

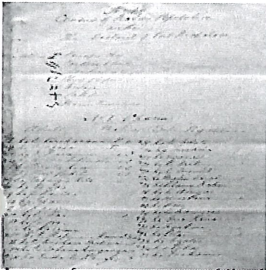
Early New Zealand population counts

Beginning in 1842, regular counts were taken throughout New Zealand of the European settlement, and irregular official counts were taken of various Māori settlements (often in Māori land). These counts, however, were not coordinated or comprehensive enough censuses.

A few early unofficial local censuses were also taken by clergymen and the New Zealand government. The largest government census up to that time was taken, of the European population in the province (from Patea to Stewart Island).

This is the first page of a local census schedule (below) listing all the Māori living between Wellington and the Rangitikei River and in the Wairarapa. Native Secretary, Henry Kemp (1818–1901), took this census of the Māori population from 1849 to 1850. It names every person, and lists their sex, whether adult or child, whether or not they are literate, their religion, their residence, their tribe, and whether or not they are married by "European custom".

This surviving local census return is typical for this period – a free-format handwritten document listing the population, with additional details and summary totals. Printed schedules (now called forms) filled in by each household or individual only came into use later in national censuses – in 1851 for the European census and 1926 for the Māori census.



A page from a census of the Māori population of Wellington in 1849.

[View large image.](#)

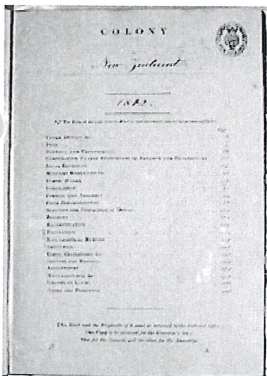
Source: Archives New Zealand

New Zealand 'blue books'

During the early colonial period, the New Zealand governor was required to provide an annual 'blue book' of statistics to the British government. The blue books recorded detailed statistical information on the colony's progress and were used to inform decision-making by the British government.

New Zealand blue books were produced annually from 1840 to 1855. They contained tables of information about population (both European and, less consistently, Māori), revenue, military, public works, legislation, trade, shipping, civil servants, foreign consuls, land transactions, agricultural produce, churches, schools, and prisons.

The population statistics tended to be compiled from counts from the larger centres of population. Small remote settlements were often overlooked.



Contents page of 1842 New Zealand blue book.

[View large image.](#)

Source: Archives New Zealandtop

This example of an early European census of New Plymouth (below) taken in 1846 by the Inspector of Police, Donald McLean, lists every householder by name, with occupation, number of people in the household, and details of cultivation and livestock.

This census was probably taken to gather the population and agricultural statistics for the 1846 blue book. Instead of destroying the returns after putting the statistics together, McLean filed them away among his papers, and they have survived to this day.



A page from the returns of a European census of New Plymouth, taken in 1846 by the Inspector of Police,

Statistics NZ, n.d.[a]

1858

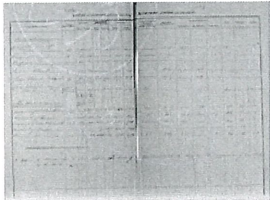


Donald McLean (1820–77).

[View large image.](#)

Source: Alexander Turnbull Library

Only a few copies of the blue books, all handwritten, were produced for official use, but the New Zealand government often selected statistics from them for publication in the *Government Gazette*.



The population statistics in the 1847 New Zealand blue book.

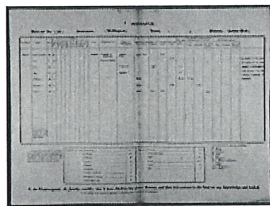
[View large image.](#)

Source: Archives New Zealand [top](#)

The development of nationwide census-taking

New Zealand's first official national population census was held in 1851 following an order from the British government to all of its colonies. This first national census only counted Europeans.

The 1851 Census asked each household about aspects of life that are just as topical today – including disability, education, and productivity.



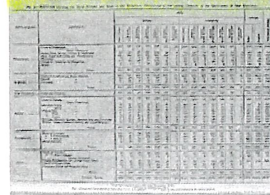
An 1851 Census schedule with example data.

[View large image.](#)

Source: Archives New Zealand

The results of the 1851 Census were published in the *Government Gazette* as a set of tables. This table shows the population broken down by age, sex, and place of residence. Even today the census is the only source of this fundamental information.

There are obvious differences between then and now. The whole European population in 1851 was the same size as Timaru in 2013. Men outnumbered women by four to three. Most people were young: only one in every 127 people was over 60. Today the number of men and women are about equal and at the 2006 Census, approximately one in every eight people was over 65.



One of a set of tables that made up the published results of the 1851 Census.

[View large image.](#)

Source: *Auckland Government Gazette*, 31 May 1853 [top](#)

Provincial censuses and a return to national censuses

The Census Ordinance 1851 provided for three national censuses per decade. However, when New Zealand was divided into six provinces in 1853, each province became responsible for conducting censuses within its boundaries. As a result, census-taking in each province often occurred on different dates or included inconsistent information, making it hard to consolidate statistics at a national level.

PROVINCE OF WELLINGTON									
Name of		Year		Sex		Age		Other	
Place	Year	Male	Female	Under 15	15 to 60	Over 60	Electors	Non-electors	Total
Wellington	1855	1000	800	500	300	200	100	100	1600
Upper Hutt	1855	500	400	250	150	100	50	50	900
Lower Hutt	1855	300	250	150	100	50	25	25	525
Porirua	1855	200	150	100	50	25	12	12	387
Wairarapa	1855	100	80	50	30	15	7	7	192
Total		2000	1680	1000	630	400	200	200	3630

The schedule used for Wellington's 1855 provincial census. The schedule is similar to the 1851 national census schedule, but with different age bands and the addition of questions on electoral qualification.

[View large image.](#)

Source: *Acts of the Province of Wellington, Session I, 1853, to Session XI, 1864*

HAWKE'S BAY - PROVINCE OF HAWKE'S BAY									
No.	Name	Age	Sex	Profession	Value of Property	Value of Stock	Value of Land	Value of Buildings	Value of Other
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

The schedule used for Hawke's Bay's only provincial census, held in 1860. The schedule is also clearly based on the 1851 national census schedule.

[View large image.](#)

Source: Province of Hawke's Bay, *Census Ordinance, Session II, No. 1, 1860*

In the interests of uniformity, a new Census Act was passed in 1858, which instituted a national European census every three years. This cycle remained in place until 1874.

From 1858 to 1867, census results were published along with other statistics on the economy under the title *Statistics of New Zealand*. From 1871, separate reports of census results were produced. [top](#)

[View a list of New Zealand national and provincial census dates.](#)



Volumes of *Statistics of New Zealand*, Wellington Central Library.

Source: Statistics NZ [top](#)

Including Māori in the census

The first attempt to count (rather than estimate) the total Māori population was a census of Māori taken over a year between 1857 and 1858. While early European censuses were conducted by the Registrar General's Office, Māori censuses came under the authority of the native secretary.

Although Māori were granted separate parliamentary representation in 1867, it appears unlikely that early Māori electoral districts were based on precise population counts. At this time Māori in the South Island made up less than 4 percent of the enumerated Māori population, yet Māori in this area were allocated one of the four Māori electorates.



Māori electorate boundaries, 1867–1919.

[View large image.](#)

Source: Te Ara – The Encyclopedia of New Zealand

Although the New Zealand Wars prevented the next national Māori census from being taken until 1874, some censuses were taken in more peaceful areas in the 1860s, such as the South Island, Stewart Island, and the Chatham Islands.

From 1874, the separate Māori censuses were conducted in the same year as the European censuses. It's unlikely that all Māori were counted in these early censuses. Unlike the European census, not all dwellings were visited and several of the early Māori census collectors noted instances of Māori being suspicious and unwilling to participate.

The information collected in these early Māori censuses was very limited. Unlike the European census, which had introduced household schedules (now known as dwelling forms) for each household as early as 1851, early Māori censuses consisted of lists handwritten by the collector. They listed the number of Māori for each county of residence by 'principal tribe' and subtribe, by sex, and whether aged over or under 15. [top](#)

The five-yearly census is introduced

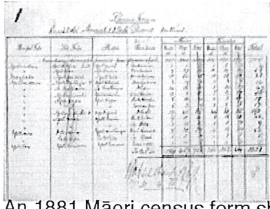
The Census Act 1877 set a requirement for censuses to be held in 1878 and every five years from 1881. Since then, a census has been held every five years with only four exceptions – 1931, 1941, 1946, and 2011.

[Learn more about the four exceptions to the five-yearly cycle.](#)

[View the dates of previous censuses in New Zealand.](#)

Printed collector books are introduced for the Māori census

From 1886, the way collectors recorded information on the Māori population changed. Starting in 1886, and in some areas as early as 1881, census collectors carried printed registers (books) in which they recorded Māori census interview responses for individuals.



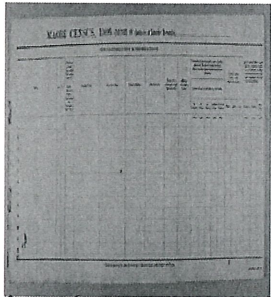
An 1881 Māori census form shows the early use of printed forms.

[View large image.](#)

Source: Archives New Zealand

The information they collected was expanded to include name, 'principal tribe', and subtribe or hapū, residence, and distinguished between Māori still living as members of tribes and those who lived in 'European' communities as individual families. From 1896, the Māori census collected information on livestock kept and land and crops under cultivation – either by individuals, or communally. From 1906, it also included a question on trade or occupation.

The Māori census schedules, however, remained considerably less comprehensive than the European schedules.



A page from one of the 1906 Māori census books carried by the Māori census collectors. It provides space for name, sex, age, 'principal tribe', subtribe or hapū, usual residence, if married to a European, trade or occupation, and crops and livestock cultivated.

[View large image.](#)

Source: Archives New Zealand

Improvements during the 20th century

The Census and Statistics Act 1910 created the Office of the Government Statistician within the Registrar General's Office. The Act reiterated the penalties for those who refuse to fill out their census schedules and collectors who disclose the content of individual census schedules. As the 1911 Census report indicates, all employees working on the census had to sign a formal declaration that they would not divulge any census information.

Confidentiality safeguards were also strengthened. Collectors (previously called enumerators) were made to include a signed declaration that they had collected all the forms in their subdistrict along with the completed forms and deliver them to the government statistician. Although it wasn't included in legislation, it had become common practice as early as 1896 to destroy census forms once processing was complete.

(1) DECLARATION OF SUB-ENUMERATOR.
I, _____, a Sub-Enumerator appointed under the Census and Statistics Act, 1910, do solemnly declare that the forms numbered from _____ to _____ inclusive, contained in the packet to which this declaration is attached, are all the forms under the said Act which have been completed and received by me within the subdistrict to which I was appointed, and that the whole contents of all the said forms are true to the best of my knowledge, information, and belief. And I further declare that I have distributed all necessary forms at every dwelling, store, and apartment as required by section nine of the said Act, and that I have collected, within the time specified in the said Act, all the forms so distributed.

[Signature of Sub-Enumerator.]
Made and subscribed before me at _____ this _____ day of _____, 19____.

[Signature of Justice of the Peace.]

Collector's declaration as indicated in the Census and Statistics Act 1910.

Source: Census and Statistics Act 1910

In 1915, the government statistician was removed from the Office of the Registrar General and became responsible for conducting the European census.

South Island Māori counted in European census

In 1916, the way Māori were counted changed significantly. From 1916 until 1951, Māori in the South Island were given the same census schedules as Europeans and were counted in the European census. This was due to the high cost of counting the few Māori throughout the South Island – only 4 percent of the total Māori population – in a separate census. This split continued until the Māori and European censuses were integrated in 1951.

Census reintroduces ethnicity

Although asked in the first European census in 1851, a question on race wasn't included again until 1916. A question on race, later changed to ethnicity, has been asked in every census since 1916. Changes to the definition of Māori following the Māori Affairs Act 1974 and the Electoral Acts of 1974 and 1975 saw the introduction of a question on Māori descent in the 1976 Census. Māori descent wasn't asked again until the 1991 Census, and has been asked in every census since.

New Zealand Post Office takes over census field collection

Between 1916 and 1981, the Post Office helped the Statistics Office to distribute and collect census schedules. This had a significant impact on how the census was carried out. Districts were redefined. Town postmasters, who had good local knowledge and were well-known and respected figures in their communities,

were appointed as collectors. The postmasters appointed sub-collectors and organised the collection routine in their district. This relationship between the Post Office and the Statistics Office continued through to the 1981 Census.

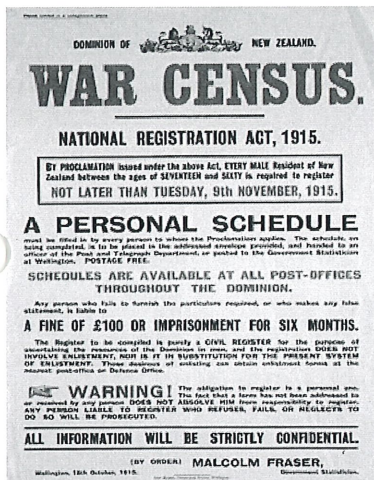
The impact of World War I

During World War I the National Registration Act 1915 was passed, requiring all males between 17 and 60 years to register for military service. A year later, with the passing of the Military Service Act 1916, military conscription was introduced for the first time – initially for Europeans only, but extended in June 1917 to include Māori.

The Government Statistician, Malcolm Fraser, was tasked with administering the National Registration Act using “all information available to him” to make sure that everyone required to register had done so. As a result, for the first and only time in New Zealand census history, household schedules from the 1916 Census were used to complete the national register.

Census information cannot be used like this today. The Statistics Act 1975 ensures that data collected from individuals and businesses can only be used for statistical purposes.

See [Security, privacy, and confidentiality](#) to learn more about how we maintain your confidentiality.



A poster advertising the National Registration Act.
Source: Alexander Turnbull Librarytop

The war also had a significant effect on who processed the 1916 Census. Due to 'war conditions', for the first time female clerks compiled the bulk of the census data.



Female typists employed in the Military Service Section of the Census and Statistics Office, 1918.
Source: NZ History Online

Introduction of punch cards and automatic counting machines

Compiling early census results was a labour-intensive task, as it had to be done manually.



Compiling census results was a labour-intensive task in the early 20th century.
Source: Statistics NZ

As early as 1891, a system of transferring the information from the actual census schedules onto small cards had been introduced. This was the first time that tables weren't made directly from the census schedules.

A card was created for every person. The response to each question was marked in the appropriate space on the card. The cards were sorted according to the type of calculation or table being made.

While transferring the information to the cards was very labour intensive, the new system allowed new and different tables to be made.

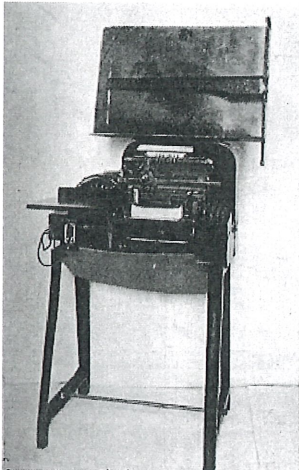
A data processing card used for the 1891 Census.

View large image.

Source: Statistics NZtop

During the 1921 Census, automatic punching, sorting, and counting machines were used for the first time. This allowed much of the census to be compiled mechanically. The Government Statistician obtained the country's first Powers electric counting machines from the United States, where census workers had been using such machines since 1870.

A team of punch-card operators used key punch machines to punch holes in the cards according to responses on the actual schedules.



An automatic key punch machine used for processing 1921 Census results.

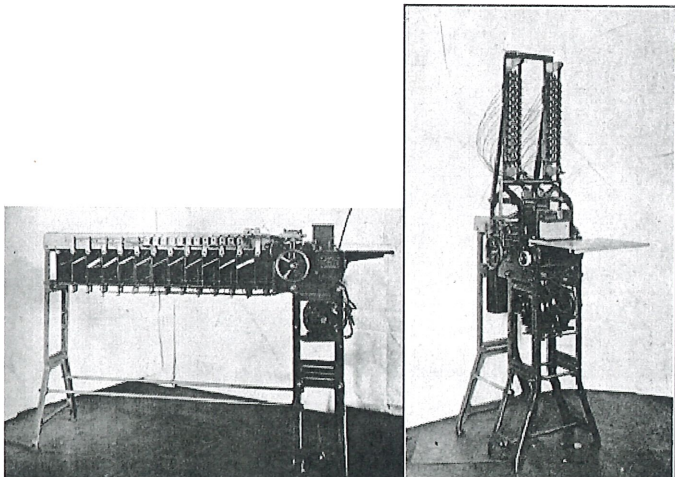
Source: Statistics NZ

The operators created a personal card (from the personal schedule) and a household card (from the dwelling schedule) for each returned schedule.

A sample personal card (top) and household card (bottom).

Source: Statistics NZ

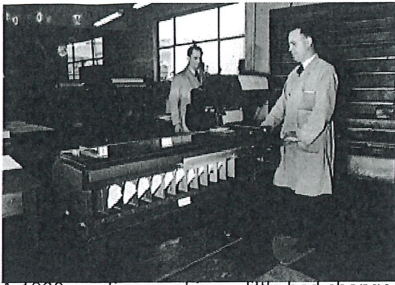
Electric counting machines tabulated the results of the 1921 Census by processing perforated 'punch cards'.



The Census and Statistics Office's Powers electric counting machine (left) and two-bank counter (right) used in the 1921 Census.

Source: Statistics NZtop

Sorting machines continued to be used to compile census results through the 1960s.



A 1960s sorting machine – little had changed since the 1920s.
Source: Archives New Zealand [top](#)

Extending the census to count individuals

In the early censuses, the results were based on a single 'household schedule', which was delivered to every household counted in the European census. The head of the household was responsible for filling out the form with details of everyone in the dwelling on census night. In 1916, collectors began giving out 'personal schedules', but only to people staying in non-private dwellings, such as hotels, boarding houses, ships, and trains, on census night. The person in charge of the non-private dwelling was still responsible for filling out a household schedule for all people in the household on census night. This method of collection meant there was little or no privacy for individuals.

The [Census and Statistics Act 1926](#) brought about a major improvement in how census information was collected. Beginning with the 1926 Census, all occupants of private dwellings counted in the European census were also given a personal schedule. The head of the household was still responsible for completing the household schedule, filling in forms for the children of the household, and seeing that every person in the household took part. If someone was concerned about the privacy of their forms, they could put them in a sealed envelope.

That same year, the Census and Statistics Office took over responsibility for conducting the Māori census from the Native Department. As a result, for the first time in New Zealand census history the Māori census was conducted for a specific night – the same night as the European census. The Census and Statistics Office introduced a bilingual (English and te reo Māori) schedule for each Māori household. The householder or person in charge of the dwelling completed the form – a significant change from the collector's books in previous Māori censuses. The 1926 Māori census form was more detailed than previous Māori forms, and more in line with the European form, but still included considerably fewer questions.

From 1926, census day was changed from a Sunday to a Tuesday. Society had changed, and people were more likely not to be home on Sundays. Tuesday evening was now considered the time most people would be home.

Depression and war interrupt the five-year census cycle

Due to [widening economic depression, the scheduled 1931 Census](#) was cancelled under the [Census Postponement Act 1930](#). According to former Government Statistician, Sir George Wood, "A population Census was due in April 1931, and preliminary arrangements were well under way, when the order came to abandon the census, for reasons of economy. Mr Fraser [the then Government Statistician] hotly contested this decision – without avail."

The 1936 Census went ahead as scheduled, but the [1941 Census was cancelled due to World War II](#). With extensive funding cuts, many young officers lost to the war, and several senior staff seconded to other departments, the Census and Statistics Department was forced to cancel the census, along with much of the department's other statistical work. Also, with so many young men away, the middle of a war was not considered an appropriate time for census-taking. [top](#)

Politics brings the 1946 Census forward

The next census was held in 1945, after the Government brought the census scheduled for 1946 forward by six months [for political reasons](#).

From 1881 to 1945, an electoral 'country quota' was in place that essentially made rural votes worth more than urban votes in general elections. With support waning in rural areas, the Labour Government abolished the country quota and brought the census forward to September 1945 in order to redefine electorates in time for the election. Labour won the 1946 election with a four-seat margin.

The impacts of war were reflected in the 1945 Census data, with thousands of young men overseas and the economy still geared to wartime conditions.

The next census was held in April 1951 as if the previous census had been taken in 1946.



Hows of clerks transcribe data in the cavernous and draughty Hood's building in Wellington. This photograph probably shows work on the 1945 Census.
Source: Archives New Zealand

One census for all

It wasn't until 1951 that everyone in New Zealand was asked the same census questions. For the 1951 Census, all Māori received the same personal and dwelling schedules as the rest of the population. A limited number of forms were printed in te reo Māori for Māori in the North Island who requested them.

Iwi affiliation question

Although included in the Māori censuses up to 1906 (as 'principal tribe', subtribe, and hapū), a question on iwi affiliation wasn't asked again until 1991. In recognition of its importance to both government and iwi, the iwi affiliation question has been included in every census since 1991. [top](#)

Strengthening confidentiality with new legislation in 1955

The Statistics Act 1955 introduced and clearly defined the duties of the Department of Statistics and the government statistician.

The Act further strengthened privacy protocols. It made it mandatory for all department employees to swear an oath to not disclose individuals' information. It also introduced requirements to get consent before publishing the information from individuals' forms, and ensured that published data was arranged so that it was impossible to identify individuals.

8. (1) Every employee of the Department, before entering on his duties, shall take and subscribe the following oath:

I, _____, solemnly swear that I will faithfully and honestly fulfil my duties as in conformity with the requirements of the Statistics Act 1955 and of all regulations thereunder, and that I will not, without due authority in that behalf, disclose or make known any matter or thing which comes to my knowledge by reason of my employment as such

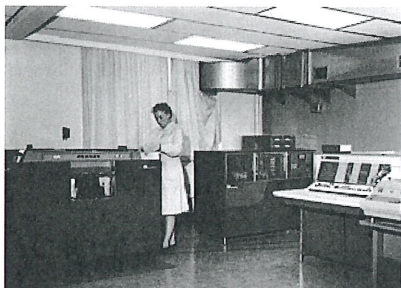
(2) The oath shall be taken before such person, and returned and recorded in such manner as the Statistician determines.

The non-disclosure oath outlined in the Statistics Act 1955.

Source: Statistics Act 1955

Computers improve timeliness of census results

Computers replaced sorting machines for processing the 1966 Census. For the first time, statistical tables were produced by computer, and although the method used was very resource intense, results were available much earlier than in previous censuses. This allowed many additional tables of census data to be produced.



The Census and Statistics Office acquired its first computer in 1962. It was used to process the 1966 Census results.

Source: Archives New Zealand

Punch cards continued to be used for each individual and dwelling until an automatic, electronically based system was introduced in 1976.



IBM cardpunch machine being used during the 1960s.

Source: Archives New Zealand [top](#)

1975 Statistics Act

The Statistics Act 1975 clarified that the information contained in returns can only be used for statistical purposes. Section 24 of the Act restated the list of topics that must be asked in the census. These include: name, address, sex, age, ethnic origin, location of dwelling, number of rooms, ownership, number of occupants, as well as a number of topics that can be included if the government statistician deems them to be in the public interest. The Statistics Act 1975 continues to guide the work of Statistics New Zealand today.

Statistics NZ takes over census collection

The 1981 Census was the last census for which the New Zealand Post Office was involved in census collection. Statistics NZ took over the collection phase of the 1986 Census to reduce costs and better manage the collection process.

Scanning technology introduced

New technological advances introduced a combination of automated and manual data processing. For the 1996 Census, computers scanned the forms as images. From the scanned images, tick box and numeric responses were recognised. Processing staff then ensured that the information was correctly captured, coded

each response, checked for any errors or inconsistencies, and finally created electronic files. These files were then used to develop datasets for the final outputs.

New Zealand was the second country in the world to use image scanning to process census data.

Modernising the census for the 21st century

For the 2001 Census, we used improved computer scanning technology and introduced software capable of scanning and recognising handwritten responses. Systems developed by Statistics NZ and technology suppliers during these technological upgrades have subsequently been installed in half a dozen countries. After the 2001 Census, census results were for the first time published online as well as in print.

Online forms and other new technology introduced

We introduced online census forms for the first time in the 2006 Census, but still delivered paper census forms to all dwellings. About 7 percent of all completed forms were submitted online.

We started using mobile text messaging to send census collectors up-to-date information – for example, if any forms had been mailed directly to us, completed online, or if people needed additional census forms.

We also introduced new automated and interactive tools for publishing some of the census data, such as [QuickStats](#) and [StatsMaps](#).

21st century legislation for a modernising census

The Public Records Act 2005 introduced new requirements for record-keeping in public offices and local authorities. The Act requires us to keep a complete set of census forms, either in paper or digital format. For the 2013 Census we will retain information from census forms completed online as a computer dataset and, after scanning, archive the paper forms as digital images – and destroy the paper forms.

Digital archiving of census forms creates about 1.25 terabytes of digital images and datasets. Storing the census forms digitally costs about one-fifth of the cost of storing paper. After 100 years, custody of the forms passes to Archives New Zealand, although access is controlled by the government statistician.



37D Disclosure of historical documents
Despite section 37, the Statistician may authorise the disclosure, after 100 years, of individual schedules (whether provided under Part III or otherwise) that the Statistician has classified as historical documents, after having regard to the advice of the Chief Archivist.

Public Records Act 2005

The part of the Public Records Act 2005 that allows the government statistician to release census forms for research after 100 years. Source: Public Records Act 2005

The Statistics Amendment Act 2010 repealed the requirement for census forms to be delivered by hand and allowed for other delivery methods, such as by post. This is meant to facilitate changes to how census forms are delivered and collected in the future. [top](#)

Cancellation of the 2011 Census

The 2011 Census, scheduled for 8 March 2011, was called off because of the 22 February 2011 [Christchurch earthquake](#). The national state of emergency and the likely impact on census results meant the census could not have been successfully completed at that time. It was postponed until 2013.

2013 Census

The 2013 Census was New Zealand's 33rd Census of Population and Dwellings. We made only minor changes to the 2006 Census forms, to keep the forms consistent with past censuses and the costs as low as possible. We did not add any new topics or questions to the 2013 Census forms.

Everyone had the option of filling out their 2013 Census forms online or on paper. We expect that 35 percent of all forms will be completed online. For the first time in New Zealand census history, a social media campaign – through Facebook, Twitter, and YouTube – was included in the general advertising campaign.

The 2013 Census was also an opportunity to trial some of the changes proposed for the next census. Instead of having paper forms delivered by a collector, residents in one district received a letter in their mailbox containing all the information they needed to complete their forms online.

Beyond 2013 Census has more information about our future census planning.

Go to [2013 Census](#) for more information about the 2013 Census.

Related links

[Statistical publications 1840–2000](#) is a comprehensive overview of more than 150 years of statistical publications in New Zealand.

