

In Confidence

Office of the Minister of Statistics

Cabinet Government Administration and Expenditure Review Committee

Report back on 2023 Census following the extended collection period

Proposal

- 1 This paper responds to Cabinet's request to report back with data on the 2023 Census response figures following the end of the extended collection period.

Executive Summary

- 2 Stats NZ has delivered the 2023 Census collection as planned for the vast majority of the country. The 2023 Census went live on 13 February 2023 and Census Day was 7 March 2023.
- 3 As at 30 June, the final date of census collection activities, 4,563,800 individual forms had been returned to Stats NZ. This translates to an estimated individual return rate of 89.1%.
- 4 On 12 July 2023, Stats NZ announced between 89 and 91% of the usual resident population of New Zealand are estimated to have taken part in the 2023 Census. This provides confidence that Stats NZ will achieve, or get very close to achieving, its target of a 90% response rate for the total population of New Zealand. Although 2023 Census response rates cannot be confirmed until they are published in 2024, Stats NZ is confident it will be able to deliver the country quality population statistics and a high-quality population count, which is the primary purpose of the census.
- 5 Stats NZ considers that the 'combined' census model, which uses administrative data to fill data gaps, means census will be able to deliver high-quality population counts for Māori, Pacific peoples and other priority populations.
- 6 The return rate of individual forms for people of Māori ethnicity is approximately 75% and for people of Pacific ethnicity this number is approximately 79%. While these return rates are an improvement on the 2018 Census, Māori and Pacific peoples' participation in the 2023 Census is not as high as Stats NZ or its partners would have liked, and it is possible there may be some data quality issues for smaller populations. The response does not reflect the priority, investment and activities that went into increasing awareness of the census for these communities and giving households census forms and support to allow participation.
- 7 The amended and extended 2023 Census design was executed following Cyclone Gabrielle. Field activity commenced in cyclone impacted areas between 17 February and 16 April and ceased on 1 June, with some community partnerships continuing to support collection activities until 30

June 2023. I am satisfied that the extended collection period had a meaningful and positive impact on the response rates in these areas, and the efforts of field collection staff in these areas was influential.

- 8 The 2023 Census has now entered its phase of post-collection activities, with processing and analysis underway, in preparation for dissemination of census data in May 2024. This has been delayed by two months due to the extended collection period.
- 9 While the 2023 Census has been delivered to design, the challenges related to traditional census collection methods need careful consideration. The Government Statistician considers the current model is not sustainable and Stats NZ has work underway to enable a long-term shift towards a modern, resilient, stable, and sustainable future census data collection model. This work requires consultation with Māori, government agencies, and the public, and the support of Ministers will be sought when a decision on a future model is required.

Background

- 10 Investment in and design of the 2023 Census was targeted to make it easier for people to take part and lift response rates, particularly for Māori, Pacific peoples, ethnic communities, young people, older people, disabled people, and Rainbow communities. These population groups either faced barriers to participation and/or had lower response rates in previous censuses.
- 11 The 2023 Census uses a 'combined' model, where a full enumeration survey is used to collect most data and administrative data already held by the government is used to supplement the survey data to improve coverage and data quality. The combined model provides a significant safeguard for the census operation and functions as a valuable tool for ensuring the production of the best quality data possible.
- 12 During preparations for the census field operation, a tight labour market and wage inflation required Stats NZ to seek \$7.9 million extra funding to raise pay rates for census field collection staff so that an adequate collection workforce for the census collection operation could be attracted and maintained [CPC-22-MIN-0044 refers]. The additional funding was successful, with most recruitment targets met and retention high.
- 13 Cyclone Gabrielle hit New Zealand during the first week of the planned 2023 Census collection operation. On 13 February 2023, census collection staff were due to commence field collection activities, including visiting households with census packs. However, after consultation with local authorities, Stats NZ initially withdrew all census staff from the field in the North Island until further information about the cyclone was known, while field operations in the South Island commenced as planned.
- 14 Following the cyclone, Stats NZ advised it was unable to execute the 2023 Census collection as planned and changes to the 2023 Census design were needed.

- 15 Cabinet agreed to fund an amended and extended 2023 Census operation in response to the impacts of Cyclone Gabrielle, involving up to an additional eight weeks of data collection on top of the planned design in the affected areas [CAB-23-MIN-0054 refers]. Cabinet also invited me to report back at the end of the extended collection period with data on the 2023 Census response.
- 16 The 2023 Census went live online on 13 February 2023. This enabled 1.4 million people to complete their census forms before Census Day on 7 March 2023. By the end of Census Day, Stats NZ had received approximately 2.5 million individual forms. The remainder of the completed forms were received during the post-Census Day collection period, a key part of the census collection design. The 2023 Census collection period ended 1 June, with some community partnerships continuing until 30 June.

Overview of the 2023 Census

- 17 As at 30 June, the final date of census collection activities, 4,563,800 individual forms had been returned to Stats NZ. This translates to an estimated individual return rate of 89.1%.
- 18 On 12 July 2023, Stats NZ announced between 89 and 91% of the usual resident population of New Zealand are estimated to have taken part in the 2023 Census. This provides confidence that Stats NZ will achieve, or get very close to achieving, its target of a 90% response rate for the total population of New Zealand. Although 2023 Census response rates cannot be confirmed until they are published in 2024, Stats NZ is confident it will be able to deliver the country quality population statistics and a high-quality population count, which is the primary purpose of the census.
- 19 Stats NZ also considers that the 'combined' census model, which uses administrative data to fill data gaps, means census will be able to deliver high-quality population counts for Māori, Pacific peoples and other priority populations.
- 20 The Census Programme had the strategic objective of delivering quality data that meets the needs of iwi Māori. Increasing and supporting Pacific peoples' participation was also a key part of the design for the 2023 Census. The return rate of individual forms for people of Māori ethnicity is approximately 75% and for people of Pacific ethnicity this number is approximately 79%.
- 21 While these return rates are an improvement on the 2018 Census, it is too early to report whether these strategic objectives have been met, as there is still processing, analysis and methodological work to do. However, Māori and Pacific peoples' participation in the 2023 Census is not as high as Stats NZ or its partners would have liked (for example, the target response rate for people of Māori descent was 90%), and it is possible there may be some data quality issues for smaller populations. The response does not reflect the priority, investment and activities that went into increasing awareness of the census for these communities and giving households census forms and support to allow participation.

- 22 A key design feature of the 2023 Census has been earlier and increased community engagement activity. During census design planning, 249 external stakeholders were invited to engage with Stats NZ, including central and local government (such as Te Puni Kōkiri and the Ministry for Pacific Peoples), Māori and Iwi, Pasifika, representatives of disabled people, the rainbow community and migrants, including people whose second language is English. Stats NZ's level of engagement throughout the 2023 Census planning and collection operation has been significantly higher than previous censuses.
- 23 Stats NZ actively manages over 1,200 community relationships supporting priority response groups for the 2023 Census and employed 48 community engagement specialists across eight regions to support 2023 Census. Community engagement teams participated in 1,472 "talks and appearances" to promote the census over the collection period.
- 24 Stats NZ worked with iwi and community partners to deliver more than 970 census support events (providing assistance to complete census forms), with 40,780 census responses completed at those events. This included events with community and religious groups, universities, and attendance at large community events such as Te Matatini in February 2023, the Pasifika Festival Auckland, and PolyFest Auckland in March 2023.
- 25 Stats NZ worked in partnership with Māori and Pacific influencers and leaders, and tailored marketing and communications for Māori, Pacific and ethnic audiences and channels. This included partnering with creative agency Te Takere to deliver a Māori-first marketing approach. The census website provided information in 26 languages (other than English, te reo Māori, and New Zealand Sign Language).
- 26 Iwi-led collections (Te Mana Whakatipu) were piloted in the 2023 Census in three locations: Far North (with Ōhau iwi collective); Gisborne (with Toitū Tairāwhiti iwi collective); and with Te Whānau ā Apanui in their rohe.
- 27 As at 30 June 2023, estimated returns of individual forms (based on the estimated population at 30 June 2022) by location are:
 - 27.1 Far North (Ōhau): total – 73 percent; for people of Māori descent – 62 percent.
 - 27.2 Gisborne (Toitū Tairāwhiti): total – 83 percent; for people of Māori descent – 74 percent.
 - 27.3 Te Whānau ā Apanui rohe: total – 92 percent; for people of Māori descent – 81 percent.
- 28 Te Whānau ā Apanui successfully implemented their own nuanced approach to the collection of census information that leveraged off the embedded hapū-driven structures they deployed during the response to COVID-19.
- 29 All collectives have indicated an increase in their capability and awareness of the complexity of the census. Response rates for these areas are still being

processed, with some locations expected to have better results than in the 2018 Census and some locations unlikely to have better results. Cyclone Gabrielle significantly impacted the Ōhau and Toitū Tairāwhiti collection areas and this will need to be considered in the evaluation. Iwi-led collection may also require more funding in the future, as it is a costly method of data collection.

- 30 When the official census collection period ended, community partnerships with Whānau Ora and South Seas Healthcare continued to support collection activities until 30 June 2023.

Executing the amended and extended 2023 Census design

- 31 The amended and extended 2023 Census design was successfully executed. Field activity commenced in areas impacted by Cyclone Gabrielle between 17 February and 16 April and ceased on 1 June 2023. The pause on collection activities enabled people to prioritise their families, homes, and businesses after the devastating impact of Cyclone Gabrielle. Stats NZ received positive feedback from communities and key local stakeholders on this decision to amend and extend the census collection.

- 32 I am satisfied that the extended collection period had a meaningful and positive impact on the response rates in the most affected areas (the Far North, Te Tairāwhiti and the Hawke’s Bay), and the efforts of field collection staff in these areas was influential. Between the commencement of the collection extension period and the end of all collection activities on 30 June 2023, Stats NZ received a total of 370,545 individual form returns across New Zealand, which represents approximately an 8.8% lift in total individual form returns.

- 33 For selected areas, the individual form return rates were as follows:

Area	Individual form returns at end of original collection period (6 April 2023)	Individual form returns at end of extension collection period (30 June 2023)	Increase of individual form returns during extension period	% increase of individual form returns during extension period
Northland	140,760	157,950	17,190	12.2%
Auckland	1,372,840	1,526,620	153,780	11.2%
Te Tairāwhiti / Hawkes Bay	122,470	185,280	62,810	51.3%

- 34 There were two high-level cyclone-impacted areas with extended collection activity, Te Tairāwhiti and Hawkes Bay. As at 30 June 2023, returns were approximately:

- 34.1 Te Tairāwhiti: 73% (17,300 returns)
 34.2 Hawkes Bay: 79% (136,620 returns).

- 35 As anticipated, there is difficulty in assessing return rates for cyclone-impacted areas. This is because Stats NZ does not know the impact the cyclone has had on the usually resident population, which is the basis for the population estimate used to calculate the response rate.
- 36 Commencement and design of collection activities in these areas was informed by engagement with the affected communities. Operational agreements were in place with different marae, hapū, and iwi to support the census collection in the Hawke's Bay and Te Tairāwhiti regions.
- 37 Managing the risks for staff entering the field was a key concern for Stats NZ and its partners. Field staff impacted by any stand down of field operations because of Cyclone Gabrielle continued to be paid what they would have otherwise earned.
- 38 Multi-channel generic and localised marketing successfully pivoted to accommodate cyclone-related activities (geo-targeted for affected and non-affected areas).
- 39 The additional activities during the extension collection period included extending Te Mana Whakatipu field collections until 1 June, community engagement support events, Te Ahu Kauawhi (a locally-based taskforce approach to collection in Te Tairāwhiti and Hawkes Bay that used a community-led engagement approach), and additional communications and marketing.
- 40 Stats NZ and census partners used incentives during the collection period to support engagement. This continued during the extension period with incentives and events particularly aimed at engaging priority populations. For example, Stats NZ partnered with the One New Zealand Warriors across two games in Auckland and Napier. Across the two games, 2,539 tickets were given out and resulted in approximately 4,802 people/households completing their census forms.
- 41 Work is underway to understand the full extent of the impacts of the amended and extended collection design on post-censal activities and any flow on impacts.

Extension Funding

- 42 Cabinet agreed to provide funding for the amended and extended 2023 Census collection [CAB-23-MIN-0054 refers]. \$36.672 million additional funding was provided. As at June 2023, approximately \$27.8 million of this has been spent. Expenditure incurred in relation to the impacts of Cyclone Gabrielle and the non-response follow up is still being incurred. The total spend will not be known until the post-censal activities, such as the Post-enumeration Survey, are complete. The table below shows the funding provided, the amount that has been spent to date, and the expected total funding commitment.

Breakdown (000's)	Funding	Spend to	Committed	Total
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		date	to spend	commitment
Data Collection Extension: red, amber, green	21,519	20,811	6,439	27,250
<i>PSK Collections</i>		16,586	4,604	21,190
<i>East Coast Task Force</i>		144	80,	224
<i>Te Whanau Ora Contract</i>		3,750	1,250	5,000
<i>South Seas Contract</i>		160	505	665
<i>Warriors Contract</i>		171	-	171
Accommodation/Travel	1,781	747	-	747
IT Licences and Support Costs	3,476	522	273	795
Print and Post	453	66	-	66
Logistics Costs	982	111	-	111
Address Verification/Response Reconciliation Team	436	-	-	-
Manual Intervention Team	890	-	565	565
Sub Total for Data Collection	29,537	22,257	7,276	29,533
Support costs to households/Koha	1,000	180	-	180
Marketing, Communications, Engagement	3,300	2,692	12	2,704
Programme Costs	2,835	2,678	167	2,845
Total	36,672	27,807	7,455	35,262

Next steps for the 2023 Census

- 43 The 2023 Census is moving into its phase of post-collection activities, which involves processing, analysis, and dissemination of census data.

Census data release and review

- 44 Stats NZ has committed to a first release of census data by 31 May 2024, following the two-month extension of the census collection period.
- 45 Pursuant to section 37 of the Data and Statistics Act 2022, an independent review of the 2023 Census operation will be undertaken.
- 45.1 The first phase of the review (to be completed by November 2023) will include a review of the data collection phase, data delivery plans and progress to date, and a review of the functioning and effectiveness of the iwi-led collections initiative.
- 45.2 The final phase of the review (to be completed by February 2024) will include a high-level overview of the processes in place to manage the quality of the data to be included in the first release, together with the approach and plans to produce the final release.

- 46 There will also be an internally led review, including debriefs with vendors and staff, to produce an operational period review report and to inform 2028 census design decisions.
- 47 A review will also be conducted on the effectiveness of the iwi-led initiative, and its impact on the 2023 Census. It will also include assessment of the relationship between iwi who participated in the initiatives and Stats NZ. This final report is due to Te Kāhui Raraunga on 31 August 2023.

Post-censal surveys

- 48 Extensions to 2023 Census fieldwork have delayed the onset of the post-censal activities. The Post-enumeration Survey (PES) and the 2023 Disability Survey will both be impacted.
- 49 The PES is a survey of a sample of households conducted to measure the completeness of the census count. The PES will take place between 2 June and 14 September.
- 50 The first information release for the PES is planned for mid to late 2024, which is later than originally planned due to the expected delay of processing census data following the extended collection period.
- 51 The 2023 Disability Survey is a standalone household survey that provides the source of official estimates of disability prevalence and provides a wide range of information about the lives of disabled people. The survey is funded to run every ten years, after every second census, and uses census data to support sampling for the survey.
- 52 This upcoming HDS is the first since 2013. The HDS has a 12-week data collection window, with data collection aimed to be completed by the end of 2023.

Modernising a future census data collection model

- 53 The 2023 Census delivered to the design and planned operation for most of the country. However, there have been challenges to the 2023 Census operation which indicate a need to move away from traditional methods of collection.
- 54 Stats NZ is observing challenges across the household survey environment, both domestically and internationally, that speaks to the need for a shift towards a more modern and sustainable data collection approach. Census has not been immune to these challenges.
- 55 It is requiring more effort, time and resource to achieve satisfactory survey response rates, particularly for key population groups such as Māori and Pacific peoples. This is increasing the cost of running the census operation. While the increased funding for 2023 Census appears to have helped improve response rates compared to 2018 Census, some response rates were still not as high as Stats NZ would have liked and delivering equitable responses for priority sub-populations is increasingly harder to achieve.

- 56 It is becoming increasingly difficult to motivate people to complete census forms and some of this difficulty can be explained by changing societal attitudes. For example, some parts of the population have a heightened sensitivity towards providing their personal information to government or are hesitant about the nature of the data being collected. Others may not see the value of spending their time completing census forms or perceive the census process as outdated.
- 57 The nature of the 2023 Census model, which relies on the successful execution of a large-scale survey once every five years using a large field workforce, also carries a vulnerability to external events. For 2023 Census, the COVID-19 pandemic and Cyclone Gabrielle impacted the planning and execution of the census operation. In 2011, the census had to be delayed until 2013 due to the State of Emergency following the Canterbury earthquakes.
- 58 These challenges, which align with current international trends and experiences of data collection, make it increasingly difficult for Stats NZ to continue to meet the data needs and expectations of Te Tiriti partners, data customers and New Zealanders. Due to the challenges, the Government Statistician considers the current model is not sustainable. Internationally, national statistics offices are also evaluating the design of future censuses.
- 59 As the 2023 Census collection period is analysed and evaluated, Stats NZ will look to the future about how to design the 2028 Census (and its future data collection model more generally) for success and provide maximum value for New Zealand, at an acceptable cost to the taxpayer. This work requires consultation with Māori, government agencies and the public. Stats NZ will keep me informed as this work progresses and will seek the support of Ministers when a decision on a future model is required.

Cost-of-living Implications

- 60 There are no direct cost-of-living implications of this paper. However, the data provided through the census will help inform future government decision-making on policies relating to the economy and cost-of-living.

Financial Implications

- 61 There are no financial implications of this paper.

Legislative Implications

- 62 There are no legislative implications of this paper.

Impact Analysis

Regulatory Impact Statement

- 63 A Regulatory Impact Statement is not required for this paper.

Climate Implications of Policy Assessment

64 A Climate Implications of Policy Assessment is not required for this paper.

Population Implications

65 The census provides a point-in-time record of all people in New Zealand that allows us to tell the story of social and economic change over time and provides critically important data about the priorities the Government needs to invest in.

66 The census provides detailed information about all population groups and communities in New Zealand, including information on population demographics, attributes and behaviours. In doing this, census data helps central and local government, iwi and Māori organisations, community groups and businesses make decisions (such as resource allocation, investment planning, policy development, and research) to contribute to positive economic and wellbeing outcomes for everyone in New Zealand. Census data also supports reporting and monitoring against key population-based strategies and conventions (e.g. climate mitigation and adaptation programmes and the New Zealand Disability Strategy 2016–2026).

67 The 2023 Census had a strategic objective of delivering quality data to meet the needs of iwi Māori. Delivering for Pacific communities was also a priority for the design of 2023 Census. It is too early to report whether these strategic objectives have been met, however Māori and Pacific peoples' participation in the 2023 Census is not as high as Stats NZ or its partners would have liked. Despite this, the 'combined' census model used by Stats NZ means that the census will still be able to deliver high-quality population counts for Māori, Pacific peoples and other priority populations.

68 The 2023 Disability Survey, which is run after every second census, will be run for the first time since 2013. This survey has been impacted by the amended and extended census design, which has increased the likelihood of low participation. However, Stats NZ is confident that the 2023 Census data is representative enough to meet the requirements of the sample design.

Human Rights

69 The proposals in the paper are consistent with the New Zealand Bill of Rights Act 1990, the Human Rights Act 1993, and the Privacy Act 2020.

Use of External Resources

70 This paper will not result in the additional use of external resources. However, Stats NZ uses external resources to help deliver the census operation. For example, Stats NZ appointed two agencies (PersoKelly NZ and Mana Recruitment) to assist with the recruitment of a large temporary workforce of census field staff. Stats NZ also used some external resources to assist with collecting census responses, such as the Te Mana Whakatipu (iwi-led census

collection) pilot initiative and partnering with Whānau Ora and South Seas Healthcare.

Consultation

- 71 The following agencies have been consulted on this paper: the Department of the Prime Minister and Cabinet, the Public Service Commission, and The Treasury.

Communications

- 72 The Government Statistician released a press release on 12 July providing some initial commentary and an estimated national response rate for 2023 Census. The Vote Statistics Estimates Hearing in June also provided commentary and high-level return rates for 2023 Census.
- 73 Stats NZ will make future public releases regarding 2023 Census, as further processing, analysis and dissemination of the 2023 Census results takes place. From mid-2024, Stats NZ will publish the interim response and coverage rates (informed by census data processing and analysis) and then the final response and coverage rates that will be informed by the Post-enumeration Survey.

Proactive Release

- 74 I intend to proactively release this paper on Stats NZ's website within 30 days of Cabinet decisions. The release will be subject to redactions as appropriate under the Official Information Act 1982.

Recommendations

The Minister of Statistics recommends that Cabinet:

- 1 **Note** that Stats NZ delivered the 2023 Census as planned for the vast majority of the country.
- 2 **Note** that current figures show that the 2023 Census achieved an estimated individual return rate of 89.1% and that between 89 and 91% of the usual resident population of New Zealand are estimated to have taken part in the 2023 Census.
- 3 **Note** that Stats NZ is confident it will be able to deliver the country high-quality population statistics and a population count.
- 4 **Note** the amended and extended 2023 Census design was executed following Cyclone Gabrielle, with collection activities ceasing on 1 June 2023 after an eight-week collection extension period.
- 5 **Note** that 2023 Census is moving into the post-collection phase of the census operation, which involves processing, analysis, and dissemination of census data.

- 6 **Note** that 2023 Census numbers cannot be confirmed until they are published in 2024.
- 7 **Note** that Stats NZ has work underway to enable a long-term shift towards a modern, resilient, stable, and sustainable future census data collection model.

Authorised for lodgement

Hon Dr Deborah Russell

Minister of Statistics