steady through to 2006 at 2.9 percent.

4.9.4 Questions and response options

Apart from some slight changes in wording, the basic premise of the status in employment question did not change significantly across the six censuses under study. Respondents were asked which one of four categories applied:

- ‘Paid employee’ (1996, 2001, 2006) / ‘Working for wages or salary’ (1981, 1986, 1991);
- ‘Self-employed and not employing any other person(s)’ (1996) / ‘Self-employed and not employing others’ (1986, 1991, 2001, 2006) / ‘working on own account and not employing labour’ (1981);
- ‘Employer of other persons in my own business’ (1996, 2001, 2006) / ‘Employer of others in own business’ (1986, 1991) / ‘Employer of labour in own business or profession’ (1981);
- ‘Working in family business or family farm without pay’ (1996, 2001, 2006) / ‘Unpaid worker in a family business’ (1986, 1991) / ‘Relative assisting in business (farm, shop, etc.) and not receiving wages’ (1981).

The only noteworthy variation was the inclusion of ‘farm’ in 1981, 1996, 2001 and 2006 as an example of type of family business for an unpaid relative. This may have increased slightly the number of respondents choosing this option in comparison to other years when farms were not specified, but the effect is unlikely to have been significant.

4.9.5 Definition and classification

Status in employment classifies employed people aged 15 years and over according to whether they are working for themselves or for other people.

The classification is based on the International Classification of Status in Employment (ICSE) adopted by the International Labour Organisation (ILO), although it does not follow this strictly.

The two main criteria underlying the classification of Status in Employment are:

Economic risk – a worker who assumes some or all of the ‘risk’ in operating an economic entity is likely to be either an employer or a self-employed person, otherwise a worker is likely to be an employee.

Economic control – who decides how and when an employed person’s work is to be performed. For example, if a particular worker decides for themselves, they are probably

either self-employed or an employer, whereas if some other person makes these decisions a worker is most likely to be an employee.

Status in Employment is a flat classification with eight categories.

- 11 Paid Employee
- 12 Employer
- 13 Self-Employed and Without Employees
- 14 Unpaid Family Worker
- 44 Don't Know
- 55 Refused to Answer
- 77 Response Unidentifiable
- 99 Not Stated

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/status-in-employment. Accessed 25 February 2008.

4.9.6 Variable-specific issues

There are no known specific issues with this variable.

4.9.7 Comparability assessment

| Status in Employment: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Inclusion of Farm as example in 1981, 1996, 2001 and 2006 | Minor | Minor | None |
| Final Comparability Assessment: <i>Highly comparable across all six censuses.</i> | | | |

4.10 Total personal income

4.10.1 Variable type

This variable was derived in 1981 by adding together the census responses to gross income amount from all social security benefits, and gross income amount from all sources excluding social security. From 1986 to 2001, the variable was not derived but was output directly from census responses stated in gross income amount from all sources. The exact census questions that this output was generated from are outlined in table 4.2.

Table 4.2 – Census questions used to ascertain total personal income.

| Census question | Census year | | | | | |
|---|--------------------|-------------|-------------|-------------|-------------|-------------|
| | 1981* | 1986 | 1991 | 1996 | 2001 | 2006 |
| Types of social security benefit/social welfare/income support received | ✓ q23 | ✓ q13 | ✓ q14 | ✓ q35 | ✓ q25 | ✓ q30 |
| Private types of income source | | | | ✓ q35 | ✓ q25 | ✓ q30 |
| Gross income amount from all sources | ✓ q24 q25 | ✓ q14 | ✓ q15 | ✓ q36 | ✓ q26 | ✓ q31 |

* In 1981, two income amount questions were asked, one on gross income amount from social security benefits and one on gross income amount from all sources excluding social security.

4.10.2 Subject population

The subject population for this variable is the census usually resident population count, aged 15 years and over.

4.10.3 Non-response

Non-response rates to the personal income question are high compared with other census questions. The overall non-response to this question rose consistently between 1991 (5.3%) and 2001 (11.2 percent) but saw a slight decrease in 2006 (10.2%). This may compromise the ability to generalise data, and also raises particular issues when deriving variables such as total family income. These issues centre on whether to include or exclude families that have missing data for any individual member(s). Non-response rates for income variables created at the family or household level may therefore be even higher.

4.10.4 Questions and response options

The instructions note that total personal income is before tax (gross) income received by the respondent in the 12 months ended 31 March of the census year (Statistics New Zealand 2001). Personal income is collected as an income range (in income bands) rather than as an actual dollar income.

For all of the censuses examined, the census questions stated that income from all sources should be included in total personal gross income, but that payments from other household members were to be excluded from this total. Also excluded were irregular one-off cash payments, for example, ACC lump sum payments, superannuation payouts, and insurance payouts (1981–2006); matrimonial payoffs and lottery winnings (1996–2006); and inheritances or sales of household assets (2001 and 2006). Note that in 1996, 2001 and 2006, instructions stated not to count loans, as these are not treated as income. This is particularly pertinent because, prior to 1991, the student allowance was universal, and was counted as income. It therefore makes sense that the material wellbeing of students, as a subset of the population, will appear to have deteriorated since 1991.

In the help notes for censuses prior to 2001, respondents were instructed to include the assessed/estimated monetary value of any income they had received in kind, in their total income (for example, ‘the assessed value of housing, board, or goods and services provided free by an employer’). In 2001 and 2006, only monetary income was counted and there were no instructions to include income in kind. This may have resulted in total gross income being underreported for 2001 and 2006 in comparison with previous census years.

In 1981 there were two income amount questions, each covering a particular type of (different) income source. In subsequent censuses, there was only one income amount question.

4.10.5 Definition and classification

For the 2001 Census this variable was defined as ‘the before tax income for the respondent in the 12 months ended 31 March 2001’. Previous definitions are comparable with this. Variable definitions prior to 2001 also emphasise that total personal income is an aggregated measure that involves adding together income from all sources.

Appendix 7.4.2 shows the comparable classifications over the six census years under study. The classifications are divided into various bands that are distinguishable for all six years. The higher bands are limited due to the 1986 Census, which compressed the higher ranges into \$50,001 and over.

4.10.6 Variable-specific issues

There are no known specific issues with this variable apart from that already stated in the non-response section.

4.10.7 Comparability assessment

| Total Personal Income: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Money in kind included in income amount for all census years except 2001 and 2006 | Minor – instructions to include were in guide notes only | Income from 2001 may be slightly underreported in comparison with 1981–1996 | None |
| In 1996, 2001 and 2006 instructions stated not to count loans, as these are not treated as income | Minor – probably people who had loans did not count this as income prior to 1996. However may affect students, as money previously counted as income now may not be counted (as is a loan rather than a universal allowance) | The income of students, as a subset of the population, may appear to have deteriorated since 1991 | |
| Response category ranges change over time | Minor | Some restrictions on the level of detail of analysis – particularly at the highest end of the salary range | Work out comparable response categories |
| 1981 variable derived (1986–2001 not derived) | Minor – as all variables are total income ranges | None | None required |
| No consistency edits applied to 2001 data (compared with 1996) | Minor | May change the percentages in certain categories, e.g. the number in the loss category higher in 2001 than in 1996 | None |
| Payments received for dependent children possibly excluded prior to 1991 | Minor – based on it not being specifically included in the income source question – people may have included them. Also may not have applied to many people prior to 1991 | Income in 1981 and 1986 may be understated in comparison with 1991–2001 | None |
| Final Comparability Assessment: <i>Broadly comparable across 1981–2006 Censuses.</i> | | | |

5. Family and household variables

5.1 Census night number of absentees

5.1.1 Variable type

The number of persons absent on census night is a numerical variable, with numbers coming directly from census dwelling forms.

5.1.2 Subject population

Every dwelling must supply this information.

5.1.3 Non-response

Non-response rates are not known for this variable.

5.1.4 Questions and response options

Information about the number of people absent from the dwelling on census night is obtained from the Dwelling Form. In 1981, the person completing the Dwelling Form was asked to provide the surname and first name, sex, age in years, marital status, relationship to occupier and address or location (if known) of 'Persons absent on census night'. Space was provided to supply information for up to four people. Instructions were also provided as to who should be defined as absent. The number of absentees was obtained from this information.

Slight changes were made to this question in the 1986 Census, with the date of the census being added into the question so that it read 'Persons away on census night (4 March 1986)'. The format of the instructions regarding who should be defined as absent was also amended, with the addition of the words 'away (for less than three months)' in place of 'temporarily absent' in the previous census. The number of absentees was obtained from this information.

The questionnaire format and wording were changed for the 1991 Census. Respondents were initially asked to respond either 'Yes' or 'No' to the question 'Are there any persons absent from this dwelling on the night of Tuesday, 5 March 1991?' When listing the details of those absent, the respondent was no longer required to supply an address.

Significant changes were made to the questionnaire wording and format for the 1996 Census. Respondents were first asked 'Is there anyone living here who is away on census night, and who will not have a Census Individual Form (the blue one) filled in here?' and then instructions were provided as to who should and should not be counted. If you responded 'Yes' you were then asked 'How many people who live here are away, and will not have an Individual Form filled in here?' and provided with a write in space to record the number. Name, age, sex and other information on absentees was gathered in the next question. Space was provided to supply information for up to four people.

The question wording was amended again for the 2001 Census, to 'Will everyone who usually lives in this dwelling fill in a blue Individual Form here (or have one filled in for them here)?', followed by 'How many people who usually live here won't fill in a blue Individual Form here (and won't have one filled in for them here)?'. Instructions as to whom to count and whom to exclude were similar to those in the 1996 Census. The question wording in 2006 was the same as in the previous census but the response options for relationship to reference person included the distinction between opposite-sex partners and same-sex partners with a separate category for 'my same-sex partner/de facto'. Space was provided to supply information for up to five people in 2001 and 2006.

5.1.5 Definition and classification

An absentee is a person who is identified on the census dwelling form as usually living in a particular dwelling but who did not complete a census individual form at that dwelling because they were elsewhere in New Zealand or overseas at the time of the census. A person listed as an absentee on a census dwelling form may complete a census individual form elsewhere in New Zealand.

Included as absentees in the census are children away at boarding school, and people away on business, on holiday, in hospital and so on. Long-term hospital patients and university and other tertiary students who live away from the dwelling for most of the year are excluded.

5.1.6 Variable-specific issues

In 2001 and 2006 two variables are supplied in the SAS dataset on number of absentees. One provides the number of absentees as provided by respondents in question 19/20 – this is called ‘Absentee Number’ and up to 99 absentees can be coded. The other variable is called ‘count of valid absentees’ and is derived from the detailed information on absentees in question 20/21 – up to five absentees can be coded – this count is made when absentee coding is completed.

Note that for 2001 and 2006 it would be best to use the ‘count of valid absentees’ as this is more realistic and more comparable with earlier censuses that collected up to four absentees.

5.1.7 Comparability assessment

| Number of persons absent on census night: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes in question wording | Minor | Minor | None |
| Final Comparability Assessment: <i>Highly comparable across all census years.</i> | | | |

5.2 Census night number of occupants

5.2.1 Variable type

This variable is numerical, with the data coming directly from the census dwelling forms.

5.2.2 Subject population

Every dwelling in the country.

5.2.3 Non-response

Non-response rates are not known for this variable.

5.2.4 Questions and response options

Questions about the number of occupants in the dwelling on census night were asked on the dwelling form in each of the six censuses from 1981 to 2006. In the 1981 Census, question three asked for the ‘Number of occupants on census night’. Instructions were given on which categories of people to include and which to exclude, along with write-in response options with space for respondents to include the number of males, the number of females and the total number of people.

There were significant changes made to the wording of this question in the 1986 Census. Respondents were asked ‘How many persons are present in this dwelling on the night of 4 March 1986?’ and provided with a space to include the number of persons. The list of instructions about who was to be included and excluded, which had been a part of the 1981 question, were removed.

The question wording was changed for the 1991 Census, to read ‘How many persons, including babies, are present in this dwelling on the night of Tuesday, 5 March 1991?’ The question also included an instruction to ‘Include also, those persons arriving before noon on Wednesday 6 March 1991, who have not completed a Personal Questionnaire’ along with a space to record the number of persons.

There were further changes to the wording of the questionnaire for the 1996 Census. The question asked ‘How many Census Individual Forms (the blue forms) are being filled in, here in this dwelling?’ This question was preceded by a preamble that gave instructions on which persons were required to complete an individual census form. Respondents were provided with a space to record the number of forms being completed.

The 2001 Census question was similar to that of 1996; it asked ‘How many blue Individual Forms are being filled in, here in this dwelling?’ in 2001 instructions were included for the census night number of occupants questions but they were not as visible as those for the 2006 question. A space was provided to record the number of forms being completed.

Although the 2006 question was the same as the 2001, instructions were included as to who fills in a blue individual form – ‘everyone, including babies, spending the night of 7 March here, and anyone who arrives on 8 March, who has not filled in a blue individual form anywhere else. This includes babies’.

5.2.5 Definition and classification

Number of occupants on census night is the number of people who are present in a particular dwelling in New Zealand on census night and who complete a census individual form at that dwelling.

Number of occupants on census night therefore includes:

- people who usually live in the dwelling and are present at the time of the census
- people who usually reside overseas but are present in the dwelling at the time of the census
- people who usually reside elsewhere in New Zealand, but are present in the dwelling at the time of the census.

Number of occupants on census night excludes:

- people who usually live in the dwelling but are absent at the time of the census.

5.2.6 Variable-specific issues

There are no known specific issues with this variable.

5.2.7 Comparability assessment

| Number of occupants in dwelling on census night: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Change to question in 1986 and removal of extra instructions | Minor | Over reporting of people who should not be included | None |
| Change to asking about 'blue forms' filled in rather than number of people present | Minor | May increase accuracy of reporting | None |
| Inclusion of more obvious instructions in 2006 | Minor | May increase accuracy of reporting in comparison to 2001 | None |
| Final Comparability Assessment: <i>Highly comparable over study period.</i> | | | |

5.3 Family type

5.3.1 Variable type

Family type is a derived variable that classifies family nuclei according to the presence or absence of couples, parents and children.

5.3.2 Subject population

The subject population for this variable is families in private occupied dwellings.

5.3.3 Non-response

There is no 'not classifiable' rate for family type. The family type classification does not have a not classifiable category. This is because the process of determining whether a group of people form a family also involves determining what type of family they form.

5.3.4 Questions and response options

The key questions from which data on family type are derived, are those on the respondent's relationship to a reference person, and the living arrangements question(s). Table 5.1 shows which questions this includes for each of the relevant censuses.

Table 5.1 – Census questions used for deriving family type

| | 1991 | 1996 | 2001 | 2006 |
|----------------------------------|-------------|--------------------------|-------------|-------------|
| Relationship to reference person | q6 | q3+, q19+* | q4+, q20+* | q6+, q21+* |
| Living Arrangements | q11 | q16, q20, q21, q22 & q23 | q19 | q19 |

+ Questions asked in the dwelling form

* Absentee's Relationship to Reference Person

5.3.5 Definition and classification

The Statistics New Zealand definition of Family Type has remained the same for the last three censuses: 'a derived variable that classifies family nuclei according to the presence or absence of couples, parents and children.' In 1991 the definition stated that it 'is based on the number

of parents and the presence or absence of adult and/or dependent children’. No distinction of the child dependency status was made in subsequent years.

A ‘family nucleus’ is a couple, with or without child(ren), or one parent and their child(ren), usually resident in the same dwelling. The children do not have partners or children of their own living in the same household. People who usually live in a particular dwelling and are members of a family nucleus in that dwelling, but who are absent on census night, are included, as long as they are reported as being absent by the reference person on the dwelling form.

The 2006 classification for family type has 3 categories:

- 1 Couple without children
- 2 Couple with child(ren)
- 3 One parent with child(ren).

5.3.6 Variable-specific issues

There are issues affecting the comparability of this variable with 1996 and 2001 Census data:

The 2001 and 2006 family type classifications do not have the child dependency sub-categories used in 1996, but family type data with these sub-categories are available via the family type by child dependency status variable.

There was a change in the classification of young people not living with their parents. In 1996, everyone under 18 years who: was not employed full-time; did not have a child and/or partner; and did not report living with parents, was coded as a child in a family nucleus and given a child dependency status of ‘dependent child’. For 2001 and 2006, the age criterion was changed to people under 15 years old. This change, however, has not had a major impact on the comparability of the data over time.

Care should be taken when analysing family type data for same-sex couples, as the numbers involved are small and the information (provided by respondents) used to derive the data was not always consistent and correct. These data are fit for use, but caution is advised when undertaking detailed analysis.

5.3.7 Comparability assessment

| Family Type: Available for 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Child dependency sub-categories in 1991 and 1996 but not in 2001 or 2006 | Minor | None at highest level | Only use at highest level or use family type by child dependency status variable |
| Change in age of dependent child from 18 (1991 and 1996) to 15 (2001 and 2006) | Minor | Decrease in the number of dependent children | None – Statistics New Zealand states this will have a minor impact on data comparability over time |
| Final Comparability Assessment: <i>Highly comparable over the four censuses.</i> | | | |

5.4 Household composition

5.4.1 Variable type

Household composition is a derived variable that classifies households according to the presence, number and type of family nuclei and the presence of related and unrelated people.

5.4.2 Subject population

All households in private occupied dwellings make up the subject population for this variable.

5.4.3 Non-response

There were 28,677 households that were unidentifiable or could not be classified out of the 1,344,267 households in private occupied dwellings, giving a response rate of 2.1 percent, in 2001. The non-response rate was even lower in 2006 at 1.9 percent.

5.4.4 Questions and response options

Family coding variables derived from the census questions are used to derive family and household derivations. The census derives Household Composition from the questions as shown in table 5.2.

Table 5.2 – Census questions used for deriving household composition

| | 1981 | 1986 | 1991 | 1996 | 2001 | 2006 |
|----------------------------------|--------|------|------|--------------------------------|--------------|--------------|
| Relationship to reference person | q5 | q6 | q6 | q3+ q19+* | q4+ q20+* | q6+ q21+* |
| Living Arrangements | | q11 | q11 | q16, q20, q21, q22 & q23 | q19 | q19 |
| Usual Residence | q7 | q1 | q1 | q2 | q5 | q5 |
| Census night address | | | | q5 | q8 | q8 |
| Marital Status | q14 | q12 | q13 | q17, q18 | q21 | q23 |
| Sex | q2 | q4 | q4 | q6 | q3 | q3 |
| Age | q3, q4 | q5 | q5 | q7 | q4 | q4 |

+ Questions asked in the dwelling form

* Absentee's Relationship to Reference Person

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/household-composition/classification-coding-process.htm. Accessed 14 July 2008.

5.4.5 Definition and classification

The current Statistics New Zealand definition for household composition states that it is a derived variable that classifies households according to the relationships between usually resident people.

A household is either one person who usually resides alone or two or more people who usually reside together and share facilities (such as eating facilities, cooking facilities, bathroom and toilet facilities, a living area).

The criterion used to place a household into level one of the classification is the number of family nuclei present, or if no family nuclei are present, then the number of people present.

At level two of the classification, one-family households are classified according to Family Type, and whether there are other people present. For two-family households in which both families contain children, the criterion is the number of parents in each family. Two-family households that contain at least one 'couple-only' family are not classified to the same level of detail as two-family households in which both families contain children.

At level three of the classification, the criterion for classifying one-family households is whether the other people present are related or unrelated to the family nucleus. For two-family households, the criterion is whether the families are related or unrelated.

For multi-person households with no family nuclei present, the criterion used at levels two and three of the classification is whether usually resident people are related, unrelated, or a mixture of both.

Household Composition is a hierarchical classification with three levels. Level one of the classification has 6 categories, level two has 19 categories while level three contains 31 categories. The level one categories are:

- 1 One-family household (with or without other people)
- 2 Two-family household (with or without other people)
- 3 Three- or more family household (with or without other people)
- 4 Other multiperson household
- 5 One-person household
- 6 Household composition unidentifiable

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/household-composition. Accessed 3 March 2008.

5.4.6 Variable-specific issues

Certain aspects of the household composition data are not comparable over time, because of classification changes. This affects analysis at the more detailed levels of the classification, but not at the least detailed level.

2001 and 2006 data for multi-family households are not comparable with 1996 data, because, in 2001 and 2006, two-family households in which at least one of the families was ‘couple only’, were classified in the ‘other two-family household’ category. In 1996, the classification did not have this category, and two-family households containing couple-only families were included in the ‘two two-parent families’ and ‘one two-parent family and a one-parent family’ categories.

In 1996, there were categories indicating whether or not ‘other multi-person households’ contained siblings, but the 2001 and 2006 classifications did not have these subcategories, so this information is not available for 2001 and 2006.

The 1986, 1991 and 1996 classifications included a ‘visitor-only household’ category, but the 2001 and 2006 classifications did not include this category. In 2001 and 2006 this information was available from the ‘visitor-only private dwelling’ category of the ‘visitor-only private dwelling indicator’ variable.

There was a change in the classification of young people not living with their parents. In 1996, everyone under 18 years old who: was not employed full time; did not have a child and/or partner; and did not report living with parents, was coded as a child in a family nucleus and given a child dependency status of ‘dependent child’. For 2001 and 2006, the age criterion was changed to people under 15 years old. This change affected how the household was classified, but has not had a major impact on the comparability of the data over time.

Source: www.stats.govt.nz/census/2006-census-information-about-data/information-by-variable/household-composition.htm. Accessed 3 March 2008.

5.4.7 Comparability assessment

| Household composition: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes in classification | Minor | Minor at Highest level of classification but more problematic for more in depth analysis | Concordances could be used to increase comparability with the classification changes |
| Change in age of dependent child in 2006 from 18 to 15 for young people not living with their parents | Minor | Minor | None |
| Final Comparability Assessment: <i>Broadly comparable across all census years at highest level of classification.</i> | | | |

5.5 Household composition by child dependency status

5.5.1 Variable type

This variable is a derived variable that classifies households according to the presence, number and type of family nuclei and the presence of related and unrelated people with the status of any children within family nuclei.

5.5.2 Subject population

All households in private occupied dwellings make up the subject population for this variable.

5.5.3 Non-response

As this is a derived variable, non-response is not relevant; household composition non-response rates (household composition unidentifiable) could be used as an indicator of non-response.

5.5.4 Questions and response options

The questions used to derive household composition were listed earlier in table 5.2. Child dependency status is derived from the age, work and labour force status variables as shown in table 5.3, and from 'family coding' and 'family type', which are also derived as discussed under Household composition.

Table 5.3 – Questions used to derive child dependency status

| Variables Used | 1981 | 1986 | 1991 | 1996 | 2001 | 2006 |
|--|-------------|--------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Age | q4 | q5 | q5 | q7 | q4 | q4 |
| Work and labour force status (derived) | q16 q17 | q16 q19 q20 q22 | q21 q22 q23 q24 q26 | q40 q48 q51 q52 q53 | q27 q35 q38 q39 q40 | q32 q40 q43 q44 q45 |

5.5.5 Definition and classification

Household composition is a derived variable that classifies households according to the relationships among usually resident people. Households are classified according to the presence, number and type of family nuclei and the presence of related and unrelated people.

Child dependency status is also derived, from family type, family coding, age and work and labour force status. It has three categories, adult child, dependent child and child dependency status unknown. An adult child is a 'child in a family nucleus' who is aged 15 to 17 years and is employed full-time, or a 'child in a family nucleus' who is aged 18 years or over. A dependent child is a 'child in a family nucleus' who is aged 15 to 17 years and is not employed full-time, or is aged under 15.

To be a 'child in a family nucleus', a person must have a usual residence with at least one parent, and have no partner or child(ren) of their own living in the same household. Note that 'child in a family nucleus' can be a person of any age.

Household Composition is a hierarchical classification with three levels. Level one of the classification has 6 categories, level two has 19 categories while level three contains 31 categories. Household composition by child dependency status uses level 2 of the household composition classification. The level two categories are:

- 10 One-family Household Not Further Defined
- 11 Couple Only
- 12 Couple Only and Other Person(s)
- 13 Couple with Child(ren)
- 14 Couple with Child(ren) and Other Person(s)
- 15 One Parent with Child(ren)
- 16 One Parent with Child(ren) and Other Person(s)
- 20 Two-Family Household Not Further Defined
- 21 Two 2-parent Families
- 22 One 2-parent Family and a 1-parent Family
- 23 Two 1-parent Families
- 24 Other 2-family Household
- 31 Three- or More Family Household (with or without Other People)
- 40 Other Multiperson Household, Not Further Defined
- 41 Household of Related People
- 42 Household of Related and Unrelated People
- 43 Household of Unrelated People
- 51 One-person Household
- 61 Household Composition Unidentifiable

Source: www.stats.govt.nz/NR/rdonlyres/6687D06B-5EA9-4783-8FBB-B2B0DFD262E8/0/HHCOMP99v10_2.xls. Accessed 10 July 2008.

Child dependency status has three categories:

- 1 Adult child
- 2 Dependent child
- 3 Child dependency status unknown.

5.5.6 Variable-specific issues

There are no known issues with this variable other than those already stated in the Household Composition section above.

5.5.7 Comparability assessment

| Household composition by child dependency status: Available for 2001, 2006 | | | |
|--|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| None | | | |
| Final Comparability Assessment: Broadly comparable across the two censuses. | | | |

5.6 Living arrangements

5.6.1 Variable type

Living arrangements is a categorical variable coded directly from census questions. This information was collected in the five censuses between 1986 and 2006, but is only listed in the data dictionaries as an available output in 1986, 1991 and 1996.

5.6.2 Subject population

The subject population for this variable changed over the different census years under review. In 1986 it was the Census night population aged 15 years and over. In 1991 and 1996 the variable applied to all New Zealand residents and overseas residents working in New Zealand. In 2001 and 2006 it was all NZ residents.

5.6.3 Non-response

Non-response rates are not known for this variable.

5.6.4 Questions and response options

Questions asking information on the living arrangements of the respondent were asked on the individual form in the 1986 to 2006 Censuses. The 1981 Census did not contain a question on living arrangements, but there was a question about de facto relationships in the marital status question.

The way in which living arrangements has been asked has varied from census to census. A single question was asked in 1986, 1991, 2001 and 2006, while in 1996 there was a series of questions about each of the different types of people with whom a person might live. In all instances, a written response was required for people not covered by the tick boxes.

Different question wording was used for each census. The 1986 question was: ‘What are your living arrangements?’. In 1991 this changed to: ‘Who are the persons that usually live in the same dwelling as you?’ followed by instructions to include children and babies and tick all boxes that applied. The questions used in 1996 were worded: ‘Which of these people live in the same household as you?’ and there was a further question to cover anyone else whom the respondent lived with. For the 2001 Census, when again just one question was used, it was worded: ‘Mark as many spaces as you need to show all the people who live in the same household as you.’ The wording of the question was the same in 2006, with civil union partnerships added to the response options. Both civil union partnerships and de facto relationships were also broken down further into ‘same-sex’ and ‘opposite-sex’ options.

Thus from 1991 to 2006 there was an emphasis on including everyone with whom a person lived, and giving multiple responses where necessary. In 1986, however, there was no indication of whether a multiple response could be given, and the question could be interpreted as requiring a single response only. The focus in 1986 seems to have been more on

collecting information about whether people were living with their husband or wife or with a partner to whom they were not married, rather than on collecting information about all the types of people with whom a person lived. Therefore, in 1986, respondents may have tended to answer according to whom they regarded themselves as living with in a more everyday sense, or in terms of the ‘main’ people they saw themselves as living with. Some students, for example, might have said that they lived with their parents, and not have included brothers and sisters who were also part of the same household. Similarly, people living with a partner may have given a response to this effect, but not included children, other relatives or flatmates who were part of their household. Thus the conceptual basis of the 1986 living arrangements data appears to be different from that of subsequent censuses. This limits the comparability of the 1986 living arrangements data with the 1991 to 2006 living arrangements data.

The range and types of response options used for the living arrangements question or questions has varied over time. In 1986 there were just four, the first two relating to people in couples, one for people living alone and another for respondents living with other types of people. In 1991, the range of tick boxes was expanded to include parents, children, siblings and other relatives. In the series of questions used in 1996, these were expanded further with separate tick boxes for each parent, for sons, daughters, sisters and brothers and for ‘none of these’. For 2001, the tick boxes were again combined for parents, children and siblings of either sex, and there was an additional tick box for flatmates. In 2006, as mentioned earlier, civil union partners were included in the response options.

The 1986 help notes instructed respondents who were temporarily away from home to answer as if they were at home and to ignore any temporary absences.

Instructions to ignore temporary absences were also given in the 1991 help notes, but for this census a time criterion of less than three months was specified. In 1991, the help notes for this question also repeated the instruction on the form to include all people, and stated that stepchildren and adopted children should be included in the ‘sons/daughters’ tick box.

In 1996, respondents were again instructed in the help notes to ignore temporary absences, but for this census no time period was given. These help notes also contained instructions on whom to count as a mother, father, child, and sibling. People who acted as a mother or father to a respondent, and whom the respondent regarded as their mother or father were to be included in the mother or father tick boxes. People who acted as a parent to a child living in their household were to tick the ‘son’ or ‘daughter’ tick box, and people whom the respondent thought of as their brother or sister were to be included in the brother or sister tick box. In addition, the help notes for this census stated that people living with a partner of the same sex should tick the ‘partner or de facto, girlfriend or boyfriend’ box.

As for 1996, the 2001 help notes provided instructions on whom to count as a mother, father, son, daughter, brother and sister, and said to include partners of the same sex in the ‘partner or de facto, boyfriend or girlfriend’ box. In 1996, respondents were also instructed that if any people they lived with were temporarily away they should answer the question in the way they would have if the absent people had been at home. The 2006 help notes gave a description of what constituted a civil union.

These differences over time in the help note instructions are likely to have had some impact on the way in which respondents answered the living arrangements question, although probably not as significant an impact as that due to questionnaire changes.

5.6.5 Definition and classification

Living Arrangements is a variable that collects the familial and non-familial relationships of a person to all the other people with whom they usually reside.

Living Arrangements is a hierarchical classification with three levels. At level one, usual residence with close familial relatives (living with spouse/partner, child and parent) is the criterion for classification. This is because spouse/partner, parent, and child living arrangements are needed to help identify different types of households and families (see the Statistical Standards for Family Type and Household Composition). All other living arrangements are aggregated at level one to three broad categories: other relative; non-relative; and guest/visitor/inmate/patient/resident.

At level two of the classification, all familial relationships are listed, including close familial relationships (spouse, child, parent) and other familial relationships (sibling, grandparent, aunt/uncle, cousin). Of the non-familial relationships, only 'flatmate' is given at level two, as it is a frequent response to the Living Arrangements question. It helps identify, for example, 'Households of unrelated people' (see the Statistical Standard for Household Composition). All other non-familial relationships are aggregated at level two under 'Other non-relative'.

Level three of the classification classifies familial relationships in greater detail, for example by categories that provide generational information such as 'great' (for example, great-grandparent) categories. Non-familial relationships are given in full detail at level three.

At level one the classification has 11 categories, while level two has 22 categories and level three, 37. The level one categories are:

- 01 Live alone
- 02 Spouse/partner
- 03 Child (natural, step, adopted, foster)
- 04 Parent (natural, step, adopted, foster)
- 05 Other relative
- 06 Non-relative
- 07 Guest/visitor/inmate/patient/resident
- 44 Don't Know
- 55 Refused to Answer
- 77 Response Unidentifiable
- 88 Response Outside Scope
- 99 Not Stated.

5.6.6 Variable-specific issues

This variable is generally not available for output. It is used to assist in family coding and also as a part of deriving social marital status. It should also be noted that in recent censuses (at least) this variable has not been edited to be consistent with family coding or other variables and consequently there are likely to be data quality issues if it is used for output purposes. Also in 2006, as stated in the Marital Status section of this report, there are issues with civil union data.

5.6.7 Comparability assessment

| Living Arrangements: Available for 1986, 1991, 1996 | | | |
|---|--------------------------------|-----------------------|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Wording changes between 1986 and 1991 and 1996 | Minor | Minor | None |
| Final Comparability Assessment: <i>Broadly comparable across the three census years under consideration at the broadest level. But there are quality issues surrounding this data.</i> | | | |

5.7 Relationship to reference person

The relationship to reference person variable provides information on the relationship of each person in a dwelling to the reference person for that dwelling. The reference person is the person who fills out the dwelling form. This can be anyone who is in the dwelling. In less recent censuses this variable was referred to as ‘relationship to occupier/reference person’ or ‘relationship to occupier’, with the occupier being defined as the owner of the dwelling, the person who paid the rent, or a responsible person. In practice, however, the ‘occupier’ was still the person who filled in the dwelling form, and the same type of information was collected. More recently there has been less emphasis on the owner of the dwelling. Children (who may speak/read English better than the adult residents where English is not their first language) or visitors may be the reference person. Therefore, assumptions cannot be made about the reference person being the owner, an adult, or even a usual resident.

5.7.1 Variable type

Relationship to reference person is a categorical variable, with values coded directly from the questions in the individual/dwelling form depending on the census year, as detailed below.

5.7.2 Subject population

The census night population for 1981–1991, when the information came from the individual forms, and all of the census night population who were in private dwellings on census night for 1996–2006.

5.7.3 Non-response

Non-response rates for this variable are not known.

5.7.4 Questions and response options

Information about people’s relationship to the reference person is collected for all people, including those present and those temporarily absent on census night. Relationship information for people present on census night was collected on the individual form for the 1981 to 1991 Censuses, and therefore was provided by each individual present in the dwelling. In the 1996 to 2006 Censuses, relationship information for people present on census night was collected on the dwelling form, and so was provided by one person, that is, the reference person. Moving the question from the individual form to the dwelling form may have improved the quality of the data obtained.

The relationship to reference person question for those present on census night contained space for up to nine people in 1996 and up to 10 people in 2001 and 2006, which was

probably sufficient to list all people present in most private dwellings. In 1996, those respondents who had more than nine people to list were instructed to use the additional spaces (for two extra people) provided at the end of the dwelling form. In 2001 and 2006, respondents were instructed to use a separate (continuation) form if they had more than 10 people to list. It is not expected that this variation in the amount of space provided would have had much impact on the completeness of the data obtained in 1996 compared to those obtained in 2001, and 2006, and so the data are believed to be comparable in this respect.

Relationship information for absentees was collected on the dwelling form for all six censuses from 1981 to 2006, and so was provided by the reference person. The 1981 to 1996 questions about absentees contained space for up to four absentees. The 2001 and 2006 absentee questions contained space for up to five absentees. As for those present on census night, it is not expected that this increase in the amount of space provided would have had a significant impact on the completeness of the data obtained in 1996 compared to those obtained in 2001 and 2006. Therefore, the data are believed to be comparable with respect to absentees.

From 1981 to 1991, the relationship question about those present on census night referred to the person's relationship to the occupier. Tick boxes were provided and a written response was required if the 'other' box was ticked. The 1981 relationship question about absentees also asked for 'relationship to occupier', but for 1986 and 1991 the wording of this question was changed to 'relationship to you'. A written response was required for the absentee relationship question for 1981 to 1991.

A different format was used for the 1996, 2001 and 2006 Censuses, when the collection of this information for those present on census night moved from the individual form to the dwelling form. For these censuses, the person filling in the dwelling form was asked to first give their name and age, then the name and age of each other person, and their relationship to the reference person. As in previous censuses, a series of tick boxes was provided and a written response was required for responses of 'other'. In 1996, the wording used was 'this person is'. For 2001, a slightly different approach was taken that involved referring to person numbers, e.g. 'person 2 is', 'person 3 is', and so on. The 1996 and 2001 relationship questions for absentees were both worded as 'this person is', followed by a series of tick boxes and a space for written responses for other types of relationships not covered in the tick boxes.

The 1981 to 1991 Census help notes for this question contained an explanation of who the 'occupier' was. The explanations relating to occupiers of private dwellings covered various possibilities including the 'head' (if any) of the household, the person in charge of the dwelling, the person who filled in the dwelling form, the person who signed the dwelling form, or an adult present on census night. As explained earlier, however, such differences do not affect the comparability over time of the resulting data.

The range of tick boxes provided and their wording varied from 1981 to 2006. All six censuses had categories relating to people in couples, and to daughters and sons, but the use of tick boxes for other types of people (such as parents, siblings, other relatives and flatmates) has varied from census to census.

The 1981 Census contained tick boxes for a wide variety of people, including grandchildren, in-laws, nephews, nieces and cousins, and tick boxes for people in non-private dwellings. The tick box for daughters and sons in 1981 specified that adopted children and stepchildren were to be included. Although fewer tick boxes were provided in subsequent censuses, the information required was just as comprehensive because in all cases a written response was required for any relationships not covered by the tick boxes.

The wording of the tick box category relating to people in couples changed over time. In 1996 and 2001, it referred to ‘wife’, ‘husband’, ‘partner’ or ‘de facto’. From 1981 to 1991 the category wording was ‘husband or wife’ and the terms ‘de facto’ and ‘partner’ did not appear on the form, but the help notes instructed respondents to tick ‘husband or wife’ if they were the de facto spouse of the occupier. In 2006, the couple response was divided into ‘same-sex partner/de facto’ and ‘wife/husband or opposite-sex partner/de facto’.

Thus the intention was that all types of partners of the reference person should be included in this category, as for 1996 and 2006. It is possible, however, that some respondents to whom these instructions would have applied may not have read them. Therefore these differences in question wording may have resulted in an undercount of people in couples from 1981 to 1991, compared to 1996 to 2006. The magnitude of the effect depends on whether partners or de factos of the reference person simply gave a written response to this effect – in which case the data obtained would still be comparable – or gave a different type of response such as ‘friend’ or ‘flatmate’.

The 1981 to 1991 Census help notes for this question also contained instructions relating to other types of relationships. Children of the occupier’s de facto spouse were to be included as children of the occupier, and in 1986 and 1991 there was an instruction that adopted children of the occupier and stepchildren of the occupier should be included as children of the occupier. People with other types of relationships to the occupier, such as flatmates, foster children, unrelated visitors, and people in non-private dwellings, were instructed in 1986 and 1991 to tick the ‘not a relative’ box and print their relationship in the space provided.

The 1996 and 2001 help notes for the relationship to reference person question did not contain any specific instructions on how to answer for certain types of relationships. In these two censuses, respondents were simply asked to make sure that they included everyone, including babies. In 2006, respondents were again reminded to include babies and to exclude absentees not filling in a ‘blue form’, and there was an explanation of why Statistics New Zealand wanted the information. There was also information about which response those in a civil union should choose.

5.7.5 Definition and classification

Relationship to Reference Person collects the familial and non-familial relationships of each person in a defined group of people to one person (the reference person).

Relationship is a hierarchical classification with three levels. At level one, close familial relationships (spouse/partner, child and parent of the reference person) are the criteria for classification. This is because spouse/partner, parent and child relationships are needed to identify different types of households and families (see the Statistical Standards for Family Type and Household Composition). All other relationships are aggregated at level one into three broad categories: other relative of reference person, non-relative of reference person, and guest/visitor/inmate/patient/resident.

At level two of the classification, all familial relationships are listed, including close familial relationships (spouse/partner, child, parent) and other familial relationships (sibling, grandparent, aunt/uncle, cousin). Of the non-familial relationships, only ‘flatmate’ is given at level two. This is because ‘flatmate’ is a frequent response to the Relationship question. It helps identify, for example, ‘Households of unrelated people’, using the standard classification for Household Composition. All other non-familial relationships are grouped at level two under ‘other non-relative’.

Level three classifies familial relationships in more detail, for example by categories that add generational detail such as ‘great’ (e.g. great-grandparent). Non-familial relationships are given in full detail at level three.

There are several categories that are not actually relationships to the reference person, but relationships to people who are not related to the reference person (child of flatmate, child of boarder, child of employer, child of employee, partner of employee). These categories are necessary because they are common responses and the additional information obtained allows households and families to be more accurately classified.

Relationship is a hierarchical classification with three levels. Level one has 11 categories, level two has 22 categories and level three, 37. The level one categories are:

- 01 Reference person
- 02 Spouse/partner of reference person
- 03 Child (natural, step, adopted, foster) of reference person
- 04 Parent (natural, step, adopted, foster) of reference person
- 05 Other relative of reference person
- 06 Non-relative of reference person
- 07 Guest/visitor/inmate/patient/resident
- 44 Don't Know
- 55 Refused to Answer
- 77 Response Unidentifiable
- 88 Response Outside Scope
- 99 Not Stated

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/relationship/default.htm. Accessed 3 March 2008.

5.7.6 Variable-specific issues

There are no known issues with this variable.

5.7.7 Comparability assessment

| Relationship to reference person: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|--|--------------------------------|---|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Change in Name from occupier (81–91) to reference person (96–06) | Minor | None | None |
| Inclusion of de facto/partner in tick boxes with husband and wife from 1996 on | Minor | Potential undercounting of de facto couples in husband and wife category due to using other instead | None |
| Dividing up partnership response option into same sex and opposite sex options | Minor | No effect at level 1 | None |
| Final Comparability Assessment: <i>Highly comparable between 1996 and 2006 and between 1981, 1986 and 1991, broadly comparable across all 6 census years.</i> | | | |

6. Dwelling variables

6.1 Access to telecommunications

6.1.1 Variable type

This output variable is not derived. It is ascertained from responses to the census question on access to telecommunication systems.

6.1.2 Subject population

The subject population for this variable is all households in private occupied dwellings.

6.1.3 Non-response

The non-response rates for this question are relatively low. Non-response was 3.5 percent in 1996, 4.1 percent in 2001 and 3.9 percent in 2006.

6.1.4 Questions and response options

In 1981, respondents completing the dwelling form were asked to tick a yes/no option on whether they had a phone as part of a question asking about the amenities present in the dwelling. This question was not asked in 1986 or 1991. The 1996 Census question asked respondents ‘Is there a telephone here in this dwelling?’, with instructions to count cellphones that were there all or most of the time, and not to count telephones that were disconnected or broken. Neither of these two instructions was given in 1981. The 1981 Census guide notes stated ‘indicate all amenities within the dwelling, whether or not they are in regular use’. Therefore, broken or disconnected phones may have been included in 1981 data.

For the 2001 and 2006 Censuses the telecommunications question was expanded to include other equipment, with 4 response options provided in 2001:

- Telephone/cellphone
- Fax access
- Internet access
- None of these.

In 2006, telephones/cellphones were divided into separate response options.

While there would have been few cellphones in 1981, the inclusion of these since 1996 may still affect data comparability, as no distinction is made between cellphones and landlines. This may be important if a cellphone has replaced a landline as the sole means of telephone communication within a household. Unlike a landline, a cellphone may not be available for use all the time, as the battery may require charging, or there may be no prepaid calling time left.¹² Another issue is that a landline is more likely to be a resource available for use by all household members, whereas a cellphone may only be available for use by a particular individual.

Broadly speaking then, 1996, 2001 and 2006 data on telecommunications are comparable, but there are some comparability issues when comparing data from these censuses with 1981 data.

¹² ‘Available for use’ means able to be answered by a person, if they are not already on the phone.

6.1.5 Definition and classification

Access to telecommunication systems is the ability of residents in a private dwelling to communicate, via telephone, fax and/or the Internet, with people outside the dwelling, and to use services provided through these media. This requires the machine to be in working order and for there to be a working connection.

This classification is designed to be used for processing data collected in multiple response questions, that is, the three categories ‘Access to a telephone’, ‘Access to a fax machine’ and ‘Access to the Internet’ are not mutually exclusive.

Accessible telephones include those with fixed connections, cordless telephones, and some cellphones. A cellphone is counted as accessible if it is predominantly located in the dwelling when household members are at home. Also included as accessible telephones are those that have been modified with Braille buttons, hearing aid attachments or other devices to assist use by people with disabilities.

Accessible fax or facsimile machines include those which are standalone fax machines, those connected to another machine such as a telephone answering machine or mobile phone, and fax enabled computers. Internet access includes access with or without access to the World Wide Web.

Access to Telecommunication Systems is a flat classification with ten categories.

- 0 No access to telecommunication systems
- 1 Access to a telephone
- 2 Access to a fax machine
- 3 Access to the Internet
- 4 Don't know
- 5 Refused to answer
- 6 Repeated value
- 7 Response unidentifiable
- 8 Response outside scope
- 9 Not stated

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/access-to-telecommunications-systems/default.htm. Accessed 3 March 2008.

6.1.6 Variable-specific issues

Statistics New Zealand notes that there are no quality issues affecting these data. The telephone access question is comparable for 1996–2001, although the scope of the topic changed in each of the previous three censuses. In 1996 only access to a telephone was asked, but in 2001 access to a telephone, a fax and the Internet was asked and in 2006 access to a telephone, a fax, the Internet and a cellphone was asked. In 1996 and 2001, access to a cellphone was included in the access to a telephone category.

Because of the changes to the questionnaire, 1996 and 2001 Census data should not be compared with 2006 Census data on access to telephones and cellphones but is comparable for access to some form of communication.

6.1.7 Comparability assessment

| Telephone access: Available for 1981, 1996 | | | |
|---|---|---|--|
| Access to telecommunications: Available for 2001, 2006 | | | |
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Cellphones were counted in 1996 and 2001, but not in 1981 | Minor, as cellphones weren't as common in 1981 (they were relatively expensive and unlikely to have replaced landlines) it wouldn't matter that they weren't counted. However, if cellphones differ in nature to landlines (and are replacing them) the impact (in 1996 and 2001) may be more major | 1981 – Negligible, 1996 and 2001 not possible to distinguish between cell phone and landline access. This may be important if cell phones, unlike landlines, are not a jointly accessible resource. Some people may be in a dwelling that only has a cell phone which means certain individuals may have no access, or incoming and outgoing access may be restricted (due to cost) | None |
| Change in the concept being measured – In 1981 presence of a phone was measured, in 1996 and 2001 access to a telephone was measured. Thus in 1996 and 2001 respondents were instructed not to count phones that were disconnected or broken but in 1981 some broken or disconnected phones may have been counted | Minor | 1981 data may slightly overstate access to a working telephone | None |
| Cellphone access a separate response option in 2006 | Minor | Cannot analyse at an in-depth level | Use data to show social connectedness only |
| <p>Final Comparability Assessment – Telephone access: 1981 and 1996 variables are broadly comparable.</p> <p>In 2001 and 2006, use the access to telecommunications variable, which is highly comparable with 1996 and broadly comparable with 1981.</p> <p>Final Comparability Assessment – Access to telecommunications: 2001 and 2006 highly comparable for the presence/absence of telecommunication devices cannot be compared to show cellphone compared to landline access.</p> | | | |

6.2 Dwelling type

6.2.1 Variable type

Dwelling type is a categorical variable showing the different types of private and non-private dwellings.

6.2.2 Subject population

All occupied dwellings were included in the subject population.

6.2.3 Non-response

There is no non-response/not stated category for this variable, because all dwellings are classified during processing as either private or non-private, based on the information provided on the dwelling form by the collector and the respondent. If no further information is available about what type of private or non-private dwelling it is, then a dwelling is classified as an ‘occupied private dwelling not further defined’ or as an ‘occupied non-private dwelling not further defined’, whichever is appropriate. These categories were not available in 1996.

6.2.4 Questions and response options

In 1996, dwelling type was determined by the enumerator. In 1981, 1986, 1991, 2001 and 2006, respondents were asked to define their dwelling type, using tick boxes.

1981 had an extensive list of options including:

- Separate house (one household not attached to any other dwelling)
- House or flat attached to shop, offices, hotel or other business premises
- House or flat whose cooking facilities are shared by 2 or more households who otherwise live separately in the house or flat
- House (one household) with 1 or more flats or other private dwellings attached
- Self-contained flat Town house, row house, villa unit
- Bach, crib or hut (not in a work camp)
- Moveable home (e.g. caravan, houseboat)
- Other including temporary or improvised (e.g. shed, tent)

The question had a part B which asked about the number of other houses/flats/apartments that were attached to the dwelling and how many storeys in the building.

This question was simplified in 1986, retaining the response options of separate house; two flats or houses joined together; three or more flats or houses joined together; flat or house attached to a business or shop; bach crib or hut (not in a work camp); caravan, cabin or tent in a motor camp; and other. 1991 gave the same response options but gave yacht as an example of other. The 2001 Census had the same response options but they were all worded slightly differently as shown below:

- A detached house or town house (not joined to any other)
- A house or flat joined to one other house/flat
- A house or flat joined to two or more other houses/flats;
 - with clarification options of: one or two storeys; three or more storeys
- A house or flat joined to a business or shop
- Bach crib or holiday home
- Other, such as yacht, etc.

- In 2006 the dwelling ‘attached to a business’ and ‘bach/crib/holiday home’ options were removed and ‘moveable dwelling, e.g. caravan, boat, tent, etc.’ was brought back in. there was also a separate question asking the number of storeys the dwelling had.

Options for non-private dwellings include:

Hotel, motel or guesthouse

Boarding house or rooming house (1981 and 1986)

Home for the elderly (1981, 1991, 2001 and 2006)

Other e.g. hospital.

6.2.5 Definition and classification

Dwelling type classifies dwellings according to their structure, location and function. The 2006 Statistics New Zealand definition of a dwelling is any building or structure, or part thereof, that is used (or intended to be used) for the purpose of human habitation. It can be of a permanent or temporary nature and includes structures such as houses, motels, hotels, prisons, motor homes, huts and tents. There can be more than one dwelling within a building, for example an apartment building where each separate apartment or unit is considered a dwelling.

However an occupied private dwelling is defined as one that accommodates a person or a group of people. It is not generally available for public use. The main purpose of a private dwelling is as a place of habitation.

Occupied private dwellings include:

- houses, flats and apartments
- flats or houses within a complex
- residences attached to a business or institution
- caravans, cabins and tents
- vehicles
- vessels
- independent self-care units in retirement complexes
- a private dwelling within a non-private dwelling structure or complex
- batches, cribs and holiday homes
- Child, Youth and Family Services (CYFS) family homes
- homestays, farmstays, and bed and breakfasts (B&Bs) with fewer than five boarders, lodgers or guests.

Occupied non-private dwellings are generally available to the public by virtue of employment, study, special care requirement, legal requirement, or recreation. They may be designed to house groups of people who are bound by either a common public objective or a common personal interest, or to provide communal or transitory type accommodation (used for short-term or long-term accommodation).

Dwelling Type is a hierarchical classification with three levels. Level one has 2 categories, level two has 4 categories, and level three, 35. The level one categories are:

1 Private Dwelling

2 Non-Private Dwelling

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/dwelling-type/default.htm. Accessed 3 March 2008.

6.2.6 Variable-specific issues

There are no known issues with this variable.

6.2.7 Comparability assessment

| Dwelling type: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|--|--|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| In 1996 the enumerator rather than the respondent ascertained dwelling type. Statistics New Zealand have noted that the use of different methods in ascertaining dwelling type might affect data comparability | Unknown | Unknown, but potentially may have changed how dwellings were classified | None, but can compare data with other sources to see if it fits within expected pattern (for example, HRNZ figures) (need to do this for 2 or 3 census years to see pattern) |
| In 1981 people living permanently in tents, cabins, or caravans, within a motor camp were not treated as being in a private dwelling, but enumerated as part of the non-private dwelling | Unknown – depends on the number of people living in this situation in 1981, possibly only a small number, however there was a sizeable increase in the number of temporary private dwellings in 1986 | The proportion of temporary dwellings may be understated in 1981 compared with other census years. 1981 data should be compared with caution | None |
| There have been many changes to the grouping together categories at the micro-level, for example, in 1986 although caravan, cabin or tent is a census response option it is not a classification category in the data dictionary. The only temporary dwelling category is 'mobile or temporary dwelling' therefore 'caravan, cabin and tent' responses would have been coded into this classification category | Increases the need for subjective judgements in deciding upon comparable categories | Changes to which category particular types of dwelling would be counted in | Analyse this variable at the highest level of aggregation (that is, temporary versus permanent dwellings) |
| Final Comparability Assessment: 1986, 1991, 2001 and 2006 data are broadly comparable. 1996 data is of limited comparability with other census years. 1981 data on temporary private dwellings is of limited comparability with other census years. | | | |

6.3 Fuel type used to heat dwellings

6.3.1 Variable type

This is not a derived variable. It is a numerical variable ascertained from census responses to the heating of dwelling question.

6.3.2 Subject population

The subject population for this question is private occupied dwellings.

6.3.3 Non-response

Non-response rates are relatively low, and have shown little significant change in the last three censuses; in 1996 the rate was 3.8 percent, in 2001, 4.2 percent, and in 2006, 4.0 percent.

6.3.4 Questions and response options

The wording of these questions and instructions is highly comparable over time. This is a multiple response question, which covers types of heating ever used in the dwelling. In 1981, the wording and response options captured appliance types in addition to the types of fuels used (as in all subsequent census years). In 1986, response options included electricity, gas wood, coke or coal, Oil (including kerosene), other and no means of heating. In 1991 the only change was the removal of the word 'coke'.

In 1996, the 'never use any form of heating in this dwelling' response was shifted to the first option, which may have affected the response rate to this option. Also oil was removed, solar heating was included for the first time and gas was divided into 'mains' and bottled' categories. The 2001 Census was the same as the 1996, but with the qualification that the mains gas was 'at street'. In 2006 the only amendment was to change to 'from street'; everything else was identical.

Guide note instructions relevant to this question only exist for two of the six census years under investigation. In 1996, guide notes instructed respondents not to tick 'solar heating' if they only used sunlight. The lack of previous instructions regarding this may have caused some respondents in previous censuses to tick 'solar heating' or 'other' when they actually used no form of heating, so there may have been some undercounting of those who used no form of heating in these census years.

6.3.5 Definition and classification

In 2001, this was named 'fuel types used to heat dwelling'. Fuel types are defined as 'the type of fuel used to heat an occupied private dwelling. More than one fuel type may be used to heat the dwelling. Fuel type examples are electricity, coal, wood, etc. Insulation is not a fuel type' (Statistics New Zealand 2001). In 1996 and 1991, this variable was referred to as 'means of heating dwelling', and in 1981 and 1986, it was called 'fuels used to heat dwelling'. Across all these censuses, it was categorised as a dwelling-level variable, and there are no pertinent differences in definition.

The criterion used to classify fuel types used in dwellings is the fuel type(s) used to heat space in a dwelling.

Fuel Types Used in Dwellings is a flat classification with 15 categories.

| | |
|----------------------------|-----------------------------------|
| 11 Electricity | 12 Mains Gas |
| 13 Bottled Gas | 14 Wood |
| 15 Coal | 16 Home Heating Oil |
| 17 Solar Power | 18 No Fuels Used in this Dwelling |
| 19 Other Fuel(s) | 44 Don't Know |
| 55 Refused to Answer | 66 Repeated Value |
| 77 Response Unidentifiable | 88 Response Outside Scope |
| 99 Not Stated | |

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/fuel-types-used-in-dwellings. Accessed 3 March 2008.

6.3.6 Variable-specific issues

No pertinent measurement issues regarding this variable are mentioned by Statistics New Zealand. The significance of this variable in terms of wellbeing may be geographically dependent. For example, heating may not be required in certain parts of New Zealand, such as in the far north where temperatures are generally much higher than in the south. Any analysis should always take geographic variables into account.

6.3.7 Comparability assessment

| Heating Fuels Used: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| In 1996 there were instructions not to tick 'solar heating' if they only used sunlight coming in through a window | Minor | Solar heating responses may have been inflated for 2001 relative to 1996 | None |
| Changes in response options – inclusion of solar heating from 1996 on and exclusion of oil | Minor | Reflects new technologies being used and still provides 'other' option so may not have an effect | None |
| Final Comparability Assessment: <i>This variable is highly comparable across the 1981–2006 Censuses.</i> | | | |

6.4 Motor vehicles

6.4.1 Variable type

This output variable is not derived, and is based on census response options to the question 'number of motor vehicles available for use'.

6.4.2 Subject population

The subject population for this variable is all households in private occupied dwellings.

6.4.3 Non-response

The non-response rates for these questions are relatively low. Non-response was 4.4 percent in 1996, 4.2 percent in 2001 and 4.1 percent in 2006.

6.4.4 Questions and response options

The 1981 Census question and response options were markedly different from all subsequent Censuses – the question asked about motor vehicles (including motorcycles), caravans and boats. From 1986 to 2006, the concept of the question changed to only look at motor vehicles available for private use (excluding motorcycles for all years; scooters for 1986 to 2001, and tractors for 1986).

In 1981, there were separate categories for motorcycles or motor scooters, bicycles or power cycles, caravans and camper-trailers, and boats. For comparability purposes, these categories should be excluded when doing time series analysis.

A major issue arises over whether data from the 1981 response category 'number of cars, station-wagons or vans, owned by company business, firm' is comparable with data from

subsequent census years. The 1981 question did stipulate that these vehicles needed to be ‘in the care of household members and available for use’; however, subsequent censuses have emphasised that vehicles should be available for private use. The 1996 guide notes stated that ‘if you are allowed to drive a vehicle to and from work, but you are not allowed to use it for any other private use do not count that vehicle’.¹³ From this, it can be inferred that the concept behind ‘private use’ is use of a vehicle in a general way, rather than use of a vehicle in a more limited way (which includes travelling to and from work). For the comparable classifications then, personal use is deemed to exclude travelling to and from work. The 1981 category ‘BCARS’ (business cars) is therefore excluded from the comparable classifications with other census years. Exclusion of this category may, however, result in a lower count of motor vehicles for 1981 in comparison with other census years.

In 1981, there were no instructions as to whether vehicles temporarily under repair should be included or not. In the four subsequent census years, it was specified in the guide notes to include vehicles temporarily under repair, although the 1996 and 2001 guide notes specified that respondents should not count vehicles that were likely to be off the road for a long time. There were no instructions about this issue in 2006.

In 1996, 2001 and 2006, respondents were instructed to only count vehicles that belonged to ‘people who live here’, so vehicles that belonged to visitors were excluded. In previous censuses, all vehicles in the care of anyone in the dwelling on census night were included. This may mean that in 1981, 1986 and 1991, access to motor vehicles (and the number of vehicles a household has access to) is overstated relative to 1996, 2001 and 2006 data.

In 1981, it stated on the census form to include borrowed vehicles, and in 1986 and 1991 similar instructions were contained in the guide notes. However, in 1996, 2001 and 2006, instructions on the census form stated to exclude vehicles occasionally borrowed from another household. Again, this may mean that in 1981, 1986 and 1991, access to motor vehicles (and the number of vehicles a household has access to) is overstated relative to 1996, 2001 and 2006 data.

6.4.5 Definition and classification

The number of motor vehicles is the number that are mechanically operational, but not necessarily licensed or having a current warrant of fitness, and are available for private use by the usual residents of private dwellings.

Motor vehicles include:

- cars, station-wagons, vans, trucks, four-wheel drive vehicles, and other vehicles used on public roads,
- business vehicles available for private use by persons in the dwelling,
- vehicles hired or leased, and
- vehicles temporarily under repair.

They do not include:

- motorbikes or scooters,
- vehicles used only for business,
- farm vehicles not licensed for road use,
- vehicles that belong to visitors, and
- vehicles occasionally borrowed from another household.

¹³ This was not specified in any of the other censuses, which relied on the respondents’ subjective interpretations of ‘available for private use’.

The criterion used to classify a private dwelling is the number of motor vehicles, in working order, to which the dwelling residents have access. Number of Motor Vehicles is a flat classification with nine categories.

- | | |
|---------------------------|--------------------------------|
| 0 No Motor Vehicle | 1 One Motor Vehicle |
| 2 Two Motor Vehicles | 3 Three or more Motor Vehicles |
| 4 Don't Know | 5 Refused to Answer |
| 7 Response Unidentifiable | 8 Response Outside Scope |
| 9 Not Stated | |

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/number-of-motor-vehicles. Accessed 3 March 2008.

6.4.6 Variable-specific issues

There are no known issues with this variable.

6.4.7 Comparability assessment

| Number of motor vehicles: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|--|--|---|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Changes in the question asked (for example, separate response options for different types of vehicles and for cars owned by the business) | This makes it difficult to create classification categories for 1981 that are comparable with subsequent census years, especially whether to include business cars | If the category 'BCARS' (business cars) is not included in comparable classifications but some of these cars are available for private use, this may mean 1981 data undercounts motor vehicles in comparison to subsequent census years | None |
| In 1996, 2001 and 2006 only vehicles which belonged to people who lived in the dwelling were included | Major | 1996, 2001 and 2006 data is a more accurate measure. 1981, 1986 and 1991 data may overstate the number of motor vehicles relative to subsequent censuses | None |
| In all years except 1981 and 2006 it was specified to include motor vehicles temporarily under repair | Minor – in the guide notes only, respondents may have tended to include these anyway | 1981 and 2006 data may undercount the presence and number of motor vehicles relative to other census years | None |
| In 1996 there were guide note instructions re what constituted available for private use. These specified that work vehicles which were available for getting to and from work but no other private use should not be included | Minor – this was noted in the guide notes only, and previously instructions may have been subjectively interpreted to mean this anyway | May have led to a slightly fewer motor vehicle counts in 1996 in comparison with other census years | None |
| Final Comparability Assessment: 1996, 2001 and 2006 variables are highly comparable, and these are both broadly comparable with 1991 and 1986 variables. 1981 is of limited comparability. | | | |

6.5 Number of bedrooms

6.5.1 Variable type

This variable is ascertained from coding responses to census questions on ‘number of bedrooms’.

6.5.2 Subject population

The subject population for this variable is private occupied dwellings.

6.5.3 Non-response

Non-response rates for this question are relatively low. The rate was 3.4 percent in 1996 then rose to 4.2 percent in 2001 and 4.4 percent in 2006.

6.5.4 Questions and response options

The wording of these questions and instructions is highly comparable over time. For each of the censuses from 1981, respondents were instructed to include spare rooms, rooms furnished as bedrooms, and caravans used as bedrooms in their bedroom count. They were also instructed to include sleepouts used as bedrooms for 1981–1996, but in 2001 and 2006 sleepouts only had to be furnished as bedrooms (rather than used) to be included in the bedroom count. Respondents whose dwelling comprised of only one room, which was used as a bedroom, were instructed to count this as a bedroom in the 1986–2006 Census guide notes. This may have resulted in a slight undercounting of bedrooms in 1981 when compared with subsequent census years. However, there is no classification category for ‘0’ bedrooms in the 1981 data dictionary. It is possible therefore that an edit was made by Statistics New Zealand that resulted in those respondents who stated there were ‘0’ bedrooms being put in the ‘1’ bedroom category. In this instance, the difference in instructions would therefore have had no effect on the number of bedrooms counted.

6.5.5 Definition and classification

A bedroom is defined as a room in a dwelling that is used, or intended, for sleeping in. The following rules apply:

A room is considered to be a bedroom if it is furnished as a bedroom even if it is not being used at the time of data collection. A room furnished as a bedroom should include a sleeping facility such as a bed or mattress, and could include items such as a dresser and chest of drawers.

Room equivalents should not be counted for one-roomed dwellings (i.e. bed-sitting room). A one-roomed dwelling should be counted as having one bedroom and one total room.

A sleepout adjacent to a private dwelling should be counted as a bedroom if it is used and/or furnished as a bedroom and is occupied by members of the household that occupies the dwelling.

A caravan adjacent to a private dwelling should be counted as a bedroom only if it is used as a bedroom and is occupied by members of the household that occupy the dwelling.

A room (such as a living room) that is used as a bedroom at night, either short-term or long-term, should not be counted as a bedroom unless the only bedroom facilities in the dwelling are in that room. If the only bedroom facilities in a dwelling are in a room that is also used for another purpose, (e.g. in a living room), this room should be counted as a bedroom.

This variable definition contained no significant differences between 1996 and 2001,¹⁴ but there were differences in the 1981–1991 definitions. For these census years, bedrooms were defined by their use, rather than their furnishing. In 1991 for example, where ‘bedrooms’ were a subcategory under the ‘number of rooms’ category, bedrooms were defined as including spare bedrooms or caravans or sleepouts used only for sleeping. This definition is consistent with the 1986 and 1981 definitions, which were contained under the ‘bedroom’ definition. On the basis of variable definition documentation then, it can be surmised that 1996 data are comparable with 2001 and 2006 data, and that 1981, 1986 and 1991 data are comparable with each other.

However, for the census wording itself, some of these intercensal differences are erased. For example, instructions to respondents stated to include spare rooms furnished as bedrooms in their bedroom count – only caravans and sleepouts needed to be used as bedrooms to be counted. This would have mitigated the magnitude of the effective difference in bedroom counts, and meant that relative to 1996, 2001 and 2006 data, there may have been a small amount of undercounting of bedrooms in 1981, 1986 and 1991.

The criterion used to place a dwelling into the classification is the number of bedrooms stated by the respondent.

Number of Bedrooms is a flat classification with nineteen categories.

| | |
|----------------------------|------------------------------|
| 01 One Bedroom | 02 Two Bedrooms |
| 03 Three Bedrooms | 04 Four Bedrooms |
| 05 Five Bedrooms | 06 Six Bedrooms |
| 07 Seven Bedrooms | 08 Eight Bedrooms |
| 09 Nine Bedrooms | 10 Ten Bedrooms |
| 11 Eleven Bedrooms | 12 Twelve Bedrooms |
| 13 Thirteen Bedrooms | 14 Fourteen or More Bedrooms |
| 44 Don’t Know | 55 Refused to Answer |
| 77 Response Unidentifiable | 88 Response Outside Scope |
| 99 Not Stated | |

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/number-of-rooms-bedrooms. Accessed 3 March 2008.

6.5.6 Variable-specific issues

Statistics New Zealand notes that 2006 data are comparable with 2001 and 1996 data, but that ‘many edits were applied to these variables in 1996 and care should be taken’.

¹⁴ The sleepout and caravan criteria are slightly different, but this may be regarded as minor.

6.5.7 Comparability assessment

| Number of bedrooms: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--|---|---|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Difference in instructions re sleepouts. In 1981, 1986, 1991 and 1996 sleepouts also had to be used as a bedroom to be included in the bedroom count, but in 2001 and 2006 sleepouts only had to be furnished as a bedroom to be included | Minor – this probably affects only a small proportion of respondents | Prior to 2001 the number of bedrooms may have been slightly understated – as unused sleepouts were not included as spare bedrooms | None |
| In all years except 1981 respondents were instructed to count one room (if this was the only room) as a bedroom | No category for zero on the 1981 classification. Any responses of zero have been put into the ‘1’ category | None | Aggregate the zero bedrooms category in with the ‘1’ category for subsequent census years as required (1981 and 1986) |
| Final Comparability Assessment: <i>Highly comparable across 1981–2006.</i> | | | |

6.6 Number of heating fuels

6.6.1 Variable type

Number of heating fuels is a numerical variable.

6.6.2 Subject population

All private occupied dwellings make up the subject population for this variable.

6.6.3 Non-response

The 1996 Census recorded a 3.8 percent non–response rate; this rose to 4.2 percent in 2001 then fell again to four percent in 2006.

6.6.4 Questions and response options

The wording of these questions and instructions is highly comparable over time. This is a multiple response question, which covers types of heating ever used in the dwelling. In 1981, the wording and response options captured appliance types in addition to the types of fuels used, but in subsequent census years only the type was recorded, and included ‘coke and coal’ and ‘wood’ as response options. These were separated into different categories in later censuses.

In 1996, solar heating was added as a response option and coal was removed, but it returned in 2001 and 2006. Guide note instructions relevant to this question only exist for two of the six census years under investigation. In 1996, guide notes instructed respondents not to tick ‘solar heating’ if they only used sunlight. The lack of instructions regarding this may have caused some respondents to tick ‘solar heating’ or ‘other’ when they actually used no form of heating, so there may have been some undercounting of those who used no form of heating, but solar heating was only a specified response option from 1996. The only other instruction was in 1991, asking respondents not to state the type of appliance used for heating.

6.6.5 Definition and classification

The 2001 definition for fuel types used to heat a dwelling states that the variable measures the type of fuel used to heat an occupied private dwelling. More than one fuel type may be used to heat a dwelling, and examples include electricity, coal, wood, piped and bottled gas and solar heating.

The number of heating fuels classification used for comparability was:

- No heating fuels used
- 1 heating fuel used
- 2 heating fuels used
- ::
- ::
- 19 heating fuels used
- 20 or more heating fuels used.

6.6.6 Variable-specific issues

There are no known issues with this variable at this time.

6.6.7 Comparability assessment

| Heating: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|--------------------------------|---|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| In 1996 there were instructions not to tick 'solar heating' if they only used sunlight coming in through a window | Minor | Solar heating responses may have been inflated for other 2001 and 2006 relative to 1996 | None |
| Final Comparability Assessment: <i>Highly comparable across 1981–2006.</i> | | | |

6.7 Sector of landlord

6.7.1 Variable type

This variable is output from responses to the census question about whom property is rented from, as outlined for each census in table 6.1. In 2001 this variable was called sector of landlord, and it was a household-level variable. In 1996 and 2006 it was called sector of landlord, and was a dwelling-level variable. In 1981, 1986 and 1991, the variable was named category of landlord, and was a dwelling-level variable.

6.7.2 Subject population

The subject population for this variable is households in rented private occupied dwellings.

6.7.3 Non-response

The 2006 non-response rate was 1.1 percent, but 4.5 percent answered 'don't know' to the question. In 2001 the non-response rate was 1.8 percent and 4.1 percent answered 'don't know'.

6.7.4 Questions and response options

In the 1981 Census, information on who owned the dwelling was obtained from part c of Question 10, which asked ‘From whom is this dwelling rented or leased?’. Respondents were provided with five tick box categories: ‘Housing Corporation’, ‘Local Authority’, ‘Other department, corporation, or agency of government’, ‘Individual person, company, partnership, solicitor, land agency’, and ‘Other’.

The same format was used for the other censuses under study but changes were made to the tick boxes available. ‘Housing Corporation’ became ‘Housing New Zealand’ in 1996 but was available in every census, as was some form of ‘other government agency’ and ‘local authority’. In 1986, the ‘other’ category was removed but ‘Individual person, company, partnership, solicitor, real estate agency’ remained. In 1991, ‘Individual person’ was separated into its own category from business organisations, and ‘other’ was still unavailable.

In 1996, ‘private trust’ was added to the ‘person’ category and an option of ‘don’t know’ was also added. The ‘don’t know’ option was included again in 2001 and 2006, but ‘person’ and ‘private trust’ were made into two separate categories in 2001 and then re-amalgamated into one in 2006.

There were no help note guidelines for this question in any census except for 1996. This year, respondents were advised that if they rented through an agent and did not know the nature of their owner they should tick the ‘don’t know’ box.

6.7.5 Definition and classification

In 2001, sector of landlord was defined as ‘the institutional unit to which the owners of rented or leased private dwellings belong. Landlord refers to the type of organisation or person from whom households rent or lease private occupied dwellings’ (Statistics New Zealand 2001). There were no substantive differences in the definitions of sector of landlord for 1981–2006.

The comparable classification categories are:

- Private person, business/real estate agency
- Housing corporation
- Other government department
- Local authority
- Residual categories.

6.7.6 Variable-specific issues

Statistics New Zealand notes that in 2001, sector of landlord data were available for all three of the rented tenure categories, whereas in 1991 and 1996 the data were only available for those respondents that indicated they were paying rent. Therefore, for 2001 data to be comparable with data from previous years, they need to be restricted by the tenure of household category, and to only include ‘dwelling not owned by usual resident(s), who make rent payments’.

6.7.7 Comparability assessment

| Sector of landlord: Available for 1981, 2001, 2006 | | | |
|---|---|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Limited variable availability | Major | Lack of consistent data availability | In 1986, 1991 and 1996 the nature of occupancy variable can be used to similar information to the sector of landlord variable |
| In 2001 data are available for all three 'not owned' tenure categories. In 1996 and 1991 the data were restricted to one tenure category – where the usual residents are making rental payments | Minor – this should not involve that many responses | In 2001 there will be increased data relative to other years | 2001 data need to be restricted by tenure of household category to make data comparable with previous years (using the nature of occupancy variable) |
| In 2001, private trust, person and business were three separate response options | Minor | More comprehensive data in 2001 but unable to compare at the same level with other years | 2001 data need to be amalgamated into one response option to compare with other census years |
| Final Comparability Assessment: 1981, 2001 and 2006 data are highly comparable. In 1986, 1991 and 1996 use the nature of occupancy variable to obtain broadly comparable information. | | | |

6.8 Tenure of household

6.8.1 Variable type

Tenure of household is a variable derived from the combination of census questions outlined in table 6.1.

Table 6.1 – How tenure of household was derived

| Census question | Years asked | | | | | |
|------------------------|--------------------|-------------|-------------|-------------|-------------|-----------------|
| | 1981 | 1986 | 1991 | 1996 | 2001 | 2006 |
| Ownership of dwelling | *q9 | q4 | q4 | q4 | q9 | q7, q9+ |
| Mortgage payments | q9 | q4 | q4 | q9 | q8 | q8, q13+ |
| Rent indicator | q9 | q4 | q4 | q7 | q11 | q11 |
| Rent (amount) | q10 | q5 | q5 | q8 | q12 | q12 |

* Information in bold indicates Statistics New Zealand output variables available for these years. Other information (1986 and 1991) indicates how this variable could be reconstructed for these years. However, for 1986 and 1991 the nature of occupancy variable will be used to provide comparable information.

+ In 2006 dwellings owned by a family trusts were distinguished from those owned by a household member.

6.8.2 Subject population

The subject population for this question is households in private occupied dwellings.

6.8.3 Non-response

Non-response rates have been relatively low. The non-response rate in 2006 was 4.7 percent, up from 4.0 percent in 1996 and a low of 3.7 percent in 2001. In 2001, an extra residual category was added – ‘unidentifiable’, which contained an additional 1 percent of households.

6.8.4 Questions and response options

The 1981 Census question asked for tenure of dwelling and provided six response options: ‘Owned with mortgage’, ‘Owned without mortgage’, ‘rented or leased, but not from employer of tenant’, ‘Rented or leased from employer of tenant’, ‘Provided free, but not with job’, and ‘Provided free with job’.

In 1986, the question asked ‘Is this dwelling’, followed by four response options: ‘Owned with a mortgage’, ‘Owned without a mortgage’, ‘Provided rent-free’, and ‘Rented or leased’. For the 1991 Census, the question wording was changed again to read ‘Do the occupants’, followed by four response options: ‘Own this dwelling with a mortgage’, ‘Own this dwelling without a mortgage’, ‘Occupy this dwelling rent free’, and ‘Rent or lease this dwelling’.

The question was changed again for the 1996 Census, asking ‘Do you, or anyone who lives here, own this dwelling (even if it is with a mortgage, or only partly owned)?’. If the respondent answered ‘Yes’, they were directed to a question that asked them whether anyone who lived in the dwelling made mortgage payments for it. If they answered ‘No’, they were directed to a question that asked who the owner was. A similar question and format were used for the 2001 Census.

In 2006, the initial question related to tenure was split, firstly asking if the dwelling was held in a family trust. This question was also used as a filter; then respondents were asked the same question as in 2001 – ‘Do you or anyone else who lives here own or partly own this dwelling (with or without a mortgage)?’.

In some cases, a dwelling may be owned by one of the household members and rent may be paid by other household members to the owner, and respondents may be unsure how to answer this question, with more than one response representing their situation. In 1986, census wording may have exacerbated this uncertainty, as it only inquired whether the dwelling was owned, not whether the dwelling was owned by any of the household members. Therefore, people who rented a dwelling may potentially have ticked that the dwelling was owned (albeit not by them). There was also potential for conflicting responses between the different housing questions. In 1991, 1996, 2001 and 2006, the questionnaire was structured in such a way that if anyone in the household owned the dwelling, they were directed not to answer the questions about rental amount. However, in 1981 and 1986, the forms were not constructed in this way, and so multiple responses may have been received to the ownership questions (for example, the occupants own the property and the occupants rent the property).

Different instructions for regarding caravans under hire purchase

In 1981, 2001 and 2006, there were no instructions in the guide notes to tick ‘Yes’ to ownership of dwelling if that dwelling was a caravan under hire purchase, whereas there were for 1986, 1991 and 1996. As caravans do not make up a large proportion of dwellings, the impact of this change is likely to have been very small.

Different instructions regarding part ownership

In 1991, 1996, 2001 and 2006, instructions on the census form noted to tick ‘Yes’ to ownership if any of the household members partly owned the dwelling. This may have resulted in a slight increase in ownership, relative to 1981 and 1986.

Different instructions for dwellings owned by private trust

In 2001, help note instructions stated that those who lived in a dwelling owned by a private trust should tick ‘No’ to the ownership question. This had not been explicitly stated in any of the previous censuses (1981–1996) and may have contributed towards a decline in ownership figures in 2001, particularly if private trust ownership of dwellings is becoming more prominent. This was obviously considered by Statistics New Zealand and taken into account for the 2006 Census, where there was a separate question about family trust ownership of dwellings.

6.8.5 Definition and classification

Tenure of household is a variable that refers to the nature of occupancy of a private household in a dwelling, at the time of the survey. Tenure of household seeks to ascertain if the household rents or owns the dwelling and whether payment is made by the household for that right. It does not refer to the tenure of the land on which the dwelling is situated.

The tenure of household variable is classified according to the ownership of the dwelling, at the highest level. At the next level, the tenure of household variable is classified according to whether payment is made by the usual resident(s) for the right to occupy the dwelling.

Tenure of Household is a hierarchical classification with two levels. In 2006 level one had five categories while level two had twelve categories. The level one categories are:

- 1 Dwelling Owned or Partly Owned by Usual Resident(s)
- 2 Dwelling Not Owned by Usual Resident(s)
- 3 Dwelling Held in a Family trust by usual resident(s)
- 7 Response Unidentifiable
- 9 Not Stated

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/tenure-of-household. Accessed 4 March 2008.

6.8.6 Variable-specific issues

Statistics New Zealand only rates the quality of this variable (between 1996 and 2001) as fair, due to remaining inconsistencies in the data. In 2001, there may have been internally inconsistent responses to the mortgage and ownership questions, due to the order in which the questions were asked. These inconsistencies were not subject to as many edits as in previous years, and when the tenure of household variable was derived from these questions, the quality of the data may have been affected.

There are also significant issues affecting the comparability of the 2006 data with earlier census data, because of the explicit identification of home ownership through family trusts in 2006 that led to three new categories of classification:

- ‘Dwelling held in a family trust by usual resident(s), mortgage arrangements not further defined’
- ‘Dwelling held in a family trust by usual resident(s), who make mortgage payments’
- ‘Dwelling held in a family trust by usual resident(s), who do not make mortgage payments’.

Dwellings in a family trust were treated as not owned in 2001. The 2001 help notes instructed respondents to mark ‘No’ to the ownership of dwelling question if their dwelling was in a family trust. However, respondents who did not read the help notes may have answered ‘Yes’, so it is likely that for 2001 some households whose dwelling was in a family trust were

included in the ‘dwelling owned or partly owned...’ categories rather than the ‘dwelling not owned...’ categories.

In 2001, the variable was renamed tenure of household, from tenure of dwelling, and visitor-only dwellings were excluded from the subject population. In order to produce comparable figures for previous census years, Statistics New Zealand suggests that the tenure variable should be restricted to households only (i.e. the analysis of pre-2001 data needs to be run with visitor-only dwellings excluded).

Availability of individual-level data

Tenure of household data only state if any of the household members own the dwelling, not which particular individuals own dwellings. Individual-level data on ownership, called ‘tenure holder’, are only available for 2001 and 2006.

Issues with the derivation process

As both tenure and nature of occupancy are derived variables, there may be limitations in the data caused by missing responses to one or more of the questions used to derive the variable.

6.8.7 Comparability assessment

The 1981, 1996 and 2001 variables are broadly comparable. For 1986 and 1991, the nature of occupancy variable, which provides broadly comparable information, should be used.

| Tenure: Available for 1981, 1996, 2001, 2006 | | | |
|---|--|--|---|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| Limited variable availability | Major | Limited data availability | For 1986 and 1991 use the nature of occupancy variable which provides similar information to the tenure of household variable |
| 2001 – change in the classification, tenure of household, previously tenure of dwelling | Minor | No tenure information for visitor only dwellings | For 1981–1996 restrict analysis of the tenure of dwelling variable to households only |
| Statistics New Zealand rate the quality of this variable as only fair in 2001, due to inconsistencies in the data (for example, between mortgage and ownership questions) | Minor | 2001 data may potentially be less reliable | None |
| In 1986 the census question referred to whether the dwelling was owned, rather than if anyone within the household owned the dwelling | Minor – there is a ‘rented’ response option contained in the same question | 1986 data may be a slightly higher ownership level relative to other census years, but probably the effect is negligible | None |

| Tenure: Available for 1981, 1996, 2001, 2006 | | | |
|--|--|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| In 1986, 1991 and 1996 there were instructions to tick 'yes' to ownership if dwelling was a caravan they were purchasing through hire purchase. No similar instructions in 1981 and 2001 | Minor – instructions in guide notes only, percentage of households affected by this would have been very low | May be a slight increase in the percentage owning their dwellings in 1986, 1991 and 1996 relative to other census years, but probably effect was negligible | None |
| In 1996 and 2001 instructions on the census form state to tick 'yes' to ownership if anyone in the household partly owned the dwelling. No such instructions prior to 1996 | Minor – although previous censuses did not specifically instruct respondents to tick 'yes' if dwelling partly owned by household, people probably did anyway | May have caused a slight undercount in the number of respondents owning their dwelling in the 1981, 1986 and 1991 Censuses | None |
| In 2001 help note instructions noted that those who lived in a dwelling owned by a private trust should tick no to the ownership question | Unknown, possibly minor – instructions in help notes only | The 'ownership' category of tenure may be understated in 2001 relative to previous census years | None, but can compare data with other sources to see if it fits within expected pattern (for example, HRNZ figures) (need to do this for 2 or 3 census years to see pattern) |
| New categories introduced in 2006 for Family Trusts | Major | Categories do not match with previous years categories, 2001 households with trusts did not own their own homes, previous years they would have been included as owning own home | Comparisons of 2006 with previous census data could be made by aggregating the three 'dwelling owned or partly owned by usual residents...' categories together with the three 'dwelling held in a family trust by usual residents...' categories for the 2006 data. However, this will still not provide an exact time series comparison, because of the different treatment of dwellings held in a family trust in the 2001 Census |
| Final Comparability Assessment: 1986, 1991, and 2001 data are broadly comparable. 1996 and 2006 data are of limited comparability with other census years. 1981 data on temporary private dwellings are of limited comparability with other census years. | | | |

6.9 Weekly rent paid by household

6.9.1 Variable type

This variable is obtained from census responses to the question regarding rent amount.

6.9.2 Subject population

The subject population for this variable are households in rented private occupied dwellings (ascertained from the tenure, or nature of occupancy variable).

6.9.3 Non-response

The non-response rate for this variable was 3.2 percent in 1996 and 4.3 percent in 2001, then fell to 2.7 percent in 2006.

6.9.4 Questions and response options

The rental amount question is reasonably comparable across time. In the 1981, 1986 and 1991 Censuses, respondents were asked to state their total weekly rent, and in 1996, 2001 and 2006, respondents stated their total rent and their rental period (for example, a week, fortnight, month) so that, if required, Statistics New Zealand could work out the weekly rent equivalent.

In 1981 and 1986, the census question inquired whether rental amount payments were made for a furnished or unfurnished dwelling, but this question was not asked subsequently. For the 1981 and 1986 Censuses, the definition of furnished dwellings included partly furnished dwellings.

In 1981, 1986 and 1991, instructions to the respondent stipulated that the weekly rent amount should only be the amount paid for the living quarters, and should not include any rent or lease payments made for an attached farm, business or shop. This was not stipulated in 1996, 2001 or 2006 (although ‘Household’ was printed in bold to make it more obvious), and may have resulted in some respondents putting an increased amount of weekly rent paid in comparison to the previous census years.

6.9.5 Definition and classification

Rent paid by households is the total weekly monetary amount spent by the household on obtaining shelter in a private dwelling. Ideally the weekly rent paid should exclude payments for the use of furniture and utilities such as electricity, gas and water and for the provision of special services like washing, cooking, etc.

The criterion used to classify the statistical unit, weekly rent paid by households, is dollar value. Weekly Rent Paid by Households is a flat classification with 9,006 categories.

0000 No Rent Paid

0001 \$1 Weekly Rent Paid

0002 \$2 Weekly Rent Paid

::

8999 \$8999 Weekly Rent Paid

9000 \$9000 Weekly Rent Paid

9444 Don't Know

9555 Refused to Answer

9777 Response Unidentifiable

9888 Response Outside Scope

9999 Not Stated

Source: www.stats.govt.nz/statistical-methods/classifications-and-related-statistical-standards/weekly-rent-paid-by-households. Accessed 4 March 2008.

6.9.6 Variable-specific issues

Statistics New Zealand notes in their statistical standards that, ideally, the measurement of weekly rent paid should exclude payments made for the use of furniture and utilities.¹⁵

¹⁵ For example, sometimes people's rent includes power.

However, they also note that it is difficult to gain accurate information about this from the census. Tenants would generally not know what portion of their rent is for furniture or other utilities, so census information on the amount of weekly rent paid makes no distinction among rent paid for use of furniture, utilities, and use of the dwelling itself.¹⁶

Statistics New Zealand notes that there are some internal inconsistencies in the data. Some respondents who are in the tenure of household category ‘dwelling not owned by usual residents, who do not make rent payments’ still had a rent amount specified. There was an edit to remove these cases in 1996, but no similar edit in 2001. Therefore, the number of responses to the rental amount question may be greater, although it is difficult to ascertain what impact this may have in measuring rental amounts.

There is a discrepancy between Housing New Zealand data and census data with an undercount of approximately 25 percent in 2006 and 15 percent in 2001. Statistics New Zealand accounts for most of this undercount as due to respondent error, although some is due to the different time periods covered.

6.9.7 Comparability assessment

| Weekly rent: Available for 1981, 1986, 1991, 1996, 2001, 2006 | | | |
|---|---|--|--|
| Factors/changes that may impact on comparability | Impact on comparability | Effect on data | Actions to increase comparability |
| In 2001 – response inconsistency. Some households in the tenure of household category ‘dwelling not owned by usual residents, who do not make rent payments’ still had a rent amount specified. There was an edit to remove such cases in 1996, but no similar edit in 2001 | Minor – not expected to apply to many respondents | 2001 data may potentially be less reliable | For 2001, restrict the analysis to households in the ‘make rent payments’ category |
| In 1981 and 1986 the rent amount question inquired whether rental payments were made for furnished or unfurnished dwellings | Minor | Lack of consistent data availability | Aggregate the furnished and unfurnished dwelling categories to make data comparable with other census years |
| In 1986 and 1991 instructions stipulated that the weekly rent amount should be the amount paid for the living quarters only, and should not include any rent or lease payments made for an attached farm, business or shop. This was not stipulated in 1981, 1996, 2001 or 2006 | Minor, these instructions were contained in the guide notes only, and probably only affect a small proportion of respondents. In other census years this may have been implicit in the whole series of questions about the dwelling and dwelling type | Little effect on the data – respondents unlikely to include payments for attached farm, business or shop. Possibly 1986 and 1991 rental amounts may be slightly artificially inflated compared with other census years | None, but can compare data with other sources to see if it fits within expected pattern (need to do this for two or three census years to see pattern) |
| Final Comparability Assessment: <i>Highly comparable across 1981–2006.</i> | | | |

¹⁶ In 1981 and 1986, there was a separate variable (furnishing) that detailed whether a dwelling was furnished or not, but this still cannot tell us what proportion of the rent pays for the furnishing.

7. Appendices

7.1 Rebased variables

This variable reclassifies 1981 household composition data according to 1991 definitions and classifications:

usual_household_comp

labour_force_status91

7.2 Variables generally not released by Statistics New Zealand for external use

| Variable description | Years | Reason for non-release |
|----------------------|-------|--|
| Family type | 1991 | Quality issues with the data |
| Living Arrangements | All | Data not edited and therefore inconsistent with other family/household variables |
| Date of Birth | All | Data inconsistent with age which is imputed |

7.3 Variables available from Statistics New Zealand data dictionaries

* Listed in Variable Names and Descriptions but full description not given

+ Refers to the section of the Data Dictionary that the variable is from, that is, Dwelling, Family, Personal, Household, Absentees or Geographic.

7.3.1 Socio-demographic variables

| + | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|-------------------------------|-----------------|---|------------------|------------------|------------------|------------------|------------------|------------------|
| Age | | | | | | | | |
| P | Age | Age | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Arrival in New Zealand | | | | | | | | |
| P | DUR | Duration of Residence in New Zealand | ✓ | | | | | |
| P | DUR | Duration of Residence in New Zealand | | ✓ | | | | |
| P | YRINNZ | Arrival in NZ – Completed Years Since Arrival | | | | ✓ | | |
| P | | Years since arrival | | | | | ✓ | |
| P | | Years since arrival | | | | | | ✓ |
| P | ARRYR | Arrival in NZ – Year of | | | | ✓ | | |
| P | | Year of Arrival | | | | | ✓ | |
| P | | Year of Arrival | | | | | | ✓ |
| Country of Birth | | | | | | | | |
| P | BTHPL | Country of Birth | ✓ | | | | | |
| P | BTHPL | Birthplace | | ✓ | | | | |
| P | BTHPL | Birthplace | | | ✓ | | | |
| P | BPLACE | Birthplace Country classification 1995 (major, minor, unit level, integrated) | | | | ✓ | | |
| P | | Birthplace Country classification – Level 1, 2, 4 | | | | | ✓ | |
| P | | Birthplace Country classification – Level 1, 2, 3 | | | | | | ✓ |
| Date of birth | | | | | | | | |
| P | BTHDT | Date of Birth | ✓ | | | | | |
| P | BTHDT | Date of Birth (day, month, year) | | ✓ | | | | |
| P | DOB | Date of Birth | | | ✓ | | | |
| P | BDAY | Day of birth | | | | ✓ | | |
| P | BMONTH | Month of Birth | | | | ✓ | | |
| P | BYEAR | Year of Birth | | | | ✓ | | |
| P | | Day of birth | | | | | ✓ | |
| P | | Month of Birth | | | | | ✓ | |
| P | | Year of Birth | | | | | ✓ | |
| P | | Day of birth | | | | | | ✓ |
| P | | Month of Birth | | | | | | ✓ |
| P | | Year of Birth | | | | | | ✓ |
| Ethnicity | | | | | | | | |
| P | ETHOR | Ethnic Origin | ✓ | | | | | |
| P | ETHOR | Ethnic Origin | | ✓ | | | | |
| P | ETHGP | Ethnic group | | | ✓ | | | |
| P | ETHNIC1 /2/3 | Ethnic Group Full List of Individual 5 Digit Codes (multiple response question) | | | | ✓ | | |
| P | | Ethnic Groups | | | | | ✓ | |
| P | | Ethnicity – grouped total responses | | | | | | ✓ |
| P | | Ethnic Group (Total Responses) | | | | | | ✓ |
| Māori indicator | | | | | | | | |
| P | MEGI | Māori ethnic group indicator | | | ✓ | | | |
| P | MIND | Māori Indicator | | | | ✓ | | |

7.3.1 Socio-demographic variables

| + | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|---|---------|--|------------------|------------------|------------------|------------------|------------------|------------------|
| P | | Māori Ethnic Group Indicator | | | | | ✓ | |
| P | | Māori Ethnic Group Indicator | | | | | | ✓ |
| Polynesian | | | | | | | | |
| P | POLY | Polynesian origin | | ✓ | | | | |
| P | PIDO | Pacific Island Ethnic Group | | | ✓ | | | |
| P | PIND | Pacific Island Indicator | | | | ✓ | | |
| P | | Pacific Island Ethnic Group Indicator | | | | | ✓ | |
| P | | Pacific Peoples Ethnic Group Indicator | | | | | | ✓ |
| F | PIDPR | Pacific Island Ind of parent | | | ✓ | | | |
| Other | | | | | | | | |
| P | AIND | Asian Indicator | | | | ✓ | | |
| P | | Asian Ethnic Group Indicator | | | | | ✓ | |
| P | | Asian Ethnic Group Indicator | | | | | | ✓ |
| P | | European Ethnic Group Indicator | | | | | ✓ | |
| P | | European Ethnic Group Indicator | | | | | | ✓ |
| P | | Middle Eastern/Latin American African Ethnic Group Indicator | | | | | | ✓ |
| P | | Other Ethnicity Ethnic Group Indicator | | | | | | ✓ |
| Ethnic Groups | | | | | | | | |
| P | E1OR | First Ethnic Origin | | ✓ | | | | |
| P | E2OR | Second Ethnic Origin | | ✓ | | | | |
| P | E3OR | Third Ethnic Origin | | ✓ | | | | |
| P | ETHGA | First ethnic group | | | ✓ | | | |
| P | ETHGB | Second ethnic group | | | ✓ | | | |
| P | ETHGC | Third ethnic group | | | ✓ | | | |
| F | EG1PR | Ethnic group 1 of parent | | | ✓ | | | |
| F | EG2PR | Ethnic group 2 of parent | | | ✓ | | | |
| F | EG3PR | Ethnic group 3 of parent | | | ✓ | | | |
| F | ETHPR | Ethnic group of parent | | | ✓ | | | |
| D | MEGO | Māori ethnic group of occupier | | | ✓ | | | |
| D | MEGOS | Māori ethnic group of spouse of occupier | | | ✓ | | | |
| D | MAO | Māori ancestry of occupier | | | ✓ | | | |
| D | MAOS | Māori ancestry of spouse of occupier | | | ✓ | | | |
| F | MEGPR | Māori Ethnic Ind of parent | | | ✓ | | | |
| F | MAIPR | Māori ancestry Ind of parent | | | ✓ | | | |
| P | ETHGR1 | Ethnic Group 1 Hierarchically Structured | | | | ✓ | | |
| P | ETHGR2 | Ethnic Group 2 Expanded Hierarchical Structure 1 | | | | ✓ | | |
| P | ETHGR3 | Ethnic Group 3 Expanded Hierarchical Structure 2 | | | | ✓ | | |
| P | ETHGR4 | Ethnic Group 4 Standard List of Combinations | | | | ✓ | | |
| P | | Ethnic Group – Level 1 | | | | | ✓ | |
| P | | Number of Ethnic Groups specified | | | | | ✓ | |
| P | | Number of Ethnic Groups specified | | | | | | ✓ |
| D | ETOD | Ethnic Type of Dwelling | ✓ | | | | | |
| D | ETOD | Ethnic Type of Dwelling | | ✓ | | | | |
| Highest Secondary School Qualification | | | | | | | | |
| P | SCQLN | School qualification | ✓ | | | | | |
| P | HSQL | Highest school qualification | | ✓ | | | | |
| P | SQUAL | Highest school qualification | | | ✓ | | | |
| P | HIGHQU | Highest school qualification | | | | ✓ | | |
| P | | Education highest secondary school qualification | | | | | ✓ | |
| P | | Highest secondary school qualification | | | | | | ✓ |
| P | SCHQUAL | School qualification | | | | ✓ | | |

7.3.1 Socio-demographic variables

| + | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|--|------------------------------------|--|------------------|------------------|------------------|------------------|------------------|------------------|
| Highest Post-school Qualification | | | | | | | | |
| P | QUAL1, 2, 3, 4. YR1, 2, 3, 4 | Qualification and year of attainment | ✓ | | | | | |
| P | TQUAL | Tertiary qualifications gained | | ✓ | | | | |
| P | TQUAL | Tertiary qualifications gained | | | ✓ | | | |
| P | Level | Tertiary qualifications level of attainment | | | | ✓ | | |
| P | | Educ post-school qualification level of attainment | | | | | ✓ | |
| P | | post-school qualification – level of attainment | | | | | | ✓ |
| P | QUAL FIELD | Field of study for tertiary qualifications – Level 1 broad field | | | | ✓ | | |
| P | | Education post-school qualification field of study – Level 1 broad field | | | | | ✓ | |
| P | | post-school qualification field of study – Level 1 broad field | | | | | | ✓ |
| P | QUAL FIELD | Field of Study for Tertiary Qualifications – Level 2 narrow field | | | | ✓ | | |
| P | | Post-school Qualification Field of Study – Level 2 narrow field | | | | | ✓ | |
| P | | Post-school Qualification Field of Study – Level 2 narrow field | | | | | | ✓ |
| P | QUAL FIELD | Field of study for tertiary qualifications – Level 3 detailed field | | | | ✓ | | |
| P | | Post-school qualification field of study – Level 3 detailed field | | | | | ✓ | |
| P | | Post-school qualification field of study – Level 3 detailed field | | | | | | ✓ |
| P | QUAL FIELD | Field of study for tertiary qualifications | | | | ✓ | | |
| P | T1QL | First tertiary qualification | | ✓ | | | | |
| P | T2QL | Second tertiary qualification | | ✓ | | | | |
| P | T3QL | Third tertiary qualification | | ✓ | | | | |
| P | YRQ1 | Tertiary qualification – Year first qualification obtained | | | | ✓ | | |
| P | YRQ2 | Tertiary qualification – Year second qualification obtained | | | | ✓ | | |
| P | TQOC | Tertiary qualifications of occupier | | ✓ | | | | |
| P | TQSP | Tertiary qualifications of spouse | | ✓ | | | | |
| Iwi | | | | | | | | |
| P | TRIBA | Main Tribe | | | ✓ | | | |
| P | TRIBB | Second Tribe | | | ✓ | | | |
| P | TRIBC | Third Tribe | | | ✓ | | | |
| P | IWI1-5 | Iwi 1 – 5 | | | | ✓ | | |
| P | | Iwi – Level 1 | | | | | ✓ | |
| P | | Iwi – Level 2 | | | | | ✓ | |
| P | | Iwi – Level 1 | | | | | | ✓ |
| P | | Iwi – Level 2 (Total responses) | | | | | | ✓ |
| Iwi | | | | | | | | |
| P | | Number of Iwi specified | | | | | ✓ | |
| P | | Number of Iwi specified | | | | | | ✓ |
| F | TB1PR | Main Tribe of parent | | | ✓ | | | |
| F | TB2PR | Secondary Tribe of parent | | | ✓ | | | |
| F | TB3PR | Third Tribe of parent | | | ✓ | | | |
| Languages | | | | | | | | |
| P | LANG 1-6 | Languages – List of | | | | ✓ | | |
| P | LANCOD E | Language indicator (official) | | | | ✓ | | |
| P | NOLANG | Languages – Number of | | | | ✓ | | |
| P | | Number of Languages Spoken | | | | | ✓ | |

7.3.1 Socio-demographic variables

| + | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|-------------------------------|------------|---|------------------|------------------|------------------|------------------|------------------|------------------|
| P | | Number of Languages Spoken | | | | | | ✓ |
| P | | Language spoken – Level 1 | | | | | ✓ | |
| P | | Language spoken Level 1 | | | | | | ✓ |
| P | | Language spoken – Level 2 | | | | | ✓ | |
| P | | Language spoken Level 3 (Total responses) | | | | | | ✓ |
| P | | Official language indicator | | | | | ✓ | |
| P | | Official language indicator | | | | | | ✓ |
| Legal Marital Status | | | | | | | | |
| P | MARST | Marital Status | ✓ | | | | | |
| P | MARST | Marital status | | ✓ | | | | |
| P | MARST | Marital status | | | ✓ | | | |
| P | LEGMAR | Marital Status – Legal | | | | ✓ | | |
| P | | Legal Marital Status | | | | | ✓ | |
| P | | Legal Marital Status | | | | | | ✓ |
| D | MSTOC | Marital Status of Occupier | | ✓ | | | | |
| Māori Descent/Ancestry | | | | | | | | |
| P | MDESC | Māori Descent | ✓ | | | | | |
| P | MAORI | Māori Origin | | ✓ | | | | |
| P | MAIND | Māori ancestry indicator | | | ✓ | | | |
| P | MDESC | Māori Ancestry | | | | ✓ | | |
| P | | Māori Descent | | | | | ✓ | |
| P | | Māori Descent | | | | | | ✓ |
| Religious Affiliation | | | | | | | | |
| P | RELIG | Religion | ✓ | | | | | |
| P | REL | Religion | | ✓ | | | | |
| P | RELIG | Religion | | | ✓ | | | |
| P | RELIG | Religion | | | | ✓ | | |
| P | | Religious Affiliation | | | | | ✓ | |
| P | | Religious Affiliation – Level 1 world religions | | | | | | ✓ |
| P | | Religious Affiliation – Level 3 (total responses) | | | | | | ✓ |
| Sex | | | | | | | | |
| P | SEX | Sex | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| De facto Status | | | | | | | | |
| P | DFAC | De facto Status | ✓ | | | | | |
| P | DFAC | De Facto status | | ✓ | | | | |
| P | DFACT | De Facto Status of Parents | | | ✓ | | | |
| Social Marital Status | | | | | | | | |
| P | SOCMAR | Marital Status – Social | | | | ✓ | | |
| P | | Social Marital Status | | | | | ✓ | |
| P | | Social Marital Status | | | | | | ✓ |
| Unpaid activities | | | | | | | | |
| P | VOLUN | Hours in unpaid voluntary work | | ✓ | | | | |
| P | VOLHR | Hours of Voluntary work | | | ✓ | | | |
| P | UNPDHR | Unpaid Work – Hours in | | | | ✓ | | |
| P | WIND | Voluntary work indicator | | | ✓ | | | |
| P | VOLWK | Type of Voluntary work | | | ✓ | | | |
| P | ACTY | Activities | | | ✓ | | | |
| P | ACTY 1-3 | Unpaid Work – Type in Same Household: | | | | ✓ | | |
| P | UNPAID 1-6 | Unpaid Work – Type in Different Household: | | | | ✓ | | |
| P | | Unpaid Activities | | | | | ✓ | |
| P | | Unpaid Activities, Number of | | | | | ✓ | |
| P | | Unpaid Activities (total responses) | | | | | | ✓ |

7.3.1 Socio-demographic variables

| + | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|------------------------------------|-------|---------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| P | | Unpaid Activities, Number of | | | | | | ✓ |
| Usual Residence | | | | | | | | |
| P | USIND | Usual Residence Indicator | ✓ | | | | | |
| P | USIND | Usual Residence Indicator | | ✓ | | | | |
| P | USIND | Usual Residence Indicator | | | ✓ | | | |
| G | | Usual Residence Indicator | | | | | ✓ | |
| G | | Usual Residence Indicator | | | | | | ✓ |
| P | USRES | Usual Residence Address | ✓ | | | | | |
| Usual Residence 5 years ago | | | | | | | | |
| P | AU5YR | Area Unit Residence 5 year Ago | ✓ | | | | | |
| P | IND5Y | Address 5 years ago indicator* | | ✓ | | | | |
| P | | Usual Residence 5 years ago Indicator | | | | | ✓ | |
| P | | Usual Residence 5 years ago Indicator | | | | | | ✓ |

7.3.2 Income- and employment-related variables

| + | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|------------------------------|---------|---------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Availability for Work | | | | | | | | |
| P | AVAIL | Availability for work | | | ✓ | | | |
| P | AVAIL | Available for work | | | | ✓ | | |
| P | | Availability for work | | | | | ✓ | |
| P | | Availability for work | | | | | | ✓ |
| Hours Worked | | | | | | | | |
| P | HRST | Total weekly hours | ✓ | | | | | |
| P | HRST | Total hours paid work | | ✓ | | | | |
| P | HRTOT | Total hours worked | | | ✓ | | | |
| P | TOTHRS | Jobs – total hours | | | | ✓ | | |
| P | | Hours worked in employment per week | | | | | ✓ | |
| P | | Hours worked in employment per week | | | | | | ✓ |
| P | HRS1 | Weekly hours in main job | ✓ | | | | | |
| P | HRSM | Weekly hours in main job | | ✓ | | | | |
| P | HRSM | Weekly hours in main job | | | ✓ | | | |
| P | HEMAIN | Jobs – hours in main job | | | | ✓ | | |
| P | | Hours worked per week in main job | | | | | ✓ | |
| P | | Hours worked per week in main job | | | | | | ✓ |
| P | HRS2 | Weekly hours in secondary job | ✓ | | | | | |
| P | HRS3 | Weekly hours in any other job | ✓ | | | | | |
| P | HRSO | Weekly hours in other job | | ✓ | | | | |
| P | HRSO | Weekly hours in other jobs | | | ✓ | | | |
| P | HROTHER | Jobs – hours in other jobs | | | | ✓ | | |
| P | | Hours worked per week in other jobs | | | | | ✓ | |
| P | | Hours worked per week in other jobs | | | | | | ✓ |
| P | HRSPR | Total hours worked by parent (family) | | | ✓ | | | |
| P | HRSFPA | Total hours worked by father | | | ✓ | | | |
| P | HRSMO | Total hours of mother | | | ✓ | | | |
| Industry | | | | | | | | |
| P | IND | Industry | ✓ | | | | | |
| P | INDUST | Industry | | ✓ | | | | |
| P | IND | Industry | | | ✓ | | | |

7.3.2 Income- and employment-related variables

| | + | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|-------------------------------------|---|----------|--|------------------|------------------|------------------|------------------|------------------|------------------|
| P | | IND1 | Industry NZSIC87 – Level 1 major division | | | | ✓ | | |
| P | | IND2 | Industry NZSIC87 – Level 2 division | | | | ✓ | | |
| P | | IND3 | Industry NZSIC87 – Level 3 major group | | | | ✓ | | |
| P | | IND4 | Industry NZSIC87 – Level 4 group | | | | ✓ | | |
| P | | IND5 | Industry NZSIC87 – Level 5 sub-group | | | | ✓ | | |
| P | | ANZSIC93 | Industry ANZSIC93 – Level 1 division | | | | ✓ | | |
| P | | ANZSIC93 | Industry ANZSIC93 – Level 2 sub-division | | | | ✓ | | |
| P | | ANZSIC93 | Industry ANZSIC93 – Level 3 group | | | | ✓ | | |
| P | | ANZSIC93 | Industry ANZSIC93 – Level 4 class | | | | ✓ | | |
| P | | | Industry – Level 1 major division (ANZSIC96 V 4.0) | | | | | ✓ | |
| P | | | Industry – Level 4 division (ANZSIC96 V 4.0) | | | | | ✓ | |
| P | | | Industry – Level 6 division (ANZSIC96 V 4.0) | | | | | ✓ | |
| P | | | Industry (ANZSIC96 V 4.1) Level 1 division | | | | | | ✓ |
| P | | | Industry (ANZSIC96 V 4.1) Level 2 subdivision | | | | | | ✓ |
| P | | | Industry (ANZSIC96 V 4.1) Level 3 group | | | | | | ✓ |
| P | | | Industry (ANZSIC96 V 4.1) Level 4 class | | | | | | ✓ |
| P | | | Industry (ANZSIC96 V 4.1) Level 5 subclass | | | | | | ✓ |
| P | | | Industry (ANZSIC06 V 1.0) Level 1 division | | | | | | ✓ |
| P | | | Industry (ANZSIC06 V 1.0) Level 2 subdivision | | | | | | ✓ |
| P | | | Industry (ANZSIC06 V 1.0) Level 3 group | | | | | | ✓ |
| P | | | Industry (ANZSIC06 V 1.0) Level 4 class | | | | | | ✓ |
| Job Search Methods | | | | | | | | | |
| P | | METH | Job search methods | | | ✓ | | | |
| P | | METH2 | Job search methods – wrote to employers | | | | ✓ | | |
| P | | METH3 | Job search methods – NZ Employment Service | | | | ✓ | | |
| P | | METH1 | Job search methods – Advertisements | | | | ✓ | | |
| P | | METH4 | Job search methods – Asked friends about work | | | | ✓ | | |
| P | | METH5 | Job search methods – Contacted careers advisors | | | | ✓ | | |
| P | | METH6 | Job search methods – Other job search methods | | | | ✓ | | |
| P | | | Job search methods | | | | | ✓ | |
| P | | | Job search methods (total responses) | | | | | | ✓ |
| P | | NOMETH | Number of specified job search methods | | | | ✓ | | |
| P | | | Number of job search methods | | | | | ✓ | |
| P | | | Number of job search methods | | | | | | ✓ |
| Main means of Travel to Work | | | | | | | | | |
| P | | TRAV | Means of travel to work | ✓ | | | | | |
| P | | TRAVEL | Means of travel to work | | ✓ | | | | |
| P | | TRAV | Means of travel to work | | | ✓ | | | |
| P | | TRAWRK | Travel to work – Means | | | | ✓ | | |
| P | | | Main means of travel to work | | | | | ✓ | |
| P | | | Main means of travel to work | | | | | | ✓ |
| Occupation | | | | | | | | | |
| P | | OCC | Occupation | ✓ | | | | | |
| P | | OCCUP | Occupation | | ✓ | | | | |
| P | | OCC | Occupation | | | ✓ | | | |
| P | | OCC951 | Occupation – NZSCO95 – Level 1 major group | | | | ✓ | | |
| P | | OCC952 | Occupation – NZSCO95 – Level 2 Sub-major group | | | | ✓ | | |
| P | | OCC953 | Occupation – NZSCO95 – Level 3 minor group | | | | ✓ | | |
| P | | OCC954 | Occupation – NZSCO95 – Level 4 unit group | | | | ✓ | | |
| P | | OCC955 | Occupation – NZSCO95 – Level 5 group | | | | ✓ | | |
| P | | OCC901 | Occupation – NZSCO90 – Level 1 major group | | | | ✓ | | |
| P | | OCC902 | Occupation – NZSCO90 – Level 2 sub-major group | | | | ✓ | | |
| P | | OCC903 | Occupation – NZSCO90 – Level 3 minor group | | | | ✓ | | |
| P | | OCC904 | Occupation – NZSCO90 – Level 4 unit group | | | | ✓ | | |

7.3.2 Income- and employment-related variables

| | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|---|---------|---|------------------|------------------|------------------|------------------|------------------|------------------|
| P | OCC905 | Occupation – NZSCO90 – Level 5 group | | | | ✓ | | |
| P | OCC681 | Occupation – NZSCO68 – Level 1 major group | | | | ✓ | | |
| P | OCC682 | Occupation – NZSCO68 – Level 2 minor group | | | | ✓ | | |
| P | OCC683 | Occupation – NZSCO68 – Level 3 unit group | | | | ✓ | | |
| P | OCC684 | Occupation – NZSCO68 – Level 4 group | | | | ✓ | | |
| P | | Occupation (NZSCO99 V 1.0) – Level 1 – major group | | | | | ✓ | |
| P | | Occupation (NZSCO99 V 1.0) – Level 2 – sub-major group | | | | | ✓ | |
| P | | Occupation (NZSCO99 V 1.0) – Level 3 – minor group | | | | | ✓ | |
| P | | Occupation (NZSCO99 V 1.0) – Level 4 – unit group | | | | | ✓ | |
| P | | Occupation (NZSCO99 V 1.0) – Level 5 – group | | | | | ✓ | |
| P | | Occupation (NZSCO99 V 1.0) Level 1 – major group | | | | | | ✓ |
| P | | Occupation (NZSCO99 V 1.0) Level 2 – sub-major group | | | | | | ✓ |
| P | | Occupation (NZSCO99 V 1.0) Level 3 – minor group | | | | | | ✓ |
| P | | Occupation (NZSCO99 V 1.0) Level 4 – unit group | | | | | | ✓ |
| P | | Occupation (NZSCO99 V 1.0) Level 5 – group | | | | | | ✓ |
| P | | Occupation (ANZSCO V 1.0) Level 1 – major group | | | | | | ✓ |
| P | | Occupation (ANZSCO V 1.0) Level 2 – sub-major group | | | | | | ✓ |
| P | | Occupation (ANZSCO V 1.0) Level 3 – minor group | | | | | | ✓ |
| P | | Occupation (ANZSCO V 1.0) Level 4 – unit group | | | | | | ✓ |
| P | | Occupation (ANZSCO V 1.0) Level 5 – group | | | | | | ✓ |
| P | OCCOC | Occupation of occupier | | ✓ | | | | |
| P | OCCSP | Occupation of spouse | | ✓ | | | | |
| P | OCCPR | Occupation of parent (family) | | | ✓ | | | |
| P | OCCFA | Occupation of father | | | ✓ | | | |
| P | OCCMO | Occupation of mother | | | ✓ | | | |
| Seeking work | | | | | | | | |
| P | SEEKW | Seeking paid work | | ✓ | | | | |
| P | SEEKW | Seeking paid work | | | ✓ | | | |
| P | SEEKWOR | Seeking paid work | | | | ✓ | | |
| P | | Seeking work | | | | | ✓ | |
| P | | Seeking work | | | | | | ✓ |
| Sources of Personal Income | | | | | | | | |
| Source of personal income – benefits | | | | | | | | |
| P | SWBEN | Social welfare benefits received – personal | ✓ | | | | | |
| P | SW1P | First social welfare payment | | ✓ | | | | |
| P | SW2P | Second social welfare payment | | ✓ | | | | |
| P | SW3P | Third social welfare payment | | ✓ | | | | |
| P | SWP | Social welfare payments received | | ✓ | | | | |
| P | ISP | Income support payments – personal | | | ✓ | | | |
| P | PINC4 | ACC regular payments – personal | | | | ✓ | | |
| P | PINC5 | NZ superannuation – personal | | | | ✓ | | |
| P | PINC6 | Other superannuation, pensions, annuities – personal | | | | ✓ | | |
| P | PINC7 | Unemployment benefit – personal | | | | ✓ | | |
| P | PINC8 | Domestic purposes benefit – personal | | | | ✓ | | |
| P | PINC9 | Sickness benefit – personal | | | | ✓ | | |
| P | PINC10 | Invalid’s benefit – personal | | | | ✓ | | |
| P | PINC11 | Student allowance – personal | | | | ✓ | | |
| P | PINC12 | Other government benefits, income support payments or war pensions – personal | | | | ✓ | | |
| P | | Sources of personal income | | | | | ✓ | |
| P | | Sources of personal income (total responses) | | | | | | ✓ |
| Sources of personal income – other | | | | | | | | |
| P | OISP | Other income support – personal | | | ✓ | | | |
| P | PINC1 | Wages, salary, commissions, bonuses, etc – personal | | | | ✓ | | |

7.3.2 Income- and employment-related variables

| | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|---|---------|--|------------------|------------------|------------------|------------------|------------------|------------------|
| P | PINC2 | Self employment or business you own and work in – personal | | | | ✓ | | |
| P | PINC3 | Interest, dividends, rent, other investments – personal | | | | ✓ | | |
| P | PINC13 | Other sources of income – personal | | | | ✓ | | |
| P | | Sources of personal income | | | | | ✓ | |
| P | | No source of income | | | | | ✓ | |
| Number of sources of personal income | | | | | | | | |
| P | NOSOUR | Number of income sources – personal | | | | ✓ | | |
| P | | Number of income sources | | | | | ✓ | |
| P | | Number of income sources | | | | | | ✓ |
| P | NOSUPP | Number of income support sources – personal | | | | ✓ | | |
| P | | Number of income support sources excluding ACC and NZ superannuation | | | | | ✓ | |
| P | | Number of income support sources excluding ACC and NZ superannuation | | | | | | ✓ |
| Status in Employment | | | | | | | | |
| P | EMPST | Employment status | ✓ | | | | | |
| P | EMP | Employment status | | ✓ | | | | |
| P | WRKST91 | Work status | | | ✓ | | | |
| P | EMPSTAT | Employment status | | | | ✓ | | |
| P | | Status in employment | | | | | ✓ | |
| P | | Status in employment | | | | | | ✓ |
| P | ESHD | Employment status of head | ✓ | | | | | |
| P | EMPST | Employment status (FT/PT) | | ✓ | | | | |
| P | ESOC | Employment status of occupier | | ✓ | | | | |
| P | ESSP | Employment status of spouse | | ✓ | | | | |
| P | WRKPR | Work status of parent (family) | | | ✓ | | | |
| P | WRKFA | Work status of father | | | ✓ | | | |
| P | WRKMO | Work status of mother | | | ✓ | | | |
| P | CWRKP | Combined work status of parents | | | ✓ | | | |
| Job indicator | | | | | | | | |
| P | JOB | Job indicator | | ✓ | ✓ | | | |
| P | | Job indicator | | | | | ✓ | |
| Labour force status | | | | | | | | |
| P | | Rebased labour force status 91 | ✓ | | | | | |
| P | LABST | Labour force status | | ✓ | | | | |
| P | LABST | Labour force status | | | ✓ | | | |
| P | LFSTAT | Labour force status | | | | ✓ | | |
| P | | Work and labour force status | | | | | ✓ | |
| P | | Work and labour force status | | | | | | ✓ |
| Total Personal Income | | | | | | | | |
| P | TINC | Total income – personal | ✓ | ✓ | ✓ | | | |
| P | TOTINC | Total personal income | | | | ✓ | | |
| P | | Total personal income | | | | | ✓ | |
| P | | Total personal income | | | | | | ✓ |

7.3.3 Family and household variables

| + | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|---|-------------------------|---|------------------|------------------|------------------|------------------|------------------|------------------|
| Census Night Number of Absentees | | | | | | | | |
| D | ABTOT | Total number of Absentees | ✓ | | | | | |
| D | | Absentees – Number of | | | | | ✓ | |
| D | | Absentees – Number of | | | | | | ✓ |
| Census Night number of Occupants | | | | | | | | |
| D | NOCCS | Total Number of Occupants | ✓ | | | | | |
| D | MALES | Number of males in dwelling | | ✓ | | | | |
| D | FEMLS | Number of females in dwelling | | ✓ | | | | |
| D | NOCCS | Number of occupants in dwelling | | | ✓ | | | |
| D | OCCUNO | Number of occupants in household | | | | ✓ | | |
| D | | Occupants, Number of | | | | | ✓ | |
| D | | Occupants in household on census night, Number of | | | | | | ✓ |
| Family Type | | | | | | | | |
| F | FAMTYP | Family Type | | | ✓ | | | |
| D | FAMIND | Family Indicator | | | | ✓ | | |
| H | | Family Type | | | | | ✓ | |
| F | | Family Type | | | | | | ✓ |
| Household Composition | | | | | | | | |
| D | USHHC | Usual Household Composition | | ✓ | | | | |
| D | USHHC | Usual Household composition | | | ✓ | | | |
| D | HHCOMP | Usual Household composition | | | | ✓ | | |
| H | | Household Composition Level 1 – (The same categories exist for the Household composition be child dependency at this level) | | | | | ✓ | |
| H | | Household Composition Level 2 – (The same categories exist for the Household composition be child dependency at this level) | | | | | ✓ | |
| H | | Household Composition Level 3 | | | | | ✓ | |
| H | | Household Composition Level 1 | | | | | | ✓ |
| H | | Household Composition Level 2 | | | | | | ✓ |
| H | | Household Composition Level 3 | | | | | | ✓ |
| Household composition with child dependency status | | | | | | | | |
| H | | Household Composition by Child Dependency Status Level 3 | | | | | ✓ | |
| P | CDEPEN | Child Dependency Indicator | | | | ✓ | | |
| P | | Child Dependency Status Indicator | | | | | ✓ | |
| H | | Household Composition by child dependency status Level 1 | | | | | | ✓ |
| H | | Household Composition by child dependency status Level 2 | | | | | | ✓ |
| H | | Household Composition by child dependency status Level 3 | | | | | | ✓ |
| Living Arrangements | | | | | | | | |
| P | LIVAR | Living arrangements | | ✓ | | | | |
| P | LIVR (A, B, C, D, E, F) | Living arrangements | | | ✓ | | | |
| P | LIVE1 | Live with Parents | | | | ✓ | | |
| P | LIVE2 | Live with Spouse/Partner | | | | ✓ | | |
| P | LIVE3 | Live with Children | | | | ✓ | | |
| P | LIVE4 | Live with Siblings | | | | ✓ | | |
| P | LIVE5 | Live with Other Relatives | | | | ✓ | | |
| P | LIVE6 | Live with Other Persons | | | | ✓ | | |

7.3.3 Family and household variables

| + | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|---|------|--|------------------|------------------|------------------|------------------|------------------|------------------|
| Number of usual Residents in Household | | | | | | | | |
| D | | Usual Residents Aged Under 15 in the Household, Number of | | | | | ✓ | |
| D | | Usual Residents Aged 15 and Over in the Household, Number of | | | | | ✓ | |
| D | | Usual Residents in the Household, Number of | | | | | ✓ | |
| D | | Usual Residents Aged Under 15 in the Household, Number of | | | | | | ✓ |
| D | | Usual Residents Aged 15 and Over in the Household, Number of | | | | | | ✓ |
| D | | Usual Residents in the Household, Number of | | | | | | ✓ |
| H | | Occupants Number of | | | | | ✓ | |
| Relationship to Reference Person | | | | | | | | |
| P | RELN | Relationship to Occupier | ✓ | | | | | |
| P | RELN | Relationship to Occupier | | ✓ | | | | |
| P | RELN | Relationship to Occupier | | | ✓ | | | |
| P | | Relationship to Reference Person | | | | | ✓ | |
| P | | Relationship to Reference Person Level 1 | | | | | | ✓ |
| P | | Relationship to Reference Person Level 2 | | | | | | ✓ |
| P | | Relationship to Reference Person Level 3 | | | | | | ✓ |

7.3.4 Dwelling variables

| + | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|--|---------|--|------------------|------------------|------------------|------------------|------------------|------------------|
| Access to telecommunication systems | | | | | | | | |
| D | PHON | Telephone | ✓ | | | | | |
| D | TELEPH | Telephones | | | | ✓ | | |
| D | | Access to telecommunication systems | | | | | ✓ | |
| D | | Telecommunication systems, access to (total responses) | | | | | | ✓ |
| D | | Access to telecommunication systems | | | | | | ✓ |
| Dwelling type | | | | | | | | |
| D | DWGTP | Dwelling type | ✓ | | | | | |
| D | DWGTP | Dwelling type | | ✓ | | | | |
| D | DWGTP | Dwelling type | | | ✓ | | | |
| D | DWEIND | Dwelling indicator | | | | ✓ | | |
| D | DWETYPE | Dwelling type | | | | ✓ | | |
| D | | Dwelling type – Level 1 | | | | | ✓ | |
| D | | Dwelling type – Level 2 | | | | | ✓ | |
| D | | Dwelling type – Level 4 | | | | | ✓ | |
| D | | Dwelling type – Level 1 | | | | | | ✓ |
| D | | Dwelling type – Level 2 | | | | | | ✓ |
| D | | Dwelling type – Level 4 | | | | | | ✓ |
| Heating Fuels used | | | | | | | | |
| Electric heating | | | | | | | | |
| D | HTG10 | Electric portable heater | ✓ | | | | | |
| D | HTG11 | Electric non-portable heater | ✓ | | | | | |
| D | HTG12 | Electric wall mounted heater | ✓ | | | | | |
| D | HTG13 | Electric night-storage heater | ✓ | | | | | |
| D | HTG14 | Electric in-floor heating | ✓ | | | | | |

7.3.4 Dwelling variables

| | + | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|---------------------------------|---|---------|---|------------------|------------------|------------------|------------------|------------------|------------------|
| D | | HEATA | Heating of dwelling (electricity) | | ✓ | | | | |
| D | | HEAT2 | Heating – electric | | | | ✓ | | |
| D | | | Electrical Heating | | | | | | ✓ |
| Gas heating | | | | | | | | | |
| D | | HTG20 | Gas portable heating | ✓ | | | | | |
| D | | HTG21 | Gas non-portable radiator | ✓ | | | | | |
| D | | HTG22 | Gas non-portable console | ✓ | | | | | |
| D | | HTG23 | Gas under floor furnace | ✓ | | | | | |
| D | | HEATB | Heating of dwelling (gas) | | ✓ | | | | |
| D | | HEAT3 | Heating – Mains gas | | | | ✓ | | |
| D | | HEAT4 | Heating – Bottled gas | | | | ✓ | | |
| D | | | Mains gas Heating | | | | | | ✓ |
| D | | | Bottled gas Heating | | | | | | ✓ |
| Wood/coke/coal heating | | | | | | | | | |
| D | | HTG30 | Open fire | ✓ | | | | | |
| D | | HTG31 | Slow combustion heater | ✓ | | | | | |
| D | | HTG32 | Wood or coal range | ✓ | | | | | |
| D | | HEATC | Heating of dwelling (wood) | | ✓ | | | | |
| D | | HEATD | Heating of dwelling (coke or coal) | | ✓ | | | | |
| D | | HEAT5 | Heating – Wood | | | | ✓ | | |
| D | | HEAT6 | Heating – Coal | | | | ✓ | | |
| D | | | Wood Heating | | | | | | ✓ |
| D | | | Coal Heating | | | | | | ✓ |
| Oil/kerosene heating | | | | | | | | | |
| D | | HTG40 | Portable kerosene heater | ✓ | | | | | |
| D | | HTG41 | Oil console/convactor | ✓ | | | | | |
| D | | HTG42 | Other oil-fired heating system | ✓ | | | | | |
| D | | HEATE | Heating of dwelling (oil, including kerosene) | | ✓ | | | | |
| Other heating | | | | | | | | | |
| D | | HTG50 | Solar heating | ✓ | | | | | |
| D | | HEAT7 | Heating – Solar | | | | ✓ | | |
| D | | | Solar heating | | | | | | ✓ |
| D | | HTG60 | Thermal bore radiator | ✓ | | | | | |
| D | | HTG61 | Incidental heat | ✓ | | | | | |
| D | | HTG62 | Other means of heating | ✓ | | | | | |
| D | | HEATF | Heating of dwelling (other) | | ✓ | | | | |
| D | | HEAT8 | Heating – Other | | | | ✓ | | |
| D | | | Other Fuel(s) | | | | | | ✓ |
| No means of heating | | | | | | | | | |
| D | | HTGOO | No heating | ✓ | | | | | |
| D | | HTNG | Heating of dwelling | | ✓ | | | | |
| D | | HTNG | Heating of dwelling | | | ✓ | | | |
| D | | | Heating fuels used – Type | | | | | ✓ | |
| D | | | No heating fuels used | | | | | | ✓ |
| Heating not specified | | | | | | | | | |
| D | | HTG99 | Heating not specified | ✓ | | | | | |
| Number of motor vehicles | | | | | | | | | |
| D | | PCARS | Number of private cars | ✓ | | | | | |
| D | | MVEH | Number of motor vehicles | | ✓ | | | | |
| D | | MVEHS | Number of motor vehicles | | | ✓ | | | |
| D | | VEHICLE | Motor vehicles | | | | ✓ | | |
| D | | | Motor vehicles, Number of | | | | | ✓ | |
| D | | | Motor vehicles, Number of | | | | | | ✓ |

7.3.4 Dwelling variables

| + | Code | Description | 1 9 8 1 | 1 9 8 6 | 1 9 9 1 | 1 9 9 6 | 2 0 0 1 | 2 0 0 6 |
|--------------------------------------|--------|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Number of bedrooms | | | | | | | | |
| D | BDRMS | No. of bedrooms | ✓ | | | | | |
| D | BDRMS | Number of bedrooms | | ✓ | | | | |
| D | BDRMS | Number of bedrooms | | | ✓ | | | |
| D | | Rooms – Bedrooms number of | | | | ✓ | | |
| D | | Bedrooms number of | | | | | ✓ | |
| D | | Bedrooms number of | | | | | | ✓ |
| Number of Heating Fuels | | | | | | | | |
| D | NOHEAT | Number of heating fuels specified | | | | ✓ | | |
| D | | Heating fuels used – Number of | | | | | ✓ | |
| D | | Heating fuels used – Number of | | | | | | ✓ |
| Ownership of Dwelling | | | | | | | | |
| D | | Ownership of dwelling | | | | | ✓ | |
| Sector of Landlord | | | | | | | | |
| D | LLORD | Type of landlord | ✓ | | | | | |
| D | | Sector of landlord | | | | | ✓ | |
| D | | Sector of landlord | | | | | | ✓ |
| Tenure of Household | | | | | | | | |
| D | TENUR | Tenure | ✓ | | | | | |
| D | TENURE | Tenure | | | | ✓ | | |
| D | | Tenure of household | | | | | ✓ | |
| D | | Tenure holder | | | | | ✓ | |
| H | | Tenure of household – Level 1 | | | | | | ✓ |
| H | | Tenure of household – Level 2 | | | | | | ✓ |
| Weekly Rent paid by Household | | | | | | | | |
| H | RENT | Weekly rent | ✓ | | | | | |
| H | RENT | Weekly rent | | ✓ | | | | |
| H | RENT | Weekly rent | | | ✓ | | | |
| H | RENT | Weekly rent | | | | ✓ | | |
| H | | Weekly rent paid by household | | | | | ✓ | |
| H | | Weekly rent paid by household | | | | | | ✓ |

7.4 Comparable classification output categories

7.4.1 Socio-demographic categories

Arrival in New Zealand

| | Classification categories for comparing 1981, 1986, 1996, 2001 & 2006 Census data |
|-------------------------------|--|
| Arrival in New Zealand | Less than one year |
| | 1–49 years |
| | 50–96 years or more |
| | Residual categories |

Country of Birth

| | Classification categories for comparing 1981–2006 Census data |
|-------------------------|--|
| Country of Birth | Oceania and Antarctica |
| | North-West Europe |
| | Southern and Eastern Europe |
| | North Africa and the Middle East |
| | Sub-Saharan Africa |
| | Southern and Central Asia |
| | North-East Asia |
| | South-East Asia |
| | The Americas |
| | Residual categories |

Ethnicity

| | Classification categories for comparing 1981–2006 Census data |
|------------------|--|
| Ethnicity | Māori |
| | Polynesian |
| | Asian |
| | European |
| | Other |

Highest Secondary School Qualification

| | Classification categories for comparing 1981–2006 Census data |
|-----------------------------|--|
| School qualification | No school qualification |
| | Qualification obtained from the 5 th form/Year 11 (School Certificate, in 1 or more subjects) |
| | Qualification obtained from the 6 th form/Year 12 (Sixth Form Certificate, in 1 or more subjects, University Entrance, Matriculation) |
| | Qualification obtained from the 7 th Form/Year 13 (Higher School Certificate/Bursary) |
| | Overseas school qualification |
| | Other |
| | Not specified/stated |

Highest Post-school Qualification

| | Classification categories for comparing 1981–2006 Census data |
|----------------------------------|--|
| Post-school qualification | Bachelors degree / NZ certificate, technical certificate |
| | Postgraduate degree / higher degree |
| | Trade certificates / vocational qualification |
| | Not specified |

Iwi

| | Classification categories for comparing 1996–2006 Census data |
|---------------------|---|
| Iwi | Te Tai Tokerau/Tāmaki-makau-rau (Northland/Auckland) Region |
| | Iwi Not Named, but Waka or Iwi Confederation Known |
| | Iwi Named but Region Unspecified |
| | Hapū Affiliated to More Than One Iwi |
| | Hauraki (Coromandel) Region |
| | Waikato/Te Rohe Pōtae (Waikato/King Country) Region |
| | Te Arawa/Taupō (Rotorua/Taupō) Region |
| | Tauranga Moana/Mātaatua (Bay of Plenty) Region |
| | Te Tai Rāwhiti (East Coast) Region |
| | Te Matau-a-Māui/Wairarapa (Hawke's Bay/Wairarapa) Region |
| | Taranaki Region |
| | Whanganui/Rangitīkei (Wanganui/Rangitīkei) Region |
| | Manawatū/Horowhenua/Te Whanganui-a-Tara (Manawatū/ Horowhenua/ Wellington) Region |
| | Te Waipounamu/Wharekauri (South Island/Chatham Islands) Region |
| | Residual categories with some Iwi information |
| Residual categories | |

Languages

| | Classification categories for comparing 1996–2006 Census data |
|----------------------------|--|
| Number of Languages | None |
| | 1–5 Languages |
| | 6 or more languages |
| | Residual Categories |

Legal Marital Status

| | Classification categories for comparing 1981–2006 Census data |
|-----------------------------|--|
| Legal Marital Status | Never Married |
| | Married |
| | Separated |
| | Divorced |
| | Widowed |
| | Residual categories |

Māori Descent

| | Classification Categories for comparing 1981–2006 Census data |
|----------------------|--|
| Māori Descent | Māori Descent |
| | No Māori Descent |
| | Residual categories |

Religious Affiliation

| | Classification categories for comparing 1981–2006 Census data |
|------------------------------|--|
| Religious Affiliation | No Religion |
| | Buddhist |
| | Christian |
| | Hindu |
| | Islam/Muslim |
| | Judaism |
| | Māori Christian |
| | Spiritualism/ New Age Religions |
| | Other |
| Residual categories | |

Social Marital Status

| | Classification categories for comparing 1996–2006 Census data |
|------------------------------|--|
| Social Marital Status | Partnered – Legal Spouse |
| | Partnered – Other Partnership |
| | Non Partnered |
| | Partnered not further defined |
| | Residual categories |

| | Classification categories for comparing 1981–1991 Census data |
|------------------------|--|
| De Facto Status | De Facto Relationship |
| | Non-De Facto Relationship |

Unpaid Activities

| | Classification categories for comparing 1986–1996 Census data |
|---------------------------------------|--|
| Number of Hours in Unpaid Work | Nil Hours |
| | 1–4 Hours per week |
| | 5–14 Hours per week |
| | 15+ Hours per week |

| | Classification categories for comparing 1996-2001 Census data |
|--------------------------|--|
| Unpaid activities | Unpaid work in same household |
| | Unpaid work in different household |
| | Other Voluntary Help |

7.4.2 Income- and employment-related classifications

Availability for work

| | Classification categories for comparing 1991–2006 Census data |
|------------------------------|--|
| Availability for Work | Available for work |
| | Not available for work |
| | Residual categories |

Hours Worked

| | Classification categories for comparing 1981–2006 Census data |
|---------------------|--|
| Hours worked | 0–96 hours |
| | 97+ hours |
| | Residual categories |

Job Search Methods

| | Classification categories for comparing 1991–2006 Census data |
|---------------------------|--|
| Job Search Methods | Looked at Advertisements |
| | Wrote or phoned Employer |
| | Contacted Govt Employment Service |
| | Contacted friends |
| | Other Methods |
| | Residual categories |

Main Means of travel to work

| | Classification categories for comparing 1981–2006 Census data |
|-------------------------------------|--|
| Main Means of Travel to Work | Public Bus |
| | Train |
| | Driver of Private Vehicle |
| | Driver of Company Vehicle |
| | Passenger |
| | Motorcycle |
| | Bicycle |
| | Walk |
| | Other |
| | Work at Home |
| | Residual categories |

Seeking Work

| | Classification categories for comparing 1986–2006 Census data |
|---------------------|--|
| Seeking Work | Looked for work |
| | Did not look for work |
| | Residual categories |

Sources of Personal Income

| | Classification categories for comparing 1981–2006 Census data | |
|---|--|----------------------------------|
| Source of income: beneficiary flag | Income support | No income support |
| | Domestic purposes benefit | No domestic purposes benefit |
| | Unemployment benefit | No unemployment benefit |
| | Sickness or invalid's benefit | No sickness or invalid's benefit |
| | National superannuation (govt provided) | No NZ superannuation |
| | Youth or student allowance | No youth or student allowance |

Status in Employment

| | Classification categories for comparing 1981–2006 Census data |
|--------------------------|--|
| Employment status | Self-employed (with employees) |
| | Self-employed (without employees) |
| | Wages or salary |
| | Unpaid family worker |
| | Unemployed – seeking work |
| | Non-labour force |
| | Labour force not specified/missing |

Total Personal Income

| | Classification categories for comparing 1981–2006 Census data |
|----------------------|--|
| Income amount | Loss or zero |
| | \$1–\$5,000 |
| | \$5,001–\$10,000 |
| | \$10,001–\$15,000 |
| | \$15,001–\$20,000 |
| | \$20,001–\$25,000 |
| | \$25,001–\$30,000 |
| | \$30,001–\$40,000 |
| | \$40,001–\$50,000 |
| | \$50,001 or more |
| | Residual categories |

7.4.3 Family and household variables

Family Type

| | Classification categories for comparing 1981–2006 Census data |
|--------------------|--|
| Family Type | Couple without children |
| | Couple with Child(ren) |
| | One Parent with Child(ren) |

Household Composition

| | Classification categories for comparing 1981–2006 Census data |
|------------------------------------|--|
| Usual Household Composition | One-Family Household |
| | Two-Family Household |
| | Three-or-more-family household |
| | Multi-person household |
| | One-person Household |

Child Dependency Status

| | Classification categories for comparing 1981–2006 Census data |
|-------------------------|--|
| Child Dependency | Dependent Child |
| | Adult Child |
| | Unknown |

Relationship to Reference Person

| | Classification categories for comparing 1981–2006 Census data |
|---|--|
| Relationship to Reference Person | Reference Person |
| | Spouse |
| | Child |
| | Child-in-law |
| | Parent |
| | Grandparent |
| | Grandchild |
| | Sibling/Sibling-in-law |
| | Uncle/Aunt |
| | Nephew/Niece/Cousin |
| | Foster child/ward |
| | Flatmate |
| | Guest |
| | Boarder |
| | Staff |

7.4.4 Dwelling variables

Access to Telecommunications

| | Classification categories for comparing 1981, 1996, 2001 and 2006 Census data |
|-------------------------------|--|
| Telephone in household | Telephone |
| | No telephone |
| | Not specified |

Dwelling Type

| | Classification categories for comparing 1981–2006 Census data |
|----------------------|--|
| Dwelling type | Permanent |
| | Joined houses or flats |
| | House or flat with business attached |
| | Bach/crib or hut (not in a work camp) |
| | Temporary homes: mobile |
| | Temporary homes: in a motor camp |
| | Other |

Heating Fuels Used

| | Classification categories for comparing 1981–2006 Census data |
|----------------|--|
| Heating | No heating |
| | Electricity |
| | Gas |
| | Wood/coal |
| | Solar |
| | Other |
| | Residual categories |

Living Arrangements

| | Classification categories for comparing 1986–1996 Census data |
|----------------------------|--|
| Living Arrangements | Parents |
| | Spouse |
| | Partner |
| | Sons/Daughters |
| | Siblings |
| | Other People |
| | Other relatives |
| | Residual categories |

Motor Vehicles

| | Classification categories for comparing 1981–2006 Census data |
|------------------------------------|--|
| Motor vehicles in household | 0 |
| | 1 |
| | 2 |
| | 3+ |
| | Residual categories |

Nature of Occupancy

| | Classification categories for comparing 1981–2006 Census data |
|-------------------------------------|--|
| Nature of occupancy / tenure | Owned with mortgage |
| | Owned without mortgage |
| | Dwelling owned but mortgage not further defined |
| | Provided free |
| | Rented |

Sector of Landlord

| | Classification categories for comparing 1981–2006 Census data |
|---------------------------|--|
| Sector of landlord | Private person |
| | Business/real estate agency |
| | Housing corporation |
| | Other government department |
| | Local authority |
| | Landlord not specified |

Number of Bedrooms

| | Classification categories for comparing 1981–2006 Census data |
|------------------------|--|
| No. of bedrooms | 0–7 |
| | 8+ |
| | Residual categories |

Number of Heating Fuels

| | Classification categories for comparing 1981–2006 Census data |
|-------------------------------------|--|
| Number of Heating fuels Used | No heating Fuels Used |
| | 1–4 heating fuels used |
| | 5 or more heating fuels used |
| | Residual categories |

Weekly Rent

| | Classification categories for comparing 1981–2006 Census data |
|--------------------|--|
| Weekly rent | No Rent Paid |
| | \$1–\$997 |
| | \$998+ |
| | Residual categories |

7.5 Variable names and SAS codes for comparable classification categories

7.5.1 Socio-demographic categories

Arrival in New Zealand

| Year | Variable | Classification category | | | |
|------|--------------------------------|-------------------------|---|--|--|
| | | Less than 1 Year | 1–49 Years | 50 or more years | Residual categories |
| 1981 | DUR | 0 = Less than 1 year | 1–49 = 1 to 49 years | 50 = 50 or more years | 51 = Not specified (with O/seas birth place) 52 = not applicable (born in NZ) |
| 1986 | DUR | 0 = less than 1 year | 1–49 = 1–49 years in New Zealand | 50–96 = 50–96 years in New Zealand 97 = 97 years and over | 98 = born in New Zealand 99 = Not specified |
| 1991 | Question not asked this census | | | | |
| 1996 | YRINNZ | 00 = Less than 1 year | 01 = 1 years 02 = 2 years 03–49 = 3 to 49 years | 50–94 = 50 to 94 years 95 = 95 years or more | 98 = Born in NZ 99 = not specified |
| 2001 | Years since arrival | 000=less than one year | 001–049=1 to 49 in single year increments | 050–096 = 50 to 96 years in single year increments 097 = 97 years or more | 777 = response unidentifiable 999 = not stated |
| 2006 | Years since arrival | 000=less than one year | 001–049=1 to 49 years | 050–096 = 50 to 96 years 097 = 97 years or more | 777 = response unidentifiable 999 = not stated |

Country of Birth

| Year | Variable | Classification category | |
|------|----------|---|---|
| | | Oceania and Antarctica | North-West Europe |
| 1981 | BTHPL | 1 = New Zealand 2 = Australia 3 = Samoa 4 = Cook Islands 5 = Niue Island 6 = Tonga (Kingdom of) 7 = Tokelau 8 = Fiji 9 = Kiribati 10 = Nauru 11 = New Hebrides 12 = Norfolk Island 13 = Papua New Guinea 14 = Pitcairn 15 = Solomon Islands 16 = Tuvalu 44 = Antarctica stations 52 = Canton and Enderbury Islands 73 = American Samoa 88 = French Polynesia | 35 = United Kingdom undefined 36 = Channel Islands 37 = England 38 = Isle of Man 39 = Northern Ireland 40 = Scotland 41 = Wales 75 = Austria 76 = Belgium 83 = Denmark 86 = Finland 87 = France 89 = German Democratic Republic (EAST) 90 = German Federal Republic (WEST) 95 = Ireland, Republic of 96 = Ireland undefined 106 = Netherlands 107 = Norway 114 = Sweden |

Country of Birth

| | | Classification category | |
|-------------|-----------------|--|---|
| Year | Variable | Oceania and Antarctica | North-West Europe |
| 1981 | BTHPL | 128 = Antarctica undefined 129 = Antarctica regions foreign 130 = Antarctica stations USA 165 = Guam 198 = New Caledonia 202 = Pacific Islands Trust Territory 203 = Pacific Islands undefined 187 = Melanesia undefined 189 = Micronesia undefined 208 = Polynesia undefined 229 = US Misc Pacific Islands 236 = Wailis and Futuna Islands | 115 = Switzerland 160 = Faeroe Islands 163 = Greenland 171 = Iceland 180 = Lichtensteom [Lichtenstein]* 181 = Luxembourg 190 = Monaco 159 = Europe (undefined) |
| 1986 | BTHPL | 020 = American Samoa 032 = Antarctica undefined 036 = Antarctica regions foreign 040 = Antarctica stations British 044 = Antarctica stations USA 060 = Australia 152 = Canton and Enderbury Islands 181 = Christmas Island 196 = Cook Islands 268 = Fiji 284 = French Polynesia 286 = French Southern Territories 312 = Kiribati 332 = Guam 544 = Nauru 564 = Belep Isles 568 = New Hebrides 572 = New Zealand 588 = Niue Island 592 = Norfolk Island 624 = Papua New Guinea 640 = Pitcairn 698 = Samoa 734 = Solomon Islands 796 = Tokelau 800 = Tonga 820 = Tuvalu 848 = US Misc Pacific Islands 888 = Futuna Islands 957 = Melanesia undefined 958 = Micronesia undefined 959 = Pacific Islands undefined 960 = Polynesia undefined | 064 = Austria 084 = Belgium 172 = Channel Islands 220 = Denmark 244 = England 260 = Faeroe Islands 272 = Finland 276 = France 296 = East Germany 300 = West Germany 320 = Greenland 368 = Iceland 388 = Republic of Ireland 392 = Isle of Man 464 = Lichtensteom [Lichtenstein]* 472 = Luxembourg 520 = Monaco 552 = Netherlands 596 = Northern Ireland 600 = Norway 712 = Scotland 768 = Sweden 772 = Switzerland 840 = United Kingdom undefined 884 = Wales 954 = Europe 955 = Germany undefined 956 = Ireland undefined |
| 1991 | BTHPL | 020 = American Samoa 032 = Antarctica 036 = Antarctica foreign 040 = Antarctica British 044 = Antarctica USA 060 = Australia 181 = Christmas 196 = Cook 268 = Fiji 284 = Polynesian 286 = French Southern Territories | 064 = Austria 084 = Belgium 172 = Jersey 220 = Denmark 244 = England 260 = Faeroe 272 = Finland 276 = France 296 = East Germany 300 = West Germany 320 = Greenland |

Country of Birth

| | | Classification category | |
|-------------|--|--|--|
| Year | Variable | Oceania and Antarctica | North-West Europe |
| 1991 | BTHPL | 312 = Kiribati 332 = Guam 502 = Marshall 518 = Caroline 544 = Nauru 564 = New Caledonia 568 = New Hebrides 572 = New Zealand 588 = Niue 592 = Norfolk 640 = Pitcairn 698 = Samoa 734 = Solomon 796 = Tokelau 800 = Tonga 820 = Ellice 888 = Walks 962 = Oceania | 368 = Iceland 388 = Eire 392 = Isle of Man 464 = Lichtenstein 472 = Luxembourg 520 = Monaco 552 = Holland 596 = Northern Ireland 600 = Norway 712 = Scotland 768 = Sweden 772 = Switzerland 840 = Britain 884 = Wales 954 = Europe 955 = Germany 956 = Ireland |
| 1996 | BPLACE | 11 = Australia 12 = Australian External Territories 13 = New Zealand 14 = Melanesia 15 = Micronesia 16 = Polynesia 17 = Antarctica | 21 = The United Kingdom and Ireland 23 = Western Europe 24 = Northern Europe |
| 2001 | Birthplace Country Class – Level 1 | 1 = Oceania and Antarctica | 2 = North West Europe |
| 2006 | Birthplace Country Class – Level 1 | 1 = Oceania and Antarctica | 2 = North West Europe |

* As stated in Statistics New Zealand Data Dictionary, corrected spelling in [] brackets.

Country of Birth

| | | Classification category | |
|-------------|-----------------|---|---|
| Year | Variable | Southern and Eastern Europe | North Africa and the Middle East |
| 1981 | BTHPL | 27 = Malta 57 = Gibraltar 77 = Bulgaria 82 = Czechoslovakia 85 = Estonia 92 = Greece 93 = Hungary 98 = Italy 103 = Latvia 105 = Lithuania 110 = Poland 111 = Rumania 113 = Spain 118 = Union of Soviet Socialist Republics (USSR) 121 = Yugoslavia 124 = Albania 126 = Andorra | 84 = Egypt 97 = Israel 104 = Lebanon 117 = Turkey 123 = Africa undefined 125 = Algeria 134 = Bahrain 152 = Djibouti 172 = Iran 173 = Iraq 175 = Jordan 177 = Kuwait 179 = Libyan Arab Republic 192 = Morocco 197 = Neutral Zone (Arabia) 201 = Oman 211 = Qatar 218 = Saudi Arabia |

Country of Birth

| Year | Variable | Classification category | |
|------|----------|--|--|
| | | Southern and Eastern Europe | North Africa and the Middle East |
| 1981 | BTHPL | 141 = Byelo Russian S. S. R. 209 = Portugal 216 = San Marino 227 = Ukrainian SSR 233 = Vatican City State | 222 = Sudan 224 = Syrian Arab Republic 226 = Tunisia 228 = United Arab Emirates 237 = Western Sahara 238 = Yemen 239 = Yemen, Democratic |
| 1986 | BTHPL | 012 = Albania 024 = A(n)dorra 128 = Bulgaria 140 = White Russia 208 = Cyprus 212 = Czechoslovakia 252 = Estonia 308 = Gibraltar 316 = Greece 364 = Hungary 400 = Italy 444 = Latvia 468 = Lithuania 500 = Malta 644 = Poland 648 = Portugal 672 = Ru[o]mania 700 = San Marino 744 = Spain 828 = Ukrainian SSR 832 = Russia 864 = Vatican City State 904 = Yugoslavia | 004 = Djibouti 016 = Algeria 072 = Bahrain 073 = Africa undefined 236 = Arab Republic Egypt 380 = Iran 384 = Iraq 396 = Israel 416 = Jordan 436 = Kuwait 448 = Lebanon 460 = Libya 532 = Morroco 604 = Oman 660 = Qatar 708 = Saudi Arabia 756 = Sudan 776 = Syrian Arab Republic 808 = Tunisia 812 = Turkey 890 = Sahara 896 = Yemen 900 = Yemen Democratic South Yemen |
| 1991 | BTHPL | 012 = Albania 024 = Andorra 128 = Bulgaria 140 = White Russia 20 = Cyprus 212 = Czechoslovakia 252 = Estonia 308 = Gibraltar 316 = Greece 364 = Hungary 400 = Italy 444 = Latvia 468 = Lithuania 500 = Malta 644 = Poland 648 = Portugal 672 = Rumania 700 = San Marino 744 = Spain 828 = Ukraine 832 = Russia 864 = Vatican City State 904 = Yugoslavia | 004 = Afars 016 = Algeria 072 = Bahrain 236 = Egypt 380 = Persia 384 = Iraq 396 = Israel 416 = Jordan 436 = Kuwait 448 = Lebanon 460 = Libya 532 = Morroco 604 = Muscat 660 = Qatar 708 = Saudi Arabia 756 = Sudan 776 = Syria 808 = Tunisia 812 = Turkey 836 = United Arab Emirates 890 = Sahara 896 = Yemen Arab Republic 900 = South Yemen 964 = Middle East |

Country of Birth

| | | Classification category | |
|-------------|------------------------------------|---|---|
| Year | Variable | Southern and Eastern Europe | North Africa and the Middle East |
| 1996 | BPLACE | 22 = Southern Europe 25 = Eastern Europe 26 = The Former USSR and the Baltic States | 31 = The Middle East 32 = North Africa |
| 2001 | Birthplace Country Class – Level 1 | 3 = Southern and Eastern Europe | 4 = North Africa and the Middle East |
| 2006 | Birthplace Country Class – Level 1 | 3 = Southern and Eastern Europe | 4 = North Africa and the Middle East |

Country of Birth

| | | Classification category | |
|-------------|-----------------|--|---|
| Year | Variable | South East Asia | North East Asia |
| 1981 | BTHPL | 26 = Malaysia 30 = Singapore 51 = Brunei 78 = Burma 94 = Indonesia 100 = Kampuchea 102 = Lao People’s Democratic Republic 109 = Philippines 116 = Thailand 120 = Vietnam, Socialist Republic of 154 = East Timor 184 = Mali 235 = Wake Island 131 = Asia (undefined) 132 = Asia, Minor (Undefined) 133 = Asia, South East (undefined) | 22 = Hong Kong 80 = China 81 = Taiwan, Province of China 99 = Japan 101 = Korea, Republic of (South) 176 = Korea, Democratic Peoples Republic (North) 182 = Macau 191 = Mongolia |
| 1986 | BTHPL | 124 = Brunei 132 = Burma 230 = East Timor 376 = Indonesia 418 = Kampuchea 440 = Laos 488 = Malaysia 496 = Malay 608 = Federated states of Micronesia 636 = Philippines 732 = Singapore 788 = Thailand 872 = Vietnam 880 = Wake Island 952 = Asia undefined 953 = South East Asia undefined | 180 = China 22 = Hong Kong 412 = Japan 428 = North Korea 432 = South Korea 476 = Macao [Macau] 524 = Mongolia 780 = Taiwan |
| 1991 | BTHPL | 124 = Brunei 132 = Burma 230 = East Timor 376 = Indonesia 418 = Cambodia 440 = Laos 488 = Borneo 496 = Mali 614 = Palau | 180 = China 360 = Hong Kong 412 = Japan 428 = North Korea 432 = Korea 476 = Macao [Macau] 524 = Mongolia 598 = Marianas 780 = Taiwan |

Country of Birth

| | | | |
|------|--|---|----------------------|
| | | 636 = Philippines 732 = Singapore 788 = Thailand 846 = Wake 872 = Vietnam 952 = Asia | |
| 1996 | BPLACE | 41 = South East Asia | 51 = North East Asia |
| 2001 | Birthplace Country Class – Level 1 | 5 = South East Asia | 6 = North East Asia |
| 2006 | Birthplace Country Class – Level 1 | 5 = South East Asia | 6 = North East Asia |

Country of Birth

| | | Classification category | |
|------|----------|--|--|
| Year | Variable | Sub-Saharan Africa | The Americas |
| 1981 | BTHPL | 25 = Kenya 28 = Mauritius 29 = Nigeria 32 = Tanzania 34 = Uganda 42 = Zambia 43 = Zimbabwe 49 = Botswana 55 = Gambia 56 = Ghana 60 = Lesotha 61 = Malawi 64 = St Helena 68 = Seychelles 69 = Sierra Leone 70 = Swaziland 112 = South Africa 127 = Angola 135 = Benin 140 = Burundi 142 = Cameroon, Unites Republic 143 = Cape Verde 145 = Central African Republic 146 = Chad 148 = Comoros 149 = Congo 157 = Equatorial Guinea 158 = Ethiopia 162 = Gabon 167 = Guinea 168 = Guinea Bissau 174 = Ivory Coast 178 = Liberia 183 = Madagascar 186 = Mauritania 193 = Mozambique 194 = Namibia 200 = Niger 212 = Reunion Islands | 17 = Barbados 18 = Bermuda 19 = Canada 21 = Faulkland Islands (Malvinas) 24 = Jamaica 33 = Trinidad and Tobago 45 = Antigua 46 = Bahamas 48 = Belize 50 = British Virgin Islands 53 = Coco's (Keeling Island) 54 = Dominica 58 = Grenada 59 = Guyana 63 = Montserrat 65 = St Kitts – Nevis – Anguilla 66 = St Lucia 67 = St Vincent 71 = Turks & Caicos Island 72 = America undefined 74 = Argentina 79 = Chile 119 = United States of America 170 = Honduras 137 = Bolivia 138 = Brazil 144 = Cayman Islands 147 = Colombia 150 = Costa Rica 151 = Cuba 153 = Dominican Republic 155 = Ecuador 156 = El Salvador 161 = French Guiana 164 = Guadeloupe 166 = Guatemala 169 = Haiti 185 = Martinique 188 = Mexico |

Country of Birth

| | | Classification category | |
|-------------|-----------------|---|---|
| Year | Variable | Sub-Saharan Africa | The Americas |
| 1981 | BTHPL | 214 = Rwanda 217 = Sao Tome and Principe 219 = Senegal 220 = Somalia 225 = Togo 231 = Upper Volta 240 = Zaire | 196 = Netherlands Antilles 199 = Nicaragua 204 = Panama 206 = Paraguay 207 = Peru 210 = Puerto Rico 215 = St Pierre and Miquelon 223 = Suriname 230 = US Virgin Islands 232 = Uruguay 234 = Venezuela 221 = South America undefined |
| 1986 | BTHPL | 028 = Angola 090 = Benin 104 = Botswana 136 = Burundi 144 = Cameroon 156 = Cape Verde 164 = Central African Republic 168 = Chad 188 = Grande Comore 192 = French Equatorial Africa 248 = Equatorial Guinea 256 = Ethiopia 288 = Gabon 292 = Gambia 304 = Ghana 340 = Guinea 404 = Ivory Coast 420 = Kenya 452 = Lesotha 456 = Liberia 480 = Madagascar 484 = Malawi 508 = Mauritania 512 = Mauritius 536 = Mozambique 540 = South West Africa 580 = Niger 584 = Nigeria 664 = Department of Reunion 668 = Republic of Zimbabwe 676 = Rwanda 680 = St Helena 704 = Sao Tome 720 = Seychelles 724 = Sierra Leone 736 = Somalia 740 = South Africa 764 = Swaziland 784 = Tanzania 792 = Togo 824 = Uganda 908 = Zaire 912 = Zambia | 030 = Anguilla 048 = Antigua and Barbuda 052 = Argentina 068 = Bahamas 080 = Barbados 088 = British Honduras 092 = Bermuda 100 = Bolivia 108 = Brazil 120 = British Virgin Islands 148 = Canada 160 = Cayman Islands 176 = Chile 182 = Cocos Island 184 = Columbia 200 = Costa Rica 204 = Cuba 228 = Dominican Republic 232 = Ecuador 240 = El Salvador 280 = Department of Guiana 264 = Falkland Islands 324 = Grenada 328 = Department of Guadeloupe 336 = Guatemala 408 = Jamaica 504 = Department of Martinique 516 = Mexico 517 = Midway Islands 528 = Montserrat 556 = Netherlands Antilles 576 = Nicaragua 616 = Panama 628 = Paraguay 632 = Peru 656 = Puerto Rico 684 = Leeward Islands Caribbean 688 = St Lucia 692 = Department of St Pierre and Miquelon 696 = St Vincent and the Grenadines 760 = Surinam 804 = Trinidad 816 = Caicos Island |

Country of Birth

| | | Classification category | |
|-------------|-----------------|---|---|
| Year | Variable | Sub-Saharan Africa | The Americas |
| 1986 | BTHPL | | 844 = United States of America 852 = US Virgin Islands 860 = Uruguay 868 = Venezuela 951 = America undefined 961 = South America undefined |
| 1991 | BTHPL | 028 = Angola 090 = Dahomy 104 = Botswana 136 = Burundi 144 = Cameroon 156 = Cape Verde 164 = Central Africa 168 = Chad 188 = Comoros 192 = Equatorial Africa 248 = Equatorial Guinea 256 = Ethiopia 288 = Gabon 291 = Gambia 304 = Ghana 340 = Guinea 344 = Portuguese Guinea 404 = Ivory Coast 420 = Kenya 452 = Basutoland 456 = Liberia 480 = Madagascar 484 = Malawi 508 = Mauritania 512 = Mauritius 536 = Mozambique 540 = Namibia 580 = Niger 584 = Nigeria 664 = Europa 668 = Zimbabwe 676 = Rwanda 680 = Ascension 704 = St Thome 716 = Senegal 720 = Seychelles 724 = Sierra Leone 736 = Somalia 740 = South Africa 764 = Swaziland 784 = Zanzibar 792 = Togo 824 = Uganda 908 = Zaire 912 = Zambia 967 = Africa | 030 = Anguilla 048 = Antigua 052 = Argentina 056 = Aruba 068 = Bahamas 080 = Barbados 088 = British Honduras 092 = Bermuda 100 = Bolivia 108 = Brazil 120 = British Virgin Islands 148 = Canada 160 = Cayman 176 = Chile 182 = Cocos Keeling 184 = Columbia 200 = Costa Rica 204 = Cuba 224 = Dominica 228 = Dominican Republic 232 = Galapagus 240 = El Salvador 280 = Guina 264 = Falkland Islands 324 = Grenada 328 = Guadetoupe 336 = Guatemala 348 = Guyana 352 = Haiti 356 = Honduras 408 = Jamaica 504 = Martinique 516 = Mexico 528 = Montserrat 556 = Curacao 576 = Nicaragua 616 = Panama 628 = Paraguay 632 = Peru 656 = Puerto Rico 684 = St Kitts Nevis 688 = St Lucia 692 = St Pierre and Miquelon 696 = Northern Grenadines 760 = Surinam 804 = Trinidad Tobago 816 = Turks 844 = America 852 = US Virgin 860 = Uruguay |

Country of Birth

| | | Classification category | |
|------|--|---|---|
| Year | Variable | Sub-Saharan Africa | The Americas |
| 1991 | BTHPL | | 868 = Venezuela 961 = South America undefined 963 = West Indies 965 = Latin America 966 = North America |
| 1996 | BPLACE | 91 = Central and West Africa 92 = Southern and East Africa | 71 = Northern America 81 = South America 82 = Central America 83 = The Caribbean |
| 2001 | Birthplace Country Class – Level 1 | 9 = Sub-Saharan Africa | 8 = The Americas |
| 2006 | Birthplace Country Class – Level 1 | 9 = Sub-Saharan Africa | 8 = The Americas |

Country of Birth

| | | Classification category | |
|------|--|--|--|
| Year | Variable | Southern and Central Asia | Residual categories |
| 1981 | BTHPL | 23 = India 31 = Sri Lanka 47 = Bangladesh 62 = Maldives 108 = Pakistan 122 = Afghanistan 136 = Bhutan 139 = British Indian Ocean Territory 195 = Nepal | 241 = Born at Sea 242 = Beyond New Zealand 243 = Not specified |
| 1986 | BTHPL | 008 = Afghanistan 076 = Bangladesh 096 = Bhutan 112 = British Indian Ocean Territory 372 = India 492 = Maldives 548 = Nepal 612 = Pakistan 752 = Sri Lanka | 242 = Born at Sea 560 = Neutral Zone 999 = Not specified |
| 1991 | BTHPL | 008 = Afghanistan 076 = Bangladesh 096 = Bhutan 112 = British Indian Ocean Territories 372 = India 492 = Maldives 548 = Nepal 612 = Pakistan 752 = Ceylon | 242 = Born at Sea 560 = Neutral Zone 999 = Not specified |
| 1996 | BPLACE | 61 = Southern Asia | 99 = Not Specified |
| 2001 | Birthplace Country Class – Level 1 | 7 = Southern and Central Asia | 0 = Inadequately Described, etc. |
| 2006 | Birthplace Country Class – Level 1 | 7 = Southern and Central Asia | 0 = Supplementary codes |

Ethnicity

| Year | Code | Classification category | |
|------|-------|---|---|
| | | Māori | Pacific Islands |
| 1981 | ETHOR | 2 = 2 Races Pred European with NZ Māori 34 = Full NZ Māori (and Māori n.o.d) 35 = 2 Races Pred NZ Māori with European 36 = 50% European, 50% NZ Māori 37 = Pred NZ Māori with Samoan 38 = 50% NZ Māori, 50% Samoan 39 = Pred NZ Māori with Cook Is. Maori 40 = 50% NZ Māori, 50% Cook Is. Maori 41 = Pred NZ Māori with Niuean 42 = 50% NZ Māori, 50% Niuean 43 = Pred NZ Māori with Tongan 44 = 50% NZ Māori, 50% Tongan 45 = Pred NZ Māori with Tokelauan 46 = 50% NZ Māori, 50% Tokelauan 47 = Pred NZ Māori with Tahitian 48 = 50% NZ Māori, 50% Tahitian 49 = Pred NZ Māori with Hawaiian 50 = 50% NZ Māori, 50% Hawaiian 51 = Pred NZ Māori with other Polynesian 52 = 50% NZ Māori, 50% other Polynesian 53 = Pred NZ Māori with Chinese 54 = 50% NZ Māori, 50% Chinese 55 = Pred NZ Māori with Indian 56 = 50% NZ Māori, 50% Indian 57 = Pred NZ Māori with Fijian 58 = 50% NZ Māori, 50% Fijian 59 = Pred NZ Māori with other Melanesian 60 = 50% NZ Māori, 50% other Melanesian 61 = Pred NZ Māori with Japanese 62 = 50% NZ Māori, 50% Japanese 63 = Pred NZ Māori with Malay 64 = 50% NZ Māori, 50% Malay 65 = Pred NZ Māori with Sri Lankan 66 = 50% NZ Māori, 50% Sri Lankan 67 = Pred NZ Māori with Arab 68 = 50% NZ Māori, 50% Arab 69 = Pred NZ Māori with Negro 70 = 50% NZ Māori, 50% Negro 71 = Pred NZ Māori with Thai 72 = 50% NZ Māori, 50% Thai 73 = Pred NZ Māori with Indonesian 74 = 50% NZ Māori, 50% Indonesian 75 = Pred NZ Māori with Vietnamese 76 = 50% NZ Māori, 50% Vietnamese 77 = Pred NZ Māori with Filipino 78 = 50% NZ Māori, 50% Filipino 79 = Pred NZ Māori with Burmese 80 = 50% NZ Māori, 50% Burmese 81 = Pred NZ Māori with Korean 82 = 50% NZ Māori, 50% Korean 83 = Pred NZ Māori with Micronesian 84 = 50% NZ Māori, 50% Micronesian 85 = Pred NZ Māori with Iranian | 3 = 2 Races Pred European with Samoan 4 = 2 Races Pred European with Cook Is. Maori 5 = 2 Races Pred European with Niuean 6 = 2 Races Pred European with Tongan 7 = 2 Races Pred European with Tokelauan 8 = 2 Races Pred European with Tahitian 9 = 2 Races Pred European with Hawaiian 10 = 2 Races Pred European with Other Polynesian 13 = 2 Races Pred European with Fijian 14 = 2 Races Pred European with Other Melanesian 98 = Full Samoan 99 = 2 Races Pred Samoan with European 100 = 50% Samoan, 50% European 102 = Pred Samoan with another Polynesian 103 = 50% Samoan. 50% other Polynesian 104 = Pred Samoan with Chinese 105 = 50% Samoan, 50% Chinese 106 = Pred Samoan with Indian 107 = 50% Samoan. 50% Indian 108 = Full Cook Island Maori 109 = 2 Races Pred Cook Is. Maori with European 110 = 50% Cook Is. Maori, 50% European 112 = Pred Cook Is. Maori with other Polynesian 113 = 50% Cook Is. Maori, 50% other Polynesian 114 = Pred Cook Is. Maori with Chinese 115 = 50% Cook Is. Maori, 50% Chinese 116 = Pred Cook Is. Maori with Indian 117 = 50% Cook Is. Maori, 50% Indian 118 = Full Niuean 119 = 2 Races Pred Niuean with European 120 = 50% Niuean, 50% European 122 = Pred Niuean with other Polynesian 123 = 50% Niuean, 50% other Polynesian 124 = Pred Niuean with Chinese 125 = 50% Niuean, 50% Chinese 126 = Pred Niuean with Indian 127 = 50% Niuean, 50% Indian 128 = Full Tongan 129 = 2 Races Pred Tongan with European 130 = 50% Tongan, 50% European 132 = Pred Tongan with other Polynesian 133 = 50% Tongan, 50% other Polynesian 134 = Pred Tongan with Chinese 135 = 50% Tongan, 50% Chinese 136 = Pred Tongan with Indian 137 = 50% Tongan, 50% Indian 138 = Full Tokelauan 139 = 2 Races Pred Tokelauan with European |

Ethnicity

| Year | Code | Classification category | |
|------|-------|--|--|
| | | Māori | Pacific Islands |
| 1981 | ETHOR | 86 = 50% NZ Māori, 50% Iranian 87 = Pred NZ Māori with Aust. Aboriginal 88 = 50% NZ Māori, 50% Aust. Aboriginal 89 = Pred NZ Māori with Kampuchean 90 = 50% NZ Māori, 50% Kampuchean 202 = Pred Chinese with NZ Māori 210 = Pred Indian with NZ Māori 225 = Pred Japanese with NZ Māori 229 = Pred Malay with NZ Māori 233 = Pred Sri Lankan with NZ Māori 241 = Pred Thai with NZ Māori 249 = Pred Vietnamese with NZ Māori 253 = Pred Filipino with NZ Māori 261 = Lankan Burmese with NZ Māori 265 = Pred Korean with NZ Māori 269 = Pred Micronesian with NZ Māori 273 = Pred Iranian with NZ Māori 277 = Pred Aust Aboriginal with NZ Māori 281 = Pred Kampuchean with NZ Māori 285 = Pred Laotian with NZ Māori 289 = Pred NZ Indian with NZ Māori 293 = Pred Other with NZ Māori | 140 = 50% Tokelauan, 50% European 142 = Pred Tokelauan with other Polynesian 143 = 50% Tokelauan, 50% other Polynesian 144 = Pred Tokelauan with Chinese 145 = 50% Tokelauan, 50% Chinese 146 = Pred Tokelauan with Indian 147 = 50% Tokelauan, 50% Indian 148 = Full Tahitian 149 = 2 Races Pred Tahitian with European 150 = 50% Tahitian, 50% European 152 = Pred Tahitian with other Polynesian 153 = 50% Tahitian, 50% other Polynesian 154 = Pred Tahitian with Chinese 155 = 50% Tahitian, 50% Chinese 156 = Pred Tahitian with Indian 157 = 50% Tahitian, 50% Indian 158 = Full Hawaiian 159 = 2 Races Pred Hawaiian with European 160 = 50% Hawaiian, 50% European 162 = Pred Hawaiian with other Polynesian 163 = 50% Hawaiian, 50% other Polynesian 164 = Pred Hawaiian with Chinese 165 = 50% Hawaiian, 50% Chinese 166 = Pred Hawaiian with Indian 167 = 50% Hawaiian, 50% Indian 168 = Full Other Polynesian 169 = 2 Races Pred other Polynesian with European 170 = 50% other Polynesian, 50% European 172 = Pred other Polynesian with other Polynesian 173 = Pred other Polynesian with Chinese 174 = 50% other Polynesian, 50% Chinese 175 = Pred other Polynesian with Indian 176 = 50% other Polynesian, 50% Indian 177 = 50% Samoan, 50% Cook Is. Maori 178 = 50% Samoan, 50% Niuean 179 = 50% Samoan, 50% Tongan 180 = 50% Samoan, 50% Tokelauan 181 = 50% Samoan, 50% Tahitian 182 = 50% Samoan, 50% Hawaiian 183 = 50% Cook Is. Maori, 50% Niuean 184 = 50% Cook Is. Maori, 50% Tongan 185 = 50% Cook Is. Maori, 50% Tokelauan 186 = 50% Cook Is. Maori, 50% Tahitian 187 = 50% Cook Is. Maori, 50% Hawaiian 188 = 50% Niuean, 50% Tongan 189 = 50% Niuean, 50% Tokelauan |

Ethnicity

| Year | Code | Classification category | |
|------|-------|--|--|
| | | Māori | Pacific Islands |
| 1981 | ETHOR | | 190 = 50% Niuean, 50% Tahitian 191 = 50% Niuean, 50% Hawaiian 192 = 50% Tongan, 50% Tokelauan 193 = 50% Tongan, 50% Tahitian 194 = 50% Tongan, 50% Hawaiian 195 = 50% Tokelauan, 50% Tahitian 196 = 50% Tokelauan, 50% Hawaiian 197 = 50% Tahitian, 50% Hawaiian 198 = 3 Races 50% Pacific Polynesian, 2 Others 203 = Pred Chinese with PI Polynesian 211 = Pred Indian with PI Polynesian 214 = Full Fijian 215 = 2 Races Pred Fijian with European 216 = 50% Fijian, 50% European 218 = Full Other Melanesian 219 = 2 Races Pred Other Melanesian with European 220 = 50% Other Melanesian, 50% European 274 = Full Australian Aboriginal 275 = 2 Races Pred Aust Aboriginal with European 276 = 50% Aust Aboriginal, 50% European |
| 1986 | ETHOR | 2 = European/NZ Māori 10 = NZ Māori only 11 = NZ Māori/Samoan 12 = NZ Māori/Cook Island Maori 13 = NZ Māori/Niuean 14 = NZ Māori/Tongan 15 = NZ Māori/Other Pacific Island Polynesian 16 = NZ Māori/Chinese 17 = NZ Māori/Indian 48 = Including NZ Māori (2 ethnic groups) 51 = Including NZ Māori (3 or more ethnic groups) | 3 = European/Samoan 4 = European/Cook Island Maori 5 = European/Niuean 6 = European/Tongan 7 = European/Other Pacific Island Polynesian 18 = Samoan only 19 = Samoan/Cook Island Maori 20 = Samoan/Niuean 21 = Samoan/Tongan 22 = Samoan/Other Pacific Island Polynesian 23 = Samoan/Chinese 24 = Samoan/Indian 25 = Cook Island Maori only 26 = Cook Island Maori/Niuean 27 = Cook Island Maori/Tongan 28 = Cook Island Maori/Other Pacific Island Polynesian 29 = Cook Island Maori/Chinese 30 = Cook Island Maori/Indian 31 = Niuean only 32 = Niuean/Tongan 33 = Niuean/Other Pacific Island Polynesian 34 = Niuean/Chinese 35 = Niuean/Indian 36 = Tongan only 37 = Tongan/Other Pacific Island Polynesian 38 = Tongan/Chinese |

Ethnicity

| Year | Code | Classification category | |
|------|-------|--|---|
| | | Māori | Pacific Islands |
| | | | 39 = Tongan/Indian 40 = Tokelauan only 41 = Other Pacific Island Polynesian only 44 = Fijian only 49 = Including Pacific Island Polynesian (2 ethnic groups) 52 = including Pacific Island Polynesian (3 or more ethnic groups) |
| 1991 | ETHGP | 04 = European/NZ Māori 15 = NZ Māori only 16 = NZ Māori/Samoan 17 = NZ Māori/Cook Island 18 = NZ Māori/Tongan 19 = NZ Māori/Niuean 20 = NZ Māori/Tokelauan 21 = NZ Māori/Other Pacific Island Polynesian 22 = NZ Māori/Chinese 23 = NZ Māori/Indian 24 = NZ Māori/Fijian 25 = NZ Māori with other single Ethnic Group | 05 = European/Samoan 06 = European/Cook Islander 07 = European/Tongan 08 = European/Niuean 09 = European/Tokelauan 10 = European/Other Pacific Island 13 = European/Fijian 26 = Samoan 27 = Samoan/Cook Islander 28 = Samoan/Tongan 29 = Samoan/Niuean 30 = Samoan/Tokelauan 31 = Samoan/Other Pacific Island Polynesian 35 = Cook Islander only 36 = Cook Islander/Tongan 37 = Cook Islander/Niuean 38 = Cook Islander/Tokelauan 39 = Cook Islander/Other Pacific Island Polynesian 43 = Tongan Only 44 = Tongan/Niuean 45 = Tongan/Tokelauan 46 = Tongan/Other Pacific Island Polynesian 49 = Tongan/Fijian 50 = Niuean only 51 = Niuean/Tokelauan 52 = Niuean/Other Pacific Island Polynesian 55 = Niuean/Fijian 56 = Tokelauan Only 57 = Tokelauan/Other Pacific Island Polynesian 60 = Tokelauan/Fijian 61 = Other single Pacific Island Polynesian 62 = Fijian only 63 = Other single Pacific Islanders 64 = Other combinations of two Ethnic Groups inch Pacific Islander 32 = Samoan/Chinese 33 = Samoan/Indian 34 = Samoan/Fijian 40 = Cook Islander/Chinese 41 = Cook Islander/Indian 42 = Cook Islander/Fijian 47 = Tongan/Chinese 48 = Tongan/Indian |

Ethnicity

| Year | Code | Classification category | |
|------|------------------------|---------------------------|--|
| | | Māori | Pacific Islands |
| | | | 53 = Niuean/Chinese 54 = Niuean/Indian 58 = Tokelauan/Chinese 59 = Tokelauan/Indian 76 = Other combinations of three ethnic groups incl. PI (excl. NZ Māori) |
| 1996 | Ethnic Group 1 | 2 = NZ Māori Ethnic group | 3 = Pacific Island Ethnic Group |
| 2001 | Ethnic Group – Level 1 | 2 = Māori Ethnic Groups | 3 = Pacific Island Ethnic Groups |
| 2006 | Ethnic Group – Level 1 | 02 = Māori Ethnic Groups | 03 = Pacific Peoples Ethnic Groups |

Ethnicity

| Year | Code | Classification category | |
|------|-------|--|--|
| | | Asian | European |
| 1981 | ETHOR | 11 = 2 Races Pred European with Chinese 12 = 2 Races Pred European with Indian 15 = 2 Races Pred European with Japanese 16 = 2 Races Pred European with Malay 17 = 2 Races Pred European with Sri Lankan 20 = 2 Races Pred European with Thai 21 = 2 Races Pred European with Indonesian 22 = 2 Races Pred European with Vietnamese 23 = 2 Races Pred European with Filipino 24 = 2 Races Pred European with Burmese 25 = 2 Races Pred European with Korean 26 = 2 Races Pred European with Micronesian 29 = 2 Races Pred European with Kampuchean 30 = 2 Races Pred European with Laotian 199 = Full Chinese 200 = 2 Races Pred Chinese with European 201 = 50% Chinese, 50% European 204 = Pred Chinese with Indian 205 = 50% Chinese, 50% Indian 206 = 3 Races 50% Chinese, 2 Others 207 = Full Indian 208 = 2 Races Pred Indian with European 209 = 50% Indian, 50% European 211 = Pred Indian with PI Polynesian 212 = Pred Indian with Chinese 213 = 3 Races 50% Indian, 2 Others 222 = Full Japanese 223 = 2 Races Pred Japanese with European 224 = 50% Japanese, 50% European 226 = Full Malay 227 = 2 Races Pred Malay with European 228 = 50% Malay, 50% European 230 = Full Sri Lankan | 1 = Full European (Caucasian) 18 = 2 Races Pred European with Arab 19 = 2 Races Pred European with Negro 27 = 2 Races Pred European with Iranian 28 = 2 Races Pred European with Aust. Aboriginal 31 = 2 Races Pred European with Nth. Am. Indian 32 = 2 Races Pred European with Other 33 = 3 Races Pred European 159 = 2 Races Pred Hawaiian with European 160 = 50% Hawaiian, 50% European 219 = 2 Races Pred Other Melanesian with European 220 = 50% Other Melanesian, 50% European 271 = 2 Races Pred Iranian with European 272 = 50% Iranian, 50% European 275 = 2 Races Pred Aust Aboriginal with European 276 = 50% Aust Aboriginal, 50% European 287 = 2 Races Pred NA Indian with European 291 = 2 Races Pred Other with European 292 = 50% Other, 50% European |

Ethnicity

| Year | Code | Classification category | |
|------|------------------------|--|--|
| | | Asian | European |
| 1981 | ETHOR | 231 = 2 Races Pred Sri Lankan with European 232 = 50% Sri Lankan, 50% European 238 = Full Thai 239 = 2 Races Pred Thai with European 240 = 50% Thai, 50% European 242 = Full Indonesian 243 = 2 Races Pred Indonesian with European 244 = 50% Indonesian, 50% European 246 = Full Vietnamese 247 = 2 Races Pred Vietnamese with European 248 = 50% Vietnamese, 50% European 250 = Full Filipino 251 = 2 Races Pred Filipino with European 252 = 50% Filipino, 50% European 258 = Full Burmese 259 = 2 Races Pred Burmese with European 260 = 50% Burmese, 50% European 262 = Full Korean 263 = 2 Races Pred Korean with European 264 = 50% Korean, 50% European 266 = Full Micronesian 267 = 2 Races Pred Micronesian with European 268 = 50% Micronesian, 50% European 278 = Full Kampuchean 279 = 2 Races Pred Kampuchean with European 280 = 50% Kampuchean, 50% European 282 = Full Laotian 283 = 2 Races Pred Laotian with European 284 = 50% Laotian, 50% European | |
| 1986 | ETHOR | 8 = European/Chinese 42 = Chinese only 45 = Vietnamese only 46 = Sri Lankan only | 1 = European only |
| 1991 | ETHGP | 11 = European/Chinese 12 = European/Indian 65 = Chinese only 66 = Indian only 67 = Chinese/Indian 68 = Vietnamese only 69 = Japanese only 70 = Cambodian only 71 = Sri Lankan only | 01 = NZ European only 02 = NZ European / Other Europeans 03 = Other Europeans only 14 = European with other single Ethnic Group |
| 1996 | Ethnic Group 1 | 4 = Asian Ethnic Group | 1 = European only |
| 2001 | Ethnic Group – Level 1 | 4 = Asian Ethnic Groups | 1 = European Ethnic Group |
| 2006 | Ethnic Group – Level 1 | 04 = Asian Ethnic Groups | 01 = European Ethnic Group |

Ethnicity

| Year | Code | Classification category | |
|------|------------------------|--|--|
| | | Other | Residual categories |
| 1981 | ETHOR | 290 = Full Other Ethnic Origin 294 = 2 Ethnic Origin mixed – N E C 295 = 3 Ethnic Origin mixed – N E C | 296 = Not Specified |
| 1986 | ETHOR | 47 = Other Single ethnic origin only 50 = Other combinations of two ethnic origins 53 = Other combinations of three or more ethnic origins | 99 = Not specified |
| 1991 | ETHGP | 72 = Other Single Ethnic Groups Only 73 = Other combinations of two Ethnic groups 77 = Other remaining combinations of three Ethnic Groups | 99 = Not Specified |
| 1996 | Ethnic Group 1 | 5 = Other | 6 = Not Specified |
| 2001 | Ethnic Group – Level 1 | 5 = Other Ethnic Groups | 7 = Response Unidentifiable 8 = Response Outside Scope 9 = Not Stated |
| 2006 | Ethnic Group – Level 1 | 05 = MELAA Ethnic Groups 06 = Other Ethnic Groups | 97 = Response Unidentifiable 98 = Response Outside Scope 99 = Not Stated |

Highest Secondary School Qualification

| Year | Variable | Classification categories | |
|------|---|--|--|
| | | No school qualification | Qualification in 5 th form/Year 11 |
| 1981 | SCQLN | 0 = No School Qualification* | 6 = School Certificate, or 3 or more subject passes in School Certificate subjects 7 = Pass in 1 or 2 School Certificate subjects |
| 1986 | HSQL | 1 = No School Qualification | 2 = School Certificate, 1 or 2 Passes 3 = School Certificate, 3 or more Passes |
| 1991 | SQUAL | 1 = No School Qualification | 2 = School Certificate in one or more subjects |
| 1996 | SCHQUAL | 77 = No secondary school qualification | 10 = NZ School Certificate in one or more subjects 71 = Overseas Equivalent to School Certificate Qualification |
| 2001 | Education Highest Secondary School Qual | 00 = No secondary school qualification | 01 = NZ School Certificate in one or more subjects, or National Certificate level 1 |
| 2006 | Highest Secondary School Qual | 00 = No qualification | 01 = level 1 Certificate |

* NB because of the question wording, this may have been dramatically understated this year. Those who would tick this box were filtered out of answering the question.

Highest Secondary School Qualification

| Year | Variable | Classification categories | |
|------|---|---|--|
| | | Qualification obtained from the 6 th Form/Year 12 | Qualification obtained from the 7 th Form/Year 13 |
| 1981 | SCQLN | 3 = University Entrance, Matriculation 4 = Endorsed School Certificate, or Sixth Form Certificate in 4 or more subjects 5 = Sixth Form Certificate in 1, 2 or 3 subjects | 1 = University Scholarship, or A or B Bursary 2 = Higher School Certificate or Higher Leaving Certificate |
| 1986 | HSQL | 4 = 6 th Form Certificate, Endorsed School Certificate 5 = University Entrance, Matriculation | 6 = Higher School Certificate or Higher Leaving Certificate 7 = University Bursary, Scholarship |
| 1991 | SQUAL | 3 = Sixth Form Certificate, University Entrance in one or more subjects (NB this figure will be larger than other years) | 4 = Higher School Certificate, Higher Leaving Certificate 5 = University Bursary, Scholarship |
| 1996 | SCHQUAL | 20 = NZ Sixth Form Certificate in one or more subjects 30 = NZ University Entrance before 1986 in one or more subjects 72 = Overseas Equivalent to Sixth Form Qualification | 40 = NZ Higher School Certificate or Higher Leaving Certificate 50 = NZ University Bursary, Entrance or Scholarship 73 = Overseas Equivalent to Higher School Qualification |
| 2001 | Education Highest Secondary School Qual | 02 = NZ 6 th Form Certificate in 1 or more subjects, or National Certificate Level 2 03 = NZ University entrance before 1986 in one or more subjects | 04 = NZ Higher School Certificate or Higher Leaving Certificate 05 = University Entrance Qualification from NZ University Bursary 06 = NZ A/B Bursary, Scholarship, or National certificate, Level 3 |
| 2006 | Highest Secondary School Qual | 02 = Level 2 Certificate | 03 = Level 3 or 4 Certificate |

Highest Secondary School Qualification

| Year | Variable | Classification categories | | |
|------|---|---|--|---|
| | | Overseas school qualification | Other | Not specified/stated |
| 1981 | SCQLN | No category | 8 = Other (must be valid qualifications) | 9 = Not Specified |
| 1986 | HSQL | No category | 8 = Other | 9 = Not Specified |
| 1991 | SQUAL | 6 = Overseas Qualification | 7 = Other School Qualification | 9 = Not Specified |
| 1996 | SCHQUAL | 70 = Overseas Secondary School Qualification not further defined 74 = Other Overseas Qualification nec | 98 = Unidentifiable | 99 = Not Specified |
| 2001 | Education Highest Secondary School Qual | 08 = Overseas secondary school qualification | 07 = Other NZ secondary school qualification | 99 = Not stated |
| 2006 | Highest Secondary School Qual | 23 = Overseas secondary school qualification | | 94 = Don't know 95 = Refused to answer 97 = Response unidentifiable 98 = Response outside scope 99 = Not stated |

Highest Post-school Qualification

| | | Classification categories | |
|-------------|--|---|--|
| Year | Variable | Undergraduate degree | Postgraduate degree/higher degree |
| 1981 | QUAL1,2,3,4 | 3001–3293 = Bachelorate | 1001–1047 = Doctorate 2001–2308 = Masterate 4001–4179 = Post-graduate Diplomas |
| 1986 | TQUAL | 9 = Baccalaureate | 10 = Postgraduate Degree/Certificate/ Diploma 12 = two tertiary qualifications 13 = three or more tertiary qualifications |
| 1991 | TQUAL | xxx1x = Bachelors Degree | xxx2x = Both Bachelors Degree and Postgraduate Degree/Certificate/Diploma xxx3x = Postgraduates Degree |
| 1996 | Tertiary Quals Level of Attainment | 08 = Bachelor Degree | 9 = Higher Degree |
| 2001 | Education Highest Qualification | 10 = Bachelor Degree | 11 = Higher Degree |
| 2006 | Highest Qualification | 07 = Bachelor Degree and Level 7 qualification | 08 = Postgraduate and Honours Degree 09 = Masters Degree 10 = Doctorate Degree |

Highest Post-school Qualification

| | | Classification categories | |
|-------------|--|--|--|
| Year | Variable | Trade certificates/vocational qualification | |
| 1981 | QUAL1,2,3,4 | 5001–5096 = Undergraduate Diplomas and Certificates 6001–6655 = Non-University Qualifications | |
| 1986 | TQUAL | 3 = Trade Certificates 4 = Nursing Certificate/diploma 5 = Teacher's Certificate/diploma 6 = Technicians certificate 7 = NZ certificate/diploma 8 = Undergraduate certificate/diploma | |
| 1991 | TQUAL | 1xxxx = Trade Certificate/Advanced Trade Certificate 2xxxx = Both Trade Certificate/Advanced Trade Certificate and Nursing Certificate/Diploma 3xxxx = Nursing Certificate/Diploma x1xxx = NZ Certificate/Diploma x2xxx = Both NZ Certificate/Diploma and Technicians Certificate x3xxx = Technicians Certificate xx1xx = Teachers Certificate/Diploma xx2xx = Both Teachers Certificate/Diploma and University Certificate/Diploma below Bachelor Level xx3xx = University Certificate/Diploma below Bachelor Level | |
| 1996 | Tertiary Quals Level of Attainment | 04 = Basic Vocational Qualification 05 = Skilled Vocational Qualification 06 = Intermediate Vocational Qualification 07 = Advanced Vocational Qualification | |
| 2001 | Education Highest Qualification | 06 = Basic Vocational Qualification 07 = Skilled Vocational Qualification 08 = Intermediate Vocational Qualification 09 = Advanced Vocational Qualification | |
| 2006 | Highest Qualification | 01 = Level 1 Certificate 03 = Level 3 Certificate 05 = Level 5 Diploma | 02 = Level 2 Certificate 04 = Level 4 Certificate 06 = Level 6 Diploma |

Iwi

Iwi was not available in 1981 or 1986. In 1991, there was the variable called Main Tribe (TRIBA) which was derived from the input fields of TRIB1, TRIB2, and TRIB3 and has iwi with codes 000–096 but no information on which iwi these codes relate to.

Iwi

| Year | Variable | Classification categories | |
|------|------------------------------|---|--|
| | | Northern/Auckland Region | Coromandel Region |
| 1996 | IWI1, IWI2, IWI3, IWI4, IWI5 | 0100 = Northland/Auckland Iwi not further defined 0101 = Te Aupōuri 0102 = Ngāti Kahu 0103 = Ngāti Kuri 0104 = Ngāpuhi 0105 = Ngāpuhi ki Whaingaroa-Ngāti Kahu ki Whaingaroa 0106 = Te Rarawa 0107 = Ngāi Takoto 0108 = Ngāti Wai 0109 = Ngāti Whātua 0110 = Te Kawerau 0111 = Te Uri o Hau 0112 = Te Roroa | 0200 = Hauraki Iwi not further defined 0201 = Ngāti Hako 0202 = Ngāti Hei 0203 = Ngāti Maru (Marutuahu) 0204 = Ngāti Paoa 0205 = Patukirikiri 0206 = Ngāti Porou ki Harataunga ki Mataora 0207 = Ngāti Pūkenga ki Waiau 0208 = Ngāti Rāhiri Tumutumu 0209 = Ngāti Tai 0210 = Ngāti Tamaterā 0211 = Ngāti Tara Tokanui 0212 = Ngāti Whanaunga |
| 2001 | Iwi Level 1 | 01 = Te Tai Tokerau/Tāmaki-makau-rau (Northern/Auckland) Region | 02 = Hauraki (Coromandel) Region |
| 2006 | Iwi – Level 1 | 01 = Te Tai Tokerau/Tamaki-makau-rau (Northern/Auckland) Region | 02 = Hauraki (Coromandel) Region |

Iwi

| Year | Variable | Classification categories | |
|------|------------------------------|--|--|
| | | Waikato/King Country Region | Rotorua/Taupo Region |
| 1996 | IWI1, IWI2, IWI3, IWI4, IWI5 | 0300 = Waikato/King Country Iwi not further defined 0301 = Ngāti Haua (Waikato) 0302 = Ngāti Maniapoto 0303 = Ngāti Raukawa (Waikato) 0304 = Waikato | 0400 = Te Arawa/Taupō Iwi not further defined 0401 = Ngāti Pīkiao 0402 = Ngāti Rangiteaorere 0403 = Ngāti Rangitīhi 0404 = Ngāti Rangiwewehi 0405 = Tapuika 0406 = Tarāwhai 0407 = Tūhourangi 0408 = Uenuku-Kōpako 0409 = Waitaha (Te Arawa) 0410 = Ngāti Whakaue 0411 = Tūwharetoa |
| 2001 | Iwi Level 1 | 03 = Waikato/Te Rohe Pōtae (Waikato/King Country) Region | 04 = Te Arawa/Taupō (Rotorua/Taupo) Region |
| 2006 | Iwi Level 1 | 03 = Waikato/Te Rohe Pōtae (Waikato/King Country) Region | 04 = Te Arawa/Taupō (Rotorua/Taupo) Region |

Iwi

| | | Classification categories | |
|-------------|------------------------------|--|---|
| Year | Variable | Bay of Plenty Region | East Coast Region |
| 1996 | IWI1, IWI2, IWI3, IWI4, IWI5 | 0500 = Bay of Plenty Iwi not further defined 0501 = Ngāti Pūkenga 0502 = Ngāiterangi 0503 = Ngātirangiinui 0504 = Ngāti Awa 0505 = Ngāti Manawa-Ngati Whare 0506 = Ngāi Tai 0507 = Tūhoe 0508 = Whakatōhea 0509 = Whānau-ā-Apanui | 0600 = East Coast Iwi not further defined 0601 = Ngāti Porou 0602 = Te Aitanga-ā-Māhaki 0603 = Rongowhakaata 0604 = Ngāi Tamanuhiri |
| 2001 | Iwi Level 1 | 05 = Tauranga Moana/Mātaatua (Bay of Plenty) Region | 06 = Te Tai Rāwhiti (East Coast) Region |
| 2006 | Iwi Level 1 | 05 = Tauranga Moana/Mātaatua (Bay of Plenty) Region | 06 = Te Tai Rāwhiti (East Coast) Region |

Iwi

| | | Classification categories | |
|-------------|------------------------------|---|---|
| Year | Variable | Hawkes Bay/Wairarapa Region | Taranaki Region |
| 1996 | IWI1, IWI2, IWI3, IWI4, IWI5 | 0700 = Hawkes Bay/Wairarapa Iwi not further defined 0701 = Rongomaiwahine 0702 = Ngāti Kahungunu ki Te Wairoa 0703 = Ngāti Kahungunu ki Heretaunga 0704 = Ngāti Kahungunu ki Wairarapa 0705 = Kahungunu, area unspecified 0706 = Rangitāne (Hawkes Bay/Wairarapa) | 0800 = Taranaki Iwi not further defined 0801 = Te Atiawa (Taranaki) 0802 = Ngāti Maru (Taranaki) 0803 = Ngāti Mutunga (Taranaki) 0804 = Ngā Rauru 0805 = Ngā Ruahine 0806 = Ngāti Raunui 0807 = Ngāti Tama (Taranaki) 0808 = Taranaki 0809 = Tangahoe 0810 = Pakakohe |
| 2001 | Iwi Level 1 | 07 = Te Matau-a-Māui/Wairarapa (Hawkes Bay/Wairarapa) Region | 08 = Taranaki (Taranaki) Region |
| 2006 | Iwi Level 1 | 07 = Te Matau-a-Māui/Wairarapa (Hawkes Bay/Wairarapa) Region | 08 = Taranaki (Taranaki) Region |

Iwi

| | | Classification categories | |
|-------------|------------------------------|--|--|
| Year | Variable | Wanganui/Rangitikei Region | Manawatu/Horowhenua/Wellington Region |
| 1996 | IWI1, IWI2, IWI3, IWI4, IWI5 | 0900 = Whanganui Iwi not further defined 0901 = Ngāti Apa 0902 = Te Ati Haunui-a-Pāpārangī 0903 = Ngāti Haua (Taumarunui) | 1000 = Manawatu/ Horowhenua/ Wellington Iwi not further defined 1001 = Te Atiawa (Wellington) 1002 = Muaupoko 1003 = Rangitane (Manawatu) 1004 = Ngāti Raukawa (Horowhenua/ Manawatu) 1005 = Ngāti Toa (Wellington) |
| 2001 | Iwi Level 1 | 09 = Whanganui/Rangitikei (Wanganui/ Rangitikei) Region | 10 = Manawatū/Horowhenua/Te Whanganui-a-Tara (Manawatu/ Horowhenua/Wellington) Region |
| 2006 | Iwi Level 1 | 09 = Whanganui/Rangitikei (Wanganui/ Rangitikei) Region | 10 = Manawatū/Horowhenua/Te Whanganui-a-Tara (Manawatu/ Horowhenua/Wellington) Region |

Iwi

| Year | Variable | Classification categories | | |
|------|------------------------------------|---|---|--|
| | | South Island/ Chatham Islands Region | Residual categories with some Iwi information | Residual categories |
| 1996 | IWI1, IWI2, IWI3, IWI4, IWI5 | 1100 = South Island/ Chatham Island Iwi not further defined 1101 = Te Atiawa (South Island) 1102 = Ngāti Koata 1103 = Ngāti Kuia 1104 = Kāti Māmoe 1105 = Ngāti Mutunga (Chatham Islands) 1107 = Rangitane (South Island) 1108 = Ngāti Rārua 1109 = Ngāi Tahu 1110 = Ngāti Tama (South Island) 1111 = Ngāti Toa (South Island) 1112 = Waitaha (South Island) 1113 = Ngāti Apa ki te Waipounamu | 3001 = Te Atiawa, area unspecified 3002 = Ngāti Haua, area unspecified 3003 = Ngāti Maru, area unspecified 3004 = Ngāti Mutunga, are unspecified 3005 = Rangitāne, area unspecified 3006 = Ngāti Raukawa, area unspecified 3007 = Ngāti Tama, area unspecified 3008 = Ngāti Toa, area unspecified 3009 = Waitaha, area unspecified 4000 = Hapū affiliated to more than one iwi | 5000 = Do not know name of Iwi 6000 = Unidentifiable 8888 = not applicable 9999 = not specified |
| 2001 | Iwi Level 1 | 11 = Te Waipounamu / Wharekauri (South Island /Chatham Islands) Region | 20 = Iwi not named, but Waka or Iwi Confederation known 21 = Iwi Named but region unspecified 22 = Hapū affiliated to more than one Iwi | 44 = Don't know 55 = Refused to answer 77 = Response unidentifiable 88 = Response outside scope 99 = Not stated |
| 2006 | Iwi Level 1 | 11 = Te Waipounamu / Wharekauri (South Island /Chatham Islands) Region | 20 = Iwi not named, but Waka or Iwi Confederation known 21 = Iwi Named but region unspecified 22 = Hapū affiliated to more than one Iwi | 44 = Don't know 55 = Refused to answer 77 = Response unidentifiable 88 = Response outside scope 99 = Not stated |

Number of Languages

| Year | Variable | Classification categories | | | |
|------|----------------------------------|--------------------------------------|--------------------------------|------------------------------|---|
| | | None | 1–5 languages | 6 or more languages | Residual categories |
| 1996 | NOLANG | 7 = None (e.g. too young to talk) | 1–5 = one to five languages | 6 = six or more languages | 8 = not applicable 9 = not specified |
| 2001 | Number of Languages spoken | 0 = None | 1–5 = one to five languages | 6 = Six Languages | 7 = Response unidentifiable 8 = Response outside scope 9 = Not stated |
| 2006 | Number of Languages spoken | 0 = None | 1–5 = one to five languages | 6 = Six Languages | 7 = Response unidentifiable 8 = Response outside scope 9 = Not stated |

Legal Marital Status

| Year | Variable | Classification categories | | |
|------|----------------------|---|---|--|
| | | Never Married | Married | Separated |
| 1981 | MARST | 1 = Never Married | 2 = Married | 3 = Separated |
| 1986 | MARST | 1 = Never Married | 2 = Married 3 = Remarried | 4 = Separated (but not divorced) |
| 1991 | MARST | 1 = Never Married | 2 = Now married for the first time 3 = Remarried | 4 = Separated from legal husband or wife |
| 1996 | LEGMAR | 211 = Never Married | 111 = Married (not separated) – first marriage 121 = Married (not separated) – subsequent marriage 131 = Married (not separated) – not further classified | 221 = Separated |
| 2001 | Legal Marital Status | 11 = Never Married | 21 = Married (Not Separated) | 31 = Separated |
| 2006 | Legal Marital Status | 1 = Never Married and Never Joined in a Civil Union | 2 = Married (Not Separated) 3 = Joined in a Civil Union | 4 = Separated |

Legal Marital Status

| Year | Variable | Classification categories | | |
|------|----------------------|------------------------------------|---|---|
| | | Divorced | Widowed | Residual categories |
| 1981 | MARST | 5 = Divorced | 4 = Widowed | 6 = Not Specified (9) |
| 1986 | MARST | 5 = Divorced | 6 = Widowed | 9 = Not Specified |
| 1991 | MARST | 5 = Divorced or marriage dissolved | 6 = Widowed | 9 = Not specified |
| 1996 | LEGMAR | 222 = Divorced | 223 = Widowed | 911 = Not Specified |
| 2001 | Legal Marital Status | 32 = Divorced | 33 = Widowed | 77 = Response unidentifiable 99 = Not stated |
| 2006 | Legal Marital Status | 5 = Divorced | 6 = Widowed or bereaved Civil Union Partner | 7 = Response unidentifiable 9 = Not stated |

Māori Descent

| Year | Variable | Classification categories | | |
|------|---------------|-------------------------------|--------------------------|---|
| | | Māori Descent | No Māori Descent | Residual categories |
| 1981 | MDESC | 1 = Māori descent | 0 = Not of Māori descent | |
| 1986 | MĀORI | 1 = Māori Origin | 1 = Non-Māori origin | |
| 1991 | MAIND | 3 = Yes – have Māori ancestry | 1 = No Māori ancestry | 2 = Don't know if have Māori ancestry 9 = Not specified |
| 1996 | MDESC | 1 = Māori ancestry | 2 = No Māori ancestry | 3 = Don't Know 9 = Not specified |
| 2001 | Māori Descent | 1 = Māori Descent | 2 = No Māori Descent | 4 = Don't Know 7 = Response unidentifiable 9 = Not stated |
| 2006 | Māori Descent | 1 = Māori Descent | 2 = No Māori Descent | 4 = Don't Know 7 = Response unidentifiable 9 = Not stated |

Religious Affiliation

| | | Classification categories | | |
|------|----------|-----------------------------|------------------------------------|---|
| Year | Variable | No Religion | Buddhist | Christian |
| 1981 | RELIG | 97 = No Religious Adherence | 77 = Buddhist 90 = Zen Buddhist | 1 = Anglican Church 2 = Presbyterian Church of New Zealand 3 = Roman Catholic 4 = Methodist 5 = Christian N.O.D. 6 = Baptist 7 = Church of Jesus Christ of Latter Day Saints 9 = Protestant N.O.D. 10 = Brethren 11 = Salvation Army 12 = Jehovah's Witness 13 = Seventh Day Adventist 14 = All Saints 15 = Apostolic Church 16 = Assemblies of God in New Zealand 17 = Associated Churches of Christ in New Zealand 18 = Believer 19 = Believer in God 20 = Bible Student 21 = Christadelphian 22 = Christian Church of New Zealand 23 = Christian Fellowship 24 = Christian Scientist 25 = Church of Christ 26 = Church of Christ (New Zealand) 27 = Church of God 28 = Church of New Zealand 30 = Church of Nazarene 31 = Commonwealth Covenant Church 32 = Congregational 33 = Cook Island Church 34 = Cook Island Congregational 35 = Divine Light Mission 36 = Dutch Reformed Church 37 = Eastern Orthodox Catholic 38 = Elim Church of New Zealand 39 = Evangelical Lutheran Church of New Zealand 40 = Evangelist 41 = Evangelistic Church of Christ 42 = Follower of Jesus 43 = Full Gospel 44 = Full Gospel Christian 45 = Full Gospel Fellowship 47 = Holy Trinity 49 = Liberal Catholic 51 = Missions 52 = Nazarene 53 = New Apostolic |

Religious Affiliation

| | | Classification categories | | |
|------|----------|----------------------------------|---------------|--|
| Year | Variable | No Religion | Buddhist | Christian |
| 1981 | RELIG | | | 54 = New Life Centre 55 = Old Believer 56 = Orthodox 57 = Pentecostal N.O.D. 58 = Reformed 59 = Reformed Church of New Zealand 60 = Reformed Presbyterian Church of New Zealand 61 = Reorganised Church of Jesus Christ of Latter Day Saints 63 = Samoan Christian Church 64 = Samoan Congregational Church 65 = Society of Friends 66 = Spiritualist Church of New Zealand 67 = Swedenborgian 68 = Undenominational Christian 69 = Union Church 70 = United Church 71 = United Church of Canada 72 = United Evangelical Church 73 = Uniting Church 74 = Universal 75 = Worldwide Church of God 88 = Theosophist 89 = Unitarian Church |
| 1986 | REL | Not listed in data dictionary | | |
| 1991 | RELIG | 08 = No religion 39 = Atheist | 19 = Buddhist | 01 = Anglican 02 = Presbyterian 03 = Catholic 04 = Methodist 05 = Baptist 07 = Latter Day Saint 10 = Christian 11 = Brethren 12 = Salvation Army 13 = Jehovah Witness 14 = Pentecostal 15 = Assembly of God 16 = Seventh Day Adventist 20 = Lutheran 21 = Associated Churches of Christ 22 = Church of Christ 23 = Apostolic 24 = Samoan Congregational Church 26 = Born again Christian 27 = Orthodox 28 = Indigenous Pentecostal 29 = Exclusive Brethren 32 = Congregational 33 = Protestant 34 = Elim 36 = Christadelphian 40 = Quaker 41 = Reformed |

Religious Affiliation

| | | Classification categories | | |
|------|----------|---------------------------|--|--|
| Year | Variable | No Religion | Buddhist | Christian |
| 1991 | RELIG | | | 42 = Christian Fellowship 43 = World Wide Church of God 46 = Cook Island Church 47 = Nazarene 48 = Union Church 49 = Tongan Church 50 = Bush Baptist 52 = Christian Revival 54 = Christian Scientist 57 = Gospel 58 = Unitarian 60 = Church of God 61 = Samoan Christian Church 62 = United Church 63 = Dutch Reformed 64 = Pacific Island Church 65 = Commonwealth Covenant Church 66 = Evangelical 67 = Theosophy 75 = Pacific Island Congregational 77 = Universal Church 78 = Fundamentalist 79 = Unification Church |
| 1996 | RELIG | 8051 = No religion | 1010 = Buddhist nfd 1011 = Theravada Buddhist 1012 = Tibetan Buddhist 1013 = Friends of the Western Buddhist Order 1014 = Zen Buddhist 1015 = Japanese Buddhist | 2010 = Adventist 2011 = Christadelphians 2012 = Seventh Day Adventist 2013 = Worldwide Church of God 2031 = Anglican 2050 = Baptist nfd 2051 = Bible Baptist 2070 = Brethren nfd 2071 = Exclusive Brethren 2090 = Catholic nfd 2091 = Maronite Catholic 2092 = Melkite Catholic 2093 = Ukrainian Catholic 2094 = Latin Rite 2100 = Christian nfd 2110 = Churches of Christ nfd 2111 = associated Churches of Christ 2121 = Chinese Christian nfd 2122 = Korean Christian nfd 2130 = Evangelical nfd 2131 = Independent Evangelical Churches 2151 = Jehovah Witness 2171 = Church of Jesus Christ of the Latter Day Saints 2172 = Reorganised Church of Jesus Christ of the Latter Day Saints 2191 = Lutheran 2201 = Methodist 2211 = Armenian Orthodox 2212 = Assyrian Orthodox 2213 = Coptic Orthodox |

Religious Affiliation

| Year | Variable | Classification categories | | |
|------|----------|---------------------------|----------|--|
| | | No Religion | Buddhist | Christian |
| 1996 | RELIG | | | 2214 = Ethiopian Orthodox 2215 = Syrian (Jacobite) Orthodox 2230 = Eastern Orthodox nfd 2231 = Antiochian Orthodox 2232 = Greek Orthodox 2233 = Lebanese Orthodox 2234 = Macedonian Orthodox 2235 = Romanian Orthodox 2236 = Russian Orthodox 2237 = Serbian Orthodox 2238 = Ukrainian Orthodox 2239 = Western Rite Orthodox 2250 = Pentecostal nfd 2251 = Apostolic Church of New Zealand 2252 = Assemblies of God 2253 = Christian Outreach 2254 = Christian Revival Crusade 2255 = Elim 2256 = Foursquare Gospel 2257 = Full Gospel 2258 = Healing Fellowship 2259 = New Life Centres 2260 = Revival Centres 2261 = United Pentecostal 2262 = Vineyard Christian Fellowship 2263 = Outreach International New Zealand 2264 = The Good News Fellowship 2265 = Canna League of Christchurch 2271 = Presbyterian 2272 = Congregational 2273 = Reformed 2274 = Reformed Episcopal Church 2275 = Korean Agape Presbyterian Church 2290 = Protestant not further defined 2311 = Salvation Army 2331 = Uniting/Union Church 2591 = Christian and Missionary Alliance 2592 = Christian Science 2593 = Commonwealth Covenant Church 2594 = Liberal Catholic 2595 = Metropolitan 2596 = Nazarene 2597 = Religious Communities 2598 = Religious Society of Friends (Quaker) 2599 = Swedenborgian (New Jerusalem Church) 2600 = Unification Church (Moonist) 2601 = Unitarian |

Religious Affiliation

| | | Classification categories | | |
|------|--|---------------------------|--------------|---------------|
| Year | Variable | No Religion | Buddhist | Christian |
| 2001 | Religious Affiliation – Level 1 Major Groups | 0 = No Religion | 1 = Buddhist | 2 = Christian |
| 2006 | Religious Affiliation – Level 1 Major Groups | 0 = No Religion | 1 = Buddhist | 2 = Christian |

Religious Affiliation

| | | Classification categories | | | |
|------|--|---|---|---|---|
| Year | Variable | Hindu | Islam/Muslim | Judaism | Māori Christian |
| 1981 | RELIG | 79 = Hare Krishna 81 = Hindu | 82 = Islam | 80 = Hebrew Congregations | 8 = Ratana Establishment Church of New Zealand 29 = Church of Te Kooti Rikirangi 50 = Māori Evangelical Fellowship 62 = Ringatu Church |
| 1986 | REL | Not listed in data dictionary | | | |
| 1991 | RELIG | 17 = Hindu 53 = Hare Krishna | 30 = Islam 74 = Sufi | 25 = Jew | 06 = Ratana 18 = Ringatu 59 = Māori Church |
| 1996 | RELIG | 3010 = Hindu nfd 3011 = Brahma Kumaris 3012 = Ananda Marga 3013 = Hare Krishna 3014 = Divine Light 3015 = Yoga | 4010 = Islam nfd 4011 = Druse 4012 = Shia 4013 = Sufi 4014 = Suni | 5010 = Judaism nfd 5011 = Liberal/Progressive 5012 = Orthodox | 2140 = Māori Christian nfd 2141 = Ratana 2142 = Ringatu |
| 2001 | Religious Affiliation – Level 1 Major Groups | 3 = Hindu | 4 = Islam / Muslim | 5 = Judaism/Jewish | 6 = Māori Christian |
| 2006 | Religious Affiliation – Level 1 Major Groups | 3 = Hindu | 4 = Islam / Muslim | 5 = Judaism/Jewish | 6 = Māori Christian |

Religious Affiliation

| Year | Variable | Classification categories | | |
|------|--|--|--|---|
| | | Spiritualism/ New Age Religions | Other | Residual categories |
| 1981 | RELIG | 48 = Humanist 83 = Pantheist 84 = Rationalist 85 = Scientology 87 = Sun Worship | 46 = Hau Hau 76 = Bahaii 78 = Deist 86 = Sikh 96 = All Others | 91 = Agnostic 92 = Atheist 93 = Nonconformist 94 = Uncertain 95 = Undenominational 98 = Object V 99 = Not Specified |
| 1986 | REL | Not listed in data dictionary | | |
| 1991 | RELIG | 31 = Spiritualist 44 = Rastafarian 69 = Scientology 71 = Pantheist 72 = Satanist | 35 = Baha'i 45 = Sikh 51 = Free Thinker 55 = Charismatic 56 = Humanist 68 = Heathen 70 = Taoist 73 = Hauhau 76 = Centrepoint 96 = Other Religion nec | 09 = Object 37 = Agnostic 38 = Undenominational 97 = Don't Know 99 = Not specified |
| 1996 | RELIG | 6011 = Church of Scientology 6030 = Nature and Earth Based Religions nfd 6031 = Animist 6032 = Druid 6033 = Wiccan 6051 = Satanist 6071 = Spiritualist 6592 = Aetherius Society 6593 = Rastafarian 6594 = Religious Science 6595 = Psychic 6596 = Transcendental Meditation 6599 = Other New Age Religions nec | 7031 = Baha'i 7050 = Chinese Religions nfd 7051 = Ancestor veneration 7052 = Confucianism 7053 = Taoism 7081 = Jain 7090 = Japanese Religion nfd 7091 = Mahikari 7092 = Shinto 7093 = Tenrikyo 7100 = Māori Religion nfd 7101 = Hauhau 7102 = Parihaka 7111 = Sikh 7131 = Zoroastrian 7132 = Parsis 7599 = Other Religions nec | 8010 = Theism nfd 8011 = Lodge 8031 = Religion unidentifiable 8071 = Religion not known 8091 = Object to state 8111 = Not applicable 9999 = Not specified |
| 2001 | Religious Affiliation – Level 1 Major Groups | 7 = Spiritualism and New Age Religions | 8 = Other Religions | 9 = Residual categories |
| 2006 | Religious Affiliation – Level 1 Major Groups | 7 = Spiritualism and New Age Religions | 8 = Other Religions | 9 = Residual categories |

Social Marital Status

| | | Classification categories | |
|-------------|-----------------------|---|---|
| Year | Variable | Partnered – Legal Spouse | Partnered – De Facto Spouse |
| 1996 | SOCMAR | 111 = Partnered, Legal Spouse (Not separated) – first marriage 112 = Partnered, Legal Spouse (Not separated) – Subsequent Marriage 113 = Partnered, Legal Spouse (Not separated) – Not further classifiable | 121 = Partnered, De Facto Spouse – Opposite sex couple 122 = Partnered, De Facto Spouse – same sex couple 131 = Partnered, Not further classifiable |
| 2001 | Social Marital Status | 111 = Legal Spouse | 100 = Partnered nfd 121 = Other partnership |
| 2006 | Social Marital Status | 11 = Legal Spouse 12 = Civil Union Partner | 10 = Partnered nfd 13 = Other partnership |

Social Marital Status

| | | Classification categories | |
|-------------|-----------------------|---|----------------------------|
| Year | Variable | Non Partnered | Residual categories |
| 1996 | | 211 = Non-partnered – Never married 221 = Non-partnered – Separated 222 = Non-partnered – Divorced 223 = Non-partnered – Widowed | 911 = Not Specified |
| 2001 | Social Marital Status | 200 = Non-partnered nfd 211 = Non-partnered – Never married 221 = Non-partnered – Separated 222 = Non-partnered – Divorced 223 = Non-partnered – Widowed | 999 = Not stated |
| 2006 | Social Marital Status | 20 = Non-partnered nfd 21 = Non-partnered – Never married and never joined in a Civil Union 22 = Non-partnered – Separated 23 = Non-partnered – Divorced 24 = Non-partnered – Widowed or bereaved Civil Union Partner | 99 = Not stated |

De Facto Status

| | | Classification categories | |
|-------------|-------------|--|---|
| Year | Code | De Facto relationship | Non De facto relationship |
| 1981 | DFAC | 1 = Living in a de facto relationship | 0 = Not living in a de facto relationship |
| 1986 | DFAC | 1 = De facto | 0 = Non-de facto |
| 1991 | DFACT | 1 = Parents are in De facto relationship | 0 = Parents not in De facto relationship |

Unpaid Activities

| | | Classification categories | |
|-------------|-----------------------|--|---|
| Year | Variable | Unpaid work in same household | Unpaid work in different household |
| 1996 | ACTY ACTY1,2,3 | 1 = Did unpaid work for yourself or people living in the same household in last 7 days 11 = Did household work, cooking, repairs, gardening 12 = Cares for Children, own or others in same household 13 = Cared for elderly, ill or disabled person in same household | |
| 1996 | UNPAID 1,2,3,4,5,6 | | 1 = Did Unpaid Work for yourself or people NOT living in the same household in last 4 weeks 21 = Cared for children not living in same household 22 = Did Household work, cooking, repairs, gardening, or cared for elderly, ill or disabled person |
| 2001 | Unpaid Activities | 01 = Household work/Cooking/Repairs/etc 02 = Looking after a Child (Member of own household) 03 = Looking after someone ill/disabled (own household) | 04 = looking after a child who does not live in own household 05 = Looking after someone ill/disabled(Not in own household) |
| 2006 | Unpaid Activities | 01 = Household work, Cooking, Repairs, gardening, etc, for own household 02 = Looking after a Child who is a Member of own household 03 = Looking after a member of own household who is ill or has a Disability | 04 = Looking after a child who does not live in own household 05 = Helping someone who is ill or has a disability who does not live in own household |

Unpaid Activities

| | | Classification categories | |
|-------------|-----------------|--|--|
| Year | Variable | Other Voluntary Help | Residual categories |
| 1996 | UNPAID | 23 = Did Unpaid training, coaching, teaching, etc. 24 = Attended committee meeting etc unpaid for group, church or marae 25 = Did Fundraising, selling etc unpaid for group, church or marae 26 = Did Other Unpaid Work | 0 = Did not do Unpaid Work for yourself or people NOT living in the same household in last 4 weeks 9 = Not Specified UNPAID1 99 = Did Not Care for children not living in same household UNPAID2 99 = Did Not Do Household work, cooking, repairs, gardening, or cared for elderly, ill or disabled person UNPAID3 99 = Did not do Unpaid training, coaching, teaching etc. UNPAID4 99= Did Not Attend committee meeting etc unpaid for group, church or marae UNPAID5 99 = Did Not Do Fundraising, selling etc unpaid for group, church or marae UNPAID6 99 = Did Not Do Other Unpaid Work |

Unpaid Activities

| Year | Variable | Classification categories | |
|------|-------------------|--|---|
| | | Other Voluntary Help | Residual categories |
| 1996 | ACTY | | 0 = Did not do unpaid work for yourself or people living in the same household in last 7 days 9 = Not specified ACTY1 99 = Did not do Household work, cooking, repairs, gardening ACTY2 99 = Did not care for children, own or others in same household ACTY3 99 = Did not care for elderly, ill or disabled person in same household |
| 2001 | Unpaid Activities | 06 = Other voluntary Help for Organisation/Group/Marae | 07 = Attending or studying 20 hours or more per week 08 = Attending or studying less than 20 hours per week 00 = No unpaid activities 99 = No or not stated |
| 2006 | Unpaid Activities | 06 = Other helping or voluntary work for or through any Organisation, Group or Marae | 00 = No activities 77 = Response unidentifiable 99 = Not stated |

Number of hours in unpaid voluntary work

| Year | Variable | Classification categories | | | | Residual categories |
|------|----------|------------------------------|-------------------------------|--|--|---------------------|
| | | Nil hours | 1–4 hours per week | 5–14 hours | 15+ | |
| 1981 | | Hours not asked | | | | |
| 1986 | VOLUN | 1 = Nil Hours | 2 = 1–4 hours per week | 3 = 5–9 hours per week 4 = 10–14 hours per week | 5 = 15 or more hours per week | 9 = Not specified |
| 1991 | VOLHR | 00 = no voluntary work hours | 01–04 = 1–4 hours spent doing | 05–09 = 5–9 hours spent doing 10–14 = 10–14 hours spent doing | 15–97 = 15–97 hours spent doing 98 = 98+ hours | 99 = Not specified |
| 1996 | UNPDHR | | 1 = 1–4 hours | 2 = 5–14 hours | 3 = 15–29 hours 4 = 30–59 hours 5 = 60 or more hours | 9 = Not specified |
| 2001 | | Hours not asked | | | | |
| 2006 | | Hours not asked | | | | |

7.5.2 Income- and employment-related classifications

Availability for work

| Year | Variable | Classification categories | | |
|------|-----------------------|---------------------------|----------------------------|---|
| | | Available for work | Not available for work | Residual categories |
| 1991 | AVAIL | 2 = Yes – available | 1 = No – not available | 9 = Not specified |
| 1996 | AVAIL | 1 = Available for work | 2 = Not available for work | 9 = Not specified |
| 2001 | Availability for work | 1 = Available for work | 2 = Not available for work | 7 = Response unidentifiable 9 = Not stated |
| 2006 | Availability for work | 1 = Available for work | 2 = Not available for work | 7 = Response unidentifiable 9 = Not stated |

Hours Worked

| Year | Variable | Classification categories | | |
|------|-------------------------------------|--|---|---|
| | | 0–96 hours | 97+ hours | Residual categories |
| 1981 | HRST | 0–96 = 0–96 hours per week | 97 = 97 or more hours per week | 98 = Not Specified |
| 1986 | Total Hours Worked | 01–29 = Hours worked: Part-time labour force 30–97 = Hours worked: Full-time Labour Force | | 00 = Not Specified (Part-time Labour Force) 98 = Not Specified (Full Time Labour Force) 99 = Non Labour Force |
| 1991 | HRTOT | 01–96 = 1–96 hours per week | 97–99 = 97–99 hours per week | |
| 1996 | TOTHR | 01–96 = 1–96 hours per week | 97 = 97 hours or more per week | 98 = Unidentifiable 99 = Not specified |
| 2001 | Hours Worked in Employment Per Week | 001 = 1 Hour Worked 002–96 = 2–96 in single hour increments | 97–168 = 97–168 in single hour increments | 777 = Response Unidentifiable 888 = Response Outside Scope 999 = Not Stated |
| 2006 | Hours Worked in Employment Per Week | 001 = One Hour Worked 002–096 = 2–96 hours in single hour increments | 97–168 = 97-168 in single hour increments | 777 = Response Unidentifiable 999 = Not Stated |

Job Search Methods

| Year | Variable | Classification categories | | |
|------|--------------------------------------|--|--|---|
| | | Looked at Advertisements | Wrote or phoned Employer | Contacted Govt Employment Service |
| 1991 | METH | 1xx = Looked at job advertisements in newspapers 2xx = Both looked at job advertisements in newspapers and contacted Dept of Labour's NZ Employment Service | x1x = Wrote, phoned or applied in person to an employer x2x = Both Wrote, phoned or applied in person to an employer and contacted friends or relatives for help in finding a job | 2xx = Both looked at job advertisements in newspapers and contacted Dept of Labour's NZ Employment Service 3xx = Contacted Dept. of Labour's NZ Employment Service |
| 1996 | METH1, 2, 3, 4, 5, 6 | METH1 1 = Advertisements | METH2 2 = Wrote to employers | METH3 3 = NZ Employment Service |
| 2001 | Job Search Methods | 1 = Looked at job advertisements | 2 = Wrote, phoned or applied in person to an employer | 3 = Contacted Dept of Work and Income NZ to look for a job |
| 2006 | Job Search Methods (total Responses) | 1 = Looked at job advertisements | 2 = Wrote, phoned or applied in person to an employer | 3 = Contacted Work and Income to look for a job |

Job Search Methods

| Year | Variable | Classification categories | | |
|------|--------------------------------------|---|---|----------------------|
| | | Contacted friends | Other Methods | Residual categories |
| 1991 | METH | x2x = Both Wrote, phoned or applied in person to an employer and contacted friends or relatives for help in finding a job x3x = Contacted friends or relatives for help in finding a job | xx1 = Other methods | 999 = not specified |
| 1996 | METH1, 2, 3, 4, 5, 6 | METH4 4 = Asked friends about work | METH5 5 = Contacted careers advisors METH6 6 = Other job-search methods | |
| 2001 | Job Search Methods | 4 = Contacted friends or relatives | 5 = Contacted career advisers or vocational guidance 6 = Other job search methods | 9 = No or Not stated |
| 2006 | Job Search Methods (Total Responses) | 4 = Contacted friends or relatives for help in finding a Job | 5 = Contacted career advisers or vocational guidance Officers 6 = Other job search methods | 9 = Not stated |

Main means of travel to work

| Year | Variable | Classification categories | | | | |
|------|------------------------------|---------------------------|------------|--|--|--|
| | | Public Bus | Train | Driver of Private Vehicle | Driver of Company Vehicle | Passenger |
| 1981 | TRAY | 0 = Public Bus | 1 = Train | 3 = Drive car, truck or van | | 2 = Passenger in car, truck, van or firm's bus |
| 1986 | TRAVEL | 1 = Public bus | 2 = Train | 3 = Drive a private car, truck or van | 4 = Drive a company car, truck or van | 5 = Passenger in car, truck, van or company car |
| 1991 | TRAV | 05 = Public bus | 06 = Train | 02 = Drove a private car, truck or van | 03 = Drove a company car, truck or van | 04 = Passenger in a car, truck or company bus |
| 1996 | TRAWRK | 03 = Public Bus | 04 = Train | 05 = Drove a Private Car, Truck, Van | 06 = Drove a Company Car, Truck or Van | 07 = Passenger in a Car, Truck, Van or Company Bus |
| 2001 | Main Means of Travel to Work | 06 = Public Bus | 07 = Train | 03 = Drove a Private Car, Truck or Van | 04 = Drove a Company Car, Truck or Van | 05 = Passenger in a Car, Truck, Van or Company Bus |
| 2006 | Main Means of Travel to Work | 06 = Public Bus | 07 = Train | 03 = Drove a Private Car, Truck or Van | 04 = Drove a Company Car, Truck or Van | 05 = Passenger in a Car, Truck, Van or Company Bus |

Main means of travel to work

| Year | Variable | Classification categories | | | | | |
|------|----------|---------------------------------|--------------|-----------------------|--|---------------------|--|
| | | Motorcycle | Bicycle | Walk | Other | Work at Home | Residual categories |
| 1981 | TRAY | 4 = Motorcycle, power cycle | 5 = Bicycle | 6 = Walk | 7 = Other means | 8 = Work at Home | 9 = Not applicable - (Where hours of work are NIL) 10 = Not specified |
| 1986 | TRAVEL | 7 = Motorcycle, Power cycle | 6 = Bicycle | 8 = Walk | 9 = Other means | 10 = Work at home | 99 = Not specified (not applicable) |
| 1991 | TRAV | 07 = Motor cycle or power cycle | 08 = Bicycle | 09 = Walked or jogged | 11 = Other (such as ferry, aeroplane) | 10 = Worked at home | 01 = Did not go to work today 99 = Not specified |
| 1996 | TRAWRK | 08 = Motor Bike or Power Cycle | 09 = Bicycle | 10 = Walked or jogged | 12 = Taxi 13 = Ferry 15 = Aeroplane 14 = Helicopter 11 = Other | 01 = Worked at home | 02 = Did not go to work on Tuesday, 5 March 1996 99 = Not Specified |

Main means of travel to work

| Year | Variable | Classification categories | | | | | |
|------|------------------------------|---------------------------------|--------------|-----------------------|------------|---------------------|--|
| | | Motorcycle | Bicycle | Walk | Other | Work at Home | Residual categories |
| 2001 | Main Means of Travel to Work | 08 = Motor Cycle or Power Cycle | 09 = Bicycle | 10 = Walked or Jogged | 15 = Other | 01 = Worked at Home | 02 = Did Not Go To Work Today 99 = Not Stated |
| 2006 | Main Means of Travel to Work | 08 = Motor Cycle or Power Cycle | 09 = Bicycle | 10 = Walked or Jogged | 15 = Other | 01 = Worked at Home | 02 = Did Not Go To Work Today 77 = Response Unidentifiable 99 = Not Stated |

Seeking Work

| Year | Variable | Classification categories | | |
|------|--------------|--|---|---|
| | | Looked for work | Did not look for work | Residual categories |
| 1986 | SEEKW | 1 = Yes – looked for full-time work 2 = Yes looked for part time work | 3 = No – did not look for work | 9 = Not specified |
| 1991 | SEEKW | 2 = Yes – looked for full-time work 3 = Yes – looked for part-time work | 1 = No – did not look for paid work | 9 = Not specified |
| 1996 | SEEKWOR | 1 = Looked for work in last 4 weeks | 2 = Did not look for work in last 4 weeks | 9 = Not specified |
| 2001 | Seeking Work | 1 = Looked for work in last 4 weeks | 2 = Did not look for work in last 4 weeks | 7 = Response Unidentifiable 9 = Not stated |
| 2006 | Seeking Work | 1 = Looked for work in last 4 weeks | 2 = Did not look for work in last 4 weeks | 7 = Response Unidentifiable 9 = Not stated |

Income Source

| Year | Variable | Classification categories | | |
|------|----------|---|--|--|
| | | Income support | Domestic Purposes Benefit | Residual categories |
| 1981 | HSOC | 1–14 = ‘single benefits received in household’ 20–48 = ‘two benefits received in household’ 49–70 = ‘three benefits received in household’ 71–72 = ‘four benefits received in household’ 73 = ‘other combinations (not covered)’ 74 = ‘benefits undefined’ | 5 = ‘Domestic Purposes Benefit’ 23 = ‘Family Benefit + Domestic Purposes Benefit’ 28 = ‘National Superannuation + Domestic Purposes Benefit’ 34 = ‘Unemployment Benefit + Domestic Purposes Benefit’ 39 = ‘Sickness Benefit + Domestic Purposes Benefit’ 43 = ‘Domestic Purposes Benefit + Other (codes 9–14)’ 52 = ‘Family Benefit + Unemployment Benefit + Domestic Purposes Benefit’ 55 = ‘Family Benefit + Domestic Purposes Benefit + Sickness Benefit’ 56 = ‘Family Benefit + Domestic Purposes Benefit + Other(Codes 9–14)’ 69 = ‘Sickness Benefit + Domestic Purposes Benefit + Other (Codes 9–14)’ 71 = ‘Family Benefit + Unemployment Benefit + Domestic Purposes Benefit + Other (Codes 9–14)’ 72 = ‘Family Benefit + Sickness Benefit + Domestic Purposes Benefit + Other (Codes 9–14)’ | 75 = ‘not specified (99)’ |
| 1986 | SWPHH | 2–18 = ‘single payments’ 19–31 = ‘two payments’ 32–36 = ‘three or more payments’ | 5 = ‘Domestic purposes’ 21 = ‘Family – Domestic purposes’ 28 = ‘Family Care – Domestic purposes’ 34 = ‘National Superannuation – Domestic purposes’ 40 = ‘Domestic purposes – Unemployment’ 41 = ‘Domestic purposes – Sickness or Invalid’s’ 42 = ‘Domestic purposes – Widow’s’ 43 = ‘Domestic purposes – War Pension’ 44 = ‘Domestic purposes – Other’ | 1 = ‘No payments received’ 98 = ‘not available’ 99 = ‘not specified’ |
| 1991 | | Has to be created | xx1xx = ‘Domestic Purposes Benefit’ xx2xx = ‘Domestic Purposes Benefit and Unemployment Benefit’ | 00000 = ‘No payments received’ 00000 = ‘No income support’ |

Income Source

| Year | Variable | Classification categories | | |
|------|--|--|----------------------------------|---|
| | | Income support | Domestic Purposes Benefit | Residual categories |
| 1996 | NOSUPP | 01 = 'one' 02 = 'two' 03 = 'three' 04 = 'four' 05 = 'five' 06 = 'six or more' | 08 = 'Domestic Purposes Benefit' | 99 = 'No New Zealand Superannuation' 99 = 'No sickness benefit' 99 = 'No invalid's benefit' 99 = 'No unemployment benefit' 99 = 'No Domestic Purposes Benefit' 00 = 'No income Support specified' 99 = 'Income sources not specified' |
| 2001 | Sources of Personal Income | Has to be created | 09 = 'Domestic Purposes Benefit' | |
| 2006 | Sources of Personal Income (Total Responses) | Has to be created | 09 = Domestic Purposes Benefit | 99 = Not Stated |

Income Source

| Year | Variable | Classification categories | |
|------|----------|--|---|
| | | Unemployment Benefit | Sickness/Invalid's benefit |
| 1981 | SWBEN | 3 = 'Unemployment Benefit' 21 = 'Family Benefit + Unemployment Benefit' 29 = 'National Superannuation + Unemployment Benefit' 34 = 'Unemployment Benefit + Domestic Purposes Benefit' 35 = 'Unemployment Benefit + War Pension(or Allowances)' 36 = 'Unemployment Benefit + Other (Codes 9–14)' 38 = 'Sickness Benefit + Unemployment Benefit' 51 = 'Family Benefit + Unemployment Benefit + Sickness Benefit' 52 = 'Family Benefit + Unemployment Benefit + Domestic Purposes Benefit' 53 = 'Family Benefit + Unemployment Benefit + War Pension (or allowances)' 54 = 'Family Benefit + Unemployment Benefit + Other (Codes 9–14)' 58 = 'National Super. + Unemployment | 4 = 'Sickness Benefit' 7 = 'Invalid's Benefit' 22 = 'Family Benefit + Sickness Benefit' 25 = 'Family Benefit + Invalid's Benefit' 31 = 'National Superannuation + Invalid's Benefit' 37 = 'Sickness Benefit + National Superannuation' 38 = 'Sickness Benefit + Unemployment Benefit' 39 = 'Sickness Benefit + Domestic Purposes Benefit' 40 = 'Sickness Benefit + Invalid's Benefit' 41 = 'Sickness Benefit + War Pension (or allowances)' 42 = 'Sickness Benefit + Other (Codes 9 – 14)' 51 = 'Family Benefit + Unemployment Benefit + Sickness Benefit' |

Income Source

| Year | Variable | Classification categories | |
|------|--|--|---|
| | | Unemployment Benefit | Sickness/Invalid's benefit |
| 1981 | SWBEN | Benefit + War Pension (or allowances) 59 = 'National Super. + Unemployment Benefit + Other (Codes 9–14)' 65 = 'Unemployment Benefit + Sickness Benefit + Invalids Benefit' 66 = 'Unemployment Benefit + Sickness Benefit + War Pension (or allowances)' 67 = 'Unemployment Benefit + Sickness Benefit + Other (Codes 9–14)' 68 = 'Unemployment Benefit + War Pension (or allowances) + Other (Codes 9–14)' 71 = 'Family Benefit + Unemployment Benefit + Domestic Purposes Benefit + Other (Codes 9–14)' | 55 = 'Family Benefit + Domestic Purposes Benefit + Sickness Benefit' 65 = 'Unemployment Benefit + Sickness Benefit + Invalids Benefit' 66 = 'Unemployment Benefit + Sickness Benefit + War Pension (or allowances)' 67 = 'Unemployment Benefit + Sickness Benefit + Other (Codes 9–14)' 69 = 'Sickness Benefit + Domestic Purposes Benefit + Other (Codes 9–14)' 70 = 'Sickness Benefit + War Pension (or allowances) + Other (Codes 9–14)' 72 = 'Family Benefit + Sickness Benefit + Domestic Purposes Benefit + Other (Codes 9–14)' |
| 1986 | SW1P SW2P SW3P | 6 = 'Unemployment' 22 = 'Family – Unemployment' 29 = 'Family Care – Unemployment' 35 = 'National Superannuation – Unemployment' 40 = 'Domestic purposes – Unemployment' 45 = 'Unemployment – Sickness or Invalid's' 46 = 'Unemployment – Widow's' 47 = 'Unemployment – War Pension' 48 = 'Unemployment – Other' | 7 = 'Sickness or Invalids' 23 = 'Family – Sickness or Invalid's' 30 = 'Family Care – Sickness or Invalid's' 36 = 'National Superannuation – Sickness or Invalid's' 41 = 'Domestic purposes – Sickness or Invalid's' 45 = 'Unemployment – Sickness or Invalid's' 49 = 'Sickness or Invalid's – Widow's' 50 = 'Sickness or Invalid's – War Pension' 51 = 'Sickness or Invalid's – Other' |
| 1991 | ISP | xx2xx = 'Domestic Purposes Benefit and Unemployment Benefit' xx3xx = 'Unemployment Benefit' | xxx2x = 'Youth/student allowance and Sickness/Invalids Benefit' xxx3x = 'Sickness/Invalid's Benefit' |
| 1996 | PINC7 | 07 = 'Unemployment Benefit' | 09 = 'Sickness benefit' 10 = 'Invalid's benefit' |
| 2001 | Sources of Personal Income | 07 = 'Community wage – Job seeker' | 08 = 'Community wage – Sickness benefit' 10 = 'Invalid's Benefit' |
| 2006 | Sources of Personal Income (Total Responses) | 07 = Unemployment Benefit | 08 = Sickness benefit 10 = Invalid's Benefit |

Income Source

| Income Source | | | |
|----------------------|----------------------|--|-------------|
| Year | Variable | Classification categories | |
| | | NZ Superannuation (government provided) | |
| | | Student Allowance | |
| 1981 | SWBEN | 2 = 'National Superannuation' 20 = 'Family Benefit + National Superannuation' 28 = 'National Superannuation + Domestic Purposes Benefit' 29 = 'National Superannuation + Unemployment Benefit' 30 = 'National Superannuation + Widow's Benefit' 31 = 'National Superannuation + Invalid's Benefit' 32 = 'National Superannuation + War Pension (or allowances)' 33 = 'National Superannuation + Other (Codes 9–14)' 37 = 'Sickness Benefit + National Superannuation' 49 = 'Family Benefit + National Superannuation + War Pension (or allowances)' 50 = 'Family Benefit + National Superannuation + Other (Codes 9–14)' 58 = 'National Super. + Unemployment Benefit + War Pension (or allowances)' 59 = 'National Super. + Unemployment Benefit + Other (Codes 9–14)' 60 = 'National Super. + Widow's Benefit + War Pension (or allowances)' 61 = 'National Super. + Widow's Benefit + Other (Codes 9–14)' 62 = 'National Super. + Invalid's Benefit + War Pension (or allowances)' 63 = 'National Super. + Invalid's Benefit + Other (Codes 9–14)' 64 = 'National Super. + War Pension (or allowances) + Other (Codes 9–14)' | |
| 1986 | SW1P SW2P SW3P | 04 = 'National Superannuation' 20 = 'Family – National Superannuation' 27 = 'Family Care – National Superannuation' 34 = 'National Superannuation – Domestic purposes' 35 = 'National Superannuation – Unemployment' 36 = 'National Superannuation – Sickness or invalid's' 37 = 'National Superannuation – Widow's' 38 = 'National Superannuation – War Pension' 39 = 'National Superannuation – Other' | Unavailable |

Income Source

| | | Classification categories | |
|-------------|----------------------------|--|--|
| Year | Variable | NZ Superannuation (government provided) | Student Allowance |
| 1991 | ISP | x1xxx = 'National Super/GRI' x2xxx = 'National Super/GRI and ACC' | xxx1x = 'Youth/student allowance' xxx2x = 'Both youth/student allowance and sickness/invalid's benefit' |
| 1996 | PINC5 | 05 = 'New Zealand Superannuation' | 11 = 'Student allowance' |
| 2001 | Sources of Personal Income | 05 = 'NZ Superannuation, pensions, annuities, etc' | 11 = 'Student allowance' |
| 2006 | Sources of Personal Income | 05 = New Zealand Superannuation or Veterans pensions 06 = Other Superannuation, Pensions, or Annuities (other than New Zealand superannuation, Veterans Pension or War Pension) | 11 = Student allowance |

NB difference 1991 included youth allowance as well as student allowance

Status in Employment

| | | Classification categories | | | |
|-------------|----------------------|--|--|--|--|
| Year | Variable | Self-employed (with employees) | Self-employed (without employees) | Wages or salary | Unpaid family worker |
| 1981 | EMPST | 0 = Self-employed, employing labour | 1 = Self-employed, not employing labour | 2 = Wages and Salary | 3 = Relative (unpaid) assisting in business |
| 1986 | EMPST | 1 = Full time Self-employed (employees) 7 = Part-time Self-employed (employees) | 2 = Full time Self-employed (no employees) 8 = Part time Self-employed (no employees) | 3 = Full time Wage/salary earner 9 = Part-time Wage/salary earners | 4 = Full time Relative assisting 10 = Part time Relative assisting |
| 1991 | WRKST91 | 03 = Full time self-employed (employees) 09 = Part-time Self-Employed (employees) | 02 = Full time self-employed (no employees) 08 = Part time Self-Employed (no employees) | 01 = Full time wage/salary earner 07 = Part time Wage/Salary Earner | 04 = Full time relative assisting 10 = Part time Relative Assisting |
| 1996 | EMPSTAT | 03 = Full-time self-employed (employees) 08 = Part-time self-employed (employees) | 02 = Full-time self-employed (no employees) 07 = Part-time self-employed (no employees) | 01 = Full-time wage and salary earner 06 = Part-time wage and salary earner | 04 = Full-time unpaid family worker 09 = Part-time unpaid family worker |
| 2001 | Status in Employment | 12 = Employer | 13 = Self-employed and without employees | 11 = Paid Employee | 14 = Unpaid Family Worker |
| 2006 | Status in Employment | 12 = Employer | 13 = Self-employed and without employees | 11 = Paid Employee | 14 = Unpaid Family Worker |

Status in Employment

| Year | Variable | Classification categories | | |
|------|----------------------|--|---|--|
| | | Unemployed – seeking work | Non-labour force | Labour force not specified/missing |
| 1981 | EMPST | 4 = Unemployed and seeking work | 6 = Retired 7 = Full-time student 8 = Household duties (unpaid) 9 = Other persons not working for financial reward | 5 = Not specified but working 20 or more hours weekly |
| 1986 | EMPST | 5 = Unemployed and seeking full-time work 11 = Unemployed and seeking part-time work | 13 = Non-labour force | 6 = Full time Not specified 12 = Part time Not specified |
| 1991 | WRKST91 | 05 = Unemployed and seeking full-time work 11 = Unemployed and seeking part-time work | 13 = Non-labour force | 06 = Not Specified 12 = Not Specified |
| 1996 | EMPSTAT | 11 = Unemployed | 12 = Not In Labour Force | 05 = Full time not specified status in employment 10 = Part time not specified status in employment |
| 2001 | Status in Employment | | | 99 = No stated |
| 2006 | Status in Employment | | | 77 = Response Unidentifiable 99 = No stated |

Total Personal Income

| Year | Variable | Classification categories | | |
|------|-----------------------|---|--|---|
| | | Loss or Zero | \$1–\$5,000 | \$5,001–\$10,000 |
| 1981 | TINC | 0 = 'Nil' (Note: category on form for income from other sources included loss) | 1 = '\$1–\$249' 2 = '\$250–\$499' 3 = '\$500–\$999' 4 = '\$1,000–\$1,999' 5 = '\$2,000–\$3,499' 6 = '\$3,500–\$4,999' | 7 = '\$5,000–\$6,499' 8 = '\$6,500–\$7,999' 9 = '\$8,000–\$9,999' |
| 1986 | TINC | 01 = 'Nil or loss' | 02 = '\$1,000 or less' 03 = '\$1,001–\$2,500' 04 = '\$2,501–\$5,000' | 05 = '\$5,001–\$7,500' 06 = '\$7,501–\$10,000' |
| 1991 | TINC | 01 = 'Nil income or loss' | 02 = '\$2,500 or less per year' 03 = '\$2,501–\$5,000' | 04 = '\$5,001–\$7,500' 05 = '\$7,501–\$10,000' |
| 1996 | TOTINC | 01 = 'Loss' 02 = 'Zero Income' | 03 = '\$1–\$5,000' | 04 = '\$5,001–\$10,000' |
| 2001 | Total Personal Income | 01 = 'Loss' 02 = 'Zero Income' | 03 = '\$1–\$5,000' | 04 = '\$5,001–\$10,000' |
| 2006 | Total Personal Income | 01 = 'Loss' 02 = 'Zero Income' | 03 = '\$1–\$5,000' | 04 = '\$5,001–\$10,000' |

Total Personal Income

| Year | Variable | Classification categories | | |
|------|-----------------------|--|--|--|
| | | \$10,001–\$15,000 | \$15,001–\$20,000 | \$20,001–\$25,000 |
| 1981 | TINC | 10 = '\$10,000–\$11,999' 11 = '\$12,000–\$13,999' 12 = '\$14,000–\$15,999' | 13 = '\$16,000–\$17,999' 14 = '\$18,000–\$19,999' | 15 = '\$20,000–\$22,499' 16 = '\$22,500–\$24,999' |
| 1986 | TINC | 07 = '\$10,001–\$12,500' 08 = '\$12,501–\$15,000' | 09 = '\$15,001–\$17,500' 10 = '\$17,501–\$20,000' | 11 = '\$20,001–\$25,000' |
| 1991 | TINC | 06 = '\$10,001–\$15,000' | 07 = '\$15,001–\$20,000' | 08 = '\$20,001–\$25,000' |
| 1996 | TOTINC | 05 = '\$10,001–\$15,000' | 06 = '\$15,001–\$20,000' | 07 = '\$20,001–\$25,000' |
| 2001 | Total Personal Income | 05 = '\$10,001–\$15,000' | 06 = '\$15,001–\$20,000' | 07 = '\$20,001–\$25,000' |
| 2006 | Total Personal Income | 05 = '\$10,001–\$15,000' | 06 = '\$15,001–\$20,000' | 07 = '\$20,001–\$25,000' |

Total Personal Income

| Year | Variable | Classification categories | | |
|------|-----------------------|--|--|--------------------------|
| | | \$25,001–\$30,000 | \$30,001–\$40,000 | \$40,001–\$50,000 |
| 1981 | TINC | 17 = '\$25,000–\$27,499' 18 = '\$27,500–\$29,999' | 19 = '\$30,000–\$34,999' 20 = '\$35,000–\$39,999' | 21 = '\$40,000–\$49,999' |
| 1986 | TINC | 12 = '\$25,001–\$30,000' | 13 = '\$30,001–\$35,000' 14 = '\$35,001–\$40,000' | 15 = '\$40,001–\$50,000' |
| 1991 | TINC | 09 = '\$25,001–\$30,000' | 10 = '\$30,001–\$40,000' | 11 = '\$40,001–\$50,000' |
| 1996 | TOTINC | 08 = '\$25,001–\$30,000' | 09 = '\$30,001–\$40,000' | 10 = '\$40,001–\$50,000' |
| 2001 | Total Personal Income | 08 = '\$25,001–\$30,000' | 09 = '\$30,001–\$40,000' | 10 = '\$40,001–\$50,000' |
| 2006 | Total Personal Income | 08 = '\$25,001–\$30,000' | 09 = '\$30,001–\$35,000' 10 = '\$35,001–\$40,000' | 11 = '\$40,001–\$50,000' |

Total Personal Income

| Year | Variable | Classification categories | |
|------|-----------------------|---|---|
| | | \$50,001 or more | Residual categories |
| 1981 | TINC | 22 = '\$50,000–\$59,999' 23 = '\$60,000 and over' | 24 = 'not specified (99)' |
| 1986 | TINC | 16 = '\$50,001 and over' | 99 = 'not specified' |
| 1991 | TINC | 12 = '\$50,001–\$70,000' 13 = '\$70,001 and over per year' | 99 = 'not specified' |
| 1996 | TOTINC | 11 = '\$50,001–\$70,000' 12 = '\$70,001–\$100,000' 13 = '\$100,001 or more' | 88 = 'unidentifiable' 99 = 'not specified' |
| 2001 | Total Personal Income | 11 = '\$50,001–\$70,000' 12 = '\$70,001–\$100,000' 13 = '\$100,001 or More' | 99 = 'not stated' |
| 2006 | Total Personal Income | 12 = '\$50,001–\$70,000' 13 = '\$70,001–\$100,000' 14 = '\$100,001 or More' | 99 = 'not stated' |

7.5.3 Family and household variables

Family Type

| | | Classification categories | | | |
|------|-------------|--|---|---|--|
| Year | Variable | Couple without Children | Couple with Child(ren) | One Parent with Child(ren) | Residual categories |
| 1981 | | Not in Data Dictionary | | | |
| 1986 | | Not in Data Dictionary | | | |
| 1991 | FAMTP | 7 = couples only | 4 = Two-parent family with dependent children only 5 = Two-parent family with dependent and adult children 6 = Two-parent family with adult children only | 1 = One-parent family with dependent children only 2 = One parent family with dependent and adult children 3 = One parent family with adult children only | 9 = Non-family unit |
| 1996 | FAMIND | 1 = Couple only (define as where family type = 11) | 2 = Two-Parent Family (define as where Family Type = 21–29) | 3 = One-Parent Family (define as where Family Type = 31–39) | 9 = Family not classifiable (define as where Family Type = 91) |
| 2001 | Family Type | 1 = Couple without Children | 2 = Couple with Child(ren) | 3 = One-Parent with Child(ren) | |
| 2006 | Family Type | 1 = Couple without Children | 2 = Couple with Child(ren) | 3 = One-Parent with Child(ren) | |

Household Composition

| | | Classification categories | |
|------|----------|---|--|
| Year | Variable | One-Family Household | Two-Family Household |
| 1981 | HHTYP | 10 = Husband and wife only (No absentees) 11 = Husband and wife, plus unmarried children (No absentees) 12 = Husband and wife only (No children absent, other person(s) absent) 13 = Husband and wife, plus unmarried children (No children absent, other person(s) absent) 20 = Husband and wife only (one or more children absent) 21 = Husband and wife, plus unmarried children (one or more children absent) 22 = Husband and wife only (one or more children absent, and other person(s) absent) 23 = Husband and wife, plus unmarried children (one or more children absent, and other Person(s) absent) 24 = One parent, plus unmarried children (spouse temporarily absent) 25 = One parent, plus unmarried children (No absentees) 26 = One parent, plus unmarried children (one or more children and spouse) | 50 = <i>Second family</i> : Husband and wife with or without unmarried children (no absentees) <i>First family</i> : Husband and wife with or without unmarried children (no absentees) 51 = <i>Second family</i> : One parent, plus unmarried children (no absentees) <i>First family</i> : One parent, plus unmarried children (no absentees) 52 = <i>Second family</i> : Husband and wife with or without unmarried children (no absentees) <i>First family</i> : One parent, plus unmarried children (no absentees) 53 = <i>Second family</i> : One parent, plus unmarried children (no absentees) 54 = Two families, plus other person(s) (with or without absentees) 55 = Two families, plus other person(s) (with or without absentees) |

Household Composition

| | | Classification categories | |
|-------------|-----------------|---|--|
| Year | Variable | One-Family Household | Two-Family Household |
| 1981 | HHTYP | temporarily absent) 27. One parent, plus unmarried children (one or more children absent, spouse permanently absent) 28 = One parent, plus unmarried children (one or more children, spouse and other person(s) temporarily absent) 29 = One parent, plus unmarried children (one or more children, and other person(s) temporarily absent, spouse permanently absent) 30 = One parent, plus unmarried children (no children absent, spouse and other person(s) temporarily absent) 31 = One parent, plus unmarried children (no children absent, other person(s) temporarily absent, spouse permanently absent) 40 = Husband and wife, plus other person(s) (with or without absentees) 41 = Husband and wife, unmarried children, plus other person(s), with or without absentees) 42 = One parent, unmarried children, plus other person(s) related to parent (with or without children and other person(s) absent, spouse temporarily absent) 43 = One parent, unmarried children, plus other person(s) related to parent (with or without children and other person(s) absent, spouse permanently absent) 44 = One parent, unmarried children, plus other person(s) not related to parent (with or without children and other person(s) absent, spouse temporarily absent) 45 = One parent, unmarried children, plus other person(s) not related to parent (with or without children and other person(s) absent, spouse permanently absent) 46 = One parent, unmarried children, plus other person(s) related and not related to parent (with or without children and other person(s) absent, spouse temporarily absent) 47 = One parent, unmarried children, plus other persons related and not related to parent (with or without children and other persons absent, spouse permanently absent) | |
| 1986 | USHHC | 1 = Couples only 2 = Couples with children 3 = One parent family 4 = Couples only plus others 5 = Couples with children plus others 6 = One parent family plus others | 7 = Two parent families with or without children 8 = Two parent plus one parent family, Two parent family with or without children 9 = Two one parent families |
| 1991 | USHHC | 01 = One Family Only Couple Only 02 = One Family Only Couple with Children | 13 = Two Families Two related 2-parent families with or without children 14 = Two Families Two non related 2- |

Household Composition

| | | Classification categories | |
|-------------|---------------------------------|---|---|
| Year | Variable | One-Family Household | Two-Family Household |
| 1991 | USHHC | 03 = One Family Only One Parent Family 04 = One Family plus Others Couple only with at least one other related person 05 = One Family plus others Couple only with other non-related persons only 06 = One Family plus Others Couple only with other persons - relationship not available 07 = One Family plus others Couple with children with at least one other related person 08 = One Family plus Others Couple with children with other non-related persons only 09 = One Family plus Others Couple with children with other persons – relationship not available 10 = One Family plus Others One-parent family with at least one other related person 11 = One Family plus Others One-parent family with other non-related person only 12 = One Family plus Others One-parent family with other persons – relationship not available | parent families with or without children 15 = Two Families Two two-parent families with or without children – relationship not available 16 = Two Families One two-parent family related to a one parent family 17 = Two Families One two-parent family non related to a one-parent family 18 = Two Families One two-parent family plus a one-parent family (with or without children) – relationship not available 19 = Two Families Two one-parent related families 20 = Two Families Two one-parent non related families 21 = Two Families Two one-parent families – relationship not available |
| 1996 | HHCMP | 111 = One-Family HH Couple Only 121 = One-Family HH Couple only and others – some related 122 = One-Family HH Couple only and others – all unrelated 129 = One-Family HH Couple only and others – relationship not classifiable 131 = One-Family HH Couple with children 141 = One-Family HH Couple with children and others – some related 142 = One-Family HH Couple with children and others – all unrelated 149 = One-Family HH Couple with children and others – relationship not classifiable 151 = One-Family HH One Parent with children 161 = One-Family HH One Parent with children and others – some related 162 = One-Family HH One Parent with children and others – all unrelated 169 = One-Family HH One Parent with children and others – relationship not classifiable 191 = One-Family HH, not further classifiable | 211 = Two related two-parent families 212 = Two unrelated two-parent families 219 = Two-parent families, relationship not classifiable 221 = One two-parent family and one related one-parent family 222 = One two-parent family and one unrelated one-parent family 229 = One two-parent family and one one-parent family, relationship not classifiable 231 = Two related one-parent families 232 = Two unrelated one-parent families 239 = Two one-parent families, relationship not classifiable 291 = Two family household not further classifiable |
| 2001 | Household Composition – Level 1 | 1 = One-family household (with or without other people) | 2 = Two-family household (with or without other people) |
| 2006 | Household Composition – Level 1 | 1 = One-family household (with or without other people) | 2 = Two-family household (with or without other people) |

Household Composition

| | | Classification categories | |
|-------------|---------------------------------|--|--|
| Year | Variable | Three-or-More-Family Household | Multi-Person household |
| 1981 | HHTYP | 60 = Three or more families, with or without other person(s) (no absentees) 61 = Three or more families, with or without other person(s) (with absentees) Non-Family | 70 = Relatives only 71 = Persons not related 72 = One Person (on Census night) |
| 1986 | USHHC | 10 = Three or more families | 11 = Non-family household |
| 1991 | USHHC | 22 = Three or more families | 23 = Non-Family Household All Related 24 = Non-Family Household Related and Non-Related 25 = Non-Family Household All Non-Related 26 = Non-Family Household Relationship Not Available |
| 1996 | HHCOMP | 311 = Three-or-more-family household (with or without other people) | 411 = Household of related people, some or all siblings 412 = Household of related people, not siblings 421 = Household of related people, some or all siblings, and unrelated person(s) 422 = Household of related people, non-siblings, and unrelated person(s) 431 = Household of unrelated people 491 = Other multi-person household not further classifiable |
| 2001 | Household Composition – Level 1 | 3 = Three-or-more-family household (with or without other people) | 4 = Other multi-person household |
| 2006 | Household Composition – Level 1 | 3 = Three-or-more-family household (with or without other people) | 4 = Other multi-person household |

Household Composition

| | | Classification categories | |
|-------------|---------------------------------|--|--|
| Year | Variable | One Person Household | Residual categories |
| 1981 | HHTYP | 80 = Usually a one-person household (no absentees) 81 = A one-person household (related person(s) temporarily absent) 82 = A one-person household (non-related person(s) temporarily absent) 83 = A one-person household (related and non-related person(s) temporarily absent) | 84 = Not elsewhere classified |
| 1986 | USHHC | 12 = One-person household | 13 = Not elsewhere classified |
| 1991 | USHHC | 27 = One-Person Households | 28 = Not Available i.e. visitor households |
| 1996 | HHCOMP | 511 = One-person household | 611 = Visitor-only household 621 = Household not classifiable |
| 2001 | Household Composition – Level 1 | 5 = One-person household | 6 = Household composition unidentifiable |
| 2006 | Household Composition – Level 1 | 5 = One-person household | 6 = Household composition unidentifiable |

Child Dependency

| | | Classification categories | | |
|------|-----------------------------------|--|--|-------------------------------------|
| Year | Code | Dependent child | Adult child | Unknown |
| 1981 | AGE | 0–14 = 0–14 years of age 15–17 = 15–17 years of age and: | 18–127 = 18–127 years of age 15–17 = 15–17 years of age and: | |
| 1981 | Rebased Labour Force Status 91 | 2 = Part time employed 3 = unemployed 4 = not in the labour force | 1 = full time employed | |
| 1986 | AGE | 0–14 = 0–14 years of age 15–17 = 15–17 years of age and: | 18–127 = 18–127 years of age 15–17 = 15–17 years of age and: | |
| 1986 | EMPST | 5 = Unemployed and seeking full-time work 7 = part-time labour force, self-employed (employees) 8 = part-time labour force, Self-employed (no employees) 9 = part-time labour force, wage/salary earner 10 = part-time labour force, relative assisting 11 = unemployed and seeking part-time work 12 = Part-time labour force, not specified 13 = non-labour force | 1 = Full-time labour force, self-employed (employees) 2 = Full time labour force, self-employed (no employees) 3 = Full-time labour force, Wage/salary earner 4 = Full-time labour force, relative assisting 6 = Full-time labour force, not specified | |
| 1991 | AGE | 000–014 = 0–14 years old 15–17 = 15–17 years old and: | 18–115 = 18–115 years old 15–17 = 15–17 years old and: | |
| 1991 | LABST | 2 = employed in the part-time labour force 3 = unemployed and actively seeking Full-time work 4 = Unemployed and actively seeking part-time work 5 = Not working –seeking work but not available for work 6 = Not working-available for work but not seeking work 7 = Not working, not available for work and not seeking work | 1 = employed in the full-time labour force | |
| 1996 | CDEPEN | 1 = Dependent | 2 = Adult Child | 9 = Not classifiable |
| 2001 | Child Dependency Status Indicator | 1 = Dependent Child | 2 = Adult child | 3 = Child Dependency Status Unknown |

Child Dependency

| | | Classification categories | | |
|------|-----------------------------------|---------------------------|-----------------|-------------------------------------|
| Year | Code | Dependent child | Adult child | Unknown |
| 2006 | Child Dependency Status Indicator | 1 = Dependent Child | 2 = Adult child | 3 = Child Dependency Status Unknown |

Relationship to Reference Person

| | | Classification categories | | | |
|------|----------------------------------|---------------------------|--|---|--|
| Year | Variable | Reference Person | Spouse | Child | Child-in-law |
| 1981 | RELN | 1 = Occupier | 2 = Spouse of occupier | 3 = Son or Daughter of Occupier | 4 = Son-in-Law or Daughter-in-law |
| 1986 | RELN | 01 = Occupier | 02 = Spouse | 03 = Son/daughter | 04 = Son/daughter-in-law |
| 1991 | RELN | 01 = Occupier | 02 = Spouse of occupier | 03 = Child of occupier | 06 = Child-in-Law |
| 1996 | | Not asked this year | | | |
| 2001 | Relationship to reference person | 0111 = Reference Person | 0211 = Spouse/ Partner of Reference Person | 0311 = Child (Natural, Step, Adopted or Foster) of Reference Person | 0561 = Daughter/Son-in-law of Reference Person |
| 2006 | Relationship to reference person | 01 = Reference Person | 02 = Spouse/Civil Union Partner/ Partner of Reference Person | 03 = Child (Natural, Step, Adopted or Foster) of Reference Person | |

Relationship to Reference Person

| | | Classification categories | | | |
|------|----------------------------------|--|--|--|--|
| Year | Variable | Parent | Grandparent | Grandchild | Sibling/ Sibling-in-law |
| 1981 | RELN | 5 = Father, Father-in-law, Mother, Mother-in-law | 6 = Grandparent, Great-grandparent | 7 = grandchild, great grandchild | 8 = Brother, brother-in-law, Sister, sister-in-law |
| 1986 | RELN | 05 = Father/mother | 06 = Grandparent | 07 = Grandchild 18 = Grandchild in Law | 08 = Brother/sister-in-law |
| 1991 | RELN | 04 = Parent of occupier 05 = Parent-in-Law | 09 = Grandparent 11 = Great-Grandparent | 10 = Grandchild 12 = Great-Grandchild | 07 = Brother/Sister 08 = Brother/Sister in-law |
| 1996 | | Not asked this year | | | |
| 2001 | Relationship to reference person | 0411 = Parent (Natural, Step, Adopted or Foster) of Reference Person 0571 = Parent-in-law of Reference Person | 0521 = Grandparent (Natural, Step, Adopted or Foster) of Reference Person 0522 = Great-grandparent (Natural, Step, Adopted or Foster) of Reference Person | 0531 = Grandchild (Natural, Step, Adopted or Foster) of Reference Person 0532 = Great-grandchild (Natural, Step, Adopted or Foster) of Reference Person | 0511 = Sibling (Natural, Step, Adopted or Foster) of Reference Person 0512 = Sibling-in-law of Reference Person |

Relationship to Reference Person

| Year | Variable | Classification categories | | | |
|------|----------------------------------|--|-------------|------------|----------------------------|
| | | Parent | Grandparent | Grandchild | Sibling/ Sibling-in-law |
| 2006 | Relationship to reference person | 04 = Parent (Natural, Step, Adopted or Foster) of Reference Person | | | |

Relationship to Reference Person

| Year | Variable | Classification categories | | | |
|------|----------------------------------|--|---|-------------------------------------|---|
| | | Uncle/Aunt | Nephew/Niece/ Cousin | Foster child/ ward | Flatmate |
| 1981 | RELN | 9 = Uncle, Great Uncle, Aunt, Great Aunt | 10 = Nephew, Niece, Cousin | 11 = Foster child | 12 = Flatmate |
| 1986 | RELN | 09 = Uncle/aunt | 10 = Nephew/niece/ cousin | 11 = Foster child/ ward of state | 12 = Flatmate/ business partner |
| 1991 | RELN | 13 = Aunt/Uncle 15 = Great uncle/Aunt | 14 = Niece/Nephew 16 = Cousin 19 = Great niece/ nephew | 20 = foster child/ Ward of State | 21 = flatmate |
| 1996 | | Not asked this year | | | |
| 2001 | Relationship to reference person | 0541 = Aunt/Uncle of Reference Person 0542 = Great-aunt/Great-uncle of Reference Person | 0551 = Niece/ Nephew of Reference Person 0552 = Great-niece/Nephew of Reference Person 0581 = Cousin of Reference Person | | 0611 = Flatmate 0612 = Child of Flatmate |
| 2006 | Relationship to reference person | | | | 0611 = Flatmate 0612 = Child of Flatmate |

Relationship to Reference Person

| Year | Variable | Classification categories | | | |
|------|----------|---------------------------|------------------------------------|---|---|
| | | Guest | Boarder | Staff | Residual categories |
| 1981 | RELN | 13 = Guest or visitor | 14 = Boarder 15 = Lodger | 16 = Housekeeper 17 = Other live in employee | 18 = Other occupant of Private Dwelling |
| 1986 | RELN | 13 = Guest/visitor | 14 = Boarder 15 = Lodger/roomer | 16 = Live in housekeeper 17 = Other live in employee | 18 = Other occupant of private dwelling |
| 1991 | RELN | 22 = Visitor | 23 = Boarder 24 = Roomer | 25 = Staff 26 = Spouse of Staff 27 = Child of Staff | 17 = Relative undefined 28 = Relationship unknown or not stated 29 = Guest/ Inmate/ Patient |
| 1996 | | Not asked this year | | | |

Relationship to Reference Person

| Year | Variable | Classification categories | | | |
|------|----------------------------------|--|--|--|---|
| | | Guest | Boarder | Staff | Residual categories |
| 2001 | Relationship to reference person | 0711 = Guest/ Visitor/ Inmate/ Patient/ Resident | 0626 = Boarder 0627 = Child of Boarder 0628 = Lodger/ Roomer | 0621 = Employer 0622 = Child of Employer 0623 = Employee 0624 = Child of Employee 0625 = Partner/ Spouse of Employee | 0500 = Other Relative of Reference Person, nfd 0599 = Other Relative of Reference Person, Not Elsewhere Classified 0600 = Non-relative of Reference Person, nfd 0629 = Landlord/ Landlady of Reference Person 0699 = Non-relative Not Elsewhere Classified 4444 = Don't Know 5555 = Refused to Answer 7777 = Response Unidentifiable 8888 = Response Outside Scope 9999 = Not Stated |
| 2006 | Relationship to reference person | 07 = Guest/ Visitor/ Inmate/ Patient/ Resident | | | 05 = Other Relative of Reference Person 06 = Non-relative of Reference Person 44 = Don't Know 55 = Refused to Answer 77 = Response Unidentifiable 88 = Response Outside Scope 99 = Not Stated |

7.5.4 Dwelling Variables

Access to telecommunications

| Year | Variable | Classification categories | | |
|------|---------------------------------------|--|---|---|
| | | Telephone | No telephone | Not specified |
| 1981 | PHON | 1 = 'Telephone present' | 0 = 'No telephone present' | |
| 1986 | | No Questions about Telephones | | |
| 1991 | | No Questions about Telephones | | |
| 1996 | TELEPH | 1 = 'Yes' | 2 = 'No' | 9 = 'Not specified' |
| 2001 | Telecommunication Systems – Access to | 1 = 'Access to telephone' | 0 = 'No Access to Telecommunication Systems' | 9 = 'No or Not stated' |
| 2006 | Telecommunication Systems – Access to | 01 = 'Access to a Cellphone/Mobile Phone' 02 = 'Access to a telephone' 03 = 'Access to a Fax Machine' 04 = 'Access to the Internet' | 00 = 'No Access to Telecommunication Systems' | 77 = 'Response Unidentifiable' 99 = 'No or Not stated' |

Private Dwelling Type

| Year | Variable | Classification categories | | |
|------|-------------------------|---|---|---|
| | | Permanent | Joined houses or flats | House or flat with business attached |
| 1981 | DWGTP | 1 = Separate house (1 H/H) | 3 = House (2 or more H/Hs) with shared facilities 4 = House with other private dwellings attached 5 = Self-contained flat or apartment 6 = Townhouse, row house, villa unit | 2 = House or flat attached to business premises |
| 1986 | DWGTP | 1 = Separate house | 2 = Two houses or flats joined together 3 = Three or more flats (houses) joined together | 4 = Flat/house attached to business |
| 1991 | DWGTP | 01 = Separate house | 02 = Two flats or houses joined together 03 = Three or more flats or houses joined together | 04 = Flat or house joined to business or shop |
| 1996 | DWETYPE | 01 = Separate house (including emergency house, women's refuge, DSW house, embassy) | 02 = Two flats or houses joined together 03 = Three or more flats or houses joined together, in 1 or 2 storey building 04 = Three or more flats or houses joined together, in 3 or more storey building | 05 = Flat or house joined to a business or shop |
| 2001 | Dwelling Type – level 4 | 1000 = Private Dwelling, nfd 1100 = Permanent Private Dwelling, nfd 1111 = Separate House | 1112 = Two Flats/ Units/ Townhouses/Apartments/ Houses Joined Together 1113 = Three or More Flats/ Units/ Townhouses/ Apartments/Houses Joined together, in 1 or 2 Storey Building 1114 = Three or More Flats/ Units/ Townhouses/ Apartments/Houses Joined together, in 3 or More Storey Building | 1115 = Flat/ Unit/ Townhouse/Apartment or House Joined to or Part of a Business or Shop |

Private Dwelling Type

| Year | Variable | Classification categories | | |
|------|-------------------------|---|---|---|
| | | Permanent | Joined houses or flats | House or flat with business attached |
| 2006 | Dwelling Type – level 3 | 1000 = Occupied Private Dwelling, not further defined 1111 = Separate House No storey Information 1112 = Separate house with one storey 1113 = Separate house with two or more storeys | 1211 = Two or more Flats/ Units/ Townhouses/ Apartments/ Houses Joined Together no storey information 1212 = Two or More Flats/ Units/ Townhouses/ Apartments/Houses Joined together, in one Storey Building 1213 = Two or More Flats/ Units/ Townhouses/ Apartments/Houses Joined together, in two or three Storey Building 1214 = Two or More Flats/ Units/ Townhouses/ Apartments/Houses Joined together, in Four or more Storey Building | 1115 = Flat/ Unit/ Townhouse/Apartment or House Joined to or Part of a Business or Shop |

Private Dwelling Type

| Year | Variable | Classification categories | | | |
|------|-------------------------|---|---|--|--|
| | | Bach/crib or hut (not in work camp) | Temporary homes: mobile | Temporary homes: in a motor camp | Other |
| 1981 | DWGTP | 7 = Bach, Crib, hut (not in work camp) | 8 = Mobile or moveable home | | 9 = Other private dwellings, incl. Temporary |
| 1986 | DWGTP | 5 = Bach, crib, hut (not in work camp) | 6 = Mobile or temporary dwelling | | 7 = Other 9 = Private dwelling, not specified |
| 1991 | DWGTP | 05 = Bach, crib or hut (not in a work camp) | | 06 = Caravan, cabin or tent in a motor camp | 07 = other (such as yacht) 09 = Non Specified private dwelling |
| 1996 | DWETYPE | 06 = Bach, crib or other holiday home | 08 = Mobile or temporary dwelling (not in a motor camp) | 07 = Caravan, cabin or tent in a motor camp | 25 = In transit/No fixed abode |
| 2001 | Dwelling Type – Level 4 | 1116 = Bach, Crib or Other Holiday Home | 1212 = Mobile Units Not in a Motor Camp 1200 = Temporary Private Dwelling, nfd | 1211 = Caravan, Cabin, Tent or Mobile Unit in a Motor Camp | 1213 = Makeshift Dwelling and or Shelter 1214 = Roofless and or Rough Sleeper |
| 2006 | Dwelling Type – Level 4 | | 1312 = Mobile dwelling not in a Motor Camp | 1311 = Dwelling in a Motor Camp | 1313 = improvised Dwelling or Shelter 1314 = Roofless or Rough Sleeper |

Heating Fuels Used

| Year | Variable | Classification categories | | |
|------|--------------------------------------|--|---|---|
| | | No Heating | Electricity | Gas |
| 1981 | Tax | 00 = No heating appliances used during the year ending on Census night | 10–14 = Electric heating | 20–23 = Gas Heating |
| 1986 | HEATA-F | 0 = No means of heating dwelling | A = 1 = Electricity | B= 1 = Gas |
| 1991 | HTNG | 000 = No heating used | 1xx = Electricity 2xx = Use both Electricity and Gas | 2xx = Use both Electricity and Gas 3xx = Gas |
| 1996 | HEATx | 9 = Do Not Use | 2 = Electric | 3-4 = Gas |
| 2001 | Heating Fuels Used – Type | 18 = No fuels used in this dwelling | 11 = Electricity | 12-13 = Gas |
| 2006 | Heating Fuels Used to heat Dwellings | 18 = No fuels used in this dwelling | 11 = Electricity | 12 = Mains Gas 13 = Bottled Gas |

Heating Fuels Used

| Year | Variable | Classification categories | | | |
|------|--------------------------------------|--|---------------------------|--|---|
| | | Wood/ Coal | Solar | Other | Residual categories |
| 1981 | HTGxx | 30–32 = Wood/ Coke/ Coal | 50 = Solar Heating | 40–42 = Oil/ Kerosene 60–62 = Other Means | 99 = Not specified |
| 1986 | HEATA-F | C = 1 = Wood D = 1 = Coke or Coal | | E = 1 = Oil (incl Kerosene) F = 1 = Other | 9 = Absence/Not specified |
| 1991 | HTNG | x1x = Wood x2x = Use both wood and coal x3x = coal | | xx1 = oil xx2 = Use both oil and Other means xx3 = Other means | 999 = not specified |
| 1996 | HEATx | 5 = Wood 6 = Coal | 7 = Solar | 8 = Other | |
| 2001 | Heating Fuels Used – Type | 14 = Wood 15 = Coal | 17 = Solar Heating System | 19 = Other Fuels | 99 = Do not use heating or Not Stated |
| 2006 | Heating Fuels Used to heat Dwellings | 14 = Wood 15 = Coal | 17 = Solar power | 19 = Other Fuel(s) | 77 = Response unidentifiable 99 = Not Stated |

Living Arrangements

| Year | Variable | Classification categories | | | |
|------|---|--|------------------------------------|---|---|
| | | Parents | Spouse | Partner | Sons/Daughters |
| 1981 | | Not asked this year | | | |
| 1986 | LIVAR | | 1 = living with legal spouse | 2 = living with a partner (de facto) | |
| 1991 | LIVRA, LIVRB, LIVRC, LIVRD, LIVRE, LIVRF | 1xxxxx = living with parents | x1xxxx = living with spouse | x2xxxx = living with partner | xx1xxx = living with sons/daughters |
| 1996 | LIVE1, LIVE2, LIVE3, LIVE4, LIVE5, LIVE6 | LIVE1 1 = Mother 2 = Father 4 = Both of these | LIVE2 1 = Legal husband or wife | LIVE2 2 = Partner or de facto, girlfriend or boyfriend | LIVE3 1 = Son(s) 2 = Daughter(s) 4 = both of these |
| 2001 | | Not asked this year | | | |
| 2006 | | Not asked this year | | | |

Living Arrangements

| Year | Variable | Classification categories | | | |
|------|---|---|--|--------------------------------------|---|
| | | Siblings | Other relatives | Other People | Residual categories |
| 1981 | | Not asked this year | | | |
| 1986 | LIVAR | | | | 3 = living alone 4 = other 9 = Not specified |
| 1991 | LIVRA, LIVRB, LIVRC, LIVRD, LIVRE, LIVRF | xxx1xx = living with brothers/sisters | xxxx1x = living with other relatives | xxxxx1 = living with other persons | 9 = Not specified 0 = Not living with (parents, spouse, partner, sons/daughters, brothers/sisters, other relatives, other persons) |
| 1996 | LIVE1, LIVE2, LIVE3, LIVE4, LIVE5, LIVE6 | LIVE4 1 = Sister(s) 2 = Brother(s) 4 = Both of these | LIVE5 1 = live with other relatives | LIVE6 1 = live with other persons | 9 = not specified 3 = none of these 0 = Did not live with other persons/relatives 8 = not applicable |
| 2001 | | Not asked this year | | | |
| 2006 | | Not asked this year | | | |

Motor Vehicles

| Year | Variable | Classification categories | | | | Residual categories |
|------|--------------------------|---------------------------|-----------------------------------|-----------------------------------|--|---|
| | | 0 | 1 | 2 | 3+ | |
| 1981 | PCARS | 0 = 'NIL' | 1 = '1 car' | 2 = '2 cars' | 3–7 = '3–7 cars' 8 = '8 or more' | 9 = 'not specified' |
| 1986 | MVEH | 0 = 'No motor vehicles' | 1–2 = 'one or two motor vehicles' | 1–2 = 'one or two motor vehicles' | 3–4 = 'three or four motor vehicles' 5 = '5 or more motor vehicles' | 9 = 'Not specified' |
| 1991 | MVEHS | 0 = 'None' | 1 = 'Number of motor vehicles' | 2 = 'Number of motor vehicles' | 3–4 = 'three or four motor vehicles' 5 = '5 or more motor vehicles' | 9 = 'Not specified' |
| 1996 | VEHICLE | 0 = 'None' | 1 = 'one' | 2 = 'two' | 3 = 'three or more' | 9 = 'not specified' |
| 2001 | Number of Motor Vehicles | 0 = 'No Motor Vehicles' | 1 = 'one motor vehicles' | 2 = 'two motor vehicles' | 3 = '3 or more motor vehicles' | 9 = 'not stated' |
| 2006 | Number of Motor Vehicles | 0 = 'No Motor Vehicles' | 1 = 'one motor vehicles' | 2 = 'two motor vehicles' | 3 = '3 or more motor vehicles' | 7 = 'Response unidentifiable' 9 = 'Not stated' |

Nature of Occupancy

| Year | Variable | Classification categories | | |
|------|---------------------|---|---|---|
| | | Owned with mortgage | Owned without mortgage | Dwelling owned but mortgage nfd |
| 1981 | TENUR | 2 = 'Owned with mortgage' | 1 = 'Owned without mortgage' | |
| 1986 | NOCCY | 1 = 'Owned with a mortgage' | 2 = 'Owned without a mortgage' | |
| 1991 | NOCCY | 0 = 'Owned with Mortgage' | 1 = 'Owned without mortgage' | |
| 1996 | OCUPAN | 01 = 'Owned with Mortgage' | 02 = 'Owned without mortgage' | 03 = Owned, Mortgage not specified |
| 2001 | Tenure of Household | 11 = 'Dwelling owned or partly owned by usual resident(s), who make mortgage payments' | 12 = 'Dwelling owned or partly owned by usual resident(s), who Do Not make mortgage payments' | 10 = 'Dwelling Owned or Partly owned by Usual Resident(s), Mortgage Arrangements, nfd' |
| 2006 | Tenure of Household | 11 = 'Dwelling owned or Partly owned by usual resident(s) who make mortgage payments' 31 = 'Dwelling held in a Family Trust by usual resident(s) Who make Mortgage payments' | 12 = 'Dwelling owned or Partly owned by usual resident(s) who do not make mortgage payments' 32 = 'Dwelling held in a Family Trust by usual resident(s) Who do not make Mortgage payments' | 10 = 'Dwelling owned or Partly owned by usual resident(s) mortgage arrangements not further defined' 30 = 'Dwelling held in a Family Trust by usual resident(s) Mortgage arrangements not further defined' |

Nature of Occupancy

| Year | Variable | Classification categories | | |
|------|---------------------|---|---|--|
| | | Rented | Provided Free | Residual categories |
| 1981 | TENUR | 3 = Rented – not from employer 4 = Rented – from employer 5 = Rented – undefined | 6 = Provided free not with job 7 = Provided free with job | 8 = Not specified |
| 1981 | LLORD | 1 = Housing Corporation 2 = Other Central Govt agency or department 3 = Local Authority 4 = Individual person, company partnership, etc. 5 = Other | | 6 = Not specified |
| 1986 | NOCCY | 3 = Furnished 4 = Unfurnished 5 = Furnishing not specified 6 = Housing Corporation 7 = Other government department 8 = Local Authority | 10 = Provided free | 9 = Landlord not specified 99 = Tenure not specified |
| 1991 | NOCCY | 3 = Rented or Leased from Private Person 4 = Rented or Leased from Real Estate Agency 5 = Rented or Leased from Housing Corporation 6 = Rented or Leased from Other Govt. Dept. 7 = Rented or Leased from Local Authority | 2 = Provided free | 8 = Rented or Leased, Landlord not specified 9 = Tenure not specified |
| 1996 | NOCCY | 05 = Private Person (rented or leased) 06 = Local Authority or City Council (rented or leased) 07 = Housing New Zealand (rented or leased) 08 = Other Central Government Agency (rented or leased) 09 = Business, Real Estate Agency or other organisation (rented or leased) 10 = Landlord not specified (rented or leased) | 04 = Provided Rent Free | 11 = Not Owned, Rental status not specified 99 = Not specified |
| 2001 | Tenure of Household | 21 = Dwelling Not Owned by Usual Resident(s), Who Make Rent Payments | 22 = Dwelling Not Owned by Usual Resident(s), Who Do Not Make Rent Payments | 77 = Response Unidentifiable 99 = Not Stated |
| 2001 | Sector of landlord | 11 = Private Person 12 = Private Trust 21 = Local Authority or City Council 31 = Housing New Zealand | | 44 = Don't Know 99 = Not Stated |

Nature of Occupancy

| Year | Variable | Classification categories | | |
|------|---------------------|---|--|---|
| | | Rented | Provided Free | Residual categories |
| 2001 | Sector of landlord | 32 = Other State-Owned Corporation or State-Owned Enterprise or Government Department or Ministry 41 = Business or Other Organisation | | |
| 2006 | Tenure of Household | 20 = Dwelling not owned by usual resident(s) Rental Arrangements not further defined 21 = Dwelling not owned by usual resident(s) who make rent Payments | 22 = Dwelling not owned by usual resident(s) who do not make rent Payments | 77 = Response Unidentifiable 99 = Not Stated |

Number of Bedrooms

| Year | Variable | Classification categories | | |
|------|--------------------------|----------------------------------|--|---|
| | | 0–7 | 8+ | Residual categories |
| 1981 | BDRMS | 1–7 = '1–7 bedrooms' | 8–19 = '8–19 bedrooms' 20 = '20 or more bedrooms' | 99 = 'Not Specified' |
| 1986 | BDRMS | 0 = 'Nil' 1–7 = '1 through 7' | 8 = '8 or more' | .,9 = 'Not Specified' |
| 1991 | BDRMS | 0 = 'Nil' | 8 = '8 or more' | .,9 = 'Not Specified' |
| 1996 | Rooms-Bedrooms Number of | 01–07 = '1–7 bedrooms' | 8–13 = '8–13 bedrooms' 14 = '14 or more bedrooms' | 98 = 'Unidentifiable' 99 = 'Not Specified' |
| 2001 | Bedrooms number of | 01–07 = '1–7 bedrooms' | 8–13 = '8–13 bedrooms' 14 = '14 or more bedrooms' | 77 = 'Response unidentifiable' 99 = 'Not Stated' |
| 2006 | Bedrooms number of | 01–07 = 'one – seven bedrooms' | 8–13 = 'eight – thirteen bedrooms' 14 = '14 or more bedrooms' | 77 = 'Response unidentifiable' 99 = 'Not Stated' |

Number of Heating Fuels

| Year | Variable | Classification categories | | | |
|------|-------------------------------|---------------------------|--|--|---------------------|
| | | 0 Fuels Used | 1–4 Fuels Used | 5+ Fuels Used | Residual categories |
| 1981 | Not listed in data dictionary | | | | |
| 1986 | HTNG | 0 = no means of heating | Single means of heating 1 = Electricity 2 = Gas 3 = Wood 4 = Coke or Coal 5 = Oil 6 = Other Two means of heating 7 = Electricity/gas 8 = Electricity/wood 9 = Electricity/coke or coal 10 = Electricity/oil | 32 = Any other combinations of heating | 99 = Not specified |

Number of Heating Fuels

| Year | Variable | Classification categories | | | |
|------|--------------------------------|------------------------------------|--|---|---|
| | | 0 Fuels Used | 1–4 Fuels Used | 5+ Fuels Used | Residual categories |
| 1986 | HTNG | | 11 = Gas/wood 12 = Gas/coke or coal 13 = Gas/oil 14 = Wood/coke or coal 15 = Wood/oil 16 = Coke or coal/ oil Three means of heating 17 = Electricity/gas/wood 18 = Electricity/gas/coke or coal 19 = Electricity/gas/oil 20 = Electricity/wood/ coke or coal 21 = Electricity/wood/oil 22 = Electricity/coke or coal/oil 23 = Gas/ wood/ coke or coal 24 = Gas/wood/oil 25 = Gas/coke or coal/ oil 26 = Wood/coke or coal/ oil Four means of heating 27 = Electricity/ gas/ wood/coke or coal 28 = Electricity/ gas/wood/oil 29 = Electricity/ gas/coke or coal/oil 30 = Electricity/ wood/ coke or coal/ oil 31 = Gas/ wood/ coke or coal/oil | | |
| 1991 | Not listed in data dictionary | | | | |
| 1996 | NOFUELS | 0 = No fuels used in this dwelling | 1–4 = one to four | 5–6 = Five to Six 7 = Seven or more | 9 = Fuels not specified |
| 2001 | Heating fuels used – Number of | 0 = No heating fuels used | 1–4 = one to four fuels | 5–6 = Five to Six fuels 7 = Seven or more | 9 = not stated |
| 2006 | Heating fuels used – Number of | 00 = No heating fuels used | 01–04 = one to four fuels | 05–06 = Five to Six fuels 07 = Seven or more | 77 = Response unidentifiable 99 = not stated |

Sector of Landlord

| Year | Variable | Classification categories | |
|------|--------------------|---|---|
| | | Private Person, Business/real estate agency | Housing Corporation |
| 1981 | LLORD | 4 = Individual person, company partnership, etc. | 1 = Housing Corporation |
| 1986 | NOCCY | 3 = Private person / company furnished 4 = Private person / company unfurnished 5 = Private person / company furnishing not specified | 6 = Housing Corporation |
| 1991 | LLORD | 1 = Private person 2 = Real Estate Agency | 3 = Housing Corporation |
| 1996 | OCUPAN | 05 = Private person (rented or leased) 09 = Business, real estate agency or other organisation (rented or leased) | 07 = Housing New Zealand (rented or leased) |
| 2001 | Sector of Landlord | 11 = Private person 12 = Private trust 41 = Business or other organisation | 31 = Housing New Zealand |
| 2006 | Sector of Landlord | 11 = Private person | 31 = Housing New Zealand Corporation |

Sector of Landlord

| Year | Variable | Classification categories | | |
|------|--------------------|---|---|---|
| | | Local Authority | Other Government agency | Residual categories |
| 1981 | LLORD | 3 = 'Local Authority' | 2 = 'Other central Govt. agency or dept.' | 5 = 'Other' 6 = 'Not Specified' 0 = 'Not applicable' |
| 1986 | NOCCY | 8 = 'Local authority' | 7 = 'Other Government depts.' | 9 = 'Landlord not specified' 99 = 'Tenure not specified' |
| 1991 | LLORD | 7 = 'Local Authority' | 4 = 'Other Govt. Dept.' | 8 = 'Landlord Not Specified' 9 = 'Tenure Not Specified' |
| 1996 | OCUPAN | 06 = 'Local authority or city council (rented or leased)' | 08 = 'Other central government agency (rented or leased)' | 10 = 'Landlord not specified (rented or leased)' 11 = 'Not owned, rental status not specified' 99 = 'Not Specified' |
| 2001 | Sector of Landlord | 21 = 'Local Authority or city council' | 32 = 'Other state owned Corporation or state owned enterprise or government department or ministry' | 44 = 'Don't Know' 99 = 'Not Stated' |
| 2006 | Sector of Landlord | 21 = 'Local Authority or city council' | 32 = 'Other state owned Corporation or state owned enterprise or government department or ministry' | 44 = 'Don't Know' 77 = 'Response unidentifiable' 99 = 'Not Stated' |

Weekly Rent

| Year | Variable | Classification categories | | | Residual categories |
|------|-------------------------------|---------------------------|---|---|--|
| | | No rent paid | \$1–\$997 | \$998+ | |
| 1981 | RENT | | 1 = 'Rent from \$0.01 to \$1.99' 2–997 = 'Rent \$2.00 to \$997.00' | | 999 = 'Not Specified' |
| 1986 | RENT | | 1–997 = '\$1–\$997 rent per week' | 998 = '\$998 and over rent per week' | 999 = 'Not Specified, not applicable' (not applicable – dwelling not rented) |
| 1991 | RENT | | 001–997 = 'Weekly Rent' | 998 = '\$998 and over Weekly Rent' | 999 = 'Not Specified' |
| 1996 | RENT | 0000 = 'No rent Paid' | 0001–0998 = '\$ dollars of weekly rent paid' 0999 = '\$999 weekly rent paid' | 1000–9997 = '\$1000 or more weekly rent paid' | 9998 = 'Unidentifiable' 9999 = 'Not specified' |
| 2001 | Weekly Rent Paid by Household | 0000 = 'No Rent Paid' | 0001–997 = 'Weekly rent in \$1 increments' | 998–9000 = 'Weekly rent in \$1 increments' | 9777 = 'Response Unidentifiable' 9999 = 'Not Stated' |
| 2001 | Weekly Rent Paid by Household | 0000 = 'No Rent Paid' | 0001–997 = 'Weekly rent in \$1 increments' | 998–9000 = 'Weekly rent in \$1 increments' | 9777 = 'Response Unidentifiable' 9999 = 'Not Stated' |

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