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Changing how we count: the New Zealand census and Māori data

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Abstract

Introduction. This paper examines the New Zealand Government's 2025 decision to cancel the 2028 census and replace it with administrative data and annual sample surveys. While censuses have supported population measurement and planning, the shift raises concerns for Māori about data quality, under-representation, and Indigenous data sovereignty. The study situates this decision within the history of census practice in Aotearoa New Zealand.

Method. The paper adopts a historical and literature-based approach, drawing on census data from 1851 to 2023, government reports, and scholarship on census and administrative data, including Māori and organisational critiques.

Analysis. The analysis compares traditional census methods with administrative data models, identifying efficiencies alongside risks of bias and undercounting. It examines Māori participation in the 2013, 2018, and 2023 censuses, limitations of iwi affiliation data, and implications for equitable representation, alongside Māori-led initiatives and international experiences.

Results. Findings show that low Māori response rates have produced incomplete data increasingly supplemented by administrative sources that often reinforce inequities. Māori-led partnership models have improved participation and data quality in some rohe, while international evidence confirms risks of undercounting without co-governance.

Conclusion. Cancelling the 2028 census risks deepening inequities and undermining Māori data sovereignty, but Māori-led governance offers equitable alternatives.

Introduction

Censuses have long been used as a mechanism for understanding a nation's population and have formed the basis for planning by its government. The earliest true census has been identified as occurring in Ancient Greece approximately 18,000 years ago (Missiakoulis, 2010). The main benefit of a census is that it is typically administered to participants simultaneously, and they are required to answer the same set of questions. This makes it easy to identify different trends and shifts in population needs, especially if the census is conducted at regular intervals. This also made it easy to evaluate the quality of the data, including its likely accuracy, interpretability, relevancy, and accessibility of the data.

In June 2025, the New Zealand government announced that they were dispensing with the five-yearly census of population and dwellings and would instead make future policy decisions using previously collected administrative data. For Māori, the use of administrative data raises concerns about data quality, bias, and data sovereignty. The results from the New Zealand 2013, 2018, and 2023 censuses had all been problematic, due to lower-than-expected return rates. In 2025, the New Zealand Government announced that the 2028 census was cancelled and would be replaced by the use of administrative data and smaller annual sample surveys. Decisions on the fate of future censuses will be made at a later date.

This paper explores how the decision to cancel the 2028 census impacts on the calls by Māori for sovereignty over their data and how it is governed.

Censuses in New Zealand

New Zealand came under colonial rule after the signing of the Treaty of Waitangi, and subsequent annexation in 1840. Although earlier population counts had been made in various settlements throughout New Zealand, the first 'national' census was not held until 1851. Despite its national status, it did not include Māori. During his exploratory voyage to New Zealand in 1769, Captain James Cook estimated the Māori population to be approximately 100,000 people. The first official survey of Māori population numbers was carried out over a year (1857-1858) under the direction of the Native Secretary. The Māori population was ascertained at that point to be approximately 56,000 and mainly living in the North Island (Appendices to the Journals of the House of Representatives, 1860: 3). The civil unrest caused by the New Zealand wars in the 1860s and early 1870s meant that the next Māori census was not conducted until 1874. Although this was the same year for the national census, information from the Māori population was collected in a different process. This practice continued until the 1951 census, when there was a joining of the two census processes. The census was normally run at regular five-yearly intervals until 2023, except for a seven-year gap between 2006 and 2018, due to a natural disaster in Christchurch in 2011 that led to the postponement of the 2011 census. Although it is compulsory for all those resident in New Zealand on census day, the 2013, 2018 and 2023 surveys were all marked by a low return rate, especially among the Māori and Pasifika population groups. Consequently, the 2018 and 2023 results were bolstered using administrative data that had been collected for other purposes by Statistics New Zealand and other government departments.

Literature review

Concerns about how administrative data may not fully represent the needs of Māori are reported in Kukutai and Cormack (2018), as they point to the strong reliance on census statistics in the past for planning and resource allocation purposes. However, they do acknowledge that due to the non-completion of census surveys, the data for Māori has had to be supplemented by previously collected data sources. Although the article was written before the reporting of the 2018 census results, their concerns about the under-reporting of Māori have subsequently been borne out by the 2018 and 2023 census results. In a later article, Kukutai (2025) outlines her further concerns about underreporting, as well as the 'social license' that the government has assumed for linking

and reusing data. Bycroft and Matheson (2020), from Statistics New Zealand, believe that the 2018 census results were enhanced by the administrative data and provided a more accurate count of the population, particularly for underrepresented groups.

The changes proposed in New Zealand are not unprecedented, as administrative data has been used in other countries to good effect. Kukutai et. al. (2015) investigated how census practices had changed internationally between 1985 and 2014. Their study discovered that alternative approaches had been used in Europe (especially in Nordic countries), where there had been a history of keeping population registers and general acceptance of the need for governmental use of personal data. Although there was a low level of take-up of similar practices across the rest of the world, more recent articles are now demonstrating the interest and value that governments are placing on using data from other sources to supplement official collection of statistics. This is demonstrated in the article by Valente (2019), which reported that for the 2020 census round, more than two thirds (n=26) of the European countries were either planning to use a register based or combined census (using administrative data and some field-based collection methods). This trend is further highlighted by Espey et.al. (2025), who report that the traditional form of collecting via national censuses appears to be getting replaced by data that is formulated from population registers, administrative data and other survey instruments. This, they state (Espey et al., 2025), has been hastened by the Covid pandemic, collecting costs and a rising distrust from citizens. They point to the massive underreporting of ethnicity statistics of the Latino population by 4.99% (2.9 million people) in the 2020 United States census, which they identify as having a potential impact on how they are represented, funded, and serviced.

It is clear, however, that there are doubts about the accuracy of some data sources when looking at the appropriateness or not of substituting administrative data for traditional statistical methods of collecting employed by censuses. Razieh et. al. (2025), highlight their use of National Health Service (NHS) data with the 2021 census data process in England as a point of comparison between the ethnicity data collected by both. Their findings revealed high levels of accuracy for those who identify as White British, and a population group from the Indian sub-continent and China. However, there was extremely low accuracy for ethnic minorities, including Gypsy or Irish travellers, other Black populations, and those who were in 'other' ethnic groups. These findings clearly demonstrate that using administrative data sources would produce greater precision for those from dominant ethnic groups and less accuracy for minority populations.

However, Ernsten et. al. (2018), investigated the value to be gained in Scotland from using NHS data for understanding the nature of internal migration, (especially of international migrants) and believed that it was helpful, as it demonstrated the advantages of linking administrative data with other longitudinal forms of data collection as a means of ensuring that accurate and timely data would be available for migration research purposes. However, they did note that in England and Wales, researchers would not have the same access to unit postcode data, and this would need changing if there was to be a trend towards greater use of administrative data in the future.

In Australia, Nelson et. al. (2019), point out some of the dangers of using administrative data when investigating the identification of Aboriginality in health data in New South Wales in Australia, where despite individuals self-identifying, they found that a substantial number of Aboriginal people are not reported as Aboriginal on any of their linked records, suggesting that this data needs to be prioritised and properly recorded at the point of data collection, to avoid underreporting.

A recent article by Brown and Chipperfield (2025) suggests that the role of national statistical organisations is changing to become data aggregators rather than just performing statistical collections, similar to the role of the integrated data infrastructure in New Zealand. In Australia, they believe that this will include data from both public and private sector sources and could include the use of smart meter data for electricity consumption to ascertain household usage

patterns, or the use of mobile phone data to gain insights into population flows throughout the day/week, rather than relying on residential data collected at one particular time. What is not clear from this is how would these capture data from those who might be marginalised through homelessness, or without smartphone devices or make differentiations by ethnicity.

Māori concerns

Māori have significant concerns about the New Zealand government's decision to cancel the 2028 New Zealand Census and its move to use an administrative data model. Recent literature on New Zealand's Integrated Data Infrastructure (IDI) (Greaves et.al, 2024; Boey et. al., 2024) highlights the unease that Māori have in relation to the questionable accuracy of the data in the IDI. The administrative datasets are drawn from previous censuses and other surveys collected by Statistics New Zealand, and data contributed by a range of government agencies and private sector organisations. Although these datasets might be peer reviewed within their agency, there is no guarantee that the data have a level of consistency and completeness relating to the identification of ethnicity, including iwi. The reliance on this data for future decision making and planning about Māori needs might lead to a deepening of existing social and economic inequities.

The low Māori return rates for the 2018 and 2023 censuses mean that the data contributed to the IDI related to Māori is much lower than that of other ethnic groups in New Zealand. This has meant that hapū (subtribes) and iwi (tribes) have not been able to access accurate information about their members. Although the 2018 iwi affiliation data was missing for 29% of the Māori population, estimates were able to be released after some technical work behind the scenes by Stats NZ and the Te Kāhui Raraunga (Data Iwi Leaders Group), it was noted that although the information available had been updated from the 2013 census results, they should not be viewed as 'official' results and had a low-quality rating. The question on iwi affiliation in the 2023 census was redesigned, including an increase in the number of iwi possible to select from a list from five to 16, or allowing people to use a map to select a region for a list of iwi within the area, or the option to select iwi from a list filtered by region without a map. However, the return rate for the census from Māori was estimated to be only 77%, thus requiring the use of administrative data again to fill the void.

However, Stats NZ believe that their methods of combining census and administrative data, along with improved statistical imputation, resulted in an increased level of data quality (Stats NZ, 2025) (<https://www.temanararaunga.maori.nz/>). Although the combined data provided a more accurate indication of the size of different iwi, it also demonstrated more clearly the faults experienced in the 2018 census. This return to accuracy means that the data related to iwi affiliation cannot be compared to the 2018 data. The gap between 2013 and 2023, and the changed response options, demonstrates large increases in the populations of smaller iwi, with some having increased by 200% over those ten years, probably making the 2023 census results more reliable for future comparisons. With the 2028 census exercise cancelled, it is imperative that any future administrative data comparisons maintain a high level of accuracy.

Māori initiatives

As indicated earlier in this paper, Māori have long been aware of census limitations, and this was formally recognised by the creation of Te Mana Raraunga (Māori Data Sovereignty Network) (<https://www.temanararaunga.maori.nz/>) in 2015. The network has been critical about the inadequacies of both the 2013 and 2018 census results for Māori, especially for their failure to collect data that would provide valuable information for iwi concerned about the social, cultural, and economic wellbeing of their members. In preparation for the 2023 census collection, the network combined with Stats NZ and Te Kāhui Raraunga to launch Te Mana Whakatipu as a trial, which empowered select iwi to coordinate the collection of census forms in their own tribal areas, as a method of restoring trust between iwi members and the government. The areas where the

trials were undertaken resulted in a very high return rate and augured well for a more comprehensive programme for (the then) planned 2028 census (Radio NZ, 2023).

In 2019, a formal agreement was developed between Te Kāhui Raraunga (<https://www.kahuiraraunga.io/>) and Stats NZ (representing the Crown) designed to recognise the equal partnership between the two parties, as stated in Article Three of te Tiriti o Waitangi (Treaty of Waitangi) by ensuring that Māori data is collected, managed, and used in a way that benefits iwi, hapū, and whānau (extended families). The Mana Ōrite agreement also helped to ensure there would be improvements in the 2023 census exercise. This included the opportunity for respondents to be more specific about iwi affiliations. Through their online platform, Te Whata.io (<https://tewhata.io/>), Te Kāhui Raraunga released iwi related census results before other 2023 results were launched on the Stats NZ website. The release of this data by Te Kāhui Raraunga enabled it to provide a Māori focused commentary on the results and emphasised how the analysis of data using a Māori perspective had improved the census outcomes. The online platform has also made it possible for individual iwi to gain direct access to the data related to their members, making it an important tool for strategic planning and resource allocation.

Conclusion

Throughout this short paper, it has been demonstrated that Māori have become increasingly frustrated about how they have not been able to rely on data accuracy or quality from the census. The low return rates from Māori to the 2018 and 2023 census exercises have led to a realisation by Stats NZ that there is a critical need to work in partnership with Māori to ensure that the results are a closer match to statistical reality. The development of Te Mana Raraunga and Te Kāhui Raraunga, and the latter group's platform, has enabled Māori to have a much more active role in assisting Stats NZ in meeting their obligations to Māori under the Mana Ōrite agreement and Te Tiriti o Waitangi. The decision to cancel the 2028 New Zealand census exercise means that the entire nation will be dependent on the accuracy and quality of the administrative data that will replace it. The nature of the annual surveys and other data collecting methods that will contribute to the development of the administrative data is yet to be determined. However, the efforts of Te Mana Raraunga and Te Kāhui Raraunga in assisting Stats NZ with the previous two census exercises will be highly valuable in the construction of future national statistical datasets. It remains imperative that Stats NZ and the wider government continue to work with Māori to ensure that the census continues to not only contribute to Māori social, cultural, and economic wellbeing but also draw on the expertise developed by iwi data analysts who can help Stats NZ to get accurate results for the rest of the nation as administrative data becomes the norm.

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