Calculating the number of Pacific islanders in Australia: data notes


Understanding the Census’ ancestry response fields

The Census allows respondents up to two ancestry responses. Ancestries selected as first responses are added to the first-ancestry response (ANC1P) count, while ancestries chosen as second responses are added to the second-ancestry response (ANC2P) count. If one replies one ancestry, “ANC2P” is recorded as “Not applicable”. Aside from the ANC1P and ANC2P fields, there is also a multi-response ancestry field (ANCP) that is derived by the ABS from the ANC1P and ANC2P responses. The sum of ANC1P and ANC2P responses deviates marginally from the multi-response ANCP count (both at the response level).

To count the number with Pacific heritage living in Australia, we can add the ANCP responses. But two adjustments need to be made.

Double counting adjustment

As respondents can report up to two ancestry responses, it is important to eliminate the duplicates when reporting the number of people. For example, if a person born in Fiji and claims both Fijian and Ni-Vanuatu ancestries, then they would be counted as “born in the country of heritage” (as Fijian) and “born elsewhere” (as Ni-Vanuatu). This person is of Fijian and Ni-Vanuatu heritage, but should not be double-counted when looking at, say, the total number with Pacific heritage. To make this adjustment, we count how many people report Pacific ancestries both in ANC1P and ANC2P, and subtract that number from the category of those “born elsewhere” and hence from the regional aggregate.

Adjustment for undercounting of Indo-Fijians

The Census started reporting “Fijian Indian” ancestry only in 2011. We assume all first-generation (i.e. born in Fiji) Indians and Southern Asians are non self identifying Indo-Fijians. To estimate the number of second-generation Indo-Fijians, we assume:

\[
\frac{\text{Second generation non self identifying Indo Fijians}}{\text{First generation non self identifying Indo Fijians}} = \frac{\text{Second generation self identifying Indo Fijians}}{\text{First generation self identifying Indo Fijians}}
\]

To estimate the number of born-elsewhere Indo Fijians, we assume:

\[
\frac{\text{Born elsewhere non self identifying Indo Fijians}}{\text{First generation non self identifying Indo Fijians}} = \frac{\text{Born elsewhere self identifying Indo Fijians}}{\text{First generation self identifying Indo Fijians}}
\]

In other words:
Non self identifying Indo Fijians born outside Fiji

Non self identifying Indo Fijians born in Fiji

\[
= \frac{\text{Self identifying Indo Fijians born outside Fiji}}{\text{Self identifying Indo Fijians born in Fiji}}
\]

This calculation also subject to the double counting issue; for example, a person may claim to both Fijian and Fijian Indian. To fix this, we subtract the duplicates of Fijian and Fijian Indians from the Fijian Indians to get adjusted Fijian Indian. We also subtract the duplicates of Indian and Southern Asian who are born in Fiji and duplicate with Fijian and Fijian Indian to get adjusted first-generation Indian and Southern Asian. Then we apply the numbers after adjustments into the equation to estimate second-generation Indian and Southern Asian.

For 2006 Census, as there is no reporting of “Fijian Indian”, the ratios are based on Fijians rather than Fijian Indians.

In general, this method will likely capture some children of Indian expatriates, but this is a much lesser risk than leaving out a large number of Fijian Indians.

Countries and regions

We include the nationalities of independent Pacific island countries (those countries not on this UN list) and also Timor-Leste.

We also include the following regional nationality categories (nfd is ‘not further defined’ and nec is ‘not elsewhere classified’). Their corresponding countries of heritage are shown in the right column. “All level” means all countries/regions within the area. Oceania and Antarctica (all level) that includes Australia and New Zealand so we need to take out people who are born in Australia or New Zealand when we calculate the number of Oceanian, nfd born in country of heritage. (There is no Oceanian nec category.)

<table>
<thead>
<tr>
<th>Nationality categories</th>
<th>Country</th>
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<tbody>
<tr>
<td>Micronesian, nfd and nec</td>
<td>Micronesia (all level)</td>
</tr>
<tr>
<td>Melanesian, nfd and nec</td>
<td>Melanesia (all level)</td>
</tr>
<tr>
<td>Polynesian, nfd and nec</td>
<td>Polynesia (excludes Hawaii) (all level)</td>
</tr>
<tr>
<td>Oceanian, nfd</td>
<td>Oceania and Antarctica (all level)</td>
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There is a special treatment for Marshall Islands, FSM and Palau. As the Census does not report Micronesian country-specific ancestry data (Marshall Islands, FSM and Palau), we treat people born in the country and claims “Micronesian nfd” or “Micronesian nec” as people of that country’s heritage. For example, we treat a person born in Palau and claims to be of Micronesian nec as a Palaun. To avoid double-counting, we subtract those Palaun, Micronesians, and Marshallese when calculating the number of people with regional nationality “Micronesian nfd” and “Micronesian nec”.

How many people with Pacific island heritage live in Australia? by Stephen Howes and Huiyuan Liu