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Population and Tourism Studies Group  
School for Social and Policy Research  
Charles Darwin University  
Northern Territory 0909  
[www.cdu.edu.au/population](http://www.cdu.edu.au/population)  
population@cdu.edu.au

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## The problem of Indigenous 'not stated' in the Northern Territory

### KEY FINDINGS

- More than 16,000 Northern Territory residents (or 8.5%) did not state their Indigenous status at the 2006 Census.
- Rates of not stated were highest in Jabiru (30%), Coomalie (26%) and inner Darwin (21%). Most suburbs in Darwin and Palmerston recorded above average rates of not stated.
- Rates were far higher for males than females with the sex ratio of not stated at 126, a difference of +20 from the overall sex ratio.
- Rates were highest for those aged over 40 years and lowest for ages 30 to 40 years.
- People who did not provide a response to Indigenous status were highly likely to also not have provided a response to questions about income and religion.
- There is a need for research to inform us of the links between Indigenous not stated and estimates of the population by Indigenous status at regional and local levels.

### RESEARCH AIM

An examination of the high rates of not stated responses to the key question of Indigenous status in the Northern Territory

This research brief discusses the high levels of non-response to the question about Indigenous status with an emphasis on the 2006 Census results. The brief looks at the distribution across the Northern Territory, by sex, and within age groups. A number of other variables are cross classified to look for links between Indigenous not stated and not stated elsewhere on the Census form.

Prepared by Andrew Taylor

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### Background

Demographic research on the past, current, and future characteristics and trends of the Northern Territory's population is highly reliant on data from the Census of Population and Housing. The Census is the only source which provides comprehensive geographic coverage and data which is collected on a consistent basis across the entire population. Census data enables us to compare and contrast the characteristics of individual communities, towns and cities within the Northern Territory and elsewhere in Australia. It is the main input to establishing how settlements and their populations have changed over time and consequently how they might change into the future. In the absence of other comprehensive data sources like a population register (common to some Asian countries), publically available administrative datasets covering a large sector of the population, or a tailored household survey collection (conducted in some States) the importance of Census data is magnified.

However, Northern Territory residents provide the least complete account of the population of all the States and Territories (ABS, 2007a). The problem extends from people either being 'missed' by design or accident (i.e. not filling out a form at all) or from not providing a fully completed census form (known as item non-response or not stated). In the case of the former, if census field staff become aware that a person is resident in a dwelling but has not provided or been included on a census form they will record that person as a resident and attempt to ascertain some information (sex and age in particular) about that person from other residents. The latter situation occurs where a census form is received but answers to particular questions are not provided or are incomplete.

Indigenous people make up a third of the Northern Territory's population. Their demographic and settlement characteristics are quite different to the remainder of the population and consequently their influence on demographic trends is substantial. This is evident in a range of measures. For example, the Territory has the youngest median age of the States and Territories reflecting higher birth rates and lower life expectancy for Indigenous Territorians. Outside of Darwin around half the population are Indigenous with many residing in remote settlements.

Planning for and delivering services to Indigenous Territorians requires robust and accurate data on which policy and programs are formed. But in the census the key question on Indigenous status is poorly completed in the Northern Territory (Figure 1). In Australia in the 2006 Census there were more than 1.1 million records (or 5.7% of the total census count) with unknown Indigenous status (ABS, 2008) with around a third of these being the result of partially completed census forms and the remainder due to the imputation of people who were identified in the census as being resident in dwellings but who did not provide a census form at all. But in the Territory the Indigenous status of almost 9% of residents was unknown, the highest amongst all States and Territories. And in some parts of the Northern Territory, high levels of non-response led to what was believed to be lower counts of the Indigenous population than was expected based on 2001 Census counts and allowing for the components of population change (ABS, 2007b). Katherine is one example. Here, 11.4% of records had unknown Indigenous status (9.9% of these were imputed records).

Figure 1 - Question 7 on the Household Census form

<p><b>7 Is the person of Aboriginal or Torres Strait Islander origin?</b></p> <p>• For persons of both Aboriginal and Torres Strait Islander origin, mark both 'Yes' boxes.</p>	<p><input type="radio"/> No</p> <p><input type="radio"/> Yes, Aboriginal</p> <p><input type="radio"/> Yes, Torres Strait Islander</p>
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Source: ABS, 2008

Where a form is incomplete, answers to some items are able to be imputed including for age, sex, marital status and place or usual residence. Indigenous status is not imputed as a requirement for determining the Indigenous status of a person is for the respondent to self-identify as such. This is not possible once the form has been returned for processing.

A number of adjustment processes are applied to census usual resident data to account for shortcomings in the census count in order to produce Estimate Resident Population (ERP) counts. These are published by Indigenous status (for example, ABS, 2008) and for 2006 they increased the usual resident count for the

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Northern Territory by 24%. Broadly the adjustments applied to the usual resident count to produce Indigenous ERP counts are:

- Imputation of Indigenous status for records with unknown Indigenous status
- An allowance for net census undercount using information from the Post (census) Enumeration Survey
- An estimate of the number of Australian residents temporarily overseas at the time of the census
- Backdating births, deaths, and interstate and overseas migration for the intervening period between the census (8<sup>th</sup> August) and the ERP date (30<sup>th</sup> June).

In this brief we examine the geographic distribution and core characteristics of Indigenous not stated responses across the Northern Territory for the 2006 Census. The aim is to identify and interpret the effects of these on our ability to conduct demographic research including the construct of population projections at the sub-NT level. Projections rely on an accurate 'jump off' population which is the age and sex structure, and by Indigenous status where required, of the population in the base year of the projections. Even at the Northern Territory level there appear to be issues with experimental estimations of the population by age and sex. For example, 2006 estimates suggest some problems with single age groups for Indigenous males aged less than 5 years old whereby there are more males of age 2, 3 and 4 years than there are those aged zero (see Table 1). All things being equal this condition could only occur through in-migration of young babies to the Territory which, on this scale, is very unlikely. This analysis may also help to identify areas where concerted attention may be required in the field and other procedures for future censuses to reduce high rates of Indigenous not stated responses for particular cohorts or in particular places.

Table 1 - Indigenous experimental estimated resident population for Northern Territory and the Remainder of Australia by sex by age at 30 June 2006

Age	Northern Territory		Remainder of Australia	
	No.	%	No.	%
0	780	19.6%	5913	20.6%
1	744	18.7%	5850	20.3%
2	783	19.7%	5638	19.6%
3	842	21.1%	5602	19.5%
4	833	20.9%	5768	20.0%
Total 0-4	3982	100.0%	28771	100.0%

Source: ABS custom data source

### Methods

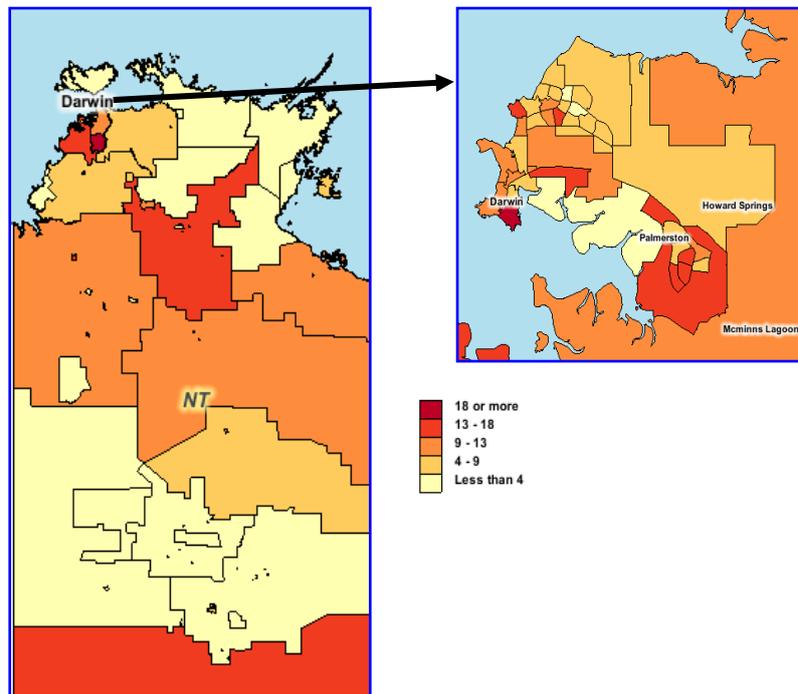
Census data for 2006 Census was obtained using the CDATE online product from the Australian Bureau of Statistics. Various cross classifications of the not stated counts by Statistical Local Areas were undertaken. Analysis of a number of variables and their relationship to not stated was undertaken to establish whether particular 'types' of people were more or less likely to be not stated.

### Results

Overall 16,500 people in the 2006 Census (8.6% of the population) were not stated to the question of Indigenous status compared to 5.7% (but still 1.1 million people) for Australia as a whole. Across the Territory rates of not stated varied significantly between SLAs (Figure 2). Places with a very high rate included Jabiru (30%), Coomalie (26%) and the inner city area of Darwin (21%). Generally rates were higher than average in the suburbs of Darwin, Palmerston, and Alice Springs when compared to the remainder of the Territory. The lowest rates were recorded in remote Aboriginal communities as a result of pre-marking of the question about Indigenous status (to 'Yes, Aboriginal') on the version of the Census form used in such places (for more information see ABS, 2007).

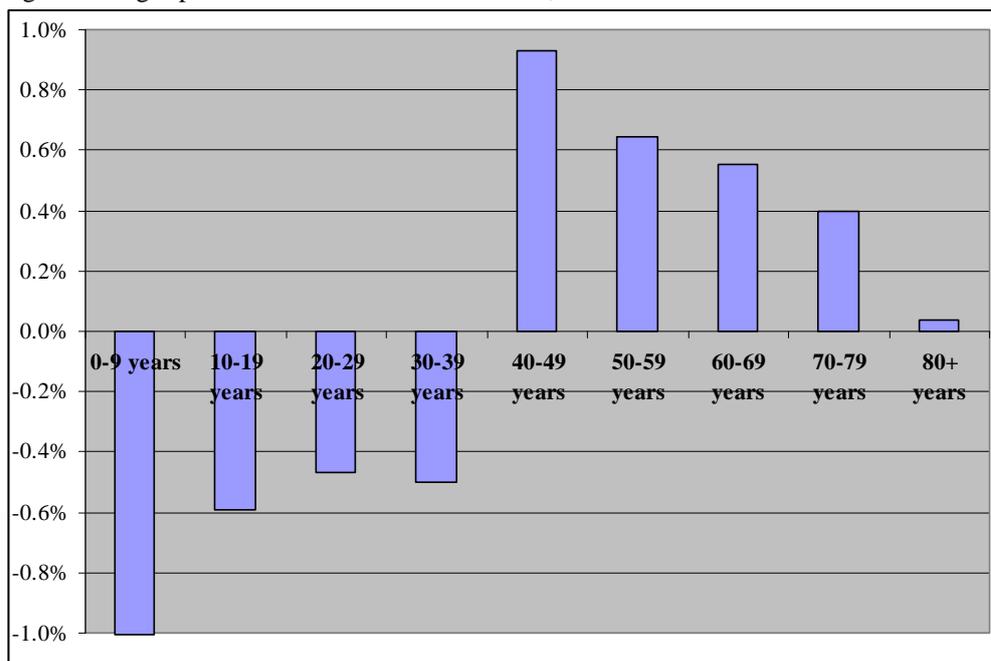
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Figure 2 – Percentage of Indigenous not stated by SLA, 2006



Males were far more likely to be Indigenous not stated but not exceedingly so. At 2006 9.1% of males were not stated and the sex ratio across the Territory for not stateds was 125.6 compared to 106.0 for the total population. In greater Darwin the sex ratio for not stateds was higher still at 130.5. In terms of ages no specific age group stood out as contributing greatly (over and above the age specific population distribution) to the problem. However, it is clear that those aged less than 40 contributed relatively less and those over 40 relatively more on an age-specific basis. Figure 3 demonstrates this by showing the difference between the proportion of each age group in the population and the proportion that age group contributes to not stateds in the NT.

Figure 3 – Age specific contributions to not stateds, 2006



Source: CDATA, 2009

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Only a very small number (680 or 4.1%) of Indigenous not stated aged 15 to 64 years were employed compared to the overall population (around 45% of all residents). Of these around three quarters stated they worked in the private sector. Of more interest is the relationship of not stated to income (which is a variable that accounts for the entire population aged 15 and over rather than just employed persons). More than 90% of Indigenous not stated were also not stated with regards to weekly individual income. This compares to just 13% for the population overall. Similarly, around 91% of Indigenous not stated were also not stated for the question on their main religion compared to 17% for the Northern Territory overall.

Only 7.7% of the Indigenous not stated said that their ancestry (most immediate ancestry) was Aboriginal compared to 42% overall with the large majority (above 90%) saying their ancestry was 'Australian'. However, 12% stated their second level ancestry as Aboriginal compared to 8.8% overall.

### Discussion

These findings are quite consistent with those published by the ABS (1994) for the 1991 Census. Disturbingly the rates of non-response to the question have increased since then despite the question being moved further towards the front of the Census form (questions towards the front generally have lower rates of non-response). Overall the issue of not stated is relatively 'worse' for suburban Northern Territory residents, particularly in Darwin; is relatively worse for males, and is relatively worse for those aged 40 years and above. The results for ancestry do not shed much light on the composition of the not stated cohort. With less than 10% of all people identifying their ancestry as Aboriginal but with a third identifying as Indigenous there is apparently a mismatch in the intent or interpretation of these questions. In some respects this is to be expected because of the special enumeration procedures in remote communities which includes pre-marking of the Indigenous question.

The adjustment processes for Indigenous not stated which leads to the production of experimental ERPs for small area geographies are not entirely clear. It is apparent that some anomalies are produced through the overall adjustment processes but it is not clear to what extent Indigenous not stated contribute because publically released information is not available to determine this. In reality, Indigenous not stated are one of the many causes of differences between the enumerated resident and actual resident population. For modelling population projections analysts are required to manually adjust the official data to cater for the anomalies like those discussed in the introduction. The application of this subjective approach leads inevitably to higher rates of forecast errors than would have otherwise been the case. Forecast errors have historically been very high for the Northern Territory through a range of factors including our small size, but with a significant, but unmeasurable, influence from input data which incorporates error (compared to the 'true' population) or anomalies.

In recent years the ABS has been increasingly willing to open up its internal technical processes for research purposes with the aim of producing more accurate and meaningful data. In the case of Indigenous not stated in the Northern Territory the work here has demonstrated the potential for further research to inform the issue. In particular, an examination of responses from locations which were not subject to pre-marking is warranted to establish whether commonalities in the cohort can be found. If the trend of increased item non-response continues this approach may not only be valuable but also essential. A collaborative approach between researchers and the Demography and Census Divisions of the ABS are likely to yield the best results.

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