

Chapter 7

Census 2016: the morning after

Response rate and quality of the data

7.1 The census is the preeminent cyclical statistical project undertaken in Australia. The statistics produced by the census are a nearly complete count of everyone in Australia. Whereas the results of a survey based on a sample are extrapolated to determine population characteristics, the census is a count of the entire population. As such, it is necessary that the census has a very high response rate in order to accurately report on key population indicators. The committee was told that the 2006 and 2011 Censuses had a 95.8 per cent and a 96.3 per cent response rate respectively.¹

7.2 It was suggested to the committee that the response rate to the 2016 census would be adversely affected by the privacy concerns surrounding the ABS' decisions to retain names and addresses, as well as the logistical impediments created through the failure of the eCensus website and telephone service.² The Executive Council of Australian Jewry Inc. expressed the concerns of many census users:

As a community, we are very concerned at the possibility that the events leading up to, during and following census night might have a detrimental effect on the quality of the 2016 Census data, potentially impacting negatively on our ability to plan for current and future service provision and need in our community.³

7.3 Trust is reported to be a key ingredient in the willingness of individuals to provide survey information. Some submitters argued that the changes to the 2016 census erode that trust and will therefore lead to a lower response rate.⁴ The APF argued:

[The] quality of data that is collected depends on trust so if the trust plummets, the quality plummets. Whether it plummets from a not very good level downwards or from a really good level downwards obviously depends on history but it plummets.⁵

1 Australian Bureau of Statistics, *Submission 38*, p. 37.

2 Australian Population Association, *Submission 54*, p. [1]; Salinger Privacy, *Submission 24*, p. 4; Name withheld, *Submission 20*, p. [1].

3 Executive Council of Australian Jewry, *Submission 26*, p. 2.

4 Salinger Privacy, *Submission 24.1*, p. 9.

5 Dr Roger Clarke, Board Member, Australian Privacy Foundation, *Committee Hansard*, 25 October 2016, p. 59.

7.4 The committee also heard suggestions that the data that was collected through the census may be less reliable than in the past due to households deliberately withholding or incorrectly supplying information. The Online Hate Prevention Institute proposed that this effect would be more pronounced for specific groups in the community where trust was already low.⁶

7.5 Whereas the completeness of coverage of the census is improved by the post-enumeration survey (PES – discussed in chapter 2), the committee heard that it is difficult to measure how many households have provided inaccurate information.⁷ It was observed by the ARC Centre of Excellence for Children and Families over the Life Course that:

[Public] perceptions of risk in completing the 2016 Census, whether actual or perceived, may have some impact on data quality and see value in further research on the potential impact of such perceptions on actual response data (if any), along with potential methodological implications and future mitigation strategies, if required.⁸

7.6 In order to maximise trust in the accuracy of the census data, the ANU Centre for Social Research and Methods suggested that the ABS should be proactive in releasing as much of the raw- and metadata from the census as possible to allow researchers to make their own estimates of reliability.⁹

Interim census results

7.7 In October 2016, the ABS was able to report to the committee that it appears that the 2016 was a success from the perspective of the response rate and early indications of data quality. The ABS was able to report to the committee that the response rate was over 96 per cent:

I am pleased to report that all the available evidence suggests we will have high quality census data from the 2016 collection—a preliminary participation rate of over 96 per cent of households contributing data to the 2016 census, comprising over 4.9 million online forms and over 3.5 million paper forms, and many personal forms in addition to the household ones.¹⁰

7.8 Although the PES is still being completed, the Australian Statistician informed the committee that:

The initial quality checks we have undertaken to date, covering over half of the total census returns, show low levels of item non-response to the known

6 Online Hate Prevention Institute, *Submission 55*, p. 9.

7 Mr Bill McLennan, private capacity, *Committee Hansard*, 25 October 2016, p. 6.

8 ARC Centre of Excellence for Children and Families over the Life Course, *Submission 32*, p. [3].

9 ANU Centre for Social Research and Methods, *Submission 57*, p. 7.

10 Mr David Kalisch, Australian Statistician, Australian Bureau of Statistics, *Committee Hansard*, 25 October 2016, p. 26.

sensitive questions. The much higher level of online response achieved in the 2016 census compared to past years is expected to lead to higher quality census responses overall, drawing on the 2006 and 2011 experience about the higher quality of online responses.¹¹

7.9 Although the committee was cautioned that it is not possible to know the response rate until the conclusion of the PES which will inform how different subgroups responded to the census, the Australian Statistician's evidence points to a successful census.¹²

7.10 Furthermore, the ABS was able to report to the committee that the census—despite the problems of August—continues to enjoy high levels of public support. In research commissioned by the ABS, around 97 per cent of Australians intended to complete the census and over 80 per cent agreed that the census should be compulsory.¹³ Importantly, only 1.2 per cent of forms counted have been returned with no name provided.¹⁴

7.11 The ABS reports that the first census data will be released on 11 April 2017.¹⁵

Fines for non-compliance

7.12 The census was completed by the vast majority of households in a timely manner. In the small number of cases in which individuals refuse to comply with the census requirements set out in law, fines or other penalties may apply.

7.13 The issue of fines featured heavily in the lead-up to the census, despite the fact that 'the ABS did not mention fines in any campaign materials before census night'.¹⁶ The ABS reported to the committee that the 'unexpected and unprompted media and social media focus on [the] potential of census fines created a degree of public fear'.¹⁷ Social media updates from the ABS on the night of 9 August made it clear that there were no fines for completing the census after 9 August.¹⁸

7.14 The census is compulsory, with the *Census and Statistics Act 1905* specifying that all questions (with the exception of religion) be answered fully and accurately. Fines for the failure to complete the census can be issued by a court.¹⁹

11 Mr David Kalisch, Australian Statistician, Australian Bureau of Statistics, *Committee Hansard*, 25 October 2016, p. 26.

12 Australian Population Association, *Submission 54*, p. [2].

13 Australian Bureau of Statistics, *Submission 38.1*, pp. 6–8.

14 Australian Bureau of Statistics, *Submission 38.1*, p. 9.

15 Australian Bureau of Statistics, *Submission 38*, p. 3.

16 Australian Bureau of Statistics, *Submission 38*, p. 59.

17 Australian Bureau of Statistics, *Submission 38*, p. 65.

18 Australian Bureau of Statistics, *Submission 38*, p. 68.

19 Australian Bureau of Statistics, *Submission 38*, p. 36.

7.15 The ABS reported that in 2006 and 2011 there were 266 and 78 cases respectively that were referred to the Commonwealth Director of Public Prosecutions (CDPP). The CDPP can choose whether or not to take further action against individuals who refuse to complete their census forms.²⁰ Although fines are able to be levied for non-compliance, the committee learnt that these powers are used sparingly:

Although the Census is compulsory, the ABS relies on the willing cooperation of Australians to conduct a successful Census. While fines for the failure to complete a form can be issued by a Court, this measure is used sparingly. For the 2011 Census, fewer than 100 persons were prosecuted for failing to complete a form.²¹

7.16 The ABS explained to the committee that referrals 'to the CDPP are considered only after all reasonable attempts to achieve compliance using a cooperative approach have failed'.²²

7.17 Citing the ABS information sheet *Do I have to do the Census?*, administrative law expert Kathryn Miller argued that:

...the ABS intended to, and did, create an impression amongst members of the public that failure to provide their name could result in penalties, including fines and a criminal conviction.²³

7.18 The committee heard that the prospect of fines caused many in the community distress when the eCensus website was shut down and the phone system failed. ID Consulting reported to the committee that:

This increased emphasis on fines resulted in a lot of public confusion and fear when the online site went down. Many elderly people with no access to a paper form were terrified of receiving fines and just wanted to do the right thing. This does not engender goodwill within the community.²⁴

7.19 Some submissions described the use of fines as an intimidation tactic in an 'attempt to force the compliance of the population'.²⁵ Electronic Frontiers Australia suggested large-scale threats of fines were 'an inappropriate means to ensuring the population accurately complete the census'.²⁶ It was queried how the collection of census data could be said to have been undertaken with the consent of the population when failure to provide private information would result in punishment.²⁷

20 Australian Bureau of Statistics, *Submission 38.1*, p. 10.

21 Australian Bureau of Statistics, *Submission 38*, p. 36.

22 Australian Bureau of Statistics, *Submission 38.1*, p. 10.

23 Ms Katherine Miller, *Submission 67*, pp. [3–4].

24 ID Consulting Pty Ltd, *Submission 39*, p. [6].

25 Name withheld, *Submission 36*, p. [1].

26 Electronic Frontiers Australia, *Submission 72*, p. 2.

27 Dr Monique Mann & Dr Matthew Rimmer, *Submission 75*, p. 32.

7.20 Of particular concern to some submitters was the potentially high value of the fine of \$180 per day until the census was completed. The APF labelled the use of potentially unlimited fines 'punitive', and recommended their discontinuation.²⁸ It was elsewhere argued that the size of the fine is disproportionate to the harm caused by the failure to complete the census.²⁹

7.21 The APF recommended that fines be of a fixed value of a 'nominal amount'.³⁰ A number of other submitters also called for fines to be of a fixed value.³¹

7.22 Several organisations called on the ABS not to fine people for failing to provide their names and addresses.³² Digital Rights Watch made this argument on privacy and logistical grounds:

The public should not be penalised for mismanagement and mistakes made by the ABS, nor should they be penalised for taking actions to protect their privacy after the ABS unilaterally changed the system by which their data is collected and recorded.³³

7.23 The Science Party argued that: 'Given the confusion and errors surrounding the 2016 census process, it is our recommendation that these fines not be pursued, as a show of good faith'.³⁴

7.24 The ABS told the committee that every census has a percentage of forms that are not completed in their entirety, and that it has not been past practice to prosecute those individuals. The Australian Statistician explained:

The other aspect I will add is that certainly we have had aspects of item nonresponse in the census in past years...aspects such as income, occupation, age, country of birth. Religion is one that is optional but nonetheless there are a number of compulsory parts of the census where we do get a small but modest level of item nonresponse. In most of those cases, I am not aware that we have prosecuted people.³⁵

7.25 The ABS later reported that:

A decision on referring matters regarding individuals not providing a full response to the census will be made in the context of the impact on the quality of the census. However, the ABS has undertaken a comprehensive

28 Australian Privacy Foundation, *Submission 74*, p. 10.

29 Name withheld, *Submission 7*, p. 9; Name withheld, *Submission 20*, p. [1].

30 Australian Privacy Foundation, *Submission 74*, p. 10.

31 Name withheld, *Submission 7*, p. 1; Salinger Privacy, *Submission 24.1*, p. 9.

32 Name withheld, *Submission 11*, p. [2]; Science Party, *Submission 56*, p. 1; Name withheld, *Submission 58*, p. [3].

33 Digital Rights Watch, *Submission 51*, p. 7.

34 Science Party, *Submission 56*, p. 5.

35 Mr David Kalisch, Australian Statistician, Australian Bureau of Statistics, *Committee Hansard*, 25 October 2016, p. 43.

data verification process involving more than 12 million person records, and at this stage, there is no indication that there have been a significant number of households that have withheld their name and address or provided a false name.³⁶

Committee view

7.26 Prominent discussions of the prospect of fines appear to have caused many Australians distress during the census period. The committee notes the evidence from the ABS that penalties can be an effective method to improve participation and truthfulness for censuses. Although it is important to ensure that the census continues to have a very high participation rate, this should be achieved through, as much as possible, the goodwill of the community based on trust in the institution of the ABS.

7.27 The value of fines should be appropriate to the harm caused by non-compliance; striking a balance between incentivising participation and sending a message that the census is an important national project requiring input from all Australians. The committee considers that the prospect of a penalty of unknown size to be unfair, and disproportionate to the harm caused by the small levels of census non-participation.

Recommendation 13

7.28 The committee recommends that the maximum value of fines and any other penalties relating to the census be explicitly stated.

Recommendation 14

7.29 The committee recommends that the Australian Bureau of Statistics develop a clear communications strategy outlining the outcomes for non-compliance with the census, including resolution processes and the value of possible penalties.

Adequacy of funding and resources for the ABS

7.30 The committee heard much evidence to the effect that the ABS is underfunded to meet its objectives, and that the current levels of funding place at risk the ongoing operations of the ABS. The ABS has a number of statutory obligations such as conducting censuses. It was put to the committee that it is important that the ABS is properly staffed, resourced and managed to enable it to fulfil these responsibilities.³⁷

Funding for day-to-day operations

7.31 The ABS is principally funded by the Australian Government. The ABS' annual appropriation is cyclical in nature due to the census which peaks every five years with the collection and processing of census data. It was reported to the committee that the average annual non-census appropriation for the ABS is around

36 Australian Bureau of Statistics, *Submission 38.1*, p. 11.

37 National Catholic Education Commission, *Submission 69*, p. 6; ARC Centre of Excellence for Children and Families over the Life Course, *Submission 32*, p. [5].

\$259 million per year.³⁸ The ABS reported that for fifteen years now resourcing for the ABS and demands have been moving in opposite directions:

Over the last 15 years, ABS resources have generally been reducing. Its staff numbers have fallen by 14% and the budget appropriation (in real terms) has also fallen by 14%. In contrast, the demands on the ABS to properly measure the economy, society and the environment, and respond to the requirements of governments, has increased and become more complex.³⁹

7.32 The committee learnt that forward funding estimates for the ABS imply that approximately 740 further staff will have to leave the ABS by 2019.⁴⁰ As of 30 June 2016—near the peak of the census cycle—the ABS employed a total of 3526 people, with 2652 employed on an ongoing basis.⁴¹

7.33 It was suggested to the committee that there is broad awareness that the ABS is lacking in resources:

...it is public knowledge that reductions in the ABS budget have resulted in the curtailment of a number of important collections and in the reduction of the ABS' analytical capacity.⁴²

7.34 The ARC Centre of Excellence for Children and Families over the Life Course stated that ongoing funding is important to continue to allow the ABS to continue undertaking high quality work:

Appropriate funding is critical to ensuring the ABS is able to realise appropriate advancements in data collection, and where government seeks to achieve efficiencies through online data collection, it is vital that additional resources are able to be invested in public information and supporting infrastructure.⁴³

7.35 The committee heard that regular users of ABS products and surveys have noticed 'an overall downgrading of ABS collections and service in recent years'.⁴⁴ The ABS explained that:

While the ABS has strived to operate efficiently and has a strong track record of innovation to improve its efficiency, the ABS has occasionally had to reduce its work program to remain within its budget and to continue to produce high quality statistics. Most recently this occurred in 2014, when

38 Australian Bureau of Statistics, *Submission 38*, p. 13.

39 Australian Bureau of Statistics, *Submission 38*, p. 14.

40 Australian Bureau of Statistics, *Submission 38*, p. 14.

41 Australian Bureau of Statistics, *Annual Report 2015–16*, p. 56.

42 School of Demography, Australian National University, *Submission 40*, p. 5.

43 ARC Centre of Excellence for Children and Families over the Life Course, *Submission 32*, p. [5].

44 National Catholic Education Commission, *Submission 69*, p. 6.

the ABS discontinued six statistical programs and made reductions to a further seven.⁴⁵

7.36 Volunteering Tasmania noted that the ABS has reduced the collection of statistics relevant to their organisation due to funding constraints.⁴⁶

7.37 The School of Demography at the Australian National University argued that collections and analysis decisions based on funding restraints restrict the availability of data for the common good.⁴⁷ The ABS observed that they will never have 'enough appropriation to produce all of the statistics or provide all of the statistical services that users want'.⁴⁸

7.38 The ABS does have some capacity to decrease its reliance on government appropriations. The ABS is able to retain revenue from the sale of its goods and services. The committee was informed that:

In 2014-15, the amount of this revenue was \$41.0 million, predominately from Commonwealth agencies towards the delivery of user-funded sample surveys, such as the National Health Survey, Survey of Disability, Ageing and Carers and the Personal Safety Survey. The funds received recover the costs of conducting the surveys.

The ABS does not, and is not permitted to, sell data about individual persons or businesses.⁴⁹

7.39 It was reported that most of this revenue comes from other Australian Government agencies.⁵⁰ It was suggested that one of the reasons behind the ABS' decision to retain names and addresses was in order to increase the commercial value of the data ABS possesses in order to confront continual downward pressure on government funding.⁵¹

7.40 The National Catholic Education Commission (NCEC) argued that access to ABS data should be encouraged and facilitated rather than restricted. NCEC cites ABS' charging for its *TableBuilder* product as a barrier to using census data.⁵² The Online Hate Prevention Institute posited that Australians expect the ABS to be funded out of consolidated revenue, not using information collected for statistical purposes to be repurposed for commercial ones.⁵³

45 Australian Bureau of Statistics, *Submission 38*, p. 14.

46 Volunteering Tasmania, *Submission 50*, p. [1].

47 School of Demography, Australian National University, *Submission 40*, p. 5.

48 Australian Bureau of Statistics, *Submission 38*, p. 15.

49 Australian Bureau of Statistics, *Submission 38*, p. 11.

50 Australian Bureau of Statistics, *Submission 38*, p. 15.

51 Mr Justin Warren, *Submission 65*, p. [1]; Mr Evan Scott, *Submission 13*, p. [2].

52 National Catholic Education Commission, *Submission 69*, p. 6.

53 Online Hate Prevention Institute, *Submission 55*, p. 9.

Funding for the census

7.41 The census is a costly but extremely important exercise. The Australian Government provided approximately \$470 million for to the 2016 census.⁵⁴ The 2011 census was reported to have cost in the order of \$440 million.⁵⁵ One of the driving forces behind the move to the eCensus was the need to reduce the ongoing cost of conducting the census. Financial considerations affect the conduct and operation of the census, as they do all public projects. Professor Richard Madden informed the committee that, in the 1990s, the Australian Government has proposed delaying the census to accommodate budgetary considerations.⁵⁶

7.42 It was put to the committee that funding pressures on the ABS were responsible for the perceived mistakes made in the 2016 census:

Of greatest concern is the apparent lack of adequate skill and resource exhibited by the ABS in conducting the 2016 Census, which appears to be a result of continual reduction in funding to the ABS by successive governments.⁵⁷

7.43 The Australian Population Association suggested that the retention of the same census topics as 2006 and 2011—without the addition of any further topics—was indicative of a lack of funding for the census.⁵⁸

7.44 Some submissions suggested the problems experienced with the 2016 census were a reflection of the resourcing environment within the ABS.⁵⁹ Vision Australia suggested the some of the problems with the CIS were a problem of resourcing, and additional funding should be provided to ensure better service in future censuses.⁶⁰

7.45 It was emphasised to the committee that '[for] censuses to continue to be reliable and timely, appropriate funding investment must be made by the Government'.⁶¹

7.46 The ABS assured the committee that it was provided with sufficient census specific resources to conduct a high quality census:

54 Mr David Kalisch, Australian Statistician, Australian Bureau of Statistics, *Committee Hansard*, 25 October 2016, p. 27.

55 Australian Bureau of Statistics, *2011 Census Fact Sheet: General*, <http://www.abs.gov.au/websitedbs/D3310114.nsf/home/2011+Census+Fact+Sheet:+General> (accessed 3 November 2016).

56 Professor Richard Madden, *Submission 81*, p. 2.

57 Mr Justin Warren, *Submission 65*, p. [1].

58 Australian Population Association, *Submission 54*, p. [3].

59 Dr Monique Mann & Dr Matthew Rimmer, *Submission 75*, p. 50; Australian Privacy Foundation, *Submission 74*, p. 14; Mr Christopher Biggs, *Submission 3*, p. [1]; Name withheld, *Submission 18*, p. [4].

60 Vision Australia, *Submission 76*, p. [7].

61 Dr Liz Allen, *Submission 41*, p. 6.

In terms of the census there were no issues with budget. We had a satisfactory budget with respect to the census. It is a separate allocation for the census compared with the rest of the organisation.⁶²

ICT capabilities within the ABS

7.47 Problems with the ABS' ICT infrastructure have been publicly acknowledged with the then Australian Statistician, Brian Pink, stating in 2013: 'I remain concerned about the wide range of ageing and fragile business processes and supporting infrastructure used by the ABS'.⁶³

7.48 The 2013 capability review of the ABS undertaken by the Australian Public Service Commission—published in late 2014—noted that ABS' core statistical business processes and IT are well overdue for an upgrade.⁶⁴

7.49 One of the findings of the 2014 ICT Review that led to the partnership between the ABS and IBM was that the ABS was facing funding challenges:

Overall the Review Team found that whilst [the Technology Service Division (TSD)] have recognised the need for and mobilised resources to support the Census 2016 Program, budgetary challenges, as with all parts of ABS, are posing TSD with the issue of stretching increasingly constrained resources (both in terms of capability and capacity) across a wide range of activities and demands. In the case of Census 2016 these are demands that will only increase rapidly as the Program moves towards execution. Should funding that has been sought from Federal Government for the Critical Statistical Infrastructure Program be granted, the demands of this Program will, despite the extra funds, only further increase the risk of untenable internal TSD resource contention.⁶⁵

7.50 In the 2015–16 Budget, the government announced a \$257 million investment in the ABS over five years to modernise ageing systems and processes and to develop additional statistical capabilities. This comprised \$190 million operating expense and a \$67 million capital injection.⁶⁶ The ABS explained how the money would be used:

This investment will enable the ABS to modernise its statistical business model to reduce the risk of error in statistical outputs; reduce red tape for providers; and achieve faster turnaround in dissemination of statistics in a more complex world. The additional investment does not allow for new statistical collections, and at the conclusion of the program, the ABS ongoing operating budget, excluding census, will reduce by 10%, or by

62 Mr Trevor Sutton, Deputy Australian Statistician, Australian Bureau of Statistics, *Committee Hansard*, 25 October 2016, p. 30.

63 Australian Bureau of Statistics, *Annual Report 2012–13*, p. 2.

64 Australian Bureau of Statistics, *Submission 38*, p. 17.

65 Australian Bureau of Statistics, answers to questions on notice, 14 October 2016 (received 18 October 2016), pp. 8–9.

66 Australian Bureau of Statistics, *Submission 38*, p. 13.

approximately \$27 million per annum. The reduction in appropriation reflects expected savings from more efficient operations after the completion of the transformation program.⁶⁷

7.51 The Australian Statistician highlighted that the extra investment provided by the Australian Government will enable the ABS to progress with certainty over the coming years to deliver a successful census in 2021.⁶⁸

Committee view

7.52 The ABS' funding has been eroded over a number of years while the demands and expectations placed on the organisation have increased. Accurate data is critical for the provision of public services and for businesses making investment decisions in Australia. The ABS is a world leading statistical agency, and to remain such it requires funding to maintain current capacities, meet new demands, and develop the skills necessary to provide quality outputs.

7.53 Issues of financial and human resourcing for the ABS must also be reassessed. The additional \$30 million of costs incurred during the events of August 9 and the inconvenience incurred by many Australians shows the importance of well-targeted investments in the ABS.⁶⁹ The following should be noted in terms of resourcing:

- (a) proper funding should be set for the 2021 census;
- (b) certainty should be given by the Australian Government that the 2021 census will go ahead (as opposed to a move to a 10-year census); and
- (c) the ABS should be afforded flexibility to recruit and train people with the necessary skills to deliver the 2021 census. Important skills include cyber security, project management and IT contract management.

7.54 The committee was concerned to hear that that the Australian Statistician position was left vacant for the majority of 2014. Complex projects require strong leadership and clear goals. The prolonged vacancy at the ABS—a relatively independent agency that is directed by the Australian Statistician—during which time preparations for the census were being completed is unacceptable.

7.55 The committee remains concerned about the current threat of cyber-attacks that seek to gain access to Australian Government data and records. It is expected that this threat will continue to worsen in the future and all government departments should be properly resourced to defend against these threats. The ABS, which collects and stores a wide array of data, should be particularly well-equipped to deal with these threats, via internal capability or the proper management of external parties to deliver these services.

67 Australian Bureau of Statistics, *Submission 38*, p. 13.

68 Mr David Kalisch, Australian Statistician, Australian Bureau of Statistics, *Committee Hansard*, 25 October 2016, p. 43.

69 Mr David Kalisch, Australian Statistician, Australian Bureau of Statistics, *Committee Hansard*, 19 October 2016, p. 118.

7.56 As discussed in this chapter, the Australian Government has promised additional restorative funding to the ABS to address concerns regarding funding shortfalls within the ABS. This is a welcome step towards ensuring that Australia continues to have the statistical capacities and knowledge within the public sector to meet future needs.

Recommendation 15

7.57 The committee recommends that the Australian Government provide sufficient funding for the ABS to undertake its legislated functions to a continued high standard.

Recommendation 16

7.58 The committee recommends that the responsible minister act as a matter of urgency to assist the ABS in filling senior positions left vacant for greater than 6 months.

**Senator Chris Ketter
Chair**