
Religious Affiliation

Variable specification

2018 Census

Log of late changes to variable specifications:

Major change to the question design has been approved (see Section 1.1). The two questions will be replaced with one question; a write-in free text box for religion and 2 tick boxes ('No religion' and 'Object to Answering').

Purpose

Census variable specifications are living documents created during the development phase of census, up to and including the 2018 Census. They serve as a resource for general reference, and inform the work of teams working on the census, including field operations, respondent interaction, questionnaire design, classifications and standards, processing, data evaluation, and outputs.

These specifications document important information about each census variable in one place, including metadata such as definitions and classifications, emerging information needs, data quality problems, and details of how we ensure that good quality data is produced. Information is added to these variable specifications as it becomes available. Feedback and analysis of testing may result in changes to these documents.

Decisions on inclusion of this topic/variable

	Inclusion (note important details)	Date	Who
Census Test July 2016	Yes	11/04/16	Denise McGregor
Census Test 2017	Yes	6/10/16	Denise McGregor
2018 Census	Yes – see changes to questionnaire as above	30/06/17	Denise McGregor

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1.0 Background information

1.1 Change indicator

Major change in the 2018 Census

- The question will no longer include any tick box religious groupings, for both level one groupings within the classification (Christianity, Buddhism, Hinduism), and Christian-based religions (e.g. Anglican, Catholic etc.). Instead all respondents who indicate they have a religion will be asked to write in their religion. This may impact the counts of religious groupings.
- Possible impacts from proposed changes to the online question design, relating to the 'No Religion' and 'Object to Answer' other fields, autofill and drop down response options

1.2 Census contact people

Primary – Digby Carter (author of variable specification)

Secondary – Kate Lang

1.3 Other key contact people

Subject matter – Population Stats – Robert Didham

Classifications and Standards – Andrew Hancock

Questionnaire Methodology and Development – Matthew Flanagan

Respondent Interaction: ?

2.0 Collection and Classification

2.1 Definition

Religious Affiliation

Religious affiliation is the self-identified association of a person with a religion, religious denomination or sub-denominational religious group.

A **religion** is a set of beliefs and practices, usually involving acknowledgement of a divine or higher being or power, by which people order the conduct of their lives both practically and in a moral sense. Entities that do not meet these criteria but are universally or widely regarded as religions, are also included.

A **denomination** is the church or religious sect that forms a sub-group 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.

2.3 Derivations

2018 Census - Derivation 81 is now incorporated into the new output derivation for randomisation of multiple responses – TBC (underway)

Census Test 2017

[Derivation 81 Sorting of Multiple Responses.](#)

2013 Census

Derivations used in 2013	
Derivation Number 81: Sorting of Multiple Responses Notes Link	<p>This derivation sorts responses to language, iwi and religion into ascending numerical order. In addition, any non-residual values that are repeated for any one record are reduced to one occurrence. For example, if a respondent ticks English and writes English in the other box the code for English will be entered twice in the processing system but later reduced to one response of English through this output system derivation.</p> <p>The residual codes: response unidentifiable, response outside scope, and not stated will be retained for each relevant multiple response question (language, iwi, religion). For example, if a respondent states two responses that are both coded to unidentifiable, then two output codes of 'response unidentifiable' will be output for that person.</p> <p>Please note that the other residual codes of 'don't know' and 'object/refused to answer' will not have duplicates i.e. the derivation will only retain one of each of these.</p>

2.4 Classifications

The following classifications will be used in the 2018 Census:

[RELIGAFF V2.0](#) – Religious Affiliation 1999

(Previous censuses: 2013 – [RELIGAFF v1.0](#); 2006 – same as 2013)

Religious affiliation is a hierarchical classification with three levels. Level one has a one-digit code structure and has 10 categories. Level two has a three-digit code structure and contains 51 categories. Level three has a five-digit code structure and contains 167 categories.

The top two levels are shown below:

0	No Religion
000	No Religion
1	Buddhism
101	Buddhism
2	Christian
200	Christian nfd

201	Adventist
202	Anglican
203	Asian Christian
204	Baptist
205	Brethren
206	Catholicism
207	Church of Christ and Associated Churches of Christ
208	Evangelical, Born Again and Fundamentalist
209	Jehovah's Witnesses
210	Latter-day Saints
211	Lutheran
212	Methodist
213	Orthodox
214	Pentecostal
215	Presbyterian, Congregational and Reformed
216	Protestant nfd
217	Salvation Army
218	Uniting/Union Church and Ecumenical
299	Other Christian
3	Hinduism
301	Hinduism
4	Islam
401	Islam
5	Judaism
501	Judaism
6	Māori Religions, Beliefs and Philosophies
600	Māori Religions, Beliefs and Philosophies nfd
601	Ratana
602	Ringatū
609	Other Māori Religions, Beliefs and Philosophies
7	Spiritualism and New Age Religions
700	New Age nfd
701	Church of Scientology
702	Nature and Earth Based Religions
703	Satanism
704	Spiritualist
709	Other New Age Religions
8	Other Religions, Beliefs and Philosophies
800	Other Religions, Beliefs and Philosophies nfd
801	Baha'i
802	Chinese Religions
803	Jainism
804	Japanese Religions
806	Sikhism
807	Theism
808	Zoroastrian

809	Unification Church (Moonist)
810	Jedi
811	Other Religions, Beliefs and Philosophies
9	Residual Categories
944	Don't Know
955	Object to answering
977	Religion Unidentifiable
988	Response Outside Scope
999	Not Stated

Concordance: This is approved for the 2017 test only.

[Religious Affiliation 1999 V1.0 to V2.0 – Predominant Concordance for Census V1.0](#)

2.5 Coding

Religion (IF16) – RELIGAFF V2.0

checkbox1 = 00000

checkbox2 = 95555

no response = 99999

3.0 Output

3.1 Subject population

Census Usually Resident Population Count

3.2 Output categories and types of output

Religious affiliation is a hierarchical classification with 190 categories. Level one has a one-digit code structure and has 10 categories. Level two has a three-digit code structure and contains 50 categories. Level three has a five-digit code structure and contains 130 categories.

The 2013 categories for Religious Affiliation (Total Response) and Religious Affiliation 1-4 at the highest level available for output were:

- 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

At this level of the classification (the highest level), 'object to answering' (which is a valid response) is included in 'residual categories' together with 'don't know', 'religion unidentifiable', 'response outside scope' and 'not stated'.

Respondents can write-in multiple answers to the religion question. During processing and coding this is reduced and output up to 4 religions (ie Religious Affiliation 1-4). If more than 4 responses (religag 1-4) then the first written responses will be taken.

- Religious Affiliation 1 (*The first response given in the Religious Affiliation question on the 2006 Individual Form.*)
- Religious Affiliation 2 (*The second response given in the Religious Affiliation question on the 2006 Individual Form.*)
- Religious Affiliation 3 (*The third response given in the Religious Affiliation question on the 2006 Individual Form.*)
- Religious Affiliation 4 (*The fourth response given in the Religious Affiliation question on the 2006 Individual Form.*)

For selecting Religious Affiliation 1-4, a priority rule was used in 2013 (the same in both 2001 and 2006) which followed the tick-boxes on the form (with written responses taking priority over tick boxes first). The 2018 Census question does not include tick boxes for religions, so this is no longer the case.

4.0 Data use and emerging information needs

4.1 Data use by Statistics New Zealand

2013 Census data on religious affiliation was output as part of the QuickStats information about culture and identity, and the QuickStats about people aged 65 and over. Output tables were also available cross-tabulated by geographic areas (regional council, territorial authorities, district health boards, general and Māori electoral boundaries). Information on religious affiliation within iwi groupings was available through NZ.Stat.

4.2 Data use outside of Statistics New Zealand

Data on religious affiliation is used

- by researchers and religious organisations to trace the changes in values and belief systems in New Zealand society
- to assess the need for various types of religion-related or religion-sponsored services, including those of churches, mosques, temples, and religious schools; and for the care of the aged and other disadvantaged groups
- by churches to assess their level of support
- as an explanatory variable for studies on subjects such as marriage formation and dissolution, educational attainment, and income
- by Māori, Pacific peoples, and other
- as part of measuring cultural affiliation in combination with the Ethnicity, Birthplace, Years since arrival in New Zealand and Languages spoken variables

4.3 Emerging trends and information needs

New Zealand has become increasingly secular and the proportion of respondents who stated they had 'No Religion' increased from 35 to 42 percent between 2006 and 2013. The proportions of most religious groups also decreased slightly between the two censuses, but there were slight increases in the proportions of Hindu, Muslim and Buddhist religions stated.

In the 2006 Census, around 20,000 respondents identified their religion as Jedi, and their responses coded as 'response outside scope', but after some public pressure, the information was released by Statistics New Zealand.

A review of the classification and standard was to take place in 2009 – this was postponed and indicated as necessary in the 2013 WOF (the last review was done in 1999), but has not taken place.

A previously identified issue is to investigate is the potential for disaggregation of the no religion category. The no religion category captures a wide range of synonyms including atheist and agnostic. The 2018 Census public consultation and engagement indicated a desire for more information (output) on non-church based religions and belief systems, this is unlikely to occur without a review of the classification.

A refresh of the classification took place in 2017 and has resulted in the updated classification being used for the 2018 Census.

4.4 2018 Census content consultation and engagement

In the *Preliminary View of 2018 Census Content* the proposed recommendation was to continue to collect information on religious in the 2018 Census.

There was not a large response to this recommendation overall. Submissions and online discussion were in favour with inclusion and largely agreed with the reasoning in the preliminary view that while society is becoming more secular, religious affiliation is still important to measure. It was also noted that the census is the only major source of data on religious affiliation.

A number of submitters and online commentators indicated that they would like more access to more information on non-church based religions and belief systems.

Documentation on content consultation and engagement:

[2018 Census content: Summary of feedback from engagement and consultation](#)

[2018 Census content: Summary of submissions](#)

Conclusions from engagement:

The need for information output on non-church based religions was assessed through the content determination framework.

The small user need for information in this area compared to mainstream religious affiliation (and their significance as a demographic attribute) meant that more detail in this area is preferable, but not important enough to necessitate a classification review.

The recommendation for this variable was no change other than investigation of options to improve data quality and collection detail. The 2017 Census Test showed that the question format was not working well, and the question has been redesigned for 2018.

4.5 Alternative data sources

No sources identified

5.0 Data quality

5.1 Quality priority level

Priority Level 3

These variables/topics are given third priority in terms of quality (accuracy, relevance, timeliness, consistency, interpretability and accessibility), time and resources across all phases of census. There are minimum quality standards (eg a quality level is assigned to all variables: one, two or three).

Priority levels document:

[Update to the 'three quality priority levels' in the 2018 Census](#)

5.2 Assessment of overall data quality for 2013

High: fit for use – with minor data quality issues only.

[2013 Census variable quality rating scale](#) gives more detail.

5.3 Non-response rate in 2013

6.9% (including substitutes, but excluding not stated responses by those who object to answering the question)

The non-response rate is complicated by the religion question having an object to answer category. With object to answer included the rate jumps from 6.9% up to 10.3%. For the official non response rate (6.9%) the not stated responses in the religion object category have been removed.

The non-response rate was just in the acceptable range specified in the FFU document (5-7%) -[Notes Link](#) - so is considered acceptable. When looking at the non-response rate over 5 Year Age Groups [table 5] the numbers mirror the 2006 and 2001 data, just slightly higher overall. It has the same peak in the 20-24 year age group and begins to increase from the 75-79 age group, however it does peak dramatically in the 100+ year age group which could be explained by the high number of elderly in rest homes not attempting to answer the Religion question.

5.4 Imputation

Imputation methods are being investigated, using historic data, deterministic imputation and donor imputation in CANCEIS.

Link to paper [TAG Imputation for item non-response](#) here.

5.5 Data quality issues

Quality of the data from the 2017 Test led to changes to the design of the 2018 Census Question, as described in other sections of the specification.

From the [2013 WOF](#):

For your information/caution:

- There were a few hundred records that were affected by the fuzzy scanning problem (similar to the problem effecting Language) and this may have impacted numbers of Buddhist nfd, Hindu nfd and Muslim nfd but it is pretty safe to assume that the impacts would not have made a big difference to the overall increase in these numbers.
- The religion_objection_code was added to the Religion classification in 2006. There was little useful information on this variable provided. Having this extra variable in the classification is very confusing and made analysis of the Religion variable much more strenuous than it otherwise would have been. It would make a lot more sense to actually get rid of the object to answering category in religion 1,2,3 and 4 and include all answers in religion_objection_code OR the other way round and get rid of the objection code altogether. It creates confusion and takes a lot more time and effort to get the total actual Not Stated Counts and the total actual Object to Answering Counts. Because of this proceed with caution when reviewing the residual responses especially 'Object to Answering' and 'Not Stated' due to religion_objection_code adding complications.
- Cross tabs with Religion and Ethnicity should always be done with the ethnic indicator variables as this removes multiple responses for Ethnicity

5.6 Recommendations and suggestions for improving data quality

Note that the 2017 question format did not capture detail on religious affiliations and has been revised for the 2018 Census. See Appendix E for more detail on the 2017 test results.

The recommendations below are from the [2013 WOF](#):

- A review of the Religion classification is necessary before the next census (a review has not been done since 1999). One of the reasons it needs a review is that the codes and synonym relationships in the residual categories (unidentifiable and outside scope) are blurry i.e. 'Free Thinker' could be classified under 'Response Outside Scope', 'Response Unidentifiable' or 'Other New Age Religions' etc instead of 'No Religion' in which it is currently under. High counts of nfd religions were also seen, could be worth adding extra synonyms into the classification.
- An urgent look at changing the way object to answering is calculated is needed. It makes it too complicated to determine the actual objection rate when having to sort out the counts for object to answering in the total response and religion objection code numbers. It also makes it difficult to calculate the exact non response rate as objecting to answering has a non-response rate included in the category also. Is this how output prefers to view the data? If not then possible changes would be beneficial, maybe to even revert back to the way it was calculated in 2001. Not sure why it needs its own category as well as one included in the total response dataset. All objection responses should either be included along with all the other religions (just put in the residual category) OR all objection responses to be included in a separate category (religion_objection_code) NOT both.

- Propose an edit where if a respondent ticks 'No Religion' and any other religion, the response will just be coded as No Religion OR a religion category. This became an issue as the scanner wasn't sensitive enough to pick up crossed out answers, instead included all 'marked' responses so this is not respecting respondents intentions. This was proposed in 2004 but got declined so this decision needs to be reviewed.
- In regards to the internet forms, a recommendation is that if a respondent chooses No Religion, all other response options should be greyed out. This way there isn't an over inflated count of No Religion responses.
- There is a need for improvement in scanning/recognition. This was also mentioned in 2006. The scanner doesn't seem to have enough sensitivity to recognise when a respondent has crossed out their answer (very obvious scribbles) so therefore in many multiple responses records, all are included even the crossed out one. This is not respecting the respondents intentions and was inflating numbers especially in regards to No Religion, Christian ndf, Anglican, Presbyterian, Catholic ndf categories. A suggestion to fix this is that when all boxes are ticked, it gets sent to an operator to double check that it is actually correct.
- Another suggestion is to add a derivation for number of religions stated (similar to the Language variable). This would be beneficial for evaluation purposes and output.
- The current situation with online forms is that respondents are able to tick 'No Religion; and/or 'Object to Answer'. (Object to answer' means the respondent objects to answering the question, but giving no religion is an answer, which means we would take that response as valid to the question. A change where this was no longer allowed could be considered. This has been implemented for the 2018 Census question.

5.7 Differences between desktop, mobile, and paper forms

Features of desktop and mobile forms that lead respondents to questions relevant to them

The online version will follow the intention of the paper form in that on the Internet the religious affiliation question will be treated as an 'and' question. This means that when forms are completed on the Internet, the system will allow multiple responses to be selected. However this may not be possible to implement for the 2017 Test and single responses only will be accepted. Multiple response to this question is possible when forms are completed on paper. Respondents will be able to select 'no religion' and/or 'object to answer' with any other religion(s) on the Internet form. When the internet data is processed the number of responses to this question will be limited to four as it is with the paper form.

On the Internet form, if Other Religion is selected, a text box will appear and respondents can write in the name of the religion (or religions) up to 60 characters. Auto-suggestions will be used online to assist the respondent with the names of religions from the codefile.

Differences in responding

Note that the question for 2018 does not provide tickboxes for religious groupings as in 2013. Respondents who wish to identify their religion will have to write in their religion in Question 16.

Link to [Auto suggestion lists for 2018 Census Internet Form](#)

Additional help information on desktop and mobile forms

There is no additional help on the internet forms, but auto-suggestion from the codefiles will aid the respondent with names and spelling.

Built-in editing on online forms for desktop and/or mobile devices.

If the user deselects the 'other religion' radio button, entered data will be cleared and the text field removed from view.

For people who stated that they are overseas visitors, this question will be greyed out, and they will not be able to answer it unless they change their answer to the previous question. When form completion is via paper, however, it is possible for overseas visitors to answer this question

5.8 Edits

2018 Census

None

2013 Census

No edits in 2013.

5.9 Evaluation checks to be updated for 2018

*** Note the possible impacts of major question change**

Total Response - Religion

Total Response - Religion >5000

Religion by 5 year age groups

Religion by Country of Birth

Religion by Region

Time series comparison 2006, 2013 total response counts

Religion counts as a % of total states response >1%

No Religion by 5 year age groups

Religion (level 1) by Ethnicity (level 1) - Counts & Percentages

Non Response by 5 year age groups

Object to Answering by 5 year age groups

Religion by Response Outside Scope – check the data for large numbers, and if they are a particular category (e.g. Jedi in 2006).

Auto coding quality checks - Auto & Manual

Check for scanning issues

Check for invalid codes

Appendices

2013 Variable Specification: [\[link\]](#)

B. 2013 Information by Variable: [\[link\]](#)

Information by variable is a brief document available on the Statistics New Zealand website which provides background information such as the definition and classification, along with information about data quality, and data quality issues to be aware of. It is the first 'port of call' for finding out about data quality issues.

C. 2013 Warrant of Fitness: [\[link\]](#)

The Warrant of Fitness (WOF) is a report on the final data quality that was achieved for a variable. It is an internal document that is much more detailed than Information by Variable. The warrant of fitness is produced at the end of data evaluation. It documents whether the data looked as expected, data quality issues and corrective actions taken, and makes recommendations for the following census. Although it is the end document for reporting on data quality, it also serves as a reference document for developing the next census.

D. Guide to determining the change indicator rating

Minor – minor changes that are not expected to have much effect on the data produced. Examples of this are minor changes to questionnaire design and/or guide notes/help information for respondents, minor classification changes that do not have much effect on what is included in each category, a small number of new codefile entries, minor changes to the derivation.

Moderate – changes that are expected to have some effect on the data produced. This could include changes to question wording, layout, or response options that are expected to change people's responses; changes in the guide note/help instructions that affect certain groups of respondents; new classification categories; changes to the codefile entries for some categories; new edits.

Major – major changes that are expected to affect the data produced eg a change in the type of information collected which means changes to the question wording; substantial changes

to response options; major changes to guide note/help instructions; a new classification with multiple changes to categories and what they include; a new codefile; significant changes to the derivation.

[E. Link to 2017 Test Analysis Report here](#)