

Regulatory Impact Statement

Options for the next census of population and dwellings of New Zealand

Agency Disclosure Statement

This Regulatory Impact Statement (RIS) has been prepared by Statistics New Zealand. It provides an analysis of options aimed at determining the timing of the next census of population and dwellings of New Zealand to resolve the uncertainty and downstream impacts created by the decision to not hold the 8 March 2011 Census. This decision was taken due to issues arising from the 22 February 2011 Christchurch earthquake.

The decision to stop the 2011 Census was based on an analysis of risks and benefits undertaken in the limited time available between the earthquake occurring and the impending census date. The analysis concluded it was not operationally feasible to carry out the census as scheduled. The decision not to hold a census in 2011 requires an amendment to the Statistics Act 1975 (the Act) which provides that a census be undertaken every five years. Statistics NZ will be in breach of its legal obligation to undertake a census in 2011 without an amendment to the Act. A determination of when the next census is to be carried out is required to resolve the uncertainty and downstream impacts, created by the decision not to hold a census in 2011, for users of census data.

This RIS has been developed in a short timeframe and consequently the analysis of options was not as comprehensive as it would be with more time available and consultation was limited primarily to central and local government. However, delaying the determination of the timing of the next census to allow more time for the provision of information to feed into the preparation of this RIS is not practical given that; the Act requires amendment before the end of the year, certainty is required by users of census data and lengthy lead-times are required by Statistics NZ for the planning and operational success of a census.

Therefore, while we do not expect that the options proposed will impose additional costs on businesses, impair market competition or impair incentives on businesses to innovate or invest, (as businesses are not considered major users of census information), the impact on business has not been able to be assessed in the timeframe available. The preferred option is to hold a census at the earliest (operationally) viable opportunity, in March 2013. This option we have assessed as the option that best meets the needs of users who require timely and good census data, for important planning decisions and to fulfil legal requirements under the Electoral Act 1993.



Vince Galvin, Deputy Government Statistician

6/4/2011

Status quo and problem definition

The Statistics Act 1975 (the Act) provides that a census must be held in 1976 and every five years thereafter. A census was due to be held on 8 March 2011 but because of the Christchurch earthquake on 22 February a decision was taken not to hold a census in 2011. This decision was based on a risk and benefit analysis that concluded it would be operationally infeasible to undertake the census as scheduled due to:

- the national state of emergency
- the extent of damage to Statistics NZ facilities in Christchurch
- the probable impact on census results.

The decision requires an amendment to the Act to ensure Statistics New Zealand is not in breach of its legal obligation to undertake a census in 2011. A determination of when the next census is to be carried out is required to resolve the uncertainty and downstream impacts, created by the postponement of the 2011 Census, on users of census data.

Census data is widely used for a range of important purposes. Over time its use has become embedded in many government processes and systems. In particular:

- The Electoral Act 1993 requires electorate numbers and boundaries to be revised on the basis of census data. The census also acts as a trigger for the Maori Electoral Option, under which Maori electors choose to be on either the Maori or the General electoral roll. Current population projections and the growth trend in the Māori electoral roll over the past decade indicate that a 2013 Census would probably result in increases of one Māori electorate and one General electorate (in the Auckland region) at the 2014 General Election. This would be the first increase in the number of Māori electorates since 2002. Consequently, failure to review the electorates in the current period risks generating public concern about fair constituency representation.
- Statistics New Zealand relies on census data to update population estimates and projections every five years to ensure they remain within acceptable limits of accuracy, as without new data they deteriorate at an increasing rate over time. To maintain reliability of data for a mobile population it is critical that the interval between adjustments of population estimates is frequent and the current five-yearly adjustment to New Zealand's population estimates is reflective of New Zealand's mobile population. Flows of migrants into and out of New Zealand are among the highest in the world, and internal migration is also high: around half of the population moved within New Zealand between the 2001 and 2006 Censuses. Currently, there is no direct measure of internal migration between censuses.
- These official estimates and projections are used extensively for planning purposes. The total amount of Government (Central and Local) expenditure that is distributed between five yearly censuses is approximately \$150 billion. For example, without a census until 2016, there would be a significant impact on funding allocations based on census population data: for example, it could be expected to result in misallocation of \$400 million of the total \$51.5 billion forecast for allocation under the Ministry of Health's Population Based Funding Formula over the next five years.

The decision not to hold a census in 2011 has meant that census data will not be available for use from late 2011 as expected. The immediate effect of this is that a number of activities have had to be deferred, including the 2012 Maori Electoral Option; the five-yearly review of the Ministry of Health's Population Based Funding Formula; the Maori Social Survey; and the Disability Survey. In the absence of 2011 Census data, agencies and organisations will need to continue to use 2006 Census data, and the population estimates and projections that are based on them.

A decision on the timing of the next census is required now to provide certainty to those who use and need census data, and to enable Statistics New Zealand to plan and allocate its resources effectively. Setting up the next census requires at a minimum a 12 month lead-in time to meet operational requirements.

Objectives

The primary objectives are to resolve uncertainty by determining when data required and expected by users from a census not held in 2011 (to update 2006 Census data) could be provided and to remove the current legal obligation on Statistics NZ to undertake a census in 2011.

Assessment criteria for options

The options considered in this RIS have been assessed using the following four primary assessment criteria; electoral representation/requirements, value to central and local government, value to other census data users, operational feasibility and take into account constraints such as; cost, data accuracy, and data comparability. The criteria have not been weighted but the key trade-off is between operational feasibility (including cost) versus users' needs for accurate and timely data for important decision making.

Regulatory impact analysis

Currently, only 2006 Census data is available to users who had the expectation of accessing up-to-date census data from a census in 2011 which was stopped (the status quo). As regulatory action is required to remove the legal requirement to undertake a census in 2011 all three options analysed in this RIS consist of an amendment to the Act that removes the obligation to undertake a census in 2011 and determines the timing of the next census:

Option 1: March 2013 (the preferred option)

Option 2: March or October 2012

Option 3: March 2016 (including other ways of collecting population data, such as a large survey, to mitigate information gaps).

A change to the long-standing requirement to conduct censuses every five years is not included as an option in this policy process. This matter is to be investigated fully as part of a separate and more in-depth policy process on the future of population and social statistics due to be completed in 2012.

Legal advice has confirmed that a stand-alone Statistics Amendment Bill (as opposed to a Statutes Amendment Bill) is the most appropriate vehicle to implement any of the options given the significance of census data for requirements under the Electoral Act and for central and local government planning decisions.

There are no relevant non-regulatory options.

Option 1: March 2013 (Preferred Option). This option defers the March 2011 Census to March 2013 and five yearly thereafter, at a cost estimated at \$54.5 million plus the \$18 million not spent on the 2011 Census.

Benefits:

- Enables electorate numbers and boundaries to be revised in time for a 2014 General Election and a 2013 Maori Electoral Option to be held
- Most operationally feasible and can be delivered without compromising the ongoing production of core statistics, or Statistics New Zealand's ability to rebuild organisational capacity impacted by the earthquake
- Would reuse most systems and processes established for the 2011 Census with consequential savings and efficiencies
- Enables the lead-in time required for operational matters such as recruitment of key staff
- Would produce the same suite of products and services (such as QuickStats and Table Builder) planned for release following the 2011 Census
- Provides three additional years of robust population data to inform planning and decision-making by central and local government compared to option 3
- Would support further work on the future of the census, by providing earlier robust population data that can be used as a benchmark for possible alternative data sources and provide opportunities to start implementing improvements in time for the next census.

Risks/Limitations:

- Some loss of cost-efficiency from two year delay rather than one year delay from winding down and starting up the census operation due to additional costs of maintaining systems for an additional 12 months and the need to replace some IT equipment that would be a year past normal replacement dates
- Additional costs or duplication incurred as a result of agencies and other census users adjusting processes to reflect the two year delay in updating data, or potentially undertaking ad-hoc data collection
- Possible loss of confidence in Statistics NZ given inability to take a census earlier
- Negative reaction from users to two-year delay from 2011
- Disruption to the pattern of holding a census in or near '0' years (i.e. turn of the decade) in accordance with United Nations recommendations. However, this is considered less important than having accurate data from a recent census.

Option 2: March or October 2012. This option defers the 2011 Census to either March 2012 or October 2012 and five yearly thereafter, at a cost estimated at \$49.7 million plus the \$18 million not spent on the 2011 Census.

Benefits:

- Would reuse the systems, processes, staff and infrastructure established for the 2011 Census with consequential savings and efficiencies
- Would produce the same suite of products and services (such as QuickStats and Table Builder) planned for release following the 2011 Census
- Electoral seat numbers and boundaries can be revised for the 2014 General Election and a 2013 Maori Electoral Option can be held
- Provides less deterioration in the quality of population estimates and projections compared to other options
- Likely to be the least controversial option as it is the key preference for users and has the potential to provide the most timely data sufficient for central and local government planning and electoral requirements.

Risks/ Limitations:

- High risk of unsuccessful census delivery due to the continuing impact of the Christchurch earthquake on departmental operations
- Requires an early decision as the minimum 12 month lead-in time required for a 2012 Census is narrowing
- Mitigation of the operational risk posed would require diverting resources from recovery efforts and other core statistical outputs such as GDP, putting these outputs at high risk
- Risk of census data quality due to unsuccessful census delivery is exacerbated by high levels of population mobility associated with school holidays, Labour weekend and the end of the university academic year in October
- An October census also risks data comparability issues as it is out of alignment with the March pattern (since 1971).

Option 3: March 2016. This option defers the 2011 Census to 2016 leaving a 10-year gap between the 2006 and 2016 Censuses. The cost of a 2016 Census is estimated at \$106-\$112 million which could be offset by \$18 million not spent on the 2011 Census. This cost would rise by an estimated \$25 million if a large survey (covering about 5 per cent of the population, compared to the 0.1-0.3 per cent coverage of the existing household survey samples) was undertaken in this period to mitigate information gaps, plus additional costs associated with evaluating administrative data.

Benefits:

- No immediate fiscal costs unless alternative data collection activity is undertaken
- An ad-hoc population survey could provide data of sufficient quality to update the models used to produce population estimates and projections. The survey would need to be able to provide reliable estimates of the populations of Territorial Authorities.

Risks/Limitations:

- There will be no change to electoral seat numbers and boundaries until the 2017 General Election and the Maori Electoral Option will only occur in 2016
- Inaccurate electoral boundaries, and potentially delayed introduction of additional General and Māori electorates
- The quality of population estimates and projections will continue to deteriorate over the 10 year period, creating distributional and equity effects.
- Likely to be controversial given impact on the electoral system and data users and may create a fair representation issue at the 2014 General Election
- Indirect costs arising from misallocation of funding; inefficient policy design and service delivery due to decisions based on increasingly irrelevant 2006 data
- Lack of up to date information to support local government planning
- Increased inequity in service delivery and distribution of government funding
- Loss of confidence in official statistics, and Statistics New Zealand, due to increasing errors in population estimates and projections, and downstream impacts on other statistical outputs reliant on census data
- Risk of loss of consensus around basic population counts
- Additional costs as agencies adjust processes and produce statistics to substitute for census data between 2011 and 2016
- Negative reactions from census users
- Set-up of an ad-hoc survey would take at least 24 months given its large scale and that there are no systems yet in place to support it

Consultation

Statistics New Zealand sought and received information on the impacts of the options from a range of central and local government agencies, including the Electoral Commission, Electoral Enrolment Centre, Land Information New Zealand, Ministry of Justice, Ministry of Health, Ministry of Education, Te Puni Kokiri, Christchurch City Council and Auckland Council.

In the time available it was only possible to consult with a small number of other census data users. Businesses, media, and Iwi were not consulted.

Conclusions and recommendations

The table below summarises the discussion above and shows how well each of the options is considered to meet the criteria associated with the objective relative to the status quo. In the table below, “+” represents an improvement on the status quo, “0” means the option is neutral in relation to the status quo, and “-“represents a position that is less favourable than the status quo.

Issue: Options for the next census	Objectives			
	Electoral representation	Value to central and local govt	Value to other census data users	Operational feasibility
Option 1. March 2013	+	0/+	0/+	+
Option 2. March 2012	+	+	+	-
October 2012	+	0	0	0
Option 3. March 2016	-	-/0	-/0	+

Conclusions and recommendations

The preferred option is Option 1: March 2013. Therefore, it is recommended to amend the Statistics Act 1975 to remove the current obligation to undertake a census in 2011 and determine the next census is held in 2013, and as the five yearly is to be maintained (until future census frequency decisions are taken) the following census will be in 2018. This option is the only option assessed as both operationally feasible and able to deliver accurate census data, to fill the information gaps created from not holding a census in 2011, in a timely way.

Implementation

The proposed amendment to the Statistics Act 1975 must be implemented before the end of 2011 to remove Statistics NZ's legal obligation to undertake a census in 2011.

There is a risk of progressing the amendment in 2011 due to the upcoming 2011 General Election limiting the time available, but this will be mitigated by proposing an appropriate priority category for the bill to the Cabinet Legislation Committee.

Implementation risks are lessened with the preferred option due to the ability to reuse processes, systems and key staff from the 2011 Census.

Monitoring, evaluation, and review

A separate and more in-depth policy process on the future of population and social statistics is due to be completed and reported to Ministers in 2012 as a Stage 2 business case. Central agencies will be involved in the development of this report and business case.

A census is defined as a major project and as such requires extensive monitoring by central agencies.

Census success will be measured by a Post-Enumeration Survey.