





# Table of Contents

List of Tables and Figures.....	4-5
List of abbreviations.....	6
<b>1</b> <b>Introduction and overview</b> .....	<b>7</b>
<b>2</b> <b>Data and geography</b> .....	<b>8</b>
2.1     Data – the 2011 Census.....	8
2.2     Geography.....	9
<b>3</b> <b>Describing the NSW Aboriginal population</b> .....	<b>10</b>
3.1     The demography of the NSW Aboriginal population.....	10
3.2     Education levels and participation amongst the NSW Aboriginal population.....	11
3.3     Employment levels of the NSW Aboriginal population.....	15
3.4     The distribution of income of the NSW Aboriginal population.....	17
3.5     Housing outcomes of the NSW Aboriginal population.....	20
<b>4</b> <b>Variation in outcomes across NSWALC Regions</b> .....	<b>22</b>
4.1     Demographic outcomes across the NSWALC Regions.....	22
4.2     Education and Indigenous language usage across the NSWALC Regions.....	23
4.3     Employment participation and employment type across the NSWALC Regions.....	25
4.4     Income across the NSWALC Regions.....	27
4.5     Family and household characteristics of Indigenous households across the NSWALC Regions.....	28
<b>5</b> <b>Analysis of the Indigenous lifecourse</b> .....	<b>30</b>
5.1     Employment, education and income across the lifecourse.....	30
5.2     Temporary mobility across the lifecourse.....	45
5.3     Permanent migration across the lifecourse.....	49
<b>6</b> <b>Migration across the NSWALC Regions</b> .....	<b>55</b>
6.1     Population flows into or out of NSWALC Regions.....	55
6.2     Source and destination Regions.....	57
References.....	61
Appendix figures and tables.....	62



New South Wales  
Aboriginal Land Council

# List of Tables and Figures

Figure 1	Age distribution of the Aboriginal and non-Aboriginal population of NSW, 2011 .....	11
Figure 2	Per cent of 4-5 year olds attending preschool (excluding those attending kindergarten or above), NSW and the rest of Australia, 2011 .....	12
Figure 3	Per cent of school students attending a non-government school, NSW and the rest of Australia, 2011 .....	13
Figure 4	Per cent of population aged 20-24 years who have completed Year 12, NSW and the rest of Australia, 2011 .....	14
Figure 5	Per cent of non-school population aged 15-24 years who were participating in post-school education, NSW and the rest of Australia by high school completion, 2011 .....	15
Figure 6	Age distribution of Aboriginal and non-Aboriginal employment, NSW, 2011 .....	16
Figure 7	Occupation status by education completion, NSW, 2011 .....	17
Figure 8	Individual income by hours worked and sex, NSW, 2011 .....	18
Figure 9	Equivalised household income (weekly), NSW, 2011 .....	19
Figure 10	Per cent of households living in a dwelling that they own or are purchasing, NSW and the rest of Australia, 2011 .....	20
Figure 11	Per cent of households estimated to not meet the occupancy standards and requiring additional bedrooms, NSW and the rest of Australia, 2011 .....	21
Figure 12	Distribution of Aboriginal peoples across nine NSWALC Regions .....	22
Figure 13	Per cent of Aboriginal population who speak an Indigenous language at home .....	23
Figure 14	Per cent of Aboriginal population participating in education – By age and NSWALC Region .....	24
Figure 15	Per cent of Aboriginal population who have completed Year 12 or equivalent – By age and NSWALC Region .....	25
Figure 16a	Employment outcomes for Aboriginal males aged 25 to 54 years, by NSWALC Region .....	26
Figure 16b	Employment outcomes for Aboriginal females aged 25 to 54 years, by NSWALC Region .....	26
Figure 17	Mean income for Aboriginal population and share of income received by the Aboriginal population, by NSWALC Region .....	27
Figure 18	Family type for people living in Indigenous households, by NSWALC Region .....	28
Figure 19	Tenure type of Indigenous households, by NSWALC Region .....	29
Figure 20	Per cent of population employed – Aboriginal and non-Aboriginal peoples in NSW by education, age and sex, 2011 .....	31
Table 1	Industry of employment for Aboriginal and non-Aboriginal males and females, NSW, 2011 .....	32
Figure 21	Index of dissimilarity for industry of employment, NSWALC Regions, 2011 .....	33
Figure 22a	Industry of employment for Aboriginal and non-Aboriginal males, by education level, 2011 .....	35
Figure 22b	Industry of employment for Aboriginal and non-Aboriginal males, by education level, 2011 .....	36
Table 2	Field of study for Aboriginal and non-Aboriginal males and females, by highest qualification, NSW, 2011 .....	37
Figure 23a	Per cent of employees who are employed as a manager or professional, Aboriginal and non-Aboriginal males, by age, NSW, 2011 .....	38

# List of Tables and Figures

<b>Figure 23b</b>	<i>Per cent of employees who are employed as a manager or professional, Aboriginal and non-Aboriginal females, by age, NSW, 2011</i> .....	39
<b>Figure 24a</b>	<i>Average weekly income, Aboriginal and non-Aboriginal males, by age and industry group, NSW, 2011</i> .....	40
<b>Figure 24b</b>	<i>Average weekly income, Aboriginal and non-Aboriginal females, by age and industry group, NSW, 2011</i> .....	41
<b>Figure 25a</b>	<i>Number of children ever born for Aboriginal females, by age, Year 12 completion and employment, NSW, 2011</i> .....	42
<b>Figure 25b</b>	<i>Number of children ever born for non-Aboriginal females, by age, Year 12 completion and employment, NSW, 2011</i> .....	43
<b>Figure 26</b>	<i>Mean income for Aboriginal and non-Aboriginal males and females, by education completion, NSW, 2011</i> .....	44
<b>Figure 27</b>	<i>Per cent of population away from their place of usual residence on Census night, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011</i> .....	45
<b>Figure 28a</b>	<i>Per cent of population who have completed Year 12 who were away from their place of usual residence on Census night, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011</i> .....	46
<b>Figure 28b</b>	<i>Per cent of population who had not completed Year 12 who were away from their place of usual residence on Census night, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011</i> .....	47
<b>Figure 29a</b>	<i>Per cent of population who were employed who were away from their place of usual residence on Census night, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011</i> .....	48
<b>Figure 29b</b>	<i>Per cent of population who were employed who were away from their place of usual residence on Census night, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011</i> .....	49
<b>Figure 30</b>	<i>Per cent of population who changed their usual residence between 2010 and 2011, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011</i> .....	50
<b>Figure 31a</b>	<i>Per cent of population who had completed Year 12 who changed their usual residence between 2010 and 2011, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011</i> .....	51
<b>Figure 31b</b>	<i>Per cent of population who had not completed Year 12 who changed their usual residence between 2010 and 2011, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011</i> .....	52
<b>Figure 32a</b>	<i>Per cent of population who were employed who changed their usual residence between 2010 and 2011, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011</i> .....	53
<b>Figure 32b</b>	<i>Per cent of population who were employed who changed their usual residence between 2010 and 2011, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011</i> .....	54
<b>Figure 33a</b>	<i>Population flows into and out of NSWALC Regions, Aboriginal peoples, 2006 to 2011</i> .....	56
<b>Figure 33b</b>	<i>Population flows into and out of NSWALC Regions, non-Aboriginal peoples, 2006 to 2011</i> .....	56
<b>Table 3</b>	<i>Destination NSWALC Regions for those who moved out of particular source NSWALC Regions between 2006 and 2011, Aboriginal and non-Aboriginal peoples</i> .....	58
<b>Table 4</b>	<i>Source NSWALC Regions for those who moved into particular source NSWALC Regions between 2006 and 2011, Aboriginal and non-Aboriginal peoples</i> .....	59

# List of abbreviations

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<b>Aboriginal Australians</b> .....	Those who identify on the Census as being Aboriginal or both Aboriginal and Torres Strait Islander
<b>ABS</b> .....	The Australian Bureau of Statistics
<b>ANU</b> .....	Australian National University
<b>ASGS</b> .....	Australian Standard Geographic Classification System
<b>ANZSIC</b> .....	Australian and New Zealand Standard Industrial Classification
<b>CALD</b> .....	Culturally and Linguistically Diverse
<b>CAEPR</b> .....	Centre for Aboriginal Economic Policy Research
<b>Indigenous Australians</b> .....	Those who identify on the Census as being Aboriginal and/or Torres Strait Islander
<b>Indigenous households</b> .....	Those households where at least one usual resident identified as being Aboriginal and/or Torres Strait Islander
<b>LALC</b> .....	Local Aboriginal Land Council
<b>NATSISS</b> .....	National Aboriginal and Torres Strait Islander Social Survey
<b>NSWALC</b> .....	New South Wales Aboriginal Land Council
<b>OECD</b> .....	Organisation for Economic Co-operation and Development
<b>SA1/SA2</b> .....	Statistical Area Level 1/2
<b>SA2U5P</b> .....	Statistical Area 2 of usual residence five years before the 2011 Census
<b>SA2UCP</b> .....	Statistical Area 2 of usual residence on the night of the 2011 Census

# 1. Introduction and overview

The New South Wales Aboriginal Land Council (NSWALC) is that state's peak Aboriginal representative body. The NSWALC's aim is to 'protect the interests and further the aspirations of its members and the broader Aboriginal community.' In addition to its main focus of the development of land rights for Aboriginal people in NSW, the NSWALC 'is committed to ensuring a better future for Aboriginal people by working for the return of culturally significant and economically viable land, pursuing cultural, social and economic independence for its people and being politically pro-active and voicing the position of Aboriginal people on issues that affect them.'

The Centre for Aboriginal Economic Policy Research (CAEPR) at the Australian National University (ANU) is Australia's foremost social science research body focusing on Indigenous economic and social policy from a national perspective. The centre's aim is to 'undertake social science research on Indigenous policy and development that is excellent by the best international and disciplinary standards and that informs intellectual understanding, public debate, policy formation and community action.'

In 2012, the NSWALC commissioned CAEPR to undertake a detailed analysis of results from the soon to be released 2011 Census of Population and Housing (or the Census, for short). Data was to be released progressively from the Census, with the first round of data available made available in late June 2012, with second release data available in late October. This paper provides a summary of the analysis of the NSW Aboriginal population as represented in the 2011 Census. The report was written by Dr. Nicholas Biddle, a Fellow at CAEPR. Assistance was provided by Ms. Maxine Montaigne, also of CAEPR, with a number of comments also greatly received by staff of the NSWALC.

In the next section of the paper provides a summary of the data and geography used in the remainder of the paper. This is followed by Section 3 which looks at the whole of the NSW Aboriginal population, with relevant comparisons made with the non-Aboriginal population of the state. Section 3 begins with a look at the demography of the NSW Aboriginal population, followed by an analysis of the education levels of the population. The analysis then turns to economic outcomes, with a particular focus on employment and income. In the final part of Section 3, discussion is provided regarding housing outcomes.

Section 4 of the paper looks at variation across the nine NSWALC Regions. There is considerable diversity across the demographic and socioeconomic outcomes of Aboriginal peoples of NSW which should not be overlooked. The nine regions (in alphabetical order) are: Central, Far North Coast, Mid North Coast, North West, Northern, South Coast, Sydney/Newcastle, Western and Wiradjuri.

Section 5 of the paper is motivated by the fact that there is considerable interaction between demography, social and economic characteristics of the population. Furthermore, these characteristics vary considerably across the lifecycle with individual and family outcomes of the young having a considerable influence on their life chances. This analysis of the Aboriginal lifecycle begins with employment, education and income the moves onto temporary mobility and permanent migration. This permanent migration not only has an impact on individuals, but can also impact on the size and structure of each region's population. For this reason, the final section of the paper looks at migration across the nine NSWALC Regions, beginning with an analysis of population flows into or out of NSWALC Regions and then looking at the source and destination Regions of those who did move over the five years leading up to the 2011 Census.

<sup>1</sup> <http://caepr.anu.edu.au/>

## 2. Data and geography

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*This section outlines the methods used for the analysis in this paper beginning with a discussion of the main data source (the 2011 Census) followed by an overview of the geography used for the regional and small-area analysis.*

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### **2.1 Data – the 2011 Census.**

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Analysis presented in this paper utilises data from the 2011 Census of Population and Housing. Those within the scope of the Census are all people in Australia on the night of the Census (August 9th), excluding foreign diplomats and their families. Visitors to Australia are counted but separately identified. Very little additional information is collected on these visitors and they tend to be excluded from most analysis (including in this paper). Australian residents out of the country on the night of the Census are not counted, but are added back into the population estimates (as explained below).

For the most part, the Census is self enumerated which means that respondents fill in the information using either pen-and-paper or (increasingly) online. Around 43,000 Census collectors drop-off and pick-up forms to private dwellings whereas in non-private dwellings staff distribute personal forms and a privacy envelope. Special strategies are used in the Census for Aboriginal and Torres Strait Islander Australians (including special collectors in certain remote communities and translation services); Culturally and Linguistically Diverse (CALD) groups; the homeless; and those travelling on the night of the Census.

The five-yearly Census is the main source of information on race and ethnicity in Australia. However, the 1976 Census was the last one to directly include a question about racial origin. In the 1986 Census, in response to community interests and lobbying, a question was included asking about each person's ancestry. While the question was discontinued in subsequent Censuses, it was reinstated for the 2001, 2006 and 2011 Censuses.

While people can identify themselves as Aboriginal and/or Torres Strait Islander in the Census ancestry question, there is also a direct question that provides a more inclusive estimate of the size of the population. Only 0.6 per cent of the population identified as Aboriginal or Torres Strait Islander in the 2011 ancestry question compared with 2.5 per cent of the population who responded that they were either Aboriginal and/or Torres Strait Islander in the direct question on Indigenous status.

The question used in the Census to identify whether a person is Aboriginal, Torres Strait Islander or neither has stayed consistent over the last few decades. In 2011, those filling out the household form were asked the following about each individual in the household—'Is the person of Aboriginal or Torres Strait Islander origin?' Three options were given for the response: No; Yes, Aboriginal; or Yes, Torres Strait Islander. Instructions on the form also indicated that 'For persons of both Aboriginal and Torres Strait Islander origin, mark both 'Yes' boxes.'



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## 2.2 Geography

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Analysis in this paper is undertaken at three levels of geography:

- The whole of NSW;
- NSWALC Regions (of which there were 9 excluding unincorporated areas); and
- Local Aboriginal Land Councils (LALCs, of which there were 120).

The boundaries and full list of these regions can be found at <http://www.alc.org.au/land-councils/lalc-regions--boundaries.aspx>. The accompanying map can also be found in Appendix Figure 1. Data at these levels of geography is not a standard output of the Australian Bureau of Statistics (ABS). However, a special request was made for this project for geographic concordances. These concordances are used to apportion people from the Census using the Australian Standard Geographic System (ASGS).

The most disaggregated level of geography in the ASGS is Statistical Area 1s (SA1s) of which there were 17,891 in NSW. Using this classification, the online data management program *Tablebuilder* was used to calculate the number of Aboriginal and non-Aboriginal people with a range of demographic and socioeconomic characteristics. If the SA1 fell wholly within a particular LALC, then all the people in the SA1 were allocated as such. However, if the SA1 crossed LALC boundaries, then the individuals in the SA1 were allocated to the relevant LALCs based on the proportion of the total population from that SA1 who were in each of the LALCs.

To help understand the way in which these concordances work, it is worth stepping through a hypothetical example. Suppose there were 10 Aboriginal people in a particular SA1 aged 25 to 54 who were employed and 20 who were not employed. Furthermore, suppose 60% of the total population in that SA1 lived in LALC-A and 40% of the population lived in LALC-B. Under these circumstances, 6 of the employed Aboriginal people would be allocated to LALC-A alongside 12 of those not employed. The remaining 4 and 8 employed and non-employed people would be allocated to LALC-B. These would then be combined with other people from other SA1s that fall within those LALCs to estimate the employment to population ratios for that LALC.

One of the downsides of this approach is that the ABS adds some random variation to data that it makes publically available. This is particularly an issue with small geographic areas like SA1s. This randomness will flow through to the LALCs when the data is aggregated. The data will not be biased – that is, percentages calculated for the LALCs will not be systematically higher or lower. However, this randomisation does add a degree of uncertainty to the LALC estimates. For this reason, some age ranges and other groupings are collapsed when producing LALC-level estimates.

Due to the randomisation carried out by the ABS, when calculating data for NSWALC Regions, data is extracted at the SA2 level. This is the next highest level of geography in the ASGS and there are 538 of these in NSW. A separate concordance which allocates SA2s to NSWALC Regions was provided by the ABS.

## 3. Describing the NSW Aboriginal population

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It is estimated that there were 631,757 Aboriginal people in Australia as of June 30th 2011.<sup>2</sup> Of these, 202,674 were living in NSW, or 32.1 per cent of the total Aboriginal population. Only Queensland has a comparable population with an estimated 164,557 Aboriginal peoples living in that state. To put these results into perspective, there were more Aboriginal peoples living in NSW than the whole of South Australia, Western Australia and the Northern Territory combined (190,871).

### 3.1 The demography of the NSW Aboriginal population

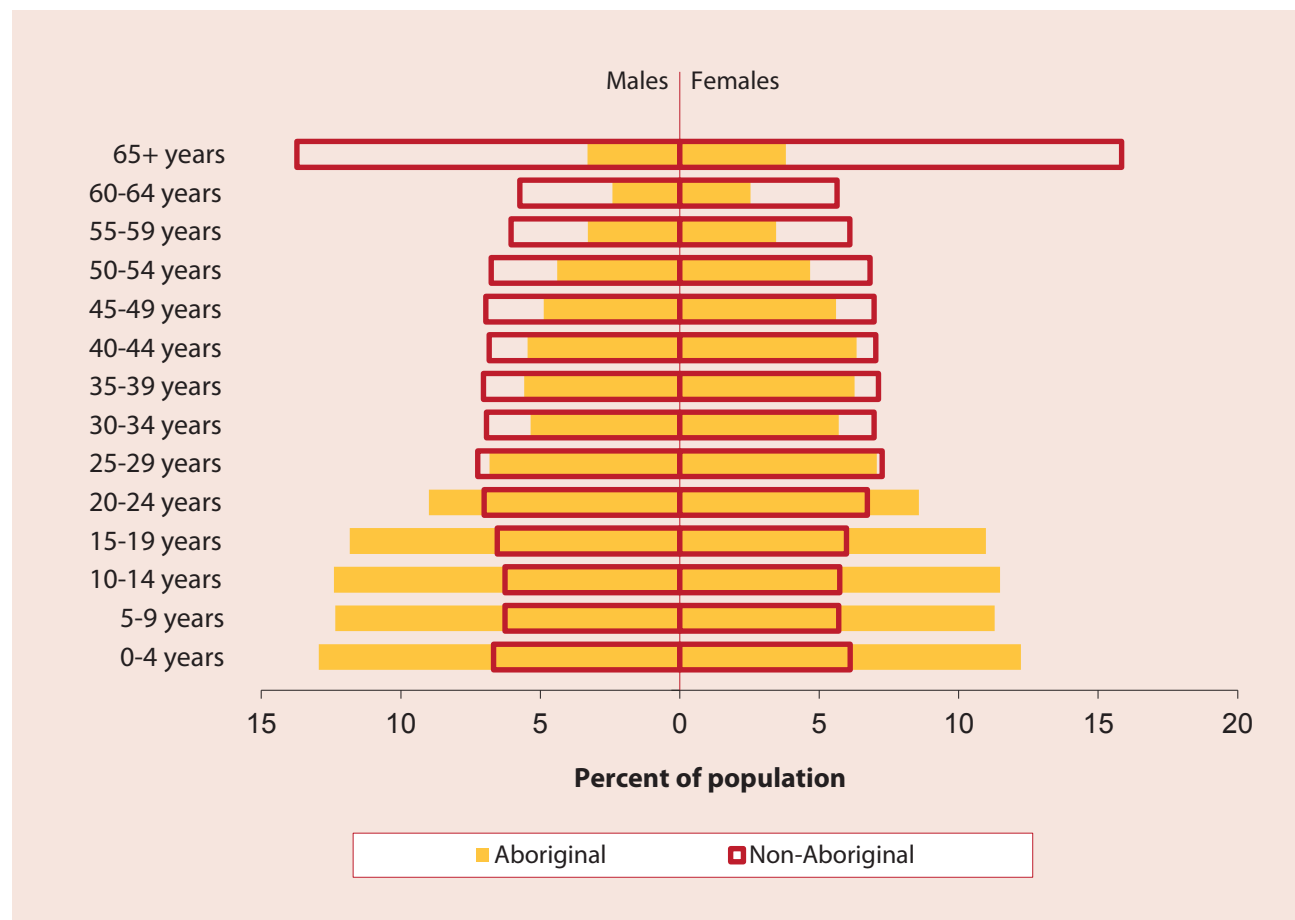
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While the Aboriginal population of NSW makes up a small share of the total NSW population, this varies considerably across the age distribution. Around 5.4 per cent of those aged 0 to 14 years living in NSW were estimated to be Aboriginal. While not as large as this child and school age population, those Aboriginal peoples in NSW aged 15 to 29 years and therefore entering the workforce and their main childbearing years made up 3.7 per cent of the total state population.

The relatively young age distribution of the Aboriginal population in NSW is demonstrated in the following age pyramid. In the figure, the grey bars show the age distribution of the Aboriginal population (through the proportion of a population that is in each age group) and the hollow bars the age distribution of the non-Aboriginal population.

<sup>2</sup> Population estimates in this paper are based on applying the age-specific undercount factor estimated by the ABS for the Indigenous population to Census population counts of those who identify as being Aboriginal or both Aboriginal and Torres Strait Islander. The non-Aboriginal population estimates are found by applying the non-Indigenous undercount factor.

Figure 1 Age distribution of the Aboriginal and non-Aboriginal population of NSW 2011



Results in the figure show that a much higher proportion of the Aboriginal population is aged 24 years of less than is the case for the non-Aboriginal population. Across males and females, these age groups represent 56.5 per cent of the total Aboriginal population compared to 31.5 per cent of the total non-Aboriginal population of NSW. At the other end of the age distribution, 26.6 per cent of the total non-Aboriginal population is aged 55 years and over compared to 9.4 per cent of the Aboriginal population. Given this age structure, it is likely that the Aboriginal population will grow in the future.

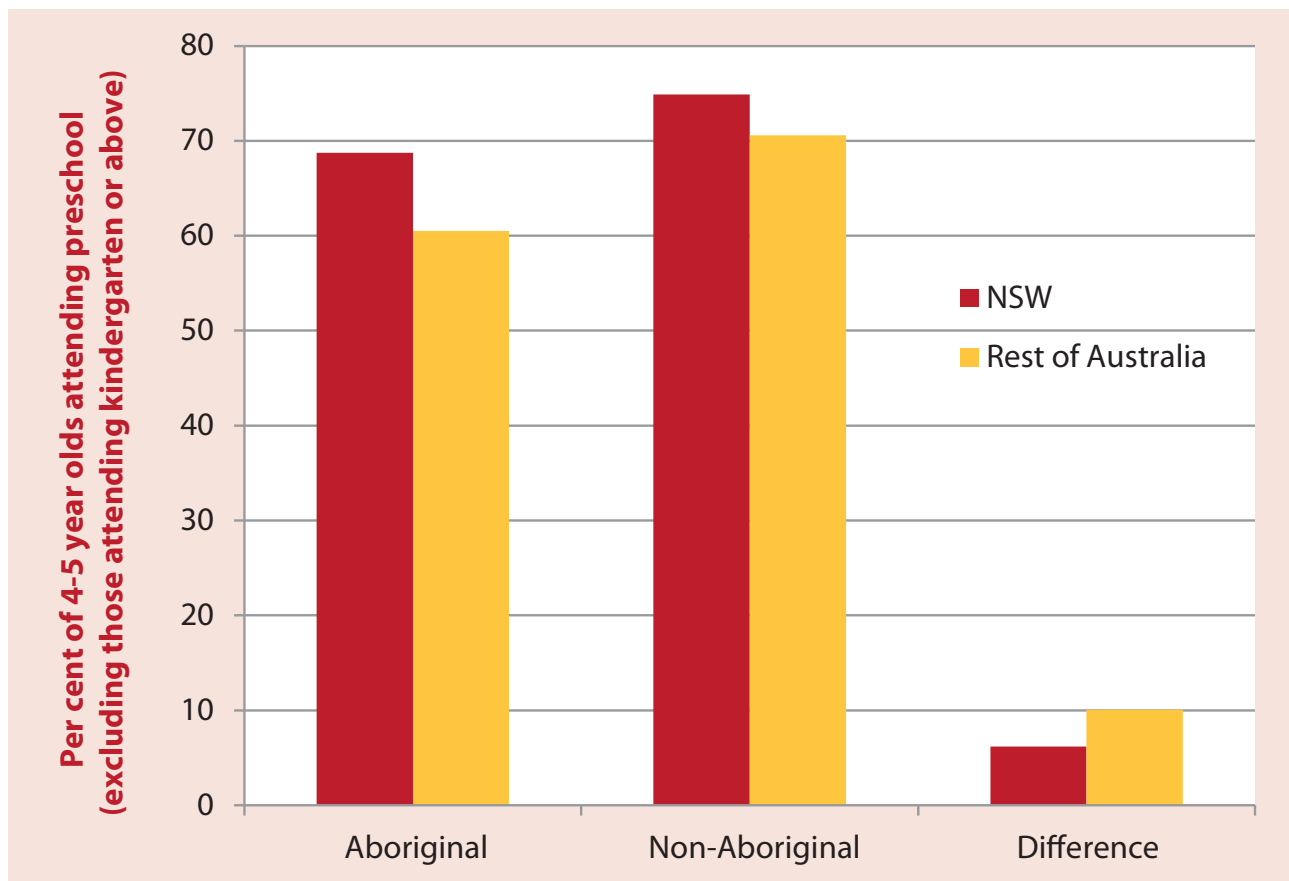
### 3.2 Education levels and participation amongst the NSW Aboriginal population

As demonstrated in the following four figures, compared to the rest of the NSW population, Aboriginal children and youth are less likely to attend preschool; less likely to be attending a non-government school (for those who are school students); less likely to complete Year 12; and less likely to participate in post-school education than their non-Aboriginal counterparts.

One of the determinants of a child's cognitive and non-cognitive development is access to quality preschool options. Partly because of the effect on later academic achievement, but also because of direct effects on social skills, maturity and self-confidence (Kronemann, 1998), children who attend preschool have been found to be better off in terms of self-esteem and later social and emotional maturity (Hull & Edsall, 2001).

With regards to health, attendance at preschool may expose a child to a greater number of potential infections and infectious diseases (Ferson, 1997). However, these short-term costs are likely to be counterbalanced by a number of positive effects. Long-term health is likely to be improved through the effect preschool has on cognitive development and academic achievement (see Masse & Barnett, 2002 for a calculation of the effect on smoking). There are also likely to be direct, immediate effects on nutritional or general health knowledge (Hendricks, Echols, & Nelson, 1989). The potential positive effects that preschool education might have on future academic achievement and broader cognitive development are also important. Preschool can improve a child's school readiness and close some of the gap between 'at-risk' and other students in terms of cognitive development and school achievement. In addition, geographic access is important. However, even if there is a preschool in the area in which an Aboriginal child lives, that does not mean that the child will necessarily attend. Results presented in Figure 2 below show that Aboriginal children in NSW are less likely to attend preschool than their non-Aboriginal counterparts.

*Figure 2 Per cent of 4-5 year olds attending preschool (excluding those attending kindergarten or above), NSW and the rest of Australia, 2011*



There are two points to note from Figure 2. First, excluding those who were currently attending kindergarten or above, there is a reasonably large difference between Aboriginal and non-Aboriginal children aged 4-5 years in terms of preschool participation. Around 68.7 per cent of the relevant Aboriginal population were attending preschool compared to 74.9 per cent of the non-Aboriginal population. The second thing to note though is that the level of participation in NSW is higher, on average, than for the rest of Australia and the difference between the Aboriginal and non-Aboriginal population is smaller.

Unfortunately, there is very little information on school progress in the Census. However, in addition to preschool attendance, one of the potential reasons for differential development of cognitive and non-cognitive ability is the school sector that Aboriginal and non-Aboriginal students attend. In NSW, there are three main education sectors: government schools (administered by NSW Department of Education and Communities), the Catholic school system and other non-government schools.

The proportion of students attending non-government schools has increased quite substantially in the last 30-40 years. This has been caused in part by Commonwealth Government funding to non-government schools that began in the early 1950s and has increased reasonably steadily (even on a per-capita basis) ever since. Ryan and Watson (2004) show that the increase in funding has not led to a fall in school fees charged by non-government schools, but rather an increase in the amount of resources devoted to each student. This in turn has led to a continuation of non-government school students being from a relatively high socioeconomic status background. This is particularly the case for independent schools or, non-Catholic, non-government schools.

Furthermore, Vella (1999) and Le and Miller (2003) showed that even after controlling for the type of student that attends, non-government school students had a higher rate of school completion than those in government schools. Economic resources are not the only input into a quality school environment and most government schools continue to provide a high quality education by international standard. Figure 3 below gives the per cent of Aboriginal and non-Aboriginal school students who were attending a non-government school according to the 2011 Census.

Figure 3 Per cent of school students attending a non-government school, NSW and the rest of Australia, 2011

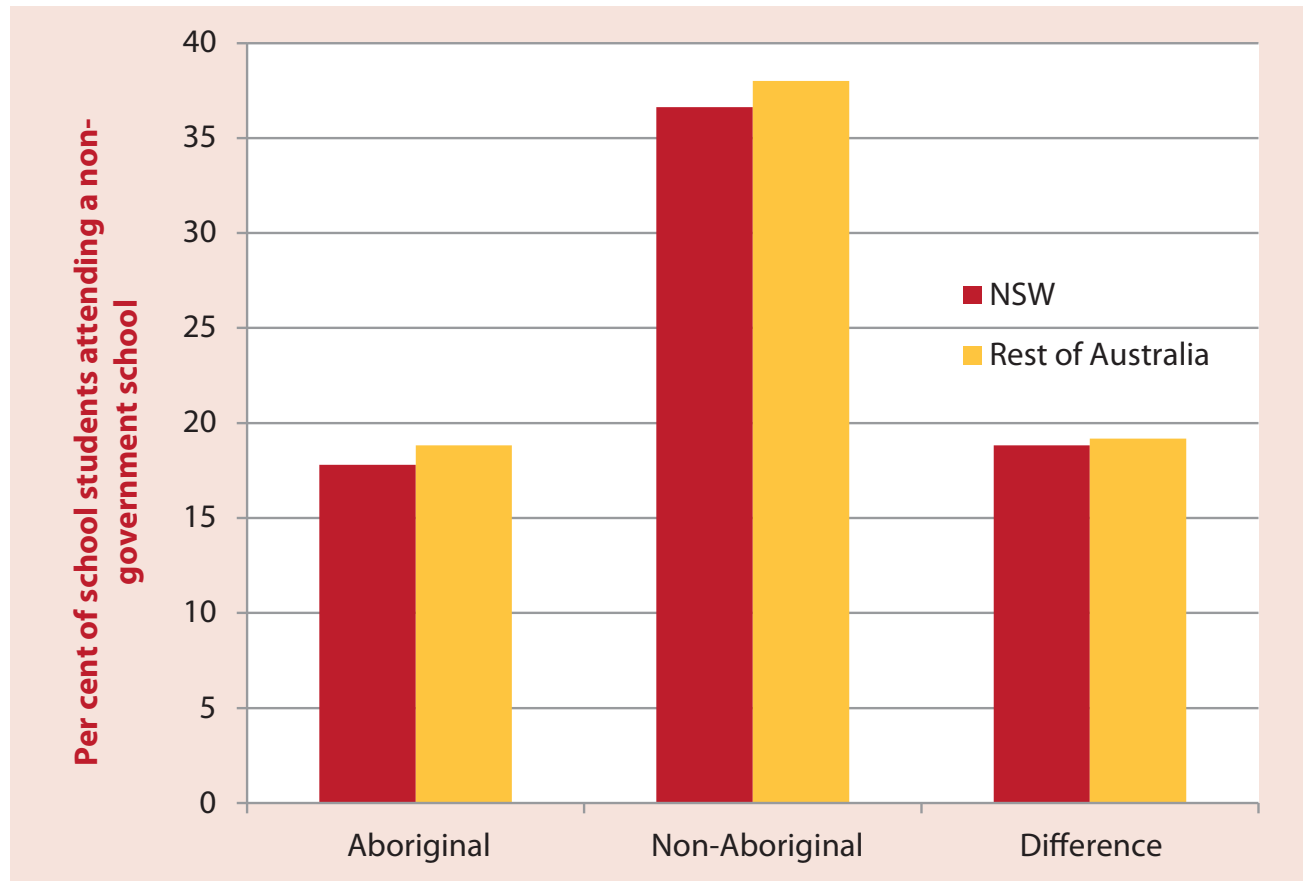


Figure 3 shows that a much smaller proportion of Aboriginal students in NSW were attending a non-government school compared to other students. Indeed, with a difference of 18.8 per cent (17.8 per cent compared to 36.6 per cent) the rate of attendance is less than half that of the non-Aboriginal population. The differences in school sector may explain at least some of the gap in school completion demonstrated in Figure 4.

Figure 4 Per cent of population aged 20-24 years who have completed Year 12, NSW and the rest of Australia, 2011

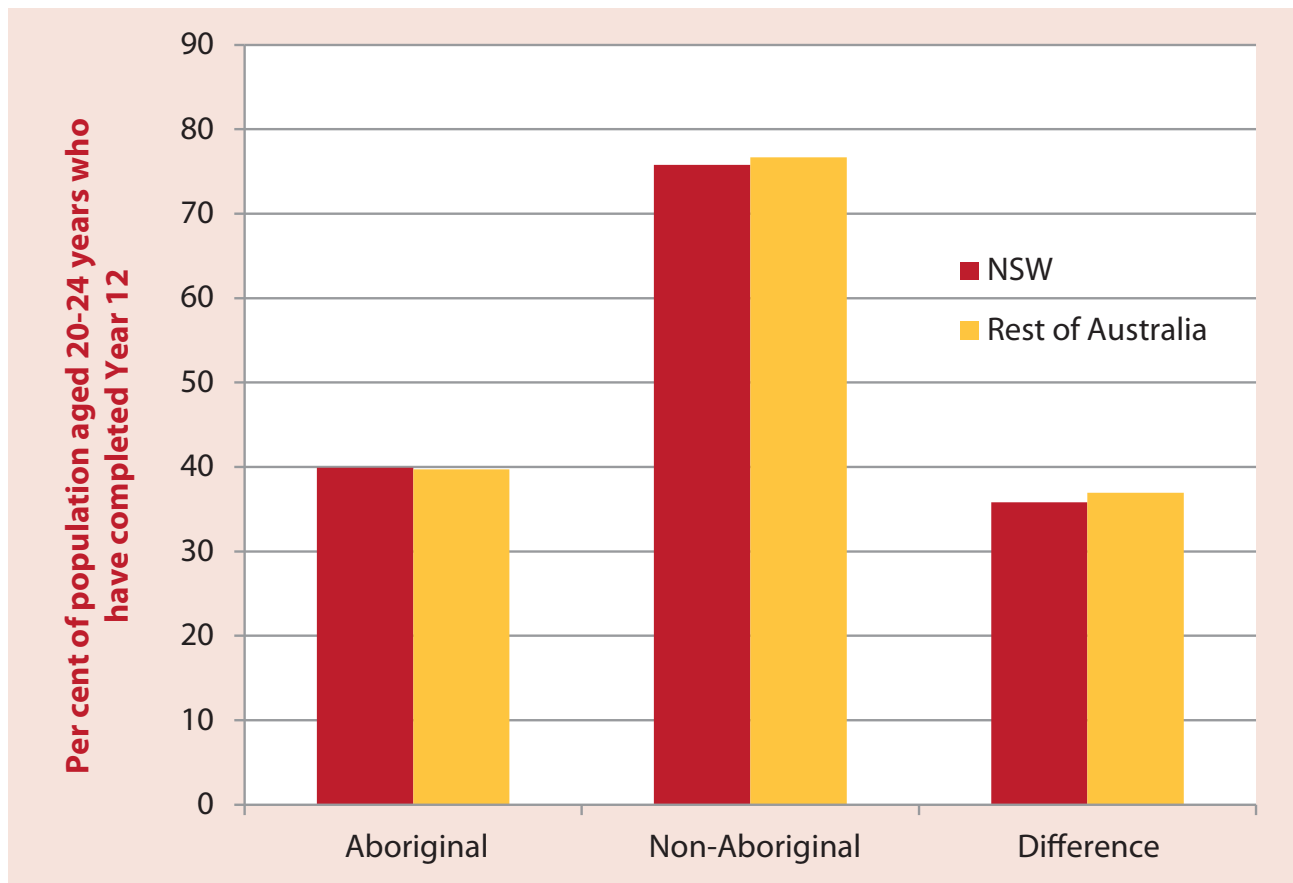


Figure 4, which gives the per cent of population aged 20-24 years who have completed Year 12, shows that Aboriginal youth in NSW are much less likely to have completed Year 12 compared to their non-Aboriginal counterparts. Although there is a slightly bigger difference for the rest of Australia, this is driven by the slightly higher percentage amongst the non-Aboriginal population.

Although there are large benefits to completing Year 12, post-school qualifications also play a large part in later life outcomes. The following figures show that, regardless of whether or not they have completed Year 12, an Aboriginal youth aged 15 to 24 years in NSW is less likely to be undertaking post-school education as opposed to a non-Aboriginal youth.

Figure 5 Per cent of non-school population aged 15-24 years who were participating in post-school education, NSW and the rest of Australia by high school completion, 2011

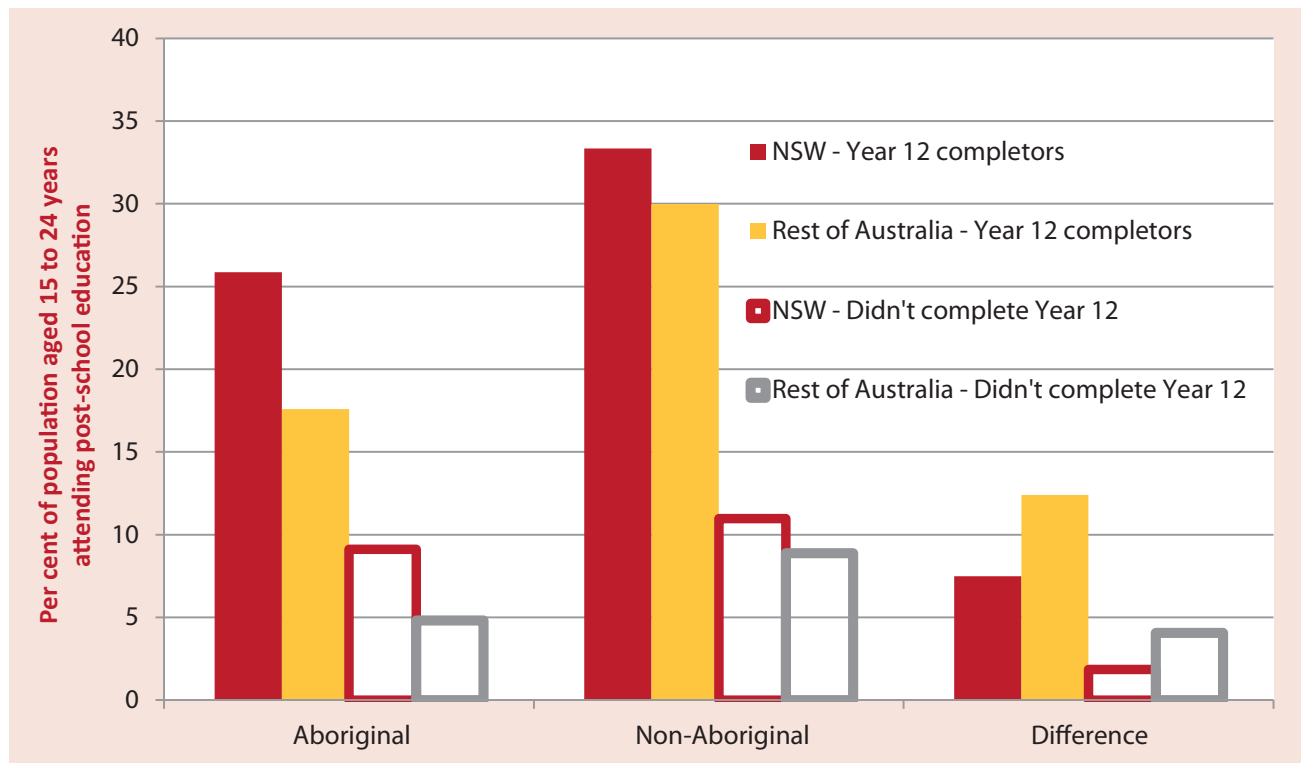


Figure 5 shows a large difference in post-school participation in NSW between Aboriginal and non-Aboriginal youth. The difference was greatest amongst those who had completed Year 12, but was lower in NSW compared to the rest of Australia.

### 3.3 Employment levels of the NSW Aboriginal population

There are a number of outcomes of completing Year 12. One of the most obvious is the improved ability to find and maintain employment. There is consistent evidence across a number of datasets (summarised in Biddle and Cameron, 2012) that Aboriginal and Torres Strait Islander peoples also experience large employment returns to education. It is not surprising, therefore, given the relatively low levels of education summarised in Figure 5 that Aboriginal peoples in NSW have poorer employment prospects than the rest of the population.

Across the state, 49.4 per cent of Aboriginal males aged 15 to 64 years were employed at the time of the 2011 Census compared to 76.0 per cent of the non-Aboriginal male population of the same age. While the difference isn't as large for females, there is still quite a gap with 44.0 per cent of Aboriginal females aged 15 to 64 employed compared to 65.4 per cent of non-Aboriginal females.

In addition to the relatively low levels of education documented in Figure 5, a further explanation for relatively low levels of employment is the youthful age profile of Aboriginal males and females in NSW. However, as shown in Figure 6, for all ages, Aboriginal peoples in NSW have a lower level of employment than their non-Aboriginal counterparts.

Figure 6 Age distribution of Aboriginal and non-Aboriginal employment, NSW, 2011

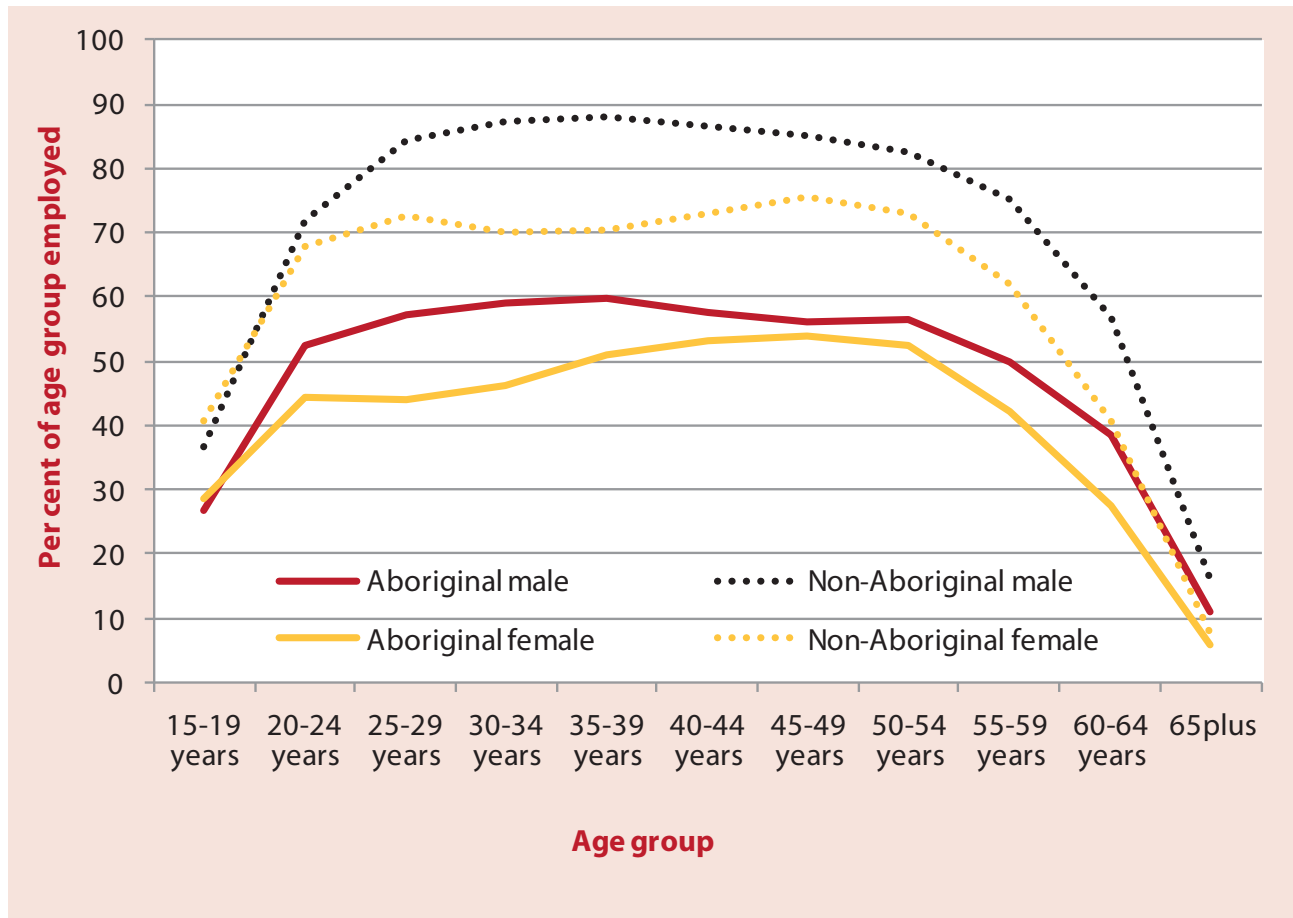


Figure 6 highlights the age profile of employment that is common to both males and females and to Aboriginal and non-Aboriginal peoples. Employment starts off very low for those aged 15 to 19, reflecting the high level of education participation at that age. It then increases substantially, before levelling out between the age of around 30 and 50. Employment then declines reaching a very low level amongst those aged 65 years and over.

There are slight differences by gender, with females reaching a peak employment probability later than men (around 45 to 54 years) reflecting greater caring responsibilities (Yap and Biddle, 2012). Differences between Aboriginal and non-Aboriginal peoples in NSW, on the other hand, are consistent across the lifecourse with higher rates of employment for the latter in all age groups.

Not only are there differences in the level of employment by whether or not a person identifies as being Aboriginal, there are also differences in the type of job held. Once again, this is driven in part by lower levels of education. However, even for a given level of education, Aboriginal people in NSW are less likely to be employed as a manager or professional than their non-Aboriginal counterparts. This is demonstrated in Figure 7 which gives the per cent of the population employed in such occupations by sex and Year 12 completion, separately for Aboriginal and non-Aboriginal peoples in NSW.



Figure 7 Occupation status by education completion, NSW, 2011



There are two main findings from Figure 7. First, for all four population groups (Aboriginal and non-Aboriginal by sex), being employed as a Manager or Professional is much more common for those who have completed Year 12 compared to those who have not. However, even for a given level of education, there are large differences in occupation status by whether or not a person identifies as being Aboriginal. The one exception to this is Aboriginal females who have not completed Year 12. For this group, Aboriginal and non-Aboriginal females have very similar percentages (around 18 per cent).

### 3.4 The distribution of income of the NSW Aboriginal population

Managers and professionals tend to have higher social status within the wider community. However, one of the more direct effects is a higher level of income. This could be through the effect on the probability of being employed full-time as opposed to part-time. However, even for a given number of hours worked, managers or professionals tend to have higher incomes than other workers. This is a partial explanation, therefore, for the higher median income of non-Aboriginal peoples in NSW compared to the Aboriginal population demonstrated in Figure 8.

Figure 8 Individual income by hours worked and sex, NSW, 2011

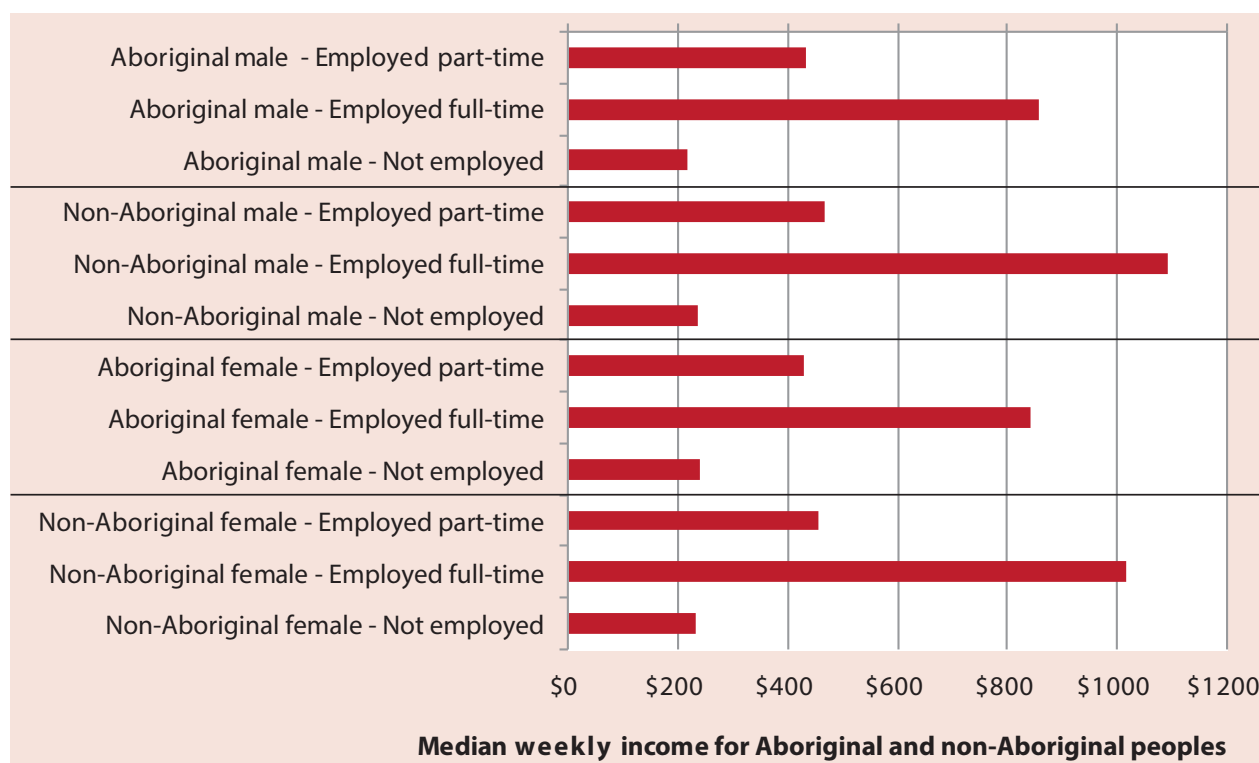


Figure 8 gives the median weekly income of Aboriginal and non-Aboriginal males and females in NSW by whether or not the person works part-time, full-time or not at all. Clearly and not surprisingly, those who work full-time have higher incomes than those who work part-time, who in turn have higher incomes than those who do not work at all. Even within these categories, however, Aboriginal peoples in NSW tend to have lower median income than their non-Aboriginal counterparts. The difference is greatest amongst Aboriginal males working full-time who have a median income that is only 78 per cent of the income of a non-Aboriginal male working full-time. However, apart from females who are not working, Aboriginal peoples on average have a lower income.

Given the employment data presented in Figures 6 and 7, it is not surprising that Aboriginal peoples in NSW have less access to economic resources than their non-Indigenous counterparts. However, this is further reinforced by the fact that, as shown in Figure 8, Aboriginal peoples in NSW have lower average income regardless of the number of hours they work per week.

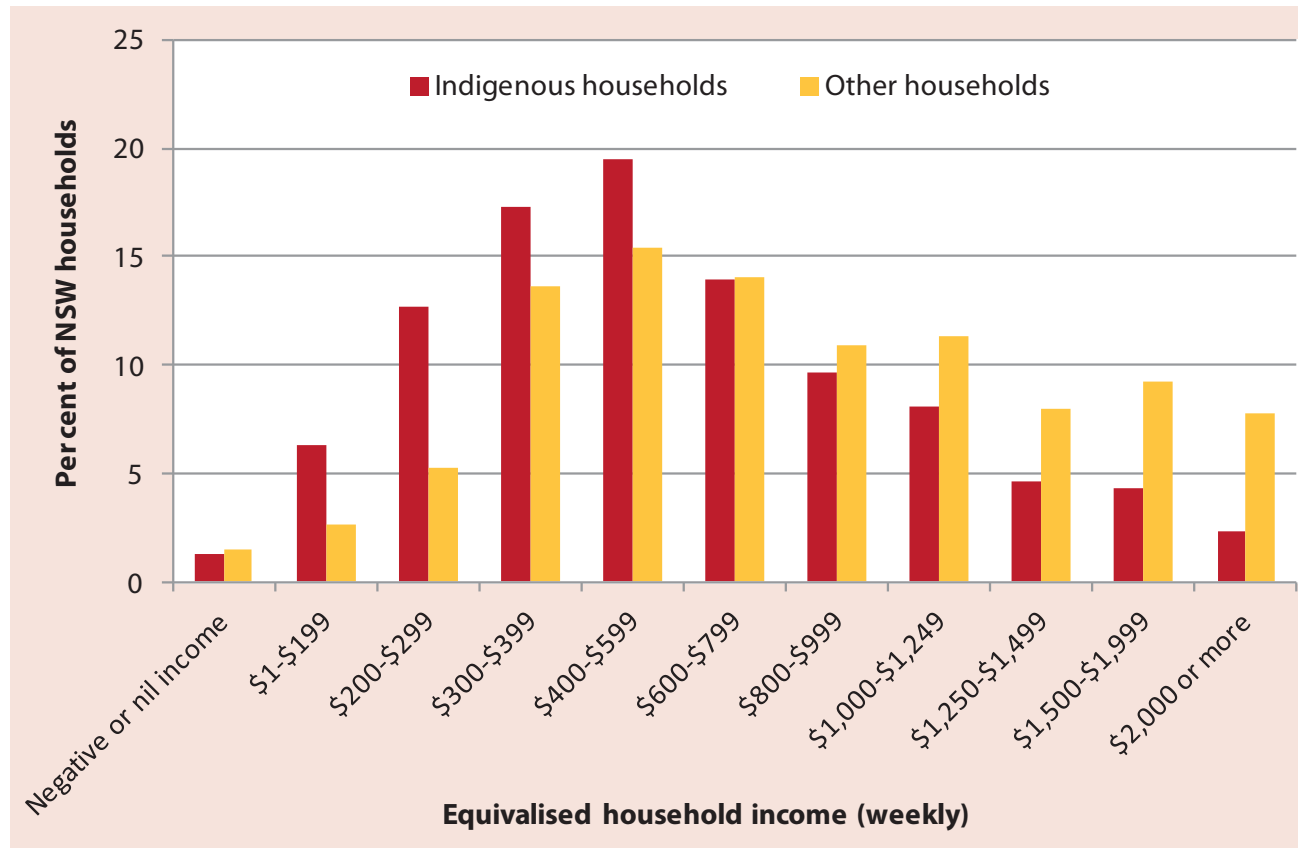
While personal income is important for understanding the structure of the labour market, most people in one way or another share some of their income with others or, alternatively, access the income earned by others. In terms of access to economic resources, therefore, household income can be a useful concept for analysis. Furthermore, measuring income at the household level can highlight the fact that income disparities are exacerbated when those with relatively low employment and income prospects tend to live with other people who have low prospects themselves.

Although it is not possible to identify Aboriginal households in 2011 Census data, the low number of people who identify as Torres Strait Islanders only in the state (2.9 per cent of all Indigenous peoples in the state) means that the concept of Indigenous households serves as a useful proxy.<sup>3</sup> As shown in Figure 9, Indigenous households tend to be found at the lower end of the income distribution. This is demonstrated through the per cent of Indigenous and other households whose equivalised household income<sup>4</sup> is in each of the 10 possible weekly income ranges, while a further bar is given for those with negative or nil income.

<sup>3</sup> An Indigenous household is one in which at least one of the usual residents identifies as being Aboriginal and/or Torres Strait Islander.

<sup>4</sup> Equivalising income takes into account the fact that an additional person in the household costs less than the first because of the potential to share resources. These figures use the OECD equivalence scale which assumes an additional adult costs 0.5 times as much and an additional child costs 0.3 times as much as the first adult.

Figure 9 Equivalised household income (weekly), NSW, 2011

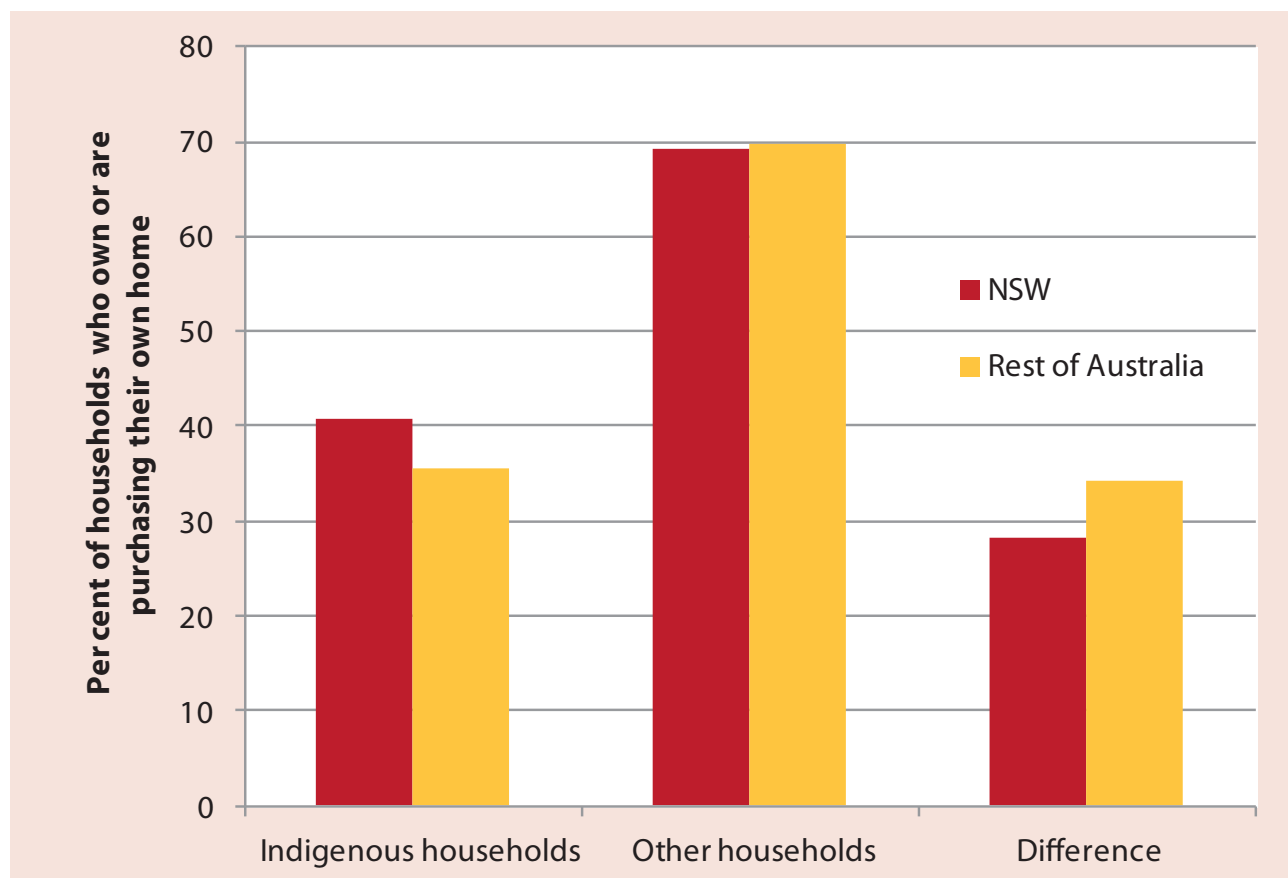


Around 20.2 per cent of Indigenous households in NSW had an equivalised income of \$299 per week at the time of the 2011 Census. This was more than twice as many as other households in the state (9.6 per cent). At the other end of the income distribution, 25.1 per cent of other households had an income of \$1,250 per week compared to 11.3 per cent of Indigenous households. While income isn't the only determinant of the wellbeing of the household, there is evidence that, at least in non-remote areas, Aboriginal peoples report higher levels of subjective wellbeing the higher along the income distribution they are (Biddle, 2011).

### 3.5 Housing outcomes of the NSW Aboriginal population

The results presented in Figure 9 indicate that Aboriginal peoples living in NSW have less access to economic resources than their non-Indigenous counterparts. However, a person's long-term economic situation is as much determined by their wealth as it is by their income at a particular point in time. Wealth, in the narrow economic sense, refers to the stock of financial resources available to an individual and can include things like shares; savings in a bank or building society; and large consumer items like cars or electronic goods. While not as liquid as these assets, the owning of equity in one's own home is one of the most common forms of wealth held by Australians. Furthermore, unlike the other forms of wealth mentioned, there is information on home ownership in the Census. Specifically, the following figure gives the per cent of Indigenous and other households in NSW (and the rest of Australia) who are living in a home that they own or are purchasing.

Figure 10 Per cent of households living in a dwelling that they own or are purchasing, NSW and the rest of Australia, 2011



Indigenous households in NSW are clearly less likely to be living in a dwelling that they own or are purchasing than the other households in the state. About 40.8 per cent of Indigenous households fall into that category compared to 69.1 per cent of other households. Figure 10 also shows, however, that while this is a large difference, the difference is actually greater for the rest of Australia.

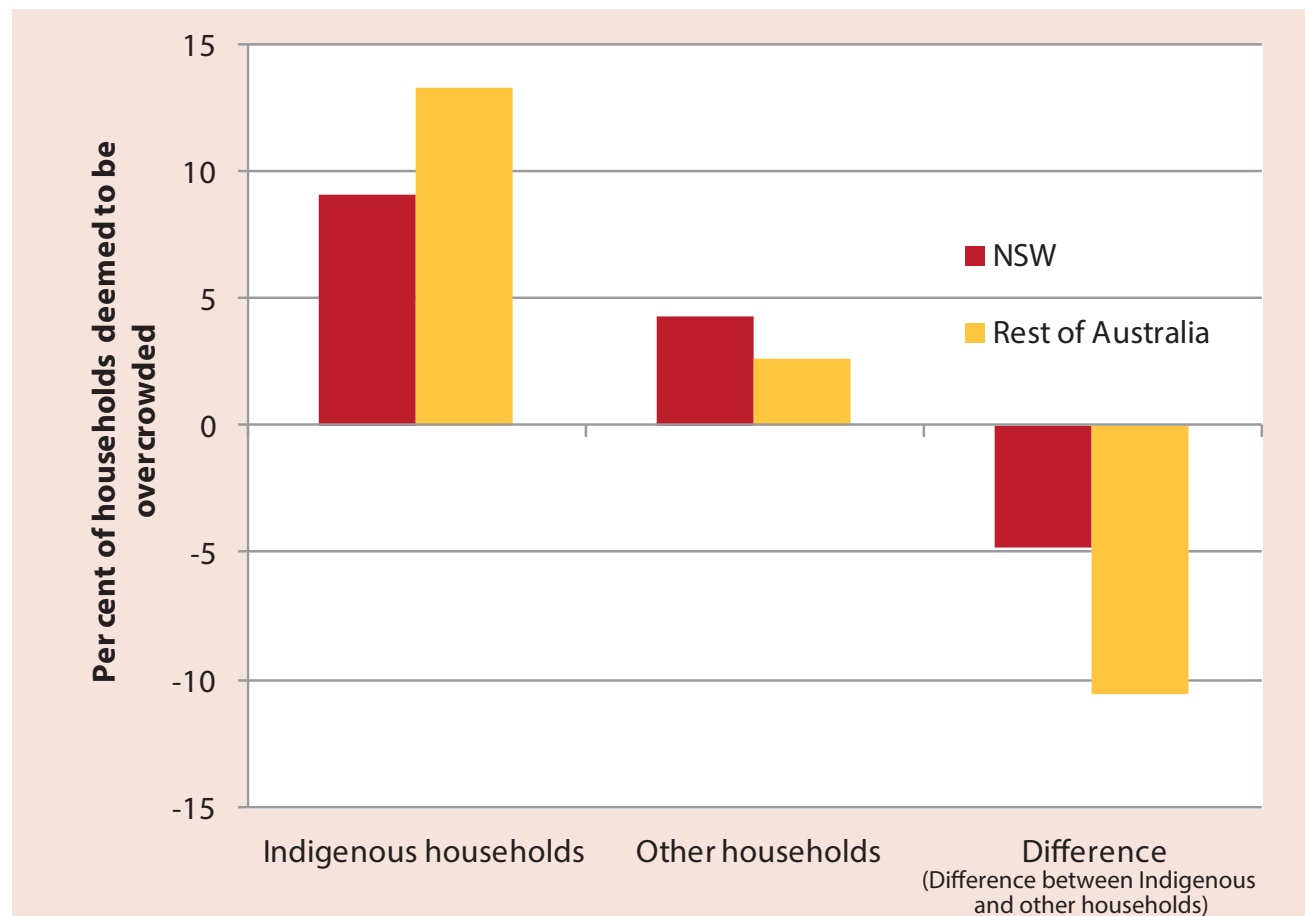
While home ownership is definitely not the dominant tenure type for Aboriginal peoples in NSW, there are still a number of potential benefits to individuals who live in such houses. For example, Boehm and Schlottmann (1999) found a significant association between parents' home ownership and the educational attainment of children in the household. Importantly, these results hold using longitudinal data and after controlling for other factors. These and other social benefits (summarised in Dietz & Haurin, 2003), generally ascribed to more stable housing tenure, are of course in addition to the wealth-generating effects from potential capital gains discussed at the start of this section.

While there is no longitudinal data available for the Aboriginal population, Biddle (2007) found an association between home ownership and educational attendance of Aboriginal youth aged 15–17. While it is not possible to establish causation with cross-sectional information, any increases in home ownership may be associated with education participation, whether it is directly or indirectly. These and other social benefits must also be weighed against the benefits that a number of people report from communal land holdings. This notwithstanding, home ownership can be used as an indicator of wealth for the Aboriginal population, especially in cities and other urban or regional areas.

Biddle (2011) looked at the relationship between tenure type and self assessed health using the 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS). The highest probability of reporting fair or poor health was found amongst those renting from a State/Territory housing authority. Those renting from a community organisation or from a private landlord had a similar probability to those in owner-occupied dwellings.

The analysis presented in Biddle (2011) also found that those who lived in an overcrowded dwelling were more likely to report relatively low levels of subjective wellbeing. As shown in Figure 10, Indigenous households in NSW were substantially more likely to be deemed to have not met the occupancy standard used by the ABS compared to other households.

*Figure 11 Per cent of households estimated to not meet the occupancy standards and requiring additional bedrooms, NSW and the rest of Australia, 2011*



The Canadian National Occupancy Standard is a commonly used measure of housing utilisation that is sensitive to both household size and composition. Under this standard, it is assumed that the bedroom requirements of a household are such that:

- there should be no more than two persons per bedroom;
- children less than 5 years of age of different sexes may reasonably share a bedroom;
- children 5 years of age or older of opposite sex should have separate bedrooms;
- children less than 18 years of age and the same sex may reasonably share a bedroom; and
- single household members 18 years or over should have a separate bedroom, as should parents or couples (ABS 2003).

Using this measure, 9.1 per cent of Indigenous households in NSW were deemed to have not met the occupancy standard. This is almost twice the rate of other households (4.3 per cent). While high, overcrowding is much less of a concern in NSW than it is in the rest of Australia. Outside of NSW, 13.3 per cent of Indigenous households were deemed to be in an overcrowded dwelling, nearly 5 times the rate of other households (2.7 per cent).

There are difficulties in measuring variation in overcrowding across population subgroups (for example Aboriginal compared to non-Aboriginal Australians) or across different regions in Australia. That is, measures of housing utilisation that may be relevant in one context may not be relevant in other contexts. However, these cultural considerations are going to be important in almost all measures used, albeit to varying degrees. Compared to specially targeted surveys or qualitative interviewing techniques, measures of overcrowding derived from pre-existing statistical analysis are likely to only give partial measures of overcrowding. A measure that is used consistently across populations and regions will include people who may subjectively feel that their housing situation does not constitute overcrowding despite being measured as such. Equally, a proportion of the population are likely to subjectively feel that they are living in an overcrowded household because of their particular circumstances but not be captured in standard measures. While these caveats are important, the Canadian National Occupancy Standard is still the most comprehensive measure of overcrowding available in the Census as it is a specially constructed variable that is derived from a number of Census variables, including the age and sex of occupants and their relationship within the household.

## 4. Variation in outcomes across NSWALC Regions

There is considerable diversity across the demographic and socioeconomic outcomes of Aboriginal peoples of NSW. This is demonstrated in this section of the paper by an analysis of outcomes across nine NSWALC Regions. These are (in alphabetical order):

- Central
- Far North Coast
- Mid North Coast
- North West
- Northern
- South Coast
- Sydney/Newcastle
- Western
- Wiradjuri

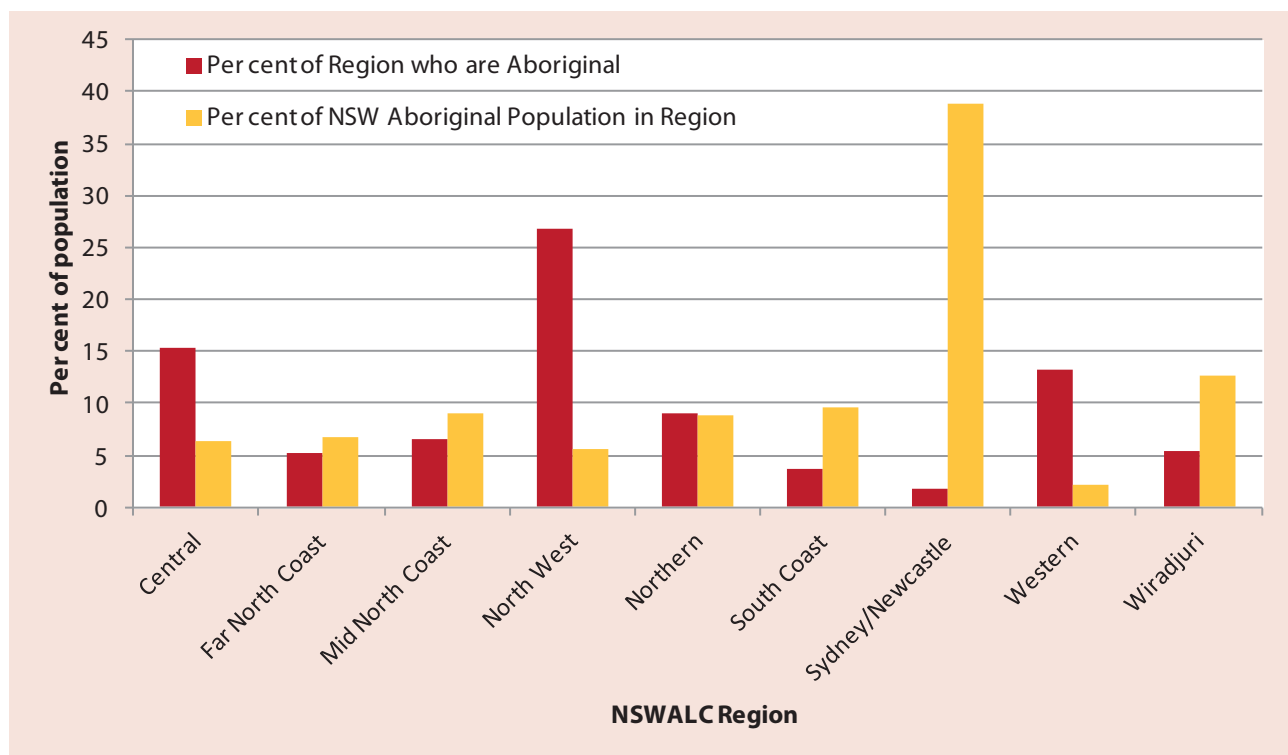
A detailed map of the NSWALC can be found here - <http://www.alc.org.au/land-councils/lalc-regions--boundaries.aspx> and is also reproduced in Appendix Figure 1.

### 4.1 Demographic outcomes across the NSWALC Regions

Perhaps one of the biggest sources of variation across the nine NSWALC Regions is the per cent of the population in those regions who identify as being Aboriginal. This ranges from the Aboriginal population making up 26.8 per cent of the population in the North West NSWALC Region to only 1.7 per cent of the total population of Sydney/Newcastle Region.

While only a small proportion of the Sydney/Newcastle Region identifies as being Aboriginal, this region contains the greatest number of Aboriginal people in the state. Around 38.8 per cent of the Aboriginal population of NSW live in this region. Figure 12 gives the relevant figures for each of the nine NSWALC Regions.

Figure 12 Distribution of Aboriginal peoples across nine NSWALC Regions

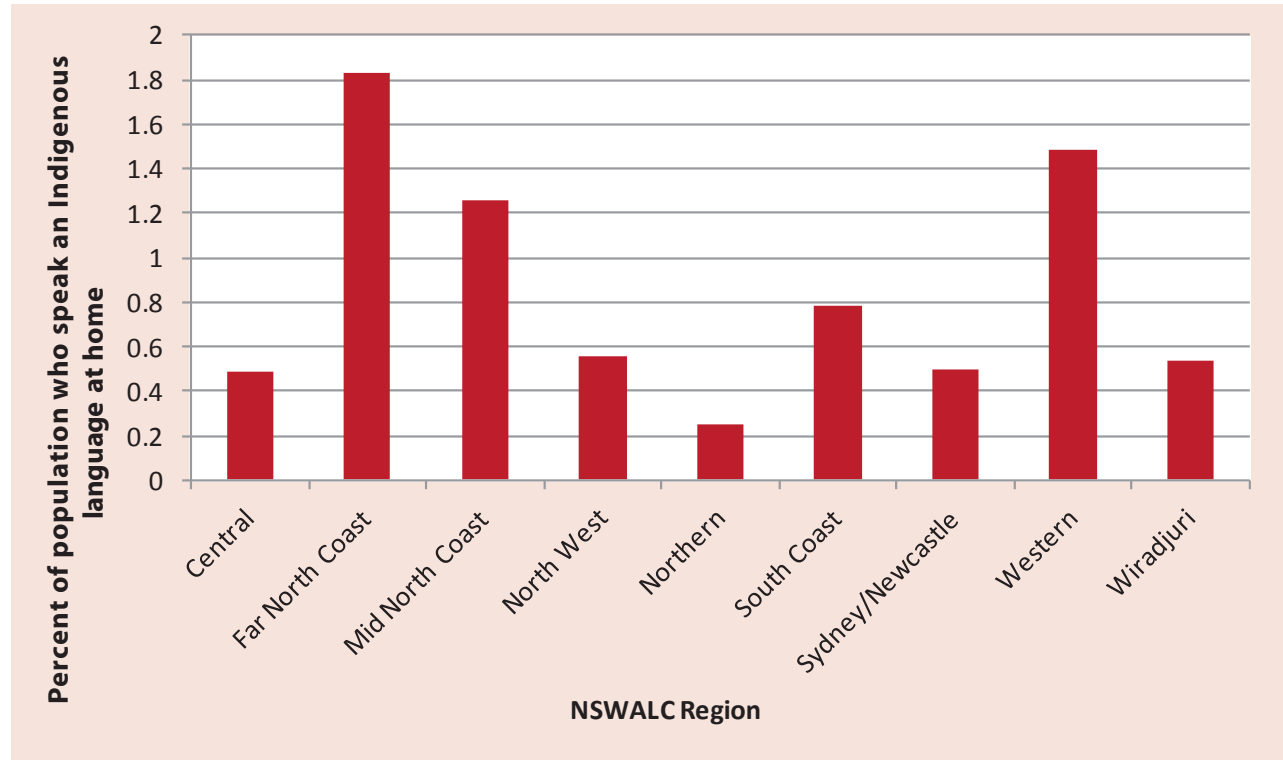


For example, in reading figure 12, it can be seen that 15% of the population of the Central region are Aboriginal, while 7% of the Aboriginal population of NSW live in the Central region.

## 4.2 Education and Indigenous language usage across the NSWALC Regions

Compared to other jurisdictions like the Northern Territory but to a lesser extent Western Australia, South Australia and Queensland (Biddle, 2012), the Aboriginal population of NSW has a reasonably low level of usage of Indigenous languages within the home. As shown in Figure 13 below, the percentage of the Aboriginal population who report that they speak an Indigenous language ranges from 0.2 per cent in the Northern Region of the state to 1.8 per cent on the Far North Coast.

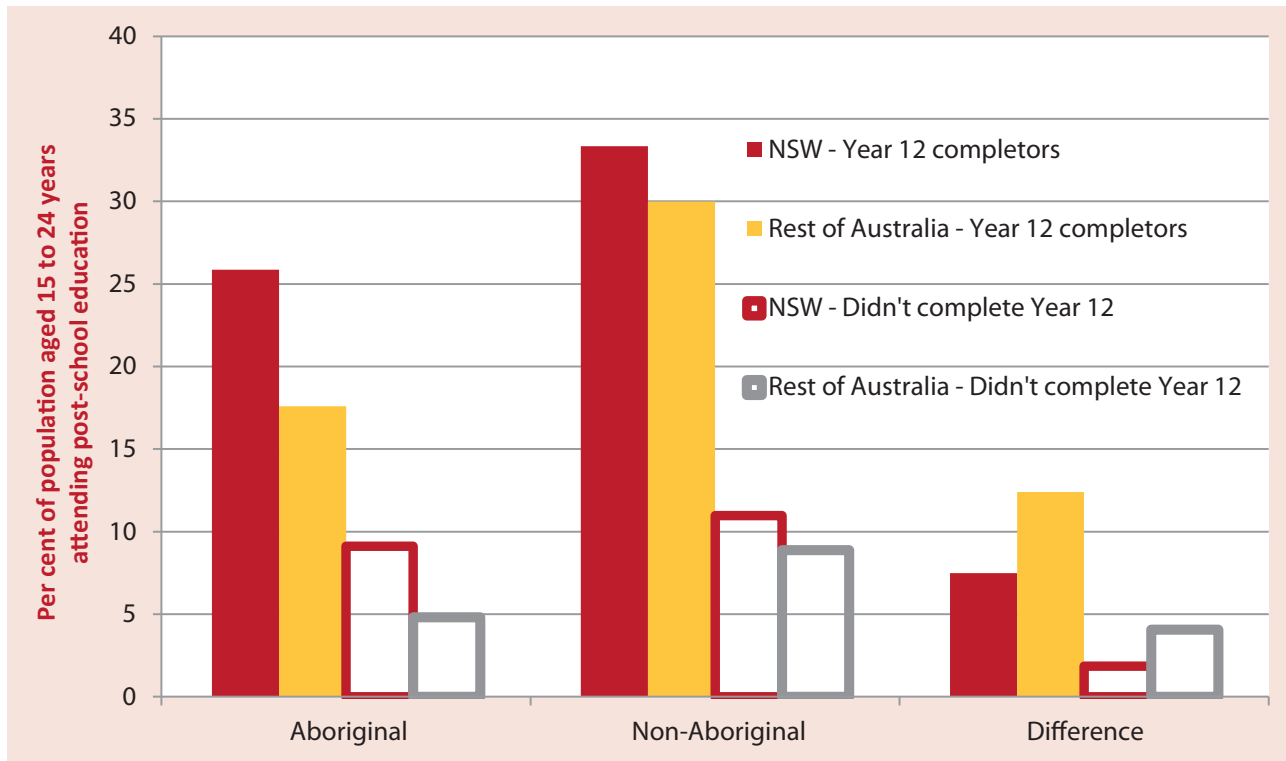
Figure 13 Per cent of Aboriginal population who speak an Indigenous language at home



While these percentages are very low, it should be noted that they do not fully capture the totality of Indigenous language usage in the state. This is because data on Indigenous language usage in the Census focuses only on those who speak a language at home. There are many other ways in which languages are used including in the workplace, at school and in social situations. For example, although data is not available for the above regions, it is worth noting that even in non-remote parts of NSW, the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) identified 3.9 per cent of Aboriginal and Torres Strait Islanders as being able to speak or understand an Indigenous language, with 8.4 per cent currently learning an Indigenous language.

The previous section of this paper showed that the Aboriginal population of NSW was less likely to be participating in education than their non-Aboriginal counterparts. However, there was still a considerable investment in education being made by the Aboriginal population with 58,345 Aboriginal peoples in NSW identified in the Census to be attending preschool, school or post-school education. Figure 14 shows, however, that this education participation is not distributed evenly across the state. In this figure, all education types are combined, with results presented separately for those aged 15 to 24 years and those aged 25 to 54 years.

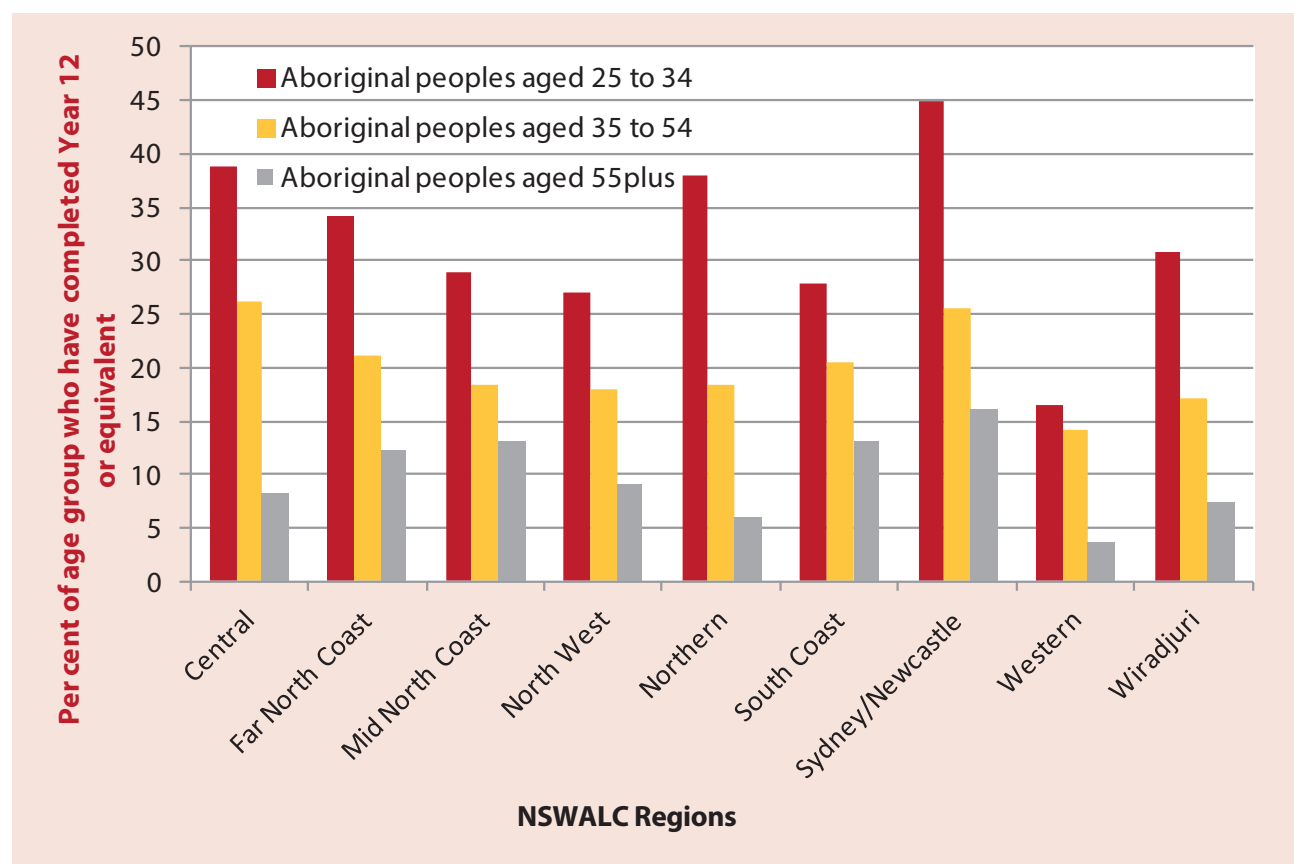
Figure 14 Per cent of Aboriginal population participating in education – By age and NSWALC Region



Not only does education participation vary by region, but so too do the education levels of the Aboriginal usual residents. This is driven not only by historic patterns of education participation, but also different migration patterns documented later in this paper. There is also significant variation across the lifecycle with the relatively young tending to have higher levels of education than their more elderly counterparts in the region. As shown in Figure 15, this lifecycle variation is most pronounced in the Northern region of NSW. In this region, the population aged 25 to 34 years was more than twice as likely to have completed Year 12 than those aged 35 to 54 years. In the Western region on the other hand, there was very little difference between these two age cohorts with 25 to 34 year olds only 16 per cent more likely to have completed Year 12 than those aged 35 to 54.



Figure 15 Per cent of Aboriginal population who have completed Year 12 or equivalent – By age and NSWALC Region



#### 4.3 Employment participation and employment type across the NSWALC Regions

There is considerable variation in employment outcomes across the NSWALC Regions. This reflects in part the variation in education outcomes described above. However, it also reflects differences in the general labour market in the area. Furthermore, there is considerable variation in the types of jobs that Aboriginal peoples in the region have access to which does not necessarily correlate with general employment outcomes. For example, amongst Aboriginal males, the Northern region has the lowest percentage of the employed population working as a manager or professional amongst all regions (19.7 per cent) but a relatively high proportion working full-time (44.4 per cent). Figure 16a gives the results for all of the regions for Aboriginal males whereas Figure 16b gives the results for Aboriginal females.

Figure 16a Employment outcomes for Aboriginal males aged 25 to 54 years, by NSWALC Region

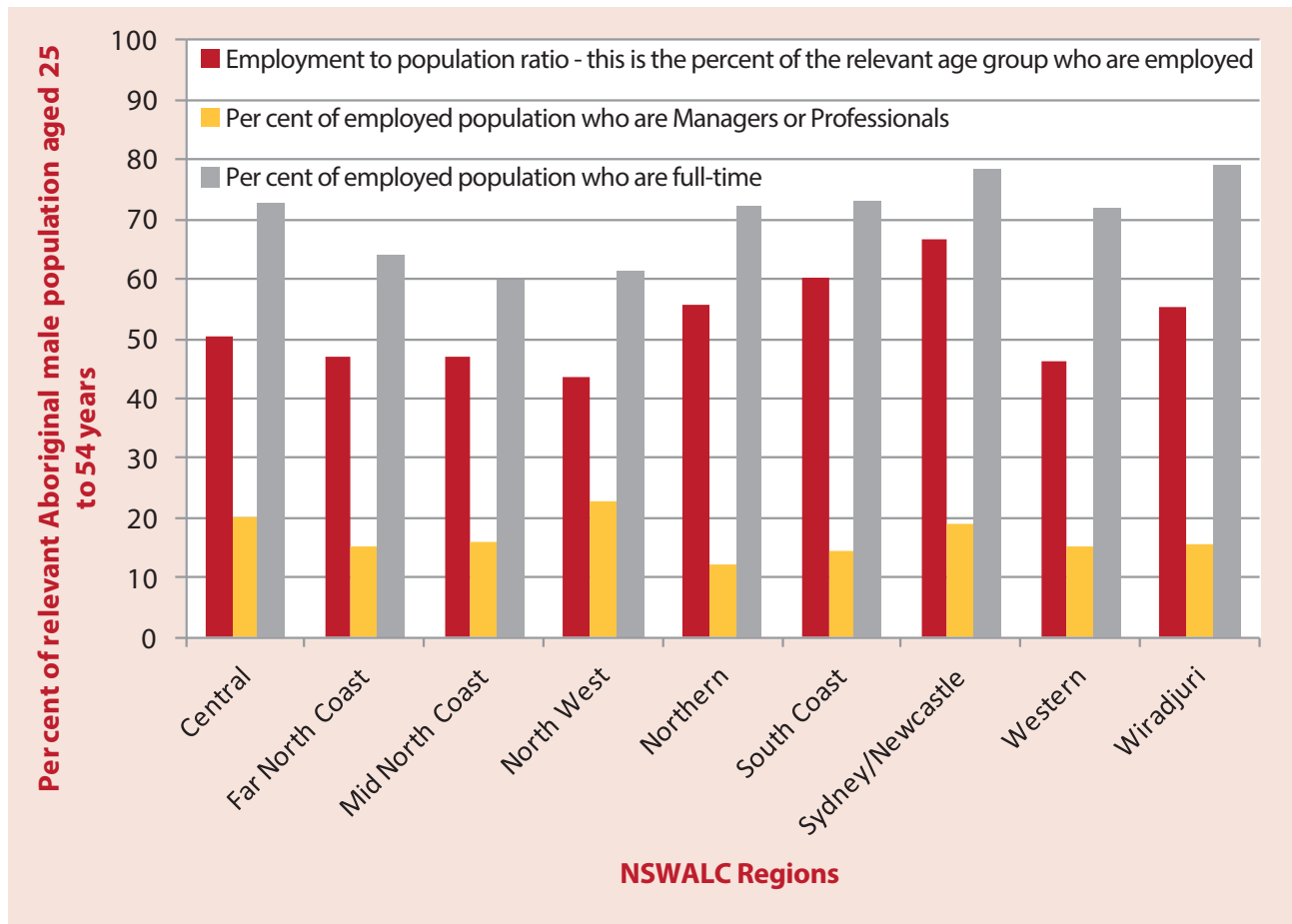
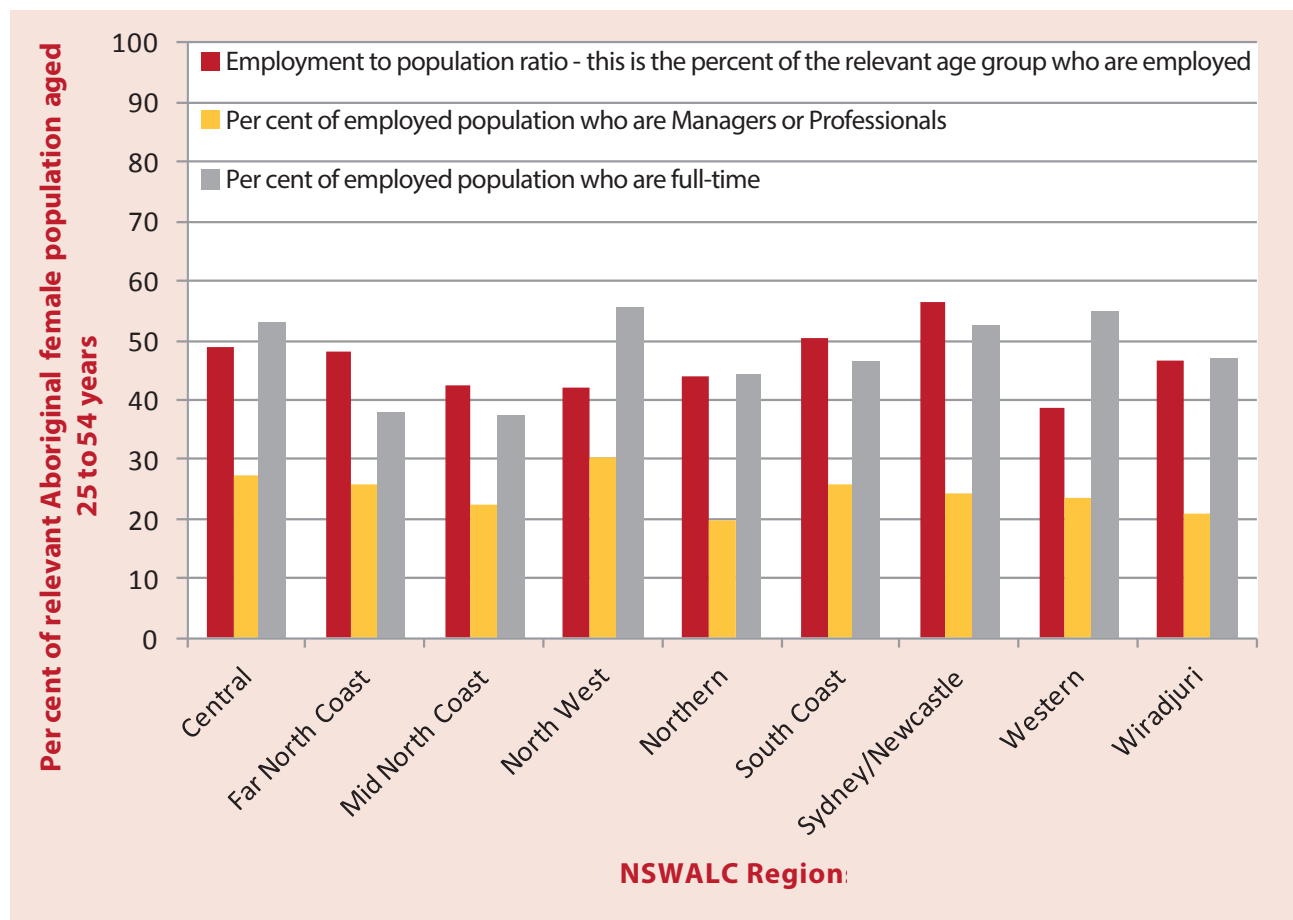


Figure 16b Employment outcomes for Aboriginal females aged 25 to 54 years, by NSWALC Region



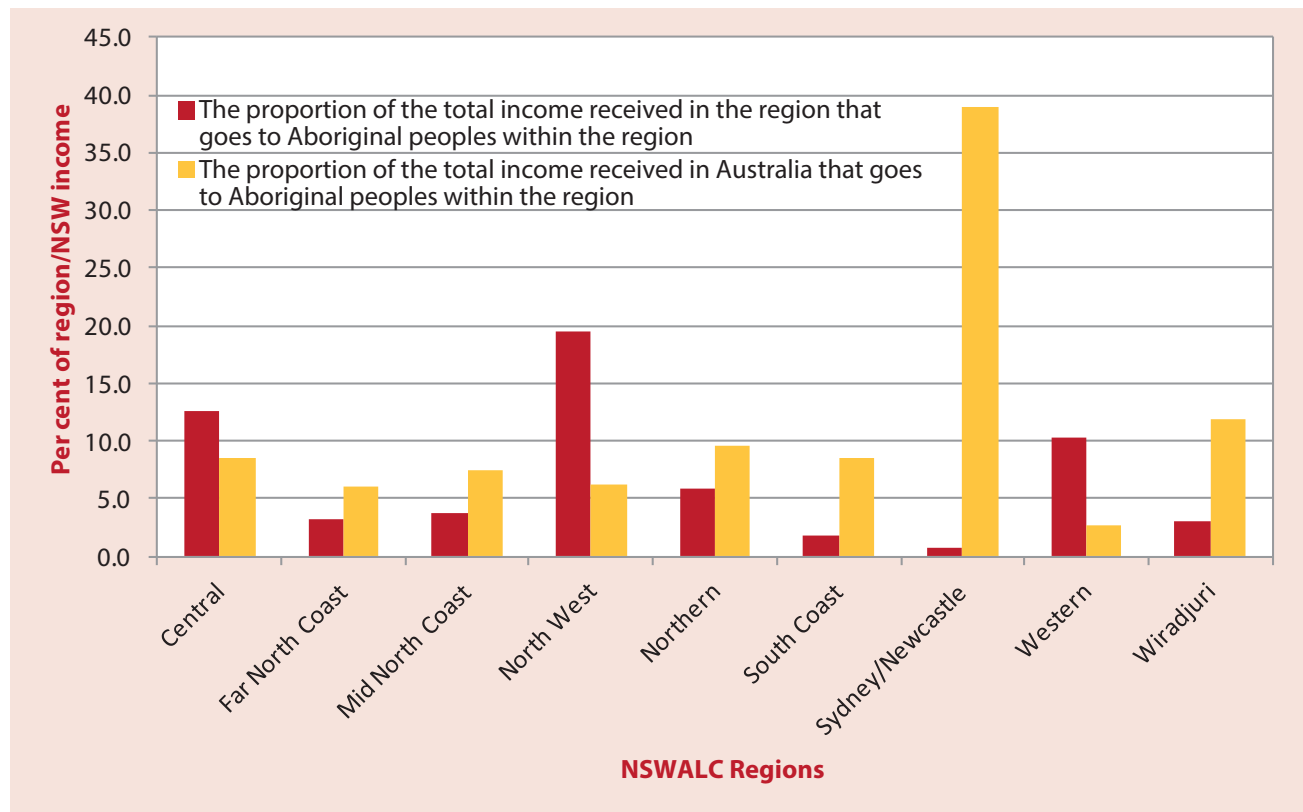
## 4.4 Income across the NSWALC Regions

Employment outcomes, and employment type, is an important factor in determining the access to economic resources in a region. Those regions with high levels of employment (for both males and females) and those with a high proportion of the population working full-time and/or working as managers or professionals have relatively high incomes and therefore relatively high access to economic resources.

The following figure looks at three aspects of access to economic resources. The numbers in the graph show the estimated mean income in the area for all Aboriginal usual residents aged 15 years and over. Although income in the Census is reported on a weekly basis, this has been converted to a yearly amount.

The red bar in the graph gives an estimate of what proportion of the total amount of income received in the region goes to the Aboriginal population. The second bar (in yellow) gives the share of total income received by the whole of the NSW Aboriginal population that is received by usual residents of that area. Both of these bars are plotted against the left-hand axis. Although neither of these figures take into account the sharing of resources that goes on within families and in many cases between Aboriginal and non-Aboriginal peoples, they do show the contribution that Aboriginal people make to the economy within the region, as well as how equitably economic resources are shared.

*Figure 17 Mean income for Aboriginal population and share of income received by the Aboriginal population, by NSWALC Region*



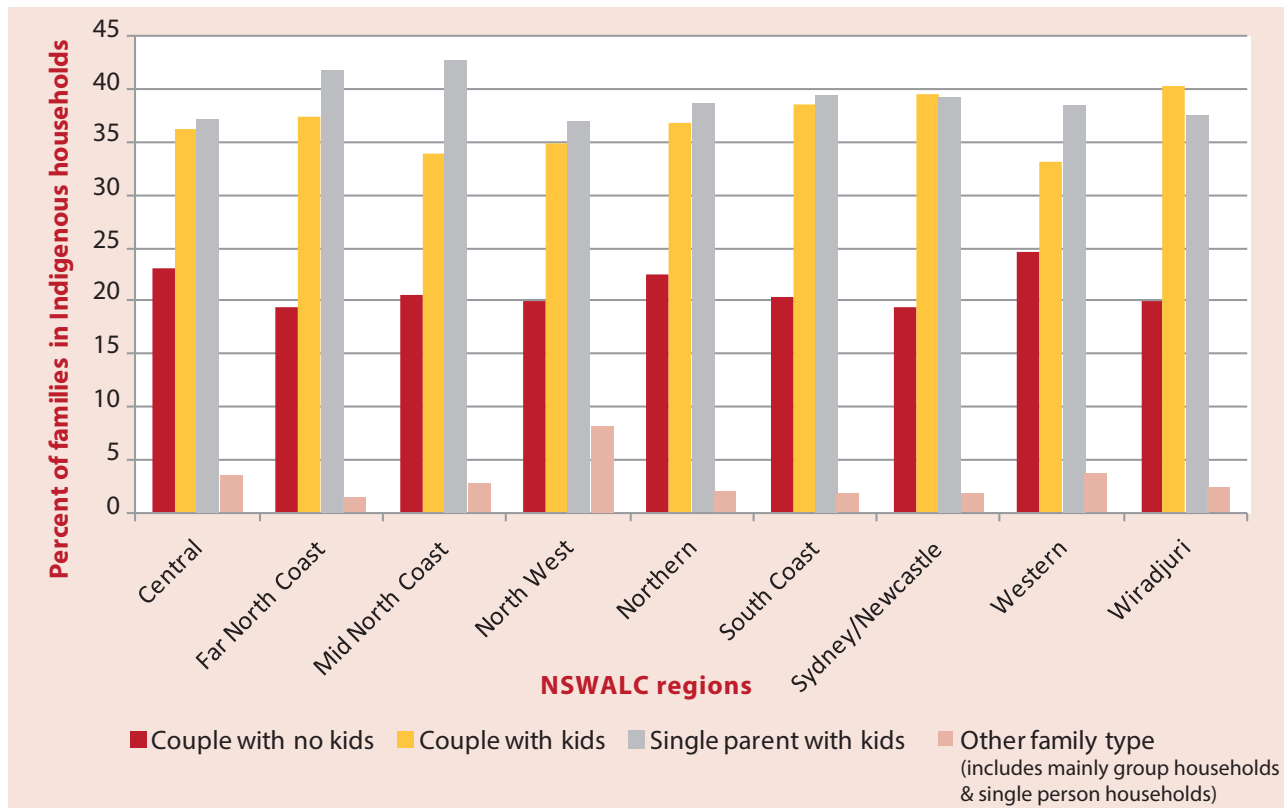
### Estimated mean income for Aboriginal residents

Central	Far North Coast	Mid North Coast	North West	Northern	South Coast	Sydney/Newcastle	Western	Wiradjuri
\$32,444	\$23,832	\$22,402	\$28,519	\$27,977	\$24,863	\$27,572	\$31,692	\$24,356

## 4.5 Family & household characteristics of Indigenous households across the NSWALC Regions

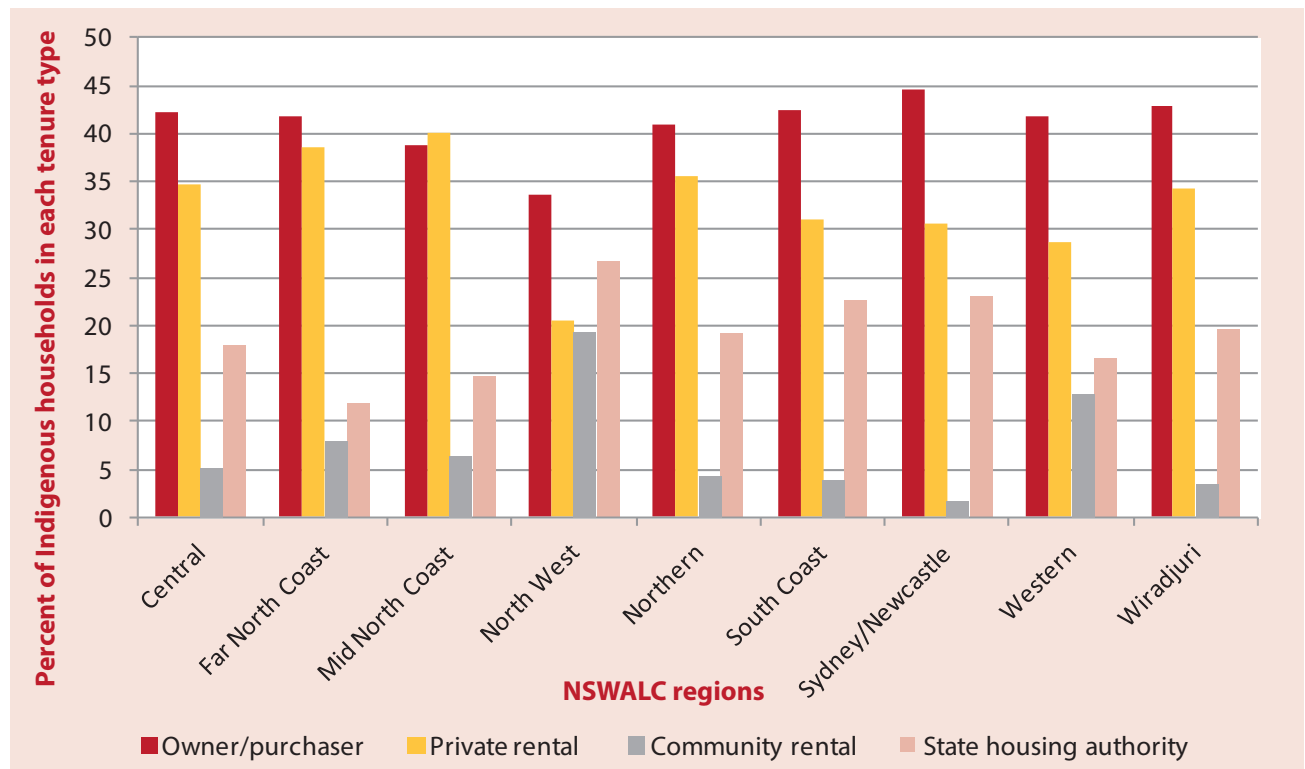
In the final part of Section 4, the variation in family and households characteristics across the Indigenous households of the NSWALC Regions is explored. This section begins with the presentation of results by looking at the distribution of family type. Different family types require a different level of support and government services. Furthermore, looking at family type highlights the diversity of the Aboriginal population both across and within regions.

Figure 18 Family type for people living in Indigenous households, by NSWALC Region



In the final graph in this section, the variation in landlord type across the NSWALC Regions is explored. Focusing on Indigenous households, it is clear that there is considerable variation in the housing market in the area. However, it is also likely that tenure type is affected by access to economic resources as well as variation in the preferences of the Aboriginal population in NSW.

*Figure 19 Tenure type of Indigenous households, by NSWALC Region*



## 5 Analysis of the Indigenous lifecourse

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### 5.1 Employment, education and income across the lifecourse

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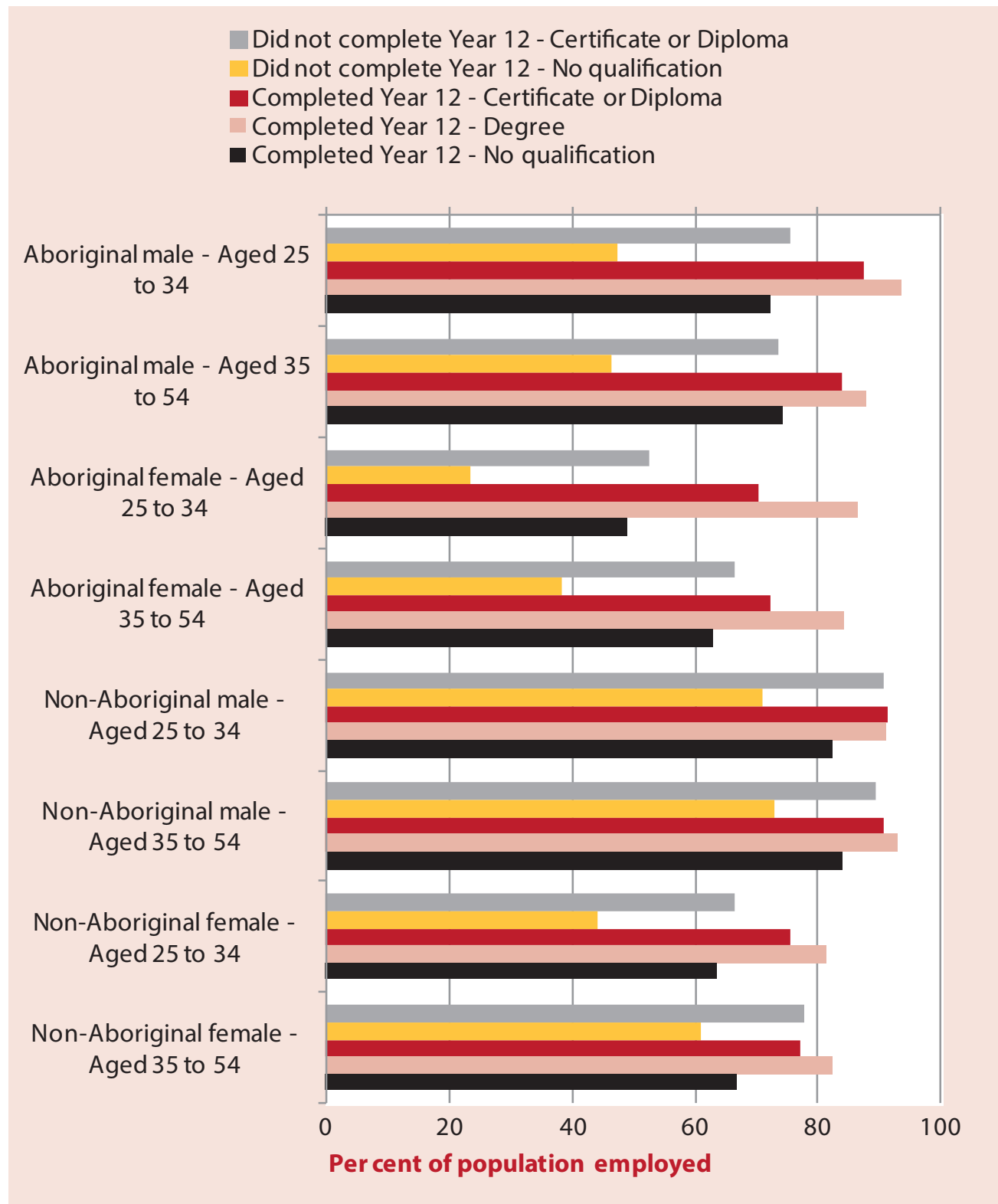
One of the major determinants of a person's ability to participate and be successful within a society's economic institutions is their education levels. Those with higher levels of education are more likely to have specific skills for a given occupation and are also likely to have the types of generic skills valued in many workplaces including literacy, numeracy and problem solving ability. In addition to the direct effects of education, it is also often used as a signalling device that people use to demonstrate pre-existing ability. If a given level of education is difficult, then having completed that education demonstrates a certain level of cognitive ability (that is intelligence and aptitude) as well as non-cognitive ability (for example motivation, drive and perseverance).

The financial, social and institutional barriers that have historically held back the educational development of Aboriginal peoples in New South Wales and beyond have therefore had the effect of reducing the skills acquisition of that population, as well as erroneously signalling to employers that individual Aboriginal peoples have lower levels of ability than their non-Aboriginal counterparts.

This section of the paper documents the relationship between education, employment and income. The analysis begins with Figure 20 that shows the employment percentage of Aboriginal and non-Aboriginal males and females in NSW who were aged 25 to 54 years at the time of the 2011 Census. Results are presented separately for those starting out in the workforce (that is, those aged 25 to 34 years) as well as those who are closer to the middle and end of their working life (those aged 35 to 54 years). Employment percentages are given for the following combinations of high school and post-school education:

- Did not complete Year 12 - Certificate or Diploma;
- Did not complete Year 12 - No qualification;
- Completed Year 12 - Certificate or Diploma;
- Completed Year 12 - Bachelor degree or higher;
- Completed Year 12 - No qualification.

Figure 20 Per cent of population employed – Aboriginal and non-Aboriginal peoples in NSW by education, age and sex, 2011



The first and most obvious finding from Figure 20 is that Aboriginal peoples in NSW who have completed relatively high levels of education are much more likely to be employed than those who have not. For example, an Aboriginal female aged 15 to 24 who has completed Year 12 but does not have a qualification is 2.1 times as likely to be employed as one who has not completed Year 12. The difference between those with and without qualifications (and especially degrees) is even greater.

The second thing to note is that although there are still large differences by education for Aboriginal males, they are not as large as those for Aboriginal females. This mainly reflects the fact that Aboriginal females who have relatively low levels of education tend to have a relatively large number of children and tend to have them when they are young (as documented later in this section). The caring responsibilities associated with this high fertility rate compounds the relationship between education and the ability to find and maintain employment.

The third and most policy relevant finding from the analysis is that there tends to be a larger difference by education in employment outcomes for Aboriginal peoples in NSW compared to the non-Aboriginal population. In essence, the benefits to government from investing in Aboriginal education (in terms of employment) are much higher than the returns for investing in non-Aboriginal education. This demonstrates that employment parity is not going to be achieved without considerable improvement in the education levels of the Aboriginal population.

The final point to note though is that, with the exception of those with a degree, employment levels for Aboriginal peoples of a given age, sex and level of education are still lower than those of non-Aboriginal peoples. So, despite the role that education is likely to play in supporting economic participation amongst the Aboriginal population, alone it will not be enough. There is still an ongoing need to look at things like labour market discrimination, employment networks and locational disadvantage.

Education is not just associated with whether or not an individual is employed, it is also related to the type of industry in which they are employed. Industry in turn is associated with pay and conditions, as well as future job prospects. Before looking at this relationship, however, the following table summarises the distribution of employed Aboriginal and non-Aboriginal males and females by the industry in which they were working. Industry is summarised using the most aggregated level of the Australian and New Zealand Standard Industrial Classification (ANZSIC).

*Table 1 Industry of employment for Aboriginal and non-Aboriginal males and females, NSW, 2011*

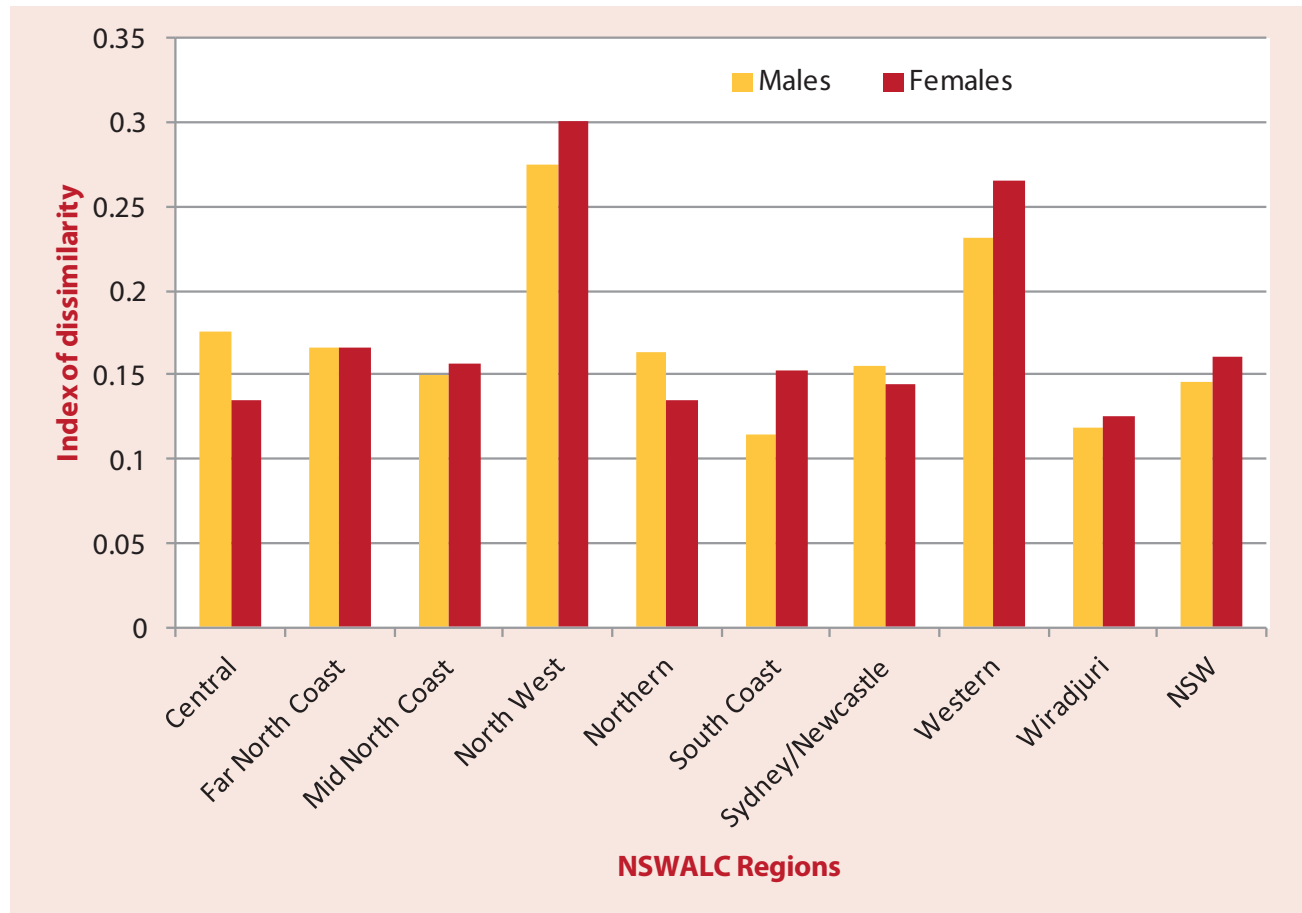
Industry	Aboriginal		Non-Aboriginal	
	Male	Female	Male	Female
Agriculture, Forestry and Fishing	3.9	0.9	3.0	1.4
Mining	2.9	0.4	1.7	0.2
Manufacturing	12.0	3.0	11.8	5.1
Electricity, Gas, Water and Waste Services	2.4	0.4	1.6	0.5
Construction	14.2	1.3	12.2	2.1
Wholesale Trade	3.8	1.5	5.5	3.5
Retail Trade	7.5	11.8	8.6	12.9
Accommodation and Food Services	6.0	11.0	5.9	7.9
Transport, Postal and Warehousing	8.0	2.2	7.3	2.5
Information Media and Telecommunications	1.0	1.0	2.6	2.1
Financial and Insurance Services	1.1	2.5	4.8	5.7
Rental, Hiring and Real Estate Services	0.9	1.4	1.6	1.8
Professional, Scientific and Technical Services	2.6	3.4	8.4	7.9
Administrative and Support Services	3.7	3.7	3.1	3.7
Public Administration and Safety	11.1	9.4	6.8	5.7
Education and Training	5.3	14.3	4.7	12.1
Health Care and Social Assistance	7.0	26.4	4.8	19.8
Arts and Recreation Services	2.2	1.5	1.5	1.5
Other Services	4.4	3.8	4.1	3.5

Table 1 demonstrates a number of industries in which Aboriginal and non-Aboriginal males and females are either under or overrepresented. For example, proportionally there are 1.6 to 1.7 times as many Aboriginal males and females employed in Mining and Public Administration and Safety as there are non-Aboriginal males and females. On the other hand, there are 2 to 4 times as many non-Aboriginal males and females employed in Information Media and Telecommunications; Financial and Insurance Services; and Professional, Scientific and Technical Services.



One way to summarise this difference in industry distribution is through the dissimilarity index. This index, used in a range of demographic and socioeconomic analyses, can tell us the proportion of the Aboriginal (or non-Aboriginal) employed population who would have to change industries in order for there to be an even distribution between the two populations. So, a value of 0 means that the distribution across industries is exactly the same, whereas a value of 1 means that all Aboriginal males or females are working in one set of industries, whereas all non-Aboriginal males or females are in a separate set of industries. According to data from the 2011 Census, the index value for males in NSW was 0.146, whereas for females it was 0.161. There is therefore a slightly bigger difference in the types of industries that Aboriginal females in NSW work in compared to non-Aboriginal females than there is for the male population of the state. As shown in the following figure, however, there are a few regions where the distribution of workers across industries is much more uneven than for the state as a whole.

*Figure 21 Index of dissimilarity for industry of employment, NSWALC Regions, 2011*



*The index of dissimilarity is the proportion of Aboriginal people who would have to change industries in order for there to be an even distribution between the Aboriginal and non-Aboriginal population.*

The two regions with the most unequal distribution of workers across industry are North West and Western NSW. In both of these regions close to or above a quarter of Aboriginal males and females would need to change industry in order for there to be an even distribution across the respective Aboriginal and non-Aboriginal populations. For most regions, there was a more uneven distribution of females across industries than males. The reverse was true, however, in the Central, Northern and Sydney/Newcastle regions.

As mentioned earlier, one of the determinants of the industry in which a person works is their education level. There are certain industries (for example retail trade) which employ a large number of people with relatively low levels of qualifications. Others (for example Professional, Scientific and Technical Services) tend to require a high level of skills and training. While it is true that the Aboriginal population is also concentrated in particular industries based on their level of education, the following two figures show that patterns and levels are somewhat different across the two populations and, it should be noted, by sex. This partly reflects geography with Aboriginal peoples in NSW having access to slightly different labour markets (on average) than the non-Aboriginal population. However, it may also reflect different preferences.

The following two figures look at the industry of employment for Aboriginal and non-Aboriginal males and females for the following five education levels:

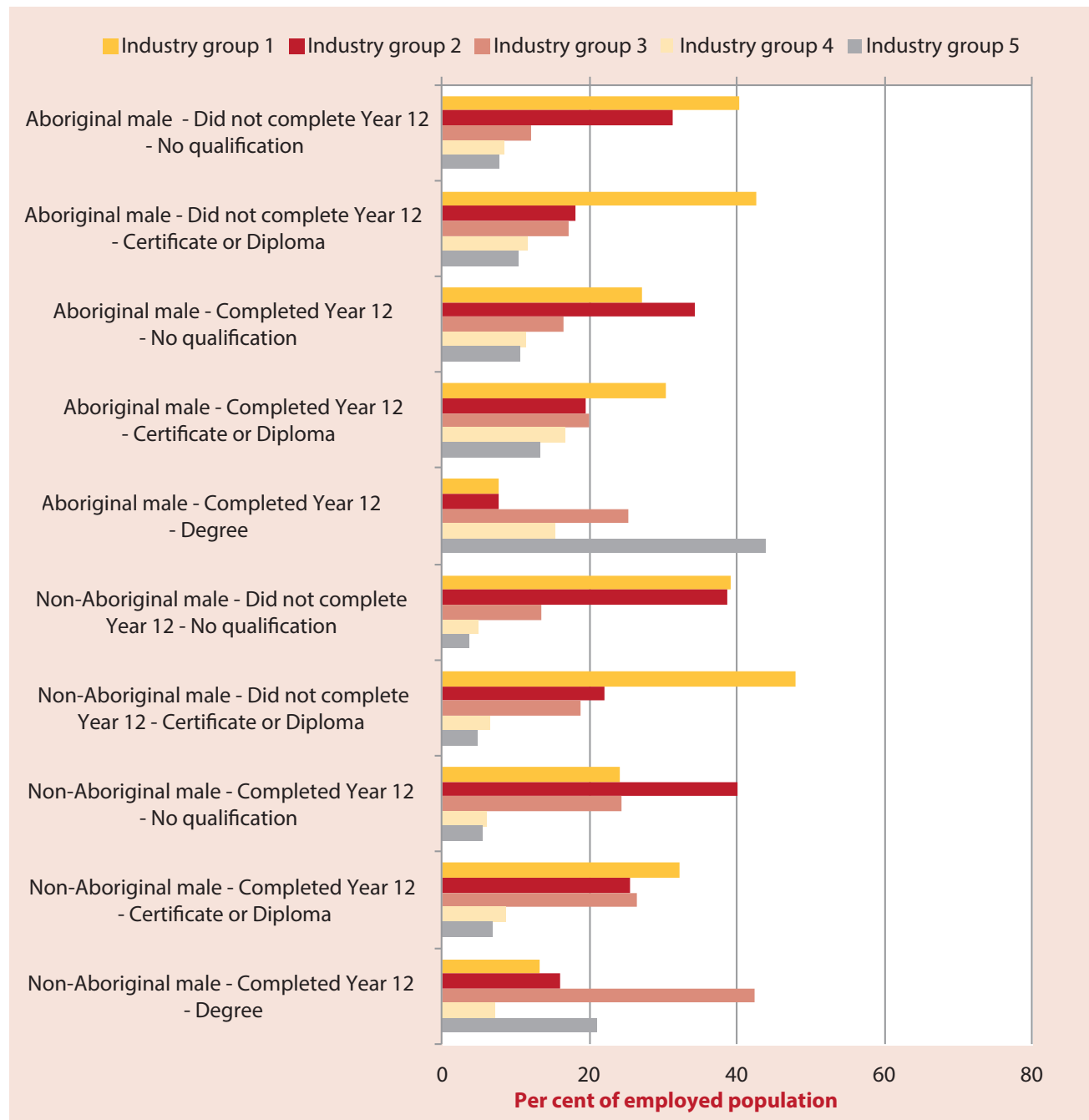
- Did not complete Year 12 - Certificate or Diploma;
- Did not complete Year 12 - No qualification;
- Completed Year 12 - Certificate or Diploma;
- Completed Year 12 – Bachelor degree or higher;
- Completed Year 12 - No qualification.

Given the low number of workers in certain industries and education combinations, the 19 industries in the ANZSIC have been collapsed into five groupings. These are:

- Industry group 1 (Agriculture, Forestry and Fishing; Construction; Electricity, Gas, Water and Waste Services; Manufacturing; and Mining);
- Industry group 2 (Accommodation and Food Services; Retail Trade; Transport, Postal and Warehousing; and Wholesale Trade);
- Industry group 3 (Administrative and Support Services; Arts and Recreation Services; Financial and Insurance Services; Information Media and Telecommunications; Other Services; Professional, Scientific and Technical Services; and Rental, Hiring and Real Estate Services);
- Industry group 4 (Public Administration and Safety); and
- Industry group 5 (Education and Training; and Health Care and Social Assistance).

Figure 22a gives the per cent of Aboriginal and non-Aboriginal employed males who are in each of the above groups of industries (by education level), whereas Figure 22b replicates the analysis for Aboriginal and non-Aboriginal females.

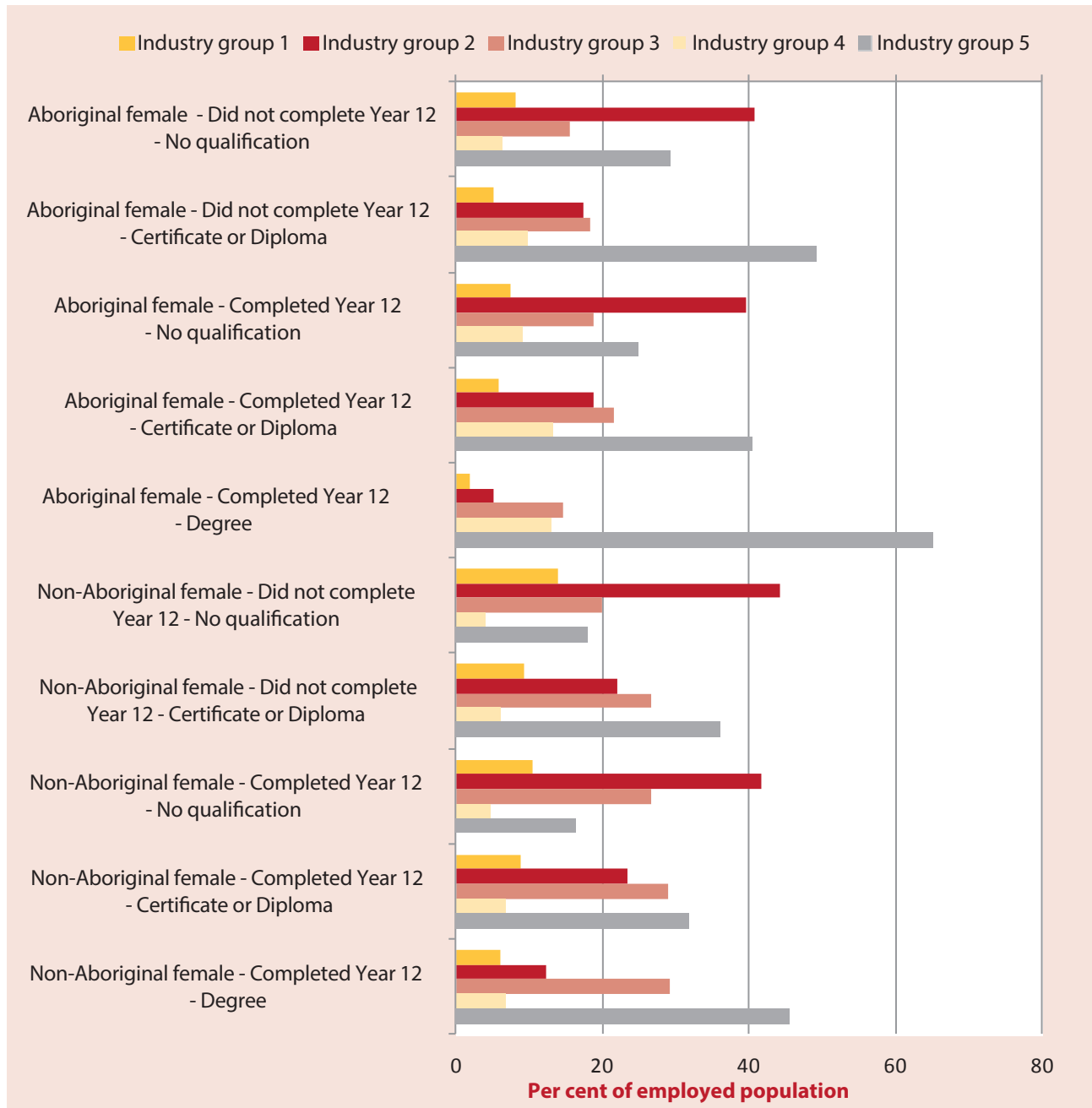
Figure 22a Industry of employment for Aboriginal and non-Aboriginal males, by education level, 2011



**Industry groups for figures 22a, 22b, and 23a**

- Industry group 1 (Agriculture, Forestry and Fishing; Construction; Electricity, Gas, Water and Waste Services; Manufacturing; and Mining);
- Industry group 2 (Accommodation and Food Services; Retail Trade; Transport, Postal and Warehousing; and Wholesale Trade);
- Industry group 3 (Administrative and Support Services; Arts and Recreation Services; Financial and Insurance Services; Information Media and Telecommunications; Other Services; Professional, Scientific and Technical Services; and Rental, Hiring and Real Estate Services);
- Industry group 4 (Public Administration and Safety); and
- Industry group 5 (Education and Training; and Health Care and Social Assistance).

Figure 22b Industry of employment for Aboriginal and non-Aboriginal males, by education level, 2011



For Aboriginal males in NSW who have not completed Year 12, the most common industry grouping is Industry Group 1 and Industry Group 2 (especially for those who do not have any post-school qualifications). Industry Group 2 is also common for Aboriginal and non-Aboriginal females who have not completed Year 12. However, for females who have not completed Year 12 but who have a Certificate or Diploma, Industry Group 5 (health and education) is by far the most common industry. Interestingly, this was also the case for Aboriginal females who have completed Year 12 and who have a post-school qualification (especially a degree), showing the importance of this industry to females who have undertaken some form of post-school study.

Aboriginal males with a degree are also likely to be working in Industry Group 5. However, there is a much greater level of employment in Industry Group 3 for this group compared to Aboriginal females. However, the group with the greatest level of participation in this grouping of service industries is non-Aboriginal males with a degree, making up 42.3 per cent of that workforce.

One of the potential reasons for why there is a disparity in industry between Aboriginal and non-Aboriginal peoples in NSW (and between males and females) is that the different populations undertake their qualifications in different fields of study. This is demonstrated in Table 2 below which gives the main field of study for those Aboriginal and non-Aboriginal males and females who have either a certificate/diploma or a bachelor degree.

Table 2 Field of study for Aboriginal and non-Aboriginal males and females, by highest qualification, NSW, 2011

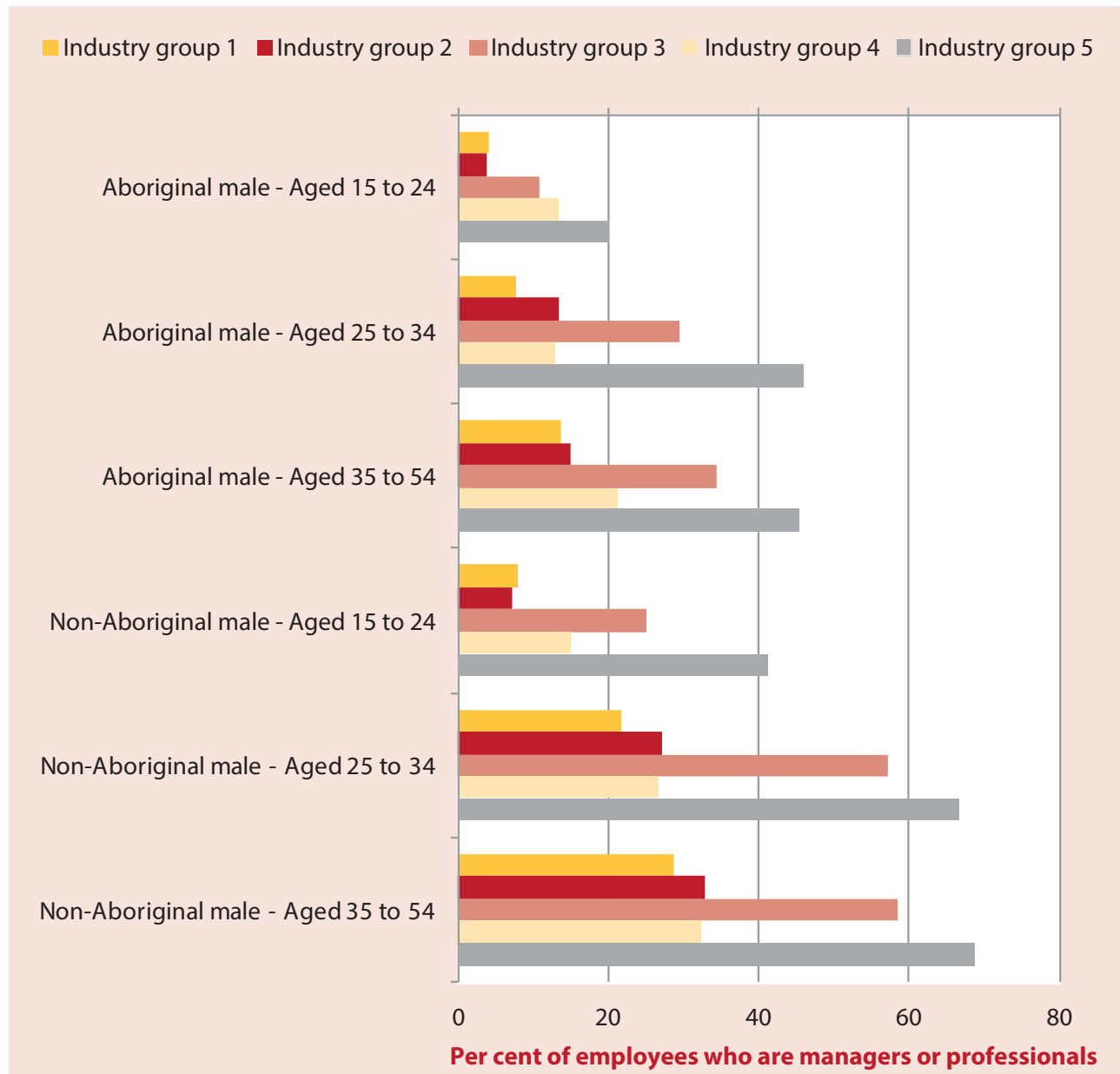
Field of study	Aboriginal		Non-Aboriginal	
	Male	Female	Male	Female
<b>Certificate or Diploma</b>				
Mixed Field Programmes	0.3	0.2	0.1	0.1
Food, Hospitality and Personal Services	7.2	13.8	6.6	14.1
Creative Arts	2.3	3.3	2.8	5.0
Society and Culture	8.6	25.2	3.8	14.9
Management and Commerce	10.6	30.9	13.8	37.4
Education	1.6	5.7	1.5	7.1
Health	3.5	14.6	2.0	12.7
Agriculture, Environmental and Related Studies	8.5	2.1	4.0	1.6
Architecture and Building	20.7	0.5	17.4	0.9
Engineering and Related Technologies	34.5	1.9	44.0	3.3
Information Technology	2.0	1.4	3.4	1.8
Natural and Physical Sciences	0.3	0.3	0.6	1.1
<b>Degree or higher</b>				
Mixed Field Programmes	0.7	0.1	0.0	0.0
Food, Hospitality and Personal Services	0.2	0.0	0.2	0.2
Creative Arts	6.4	5.6	4.2	6.5
Society and Culture	21.7	22.1	15.5	19.3
Management and Commerce	16.1	7.6	27.1	20.9
Education	25.7	39.8	8.6	20.9
Health	13.2	20.8	8.6	19.1
Agriculture, Environmental and Related Studies	2.2	0.6	2.0	1.1
Architecture and Building	2.0	0.3	2.9	1.3
Engineering and Related Technologies	5.1	0.6	14.8	2.2
Information Technology	2.2	0.1	8.5	2.6
Natural and Physical Sciences	4.6	2.4	7.6	5.9

There are significant differences between Aboriginal and non-Aboriginal peoples in NSW in terms of the main field of study of their highest qualification. However, these differences are in many ways not as large as the differences by the level of the person's highest qualification, as well as by sex. For those Aboriginal and non-Aboriginal males with a certificate or diploma as their highest qualification, Engineering and Related Technologies, as well as Architecture and Building are far and away the most common qualification. Mainly representing those who work in building and construction, these fields are relatively uncommon for Aboriginal and non-Aboriginal females with the same level of education, as well as those Aboriginal and non-Aboriginal males with a degree or higher.

Aboriginal and non-Aboriginal females with a certificate or diploma, by contrast, have a more diverse range of qualifications with relatively high percentages in Management and Commerce; Society and Culture; Health; and Food, Hospitality and Personal Services. There is a much more even distribution of fields of study by sex and Aboriginal status for those with a Degree or higher with Society and Culture; Management and Commerce; Education; and Health all having a large number of graduates.

One of the consequences of the differences in field of study and education levels is that those Aboriginal males and females in a particular industry tend to have lower occupation status than their non-Aboriginal counterparts. This is demonstrated in Figure 23 which gives the per cent of Aboriginal and non-Aboriginal males (Figure 23a) and females (Figure 23b) who are identified as being a Manager or Professional. Results are given separately by the industry groupings used earlier, as well as by three broad age cohorts – aged 15 to 24; aged 25 to 34; and aged 35 plus.

*Figure 23a Per cent of employees who are employed as a manager or professional, Aboriginal and non-Aboriginal males, by age, NSW, 2011*



**Figure 23b** Per cent of employees who are employed as a manager or professional, Aboriginal and non-Aboriginal females, by age, NSW, 2011



There are four main points to note from Figure 23. First, the probability of being employed as a manager or professional within a particular industry tends to increase between the 15 to 24 year age group and those aged 25 to 34, but then stays reasonably consistent into the 35 to 54 year age group. The second thing to note is that those in Industry Group 5 (education and health) tend to have the highest probability of being employed as a manager or professional. For Aboriginal males, the next highest Industry Group is 3, whereas for Aboriginal females Industry Groups 3 and 4 have roughly the same percentages. The third thing to note is that there are no consistent patterns in occupation status by sex for the Aboriginal population, once age and industry is controlled for. In some of the groups, females have a higher percentage, in others, males do.

The fourth and final point to note from Figure 23 is that for both males and females and for all combinations of age and industry, Aboriginal peoples in NSW are less likely to be employed as a manager or professional compared to their non-Aboriginal counterparts.

As mentioned previously, occupational status is a strong predictor of a person's wage or salary. Those who are employed as managers or professionals are more likely to have a relatively high income both because they are more likely to work full-time and also because they receive greater remuneration for each hour worked. There is not, however, a one-to-one relationship between occupation and income. There are some industries which have relatively unpleasant working conditions; these are concentrated in areas which for a number of reasons people do not want to live in; or require specialised skills unrelated to occupation. In these industries, wages or salaries tend to be higher due to a process known as compensating differentials. Nonetheless, there is a correlation of 0.64 in terms of the proportion of people employed as managers or professionals in each industry group/age/sex and Aboriginal status combination presented in Figure 23 and the average weekly income for the same combination documented in Figure 24.

Figure 24a Average weekly income, Aboriginal and non-Aboriginal males, by age and industry group, NSW, 2011





Figure 24b Average weekly income, Aboriginal and non-Aboriginal females, by age and industry group, NSW, 2011



A consistent finding presented in this paper is that Aboriginal females in NSW are less likely to be employed on average than non-Aboriginal females in NSW. Part of the reason for this is the relatively low levels of education of Aboriginal females. Related to this, however, is the fact that Aboriginal females tend to have more children on average than their non-Aboriginal counterparts and do so at a relatively young age. This is demonstrated in Figure 25 which gives the per cent of Aboriginal (Figure 25a) and non-Aboriginal (Figure 25b) females who have not had any children; have had one to three children; and have had four children or more. Results are presented separately by age, Year 12 completion and whether or not the person was employed at the time of the Census.

Figure 25a Number of children ever born for Aboriginal females, by age, Year 12 completion and employment, NSW, 2011



Figure 25b Number of children ever born for non-Aboriginal females, by age, Year 12 completion and employment, NSW, 2011



Looking first at the data for Aboriginal females, it is not surprising that the number of females with one to three children and, especially, four or more children, increases across the lifecycle. However, what Figure 25a also shows is that those females who are working have fewer children on average than those who are not working and that those females who have completed Year 12 have fewer children than those who have not. While there is a complex interaction between fertility decisions, education and employment, it is clear from Figure 25a that those females who are likely to be working and have higher levels of education tend to be those with fewer children. When Figure 25a is compared to Figure 25b, it is also clear that this is particularly the case for the Aboriginal population.

Ultimately, one of the major outcomes from participating in employment and undertaking education is a higher level of income. Given the different industry mix, employment profile and fertility decisions of the Aboriginal population, it is not surprising therefore that Figure 8 and Figure 9 presented earlier in this paper showed a lower level of income for the Aboriginal population of NSW compared to the non-Aboriginal population. However, as shown in Figure 26, even for a given level of education, the Aboriginal population has lower income than their non-Aboriginal counterparts.

Figure 26 Mean income for Aboriginal and non-Aboriginal males and females, by education completion, NSW, 2011

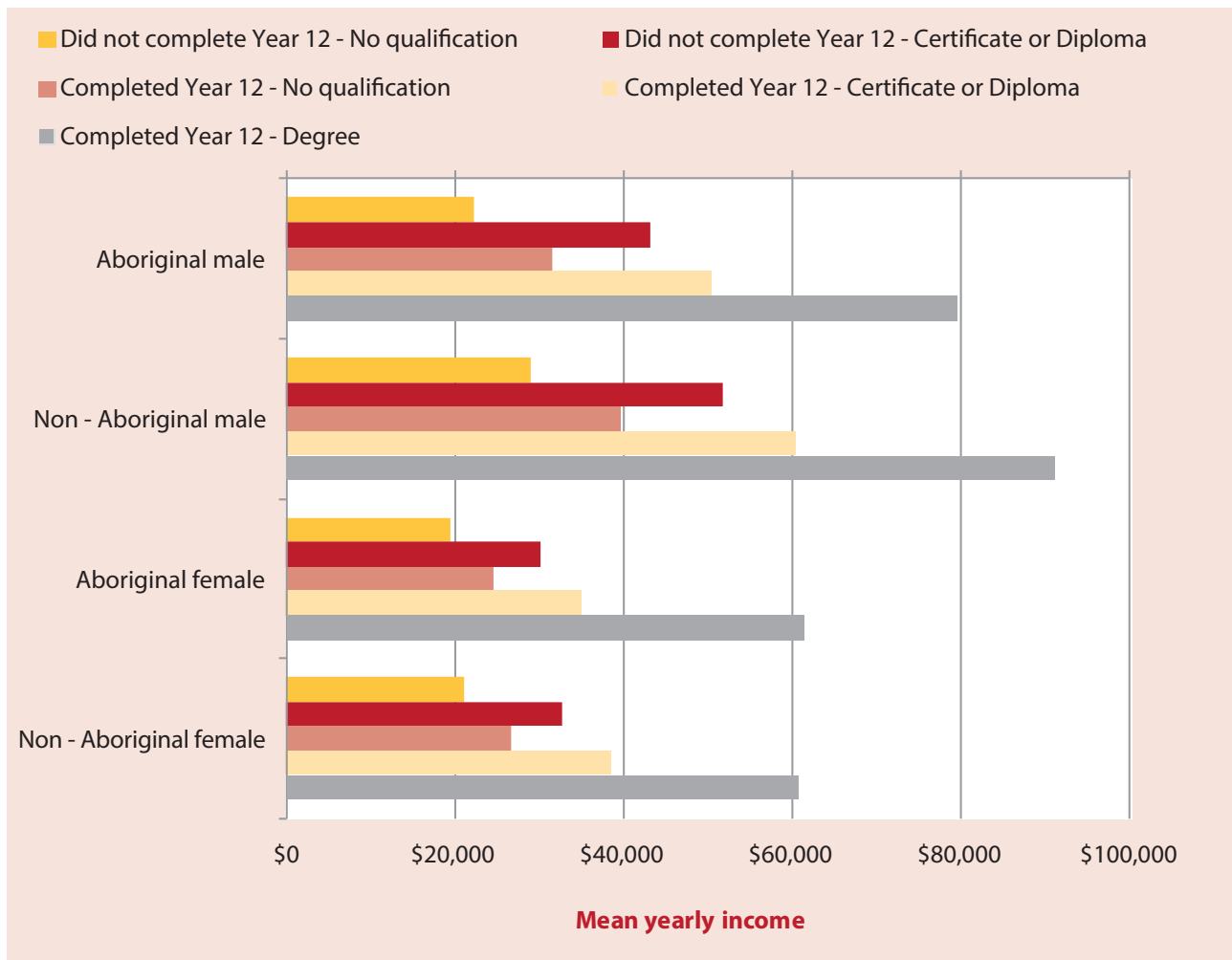
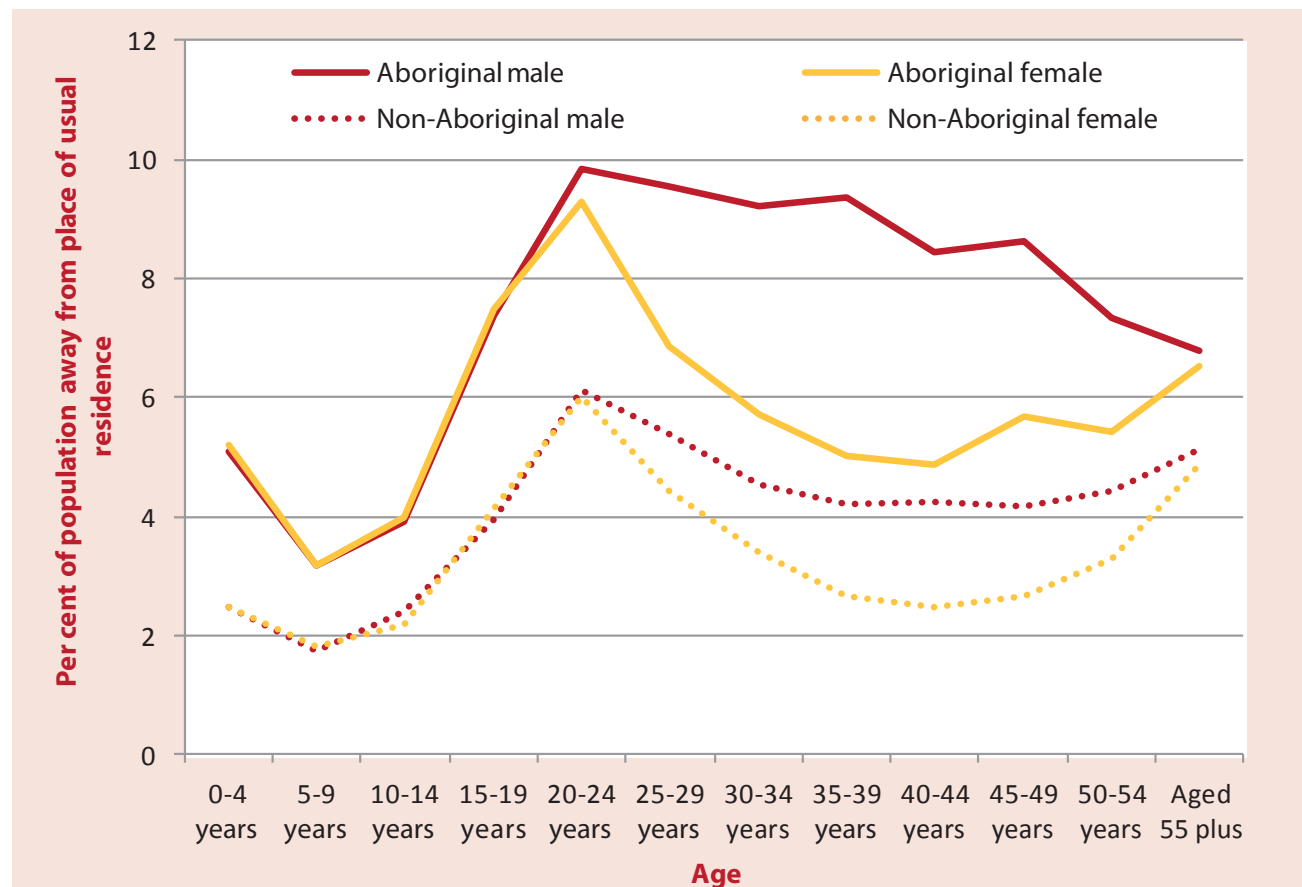


Figure 26, which gives the estimated mean yearly income for Aboriginal and non-Aboriginal males and females by education completion, shows that for almost all combinations of education status, the Aboriginal population of NSW has a lower income than their non-Aboriginal counterparts. The only exception to this is amongst females who have a bachelor degree or higher. Amongst this group the Aboriginal and non-Aboriginal population has roughly the same level of income. In general, not only does the level of income increase for the Aboriginal population along with the level of education, but the difference between Aboriginal and non-Aboriginal peoples declines. This highlights the vital role that education plays in supporting Aboriginal economic participation both now and into the future and also shows a discrepancy between Aboriginal and non-Aboriginal income levels when Aboriginal peoples have the same education outcomes.

## 5.2 Temporary mobility across the lifecourse

One of the defining features of temporary mobility in Australia is that rates are substantially higher for the Aboriginal and Torres Strait Islander population than the non-Indigenous population. At the time of the 2011 Census, 6.9 per cent of Aboriginal and Torres Strait Islander peoples were away from their place of usual residence, substantially higher than the 4.4 per cent of non-Indigenous peoples. Although slightly lower than the above national average, rates of temporary mobility for the Aboriginal population of NSW were also quite high, with 6.2 per cent of the population being away from their place of usual residence at the time of the Census. As shown in the following figure, however, there was as much variation across the lifecourse and by sex as there was between Aboriginal and non-Aboriginal residents of NSW.

Figure 27 Per cent of population away from their place of usual residence on Census night, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011



There are three points to note from Figure 27. First, there is a distinct lifecycle pattern to temporary mobility. For all four population groups, rates start off low for the population aged 0–4 years, then decline even further during the compulsory school years (those aged 5–14). Rates of temporary mobility then increase substantially, reaching a peak during the early to mid-20s. Beyond the mid-20s, the second key finding from Figure 27 becomes apparent—divergence by gender. While rates of temporary mobility stay reasonably high for Aboriginal males (and to a lesser extent, non-Aboriginal males), there is a substantial decline in temporary mobility for females. By the 35–39-year age group, only 5.0 per cent of Aboriginal females were away from their place of usual residence. For non-Aboriginal females, a low of 2.5 per cent is reached in the 40–44-year age group. Given that the Census is carried out on a Tuesday during school term, the two most obvious reasons for this gender-specific decline are that females are less likely to be employed than males (and hence away from home for work) and are more likely to have caring responsibilities for children (Yap & Biddle, 2012). Finally, Figure 27 also demonstrates that at every point on the age distribution, Aboriginal males and females are more likely to be away from their place of usual residence than their non-Aboriginal counterparts.

In addition to variation across the lifecourse, there are also differences in temporary mobility by a person's education levels. On balance, those with higher levels of education tend to be slightly less likely to be away from their place of usual residence on the night of the Census. For the Aboriginal population, 6.8 per cent of those who had completed Year 12 were away from their place of usual residence on the night of the Census compared to 7.5 per cent of those who had not completed Year 12. These differences are further highlighted in Figure 28a and Figure 28b.

Figure 28a Per cent of population who have completed Year 12 who were away from their place of usual residence on Census night, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011

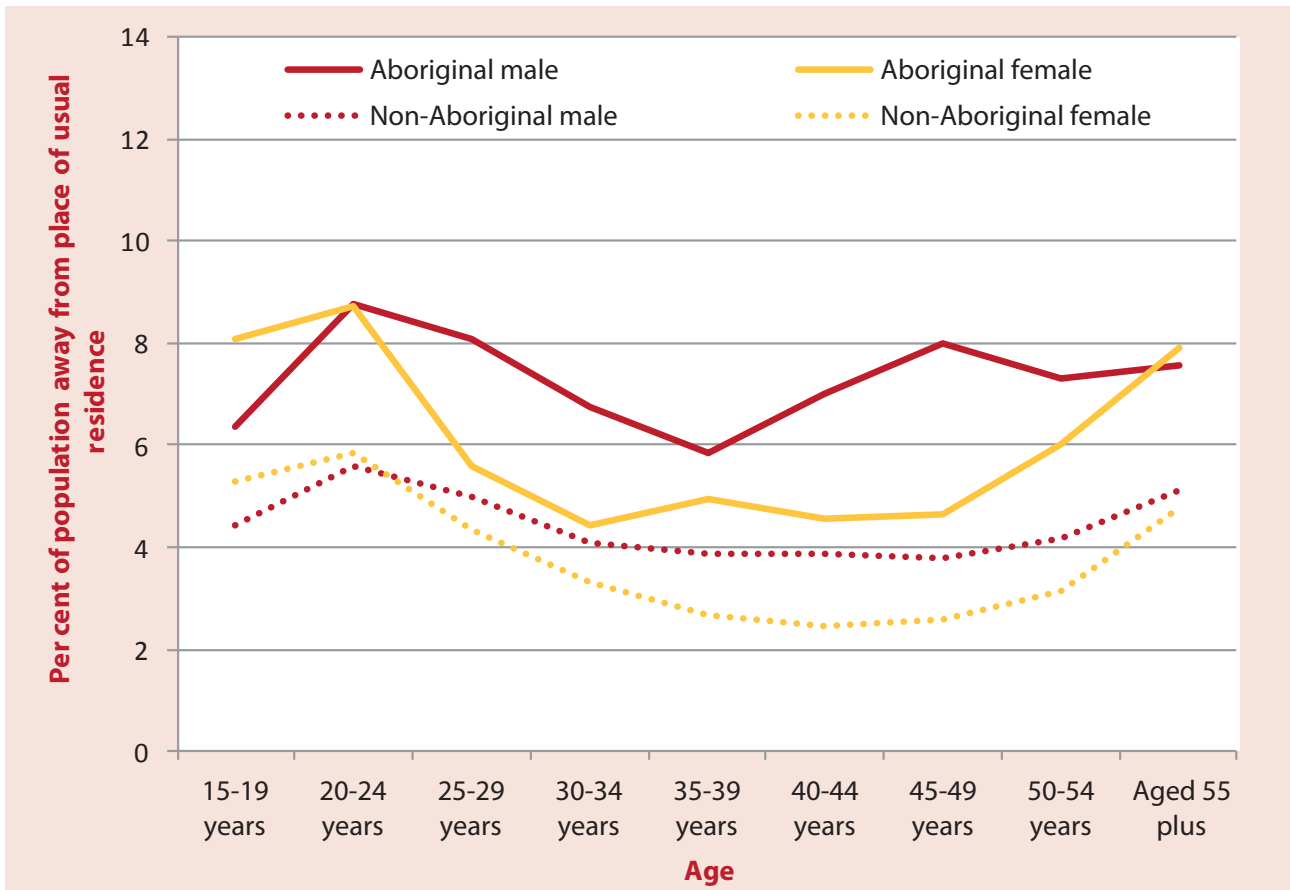
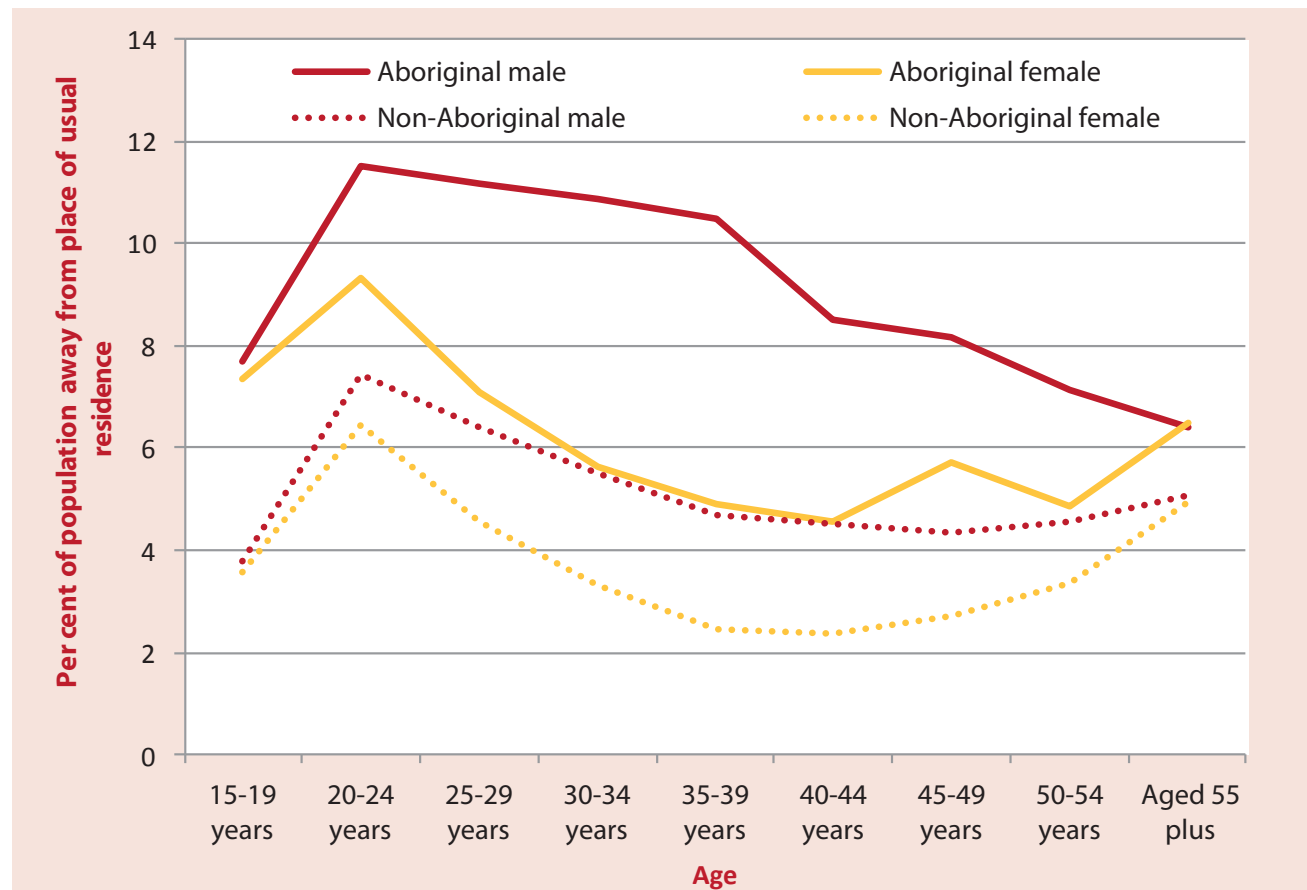
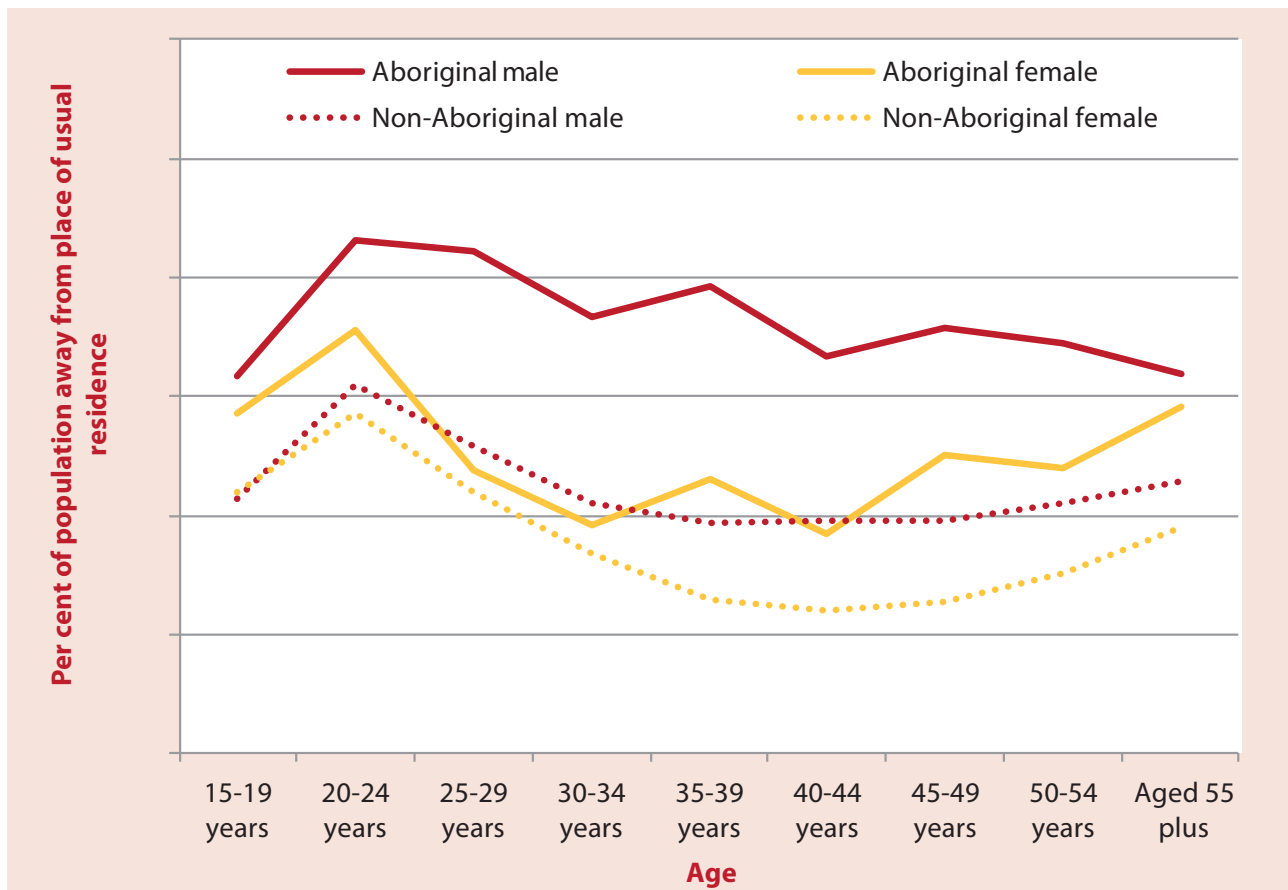


Figure 28b Per cent of population who had not completed Year 12 who were away from their place of usual residence on Census night, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011



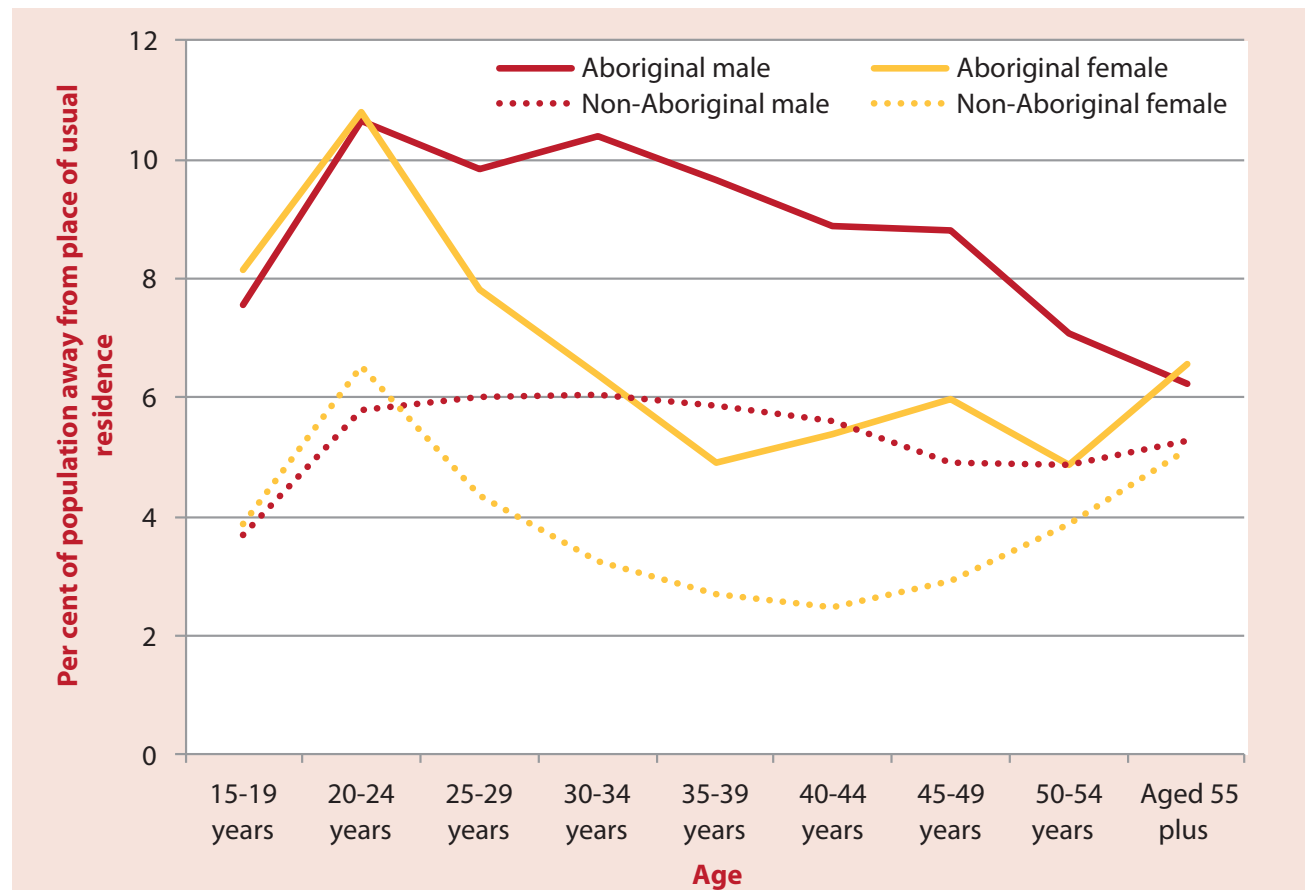
Although many people who are away from their place of usual residence are away for work, it is also the case that not being employed leads to a person having fewer ties to a particular area. On balance, the latter effect dominates, with those who are not employed tending to have a higher level of mobility than those who are employed. Specifically, 6.3 per cent of the employed Aboriginal population were away from their place of usual residence on the night of the Census compared to 7.7 per cent of the Aboriginal population not employed. However, Figure 29a and 29b show that even when one controls for employment status and age, rates of temporary mobility are higher for the Aboriginal population than the non-Aboriginal population.

Figure 29a Per cent of population who were employed who were away from their place of usual residence on Census night, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011





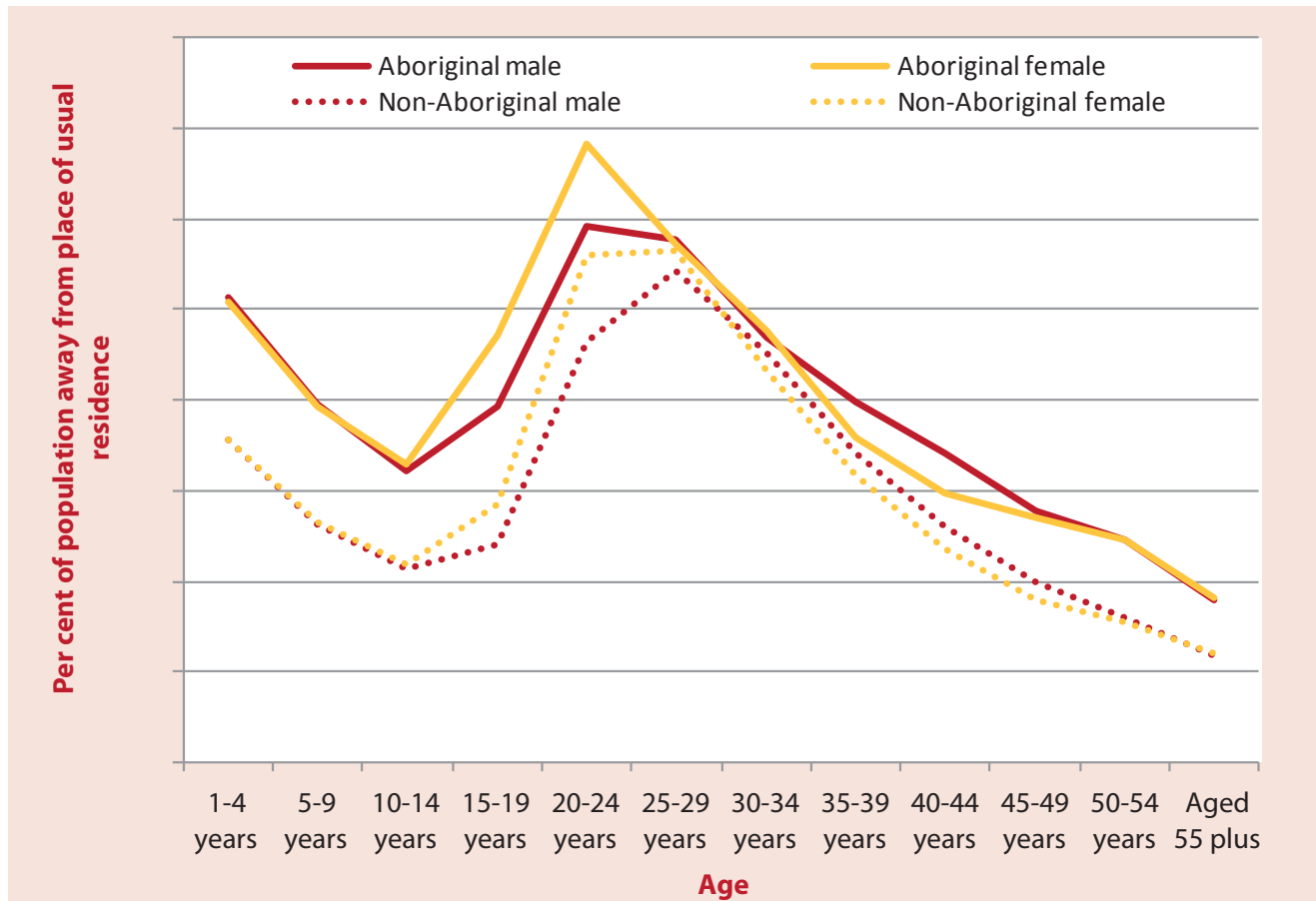
**Figure 29b** Per cent of population who were not employed who were away from their place of usual residence on Census night, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011



### 5.3 Permanent migration across the lifecycle

Not only are Aboriginal and Torres Strait Islander peoples more likely to be away from their place of usual residence on the night of the Census, they are also more likely to change where they live over a given time period (permanent migration). According to the most recent Census, 20.3 per cent of the Aboriginal and Torres Strait Islander population reported a different usual residence in 2011 than in 2010. This is substantially higher than the 14.4 per cent of the non-Indigenous population who moved over the same period. Once again though, although the NSW Aboriginal population has a similar level of permanent migration to the total Australian Aboriginal and Torres Strait Islander population, these averages mask considerable variation by age and sex. This is demonstrated in Figure 30.

Figure 30 Per cent of population who changed their usual residence between 2010 and 2011, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011



All four population subgroups follow a similar pattern across the lifecycle. Migration rates start off high in the age group of 1–4 years and then decline through the compulsory school years. Rates then increase, reaching a peak in the age groups of 20–24 and 25–29 years. There is then a gradual decline with migration rates for all four groups, falling below 10 per cent for those 55 years and over.

While the patterns are similar, there are differences in levels by sex and between the Aboriginal and non-Aboriginal population. The Aboriginal population has much higher rates of migration for those younger than 20 and older than 35. During the peak migration ages, however, rates are quite similar for the Aboriginal and non-Aboriginal populations. By sex, there are very similar rates of migration for those aged 14 years and under and for those aged 25 years and over. During the peak migration years, however, both Aboriginal and non-Aboriginal females have higher rates of migration than their male counterparts.

In the previous part of this paper, it was shown that those who had not completed Year 12 had a higher rate of temporary mobility than those who had. However, the reverse was true with regards to permanent migration. Specifically, 22.5 per cent of Aboriginal peoples in NSW who had completed Year 12 had changed usual residence between 2010 and 2011 compare to 19.0 per cent of those who had not completed Year 12. However, Figure 31a and Figure 31b show that, amongst those who had not completed Year 12, there was much greater variation across the lifecycle with a higher peak during the peak migration years compared to those who had not completed Year 12.

Figure 31a Per cent of population who had completed Year 12 who changed their usual residence between 2010 and 2011, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011

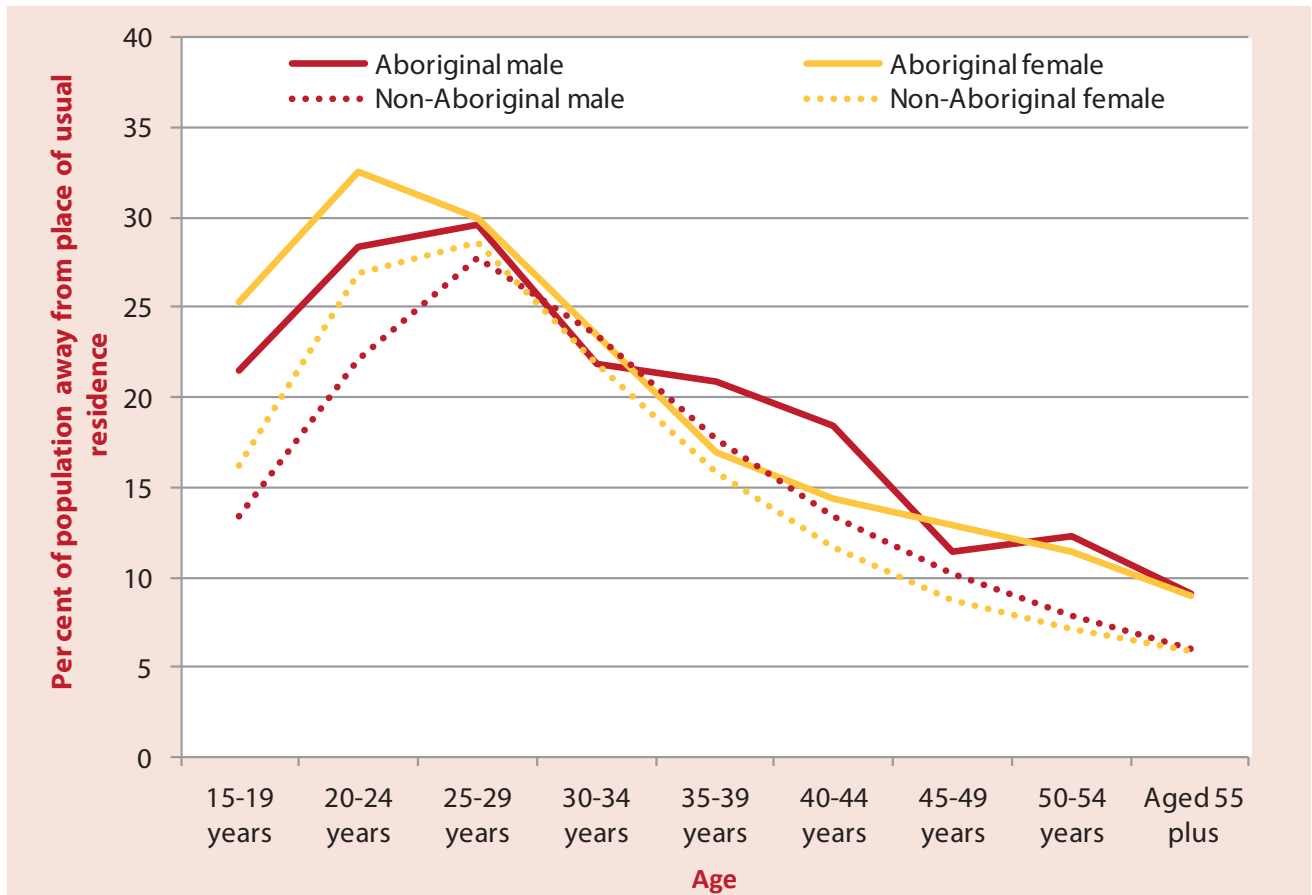
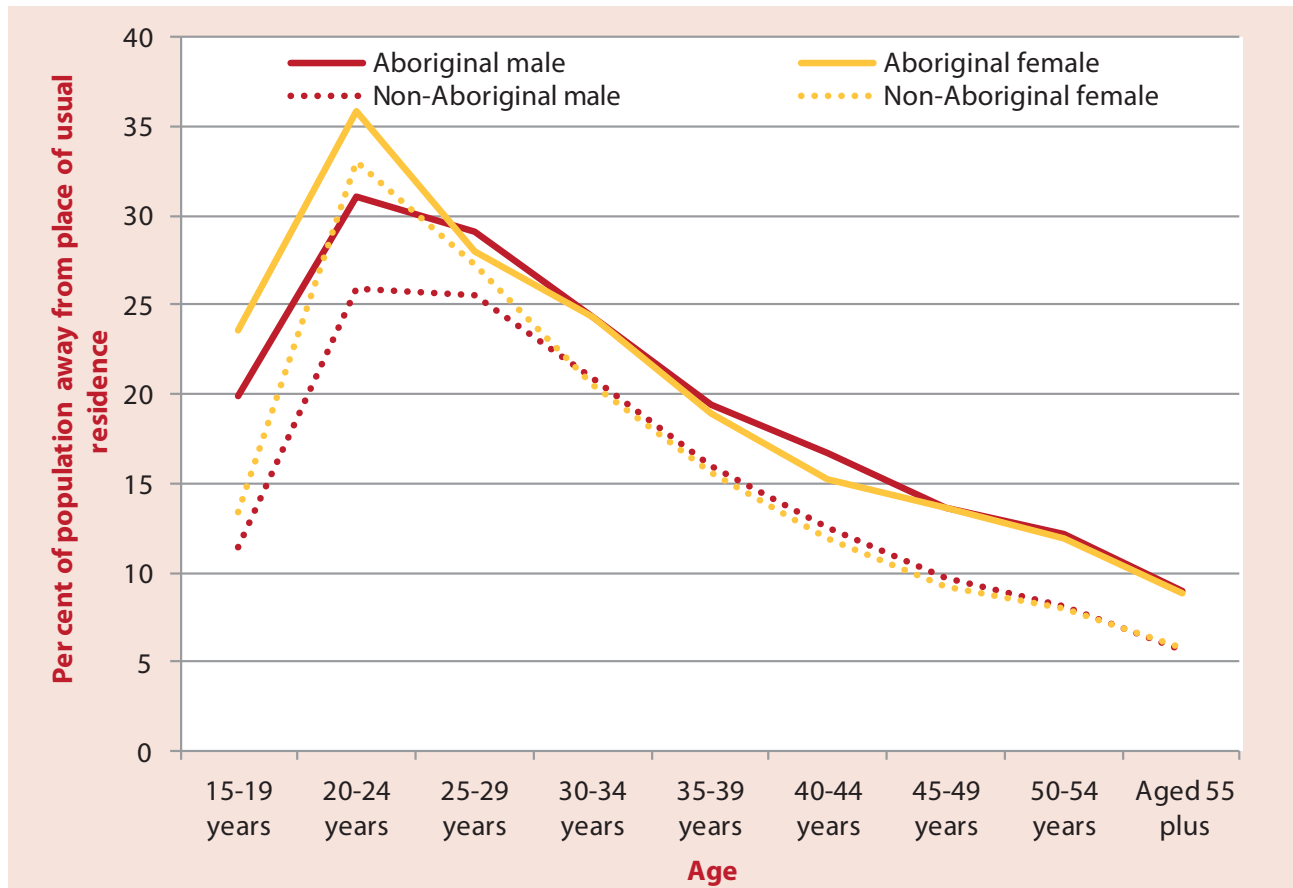


Figure 31b Per cent of population who had not completed Year 12 who changed their usual residence between 2010 and 2011, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011



Like with temporary mobility, employment tends to put a brake on permanent migration. A person with ties to a particular job is much less likely to change usual residence than one without such ties. This was true amongst the Aboriginal population of NSW with 18.8 per cent of the population who were employed in 2011 having changed usual residence over the previous year compared to 20.2 per cent of those who were not employed at the end of the period. Once again, there is considerable variation by age and sex with smaller differences between the Aboriginal and non-Aboriginal population of NSW who are employed compared to those who were not employed.

Figure 32a Per cent of population who were employed who changed their usual residence between 2010 and 2011, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011

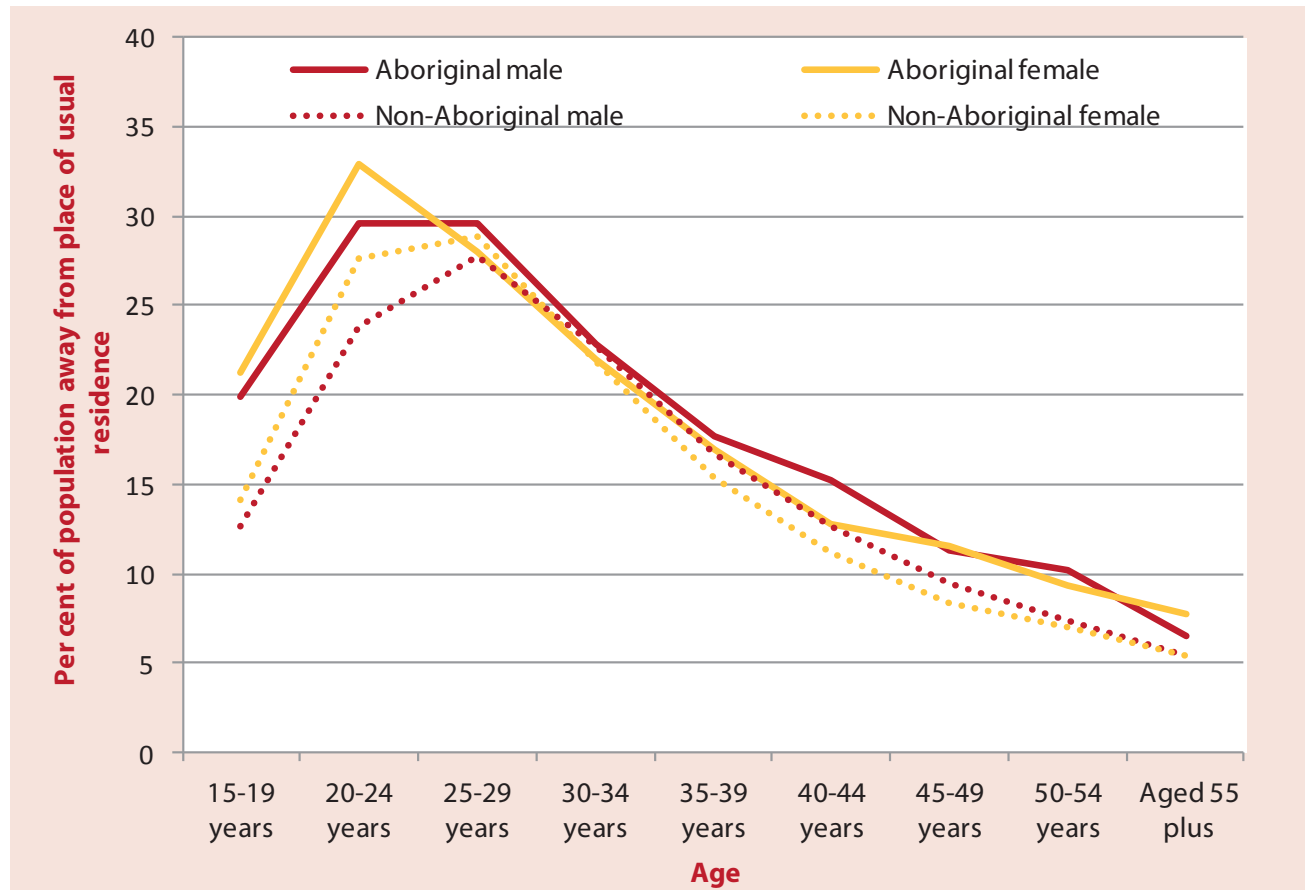
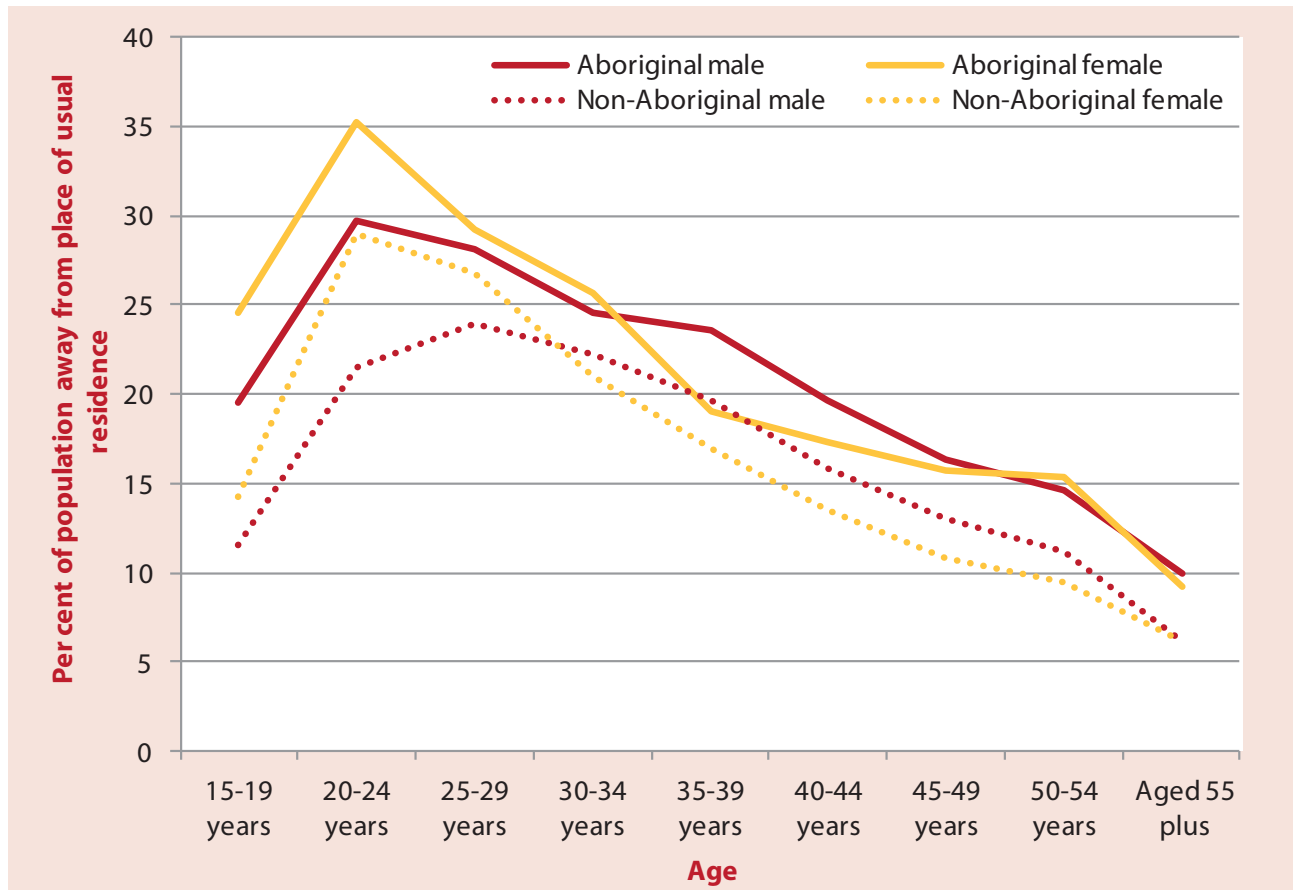


Figure 32b Per cent of population who were not employed who changed their usual residence between 2010 and 2011, Aboriginal and non-Aboriginal males and females, by age, NSW, 2011



## 6. Migration across the NSWALC Regions

The last section of Chapter 5 of this paper showed significant variation across the lifecourse in terms of whether an Aboriginal person changed their place of usual residence in the year preceding the 2011 Census. Furthermore, although the lifecourse patterns were reasonably similar, there were differences between Aboriginal and non-Aboriginal peoples in the level of permanent migration. In this chapter of the paper, the geographic patterns of geographic mobility is studied in more detail.

In order to analyse migration across the NSWALC Regions, question in the 2011 Census that asks of all those aged 5 years and older in 2011 'Where did the person usually live five years ago (at 9 August 2006)?' is made use of. Responses to this question are coded to the SA2 level based on the concordances discussed in Section 2.2 of this paper.

When data on usual residence five years ago is combined with data on usual residence on the night of the Census, it is possible to create a migration matrix. This migration matrix is used in two ways. First, results presented in Section 6.1 look at the net flows of people into and out of each of the nine NSWALC Regions. Such analysis is useful for understanding migration-driven population change. The second way in which the migration matrix is used (in Section 6.2) is to look at the source and destination regions of those who did migrate between 2006 and 2011.

### 6.1 Population flows into or out of NSWALC Regions

The migration matrix discussed at the start of this chapter gives a person's place of usual residence in 2006 alongside their place of usual residence in 2011. In order to maintain a balanced population, a tenth region called non-NSW is created, representing the rest of Australia. Using this migration matrix, it is possible for each NSWALC Region (and for non-NSW) to obtain an estimate of the number of Aboriginal and non-Aboriginal aged 5 years and older who stayed in a given region over the whole period; the number who migrated out of the region between 2006 and 2011; and the number of people who migrated into the region over the same period. These migration flows can then be used to create the following four percentages:

- In migration – The number of people who moved into that region between 2006 and 2011, expressed as a percentage of the 2006 base population.
- Out migration – The number of people who moved out of that region between 2006 and 2011, expressed as a percentage of the 2006 base population.
- Net migration – The difference between in migration and out migration;
- Churn – The number of people who moved into that region between 2006 and 2011, expressed as a percentage of the 2011 usual resident population.

Values for each of the four percentages are given in Figure 33 for each of the nine NSWALC Regions, as well as for the rest of Australia (non-NSW). Results in Figure 33a are for the Aboriginal population whereas results for Figure 33b are for the non-Aboriginal population.<sup>5</sup>

<sup>5</sup> In order to construct the migration matrix for the NSWALC Regions, it is necessary to first construct a migration matrix of SA2 in 2006 (SA2U5P) by SA2 in 2011 (SA2UCP). Given that there are 539 possible values for each of SA2U5P and SA2UCP (including the non-NSW grouping) this leads to a matrix of 539 x 539 or 290,521 cells. In order to minimise the degree of randomisation undertaken by the ABS, it is therefore not possible to calculate a migration matrix for males and females separately or for separate age groups.

Figure 33a Population flows into and out of NSWALC Regions, Aboriginal peoples, 2006 to 2011

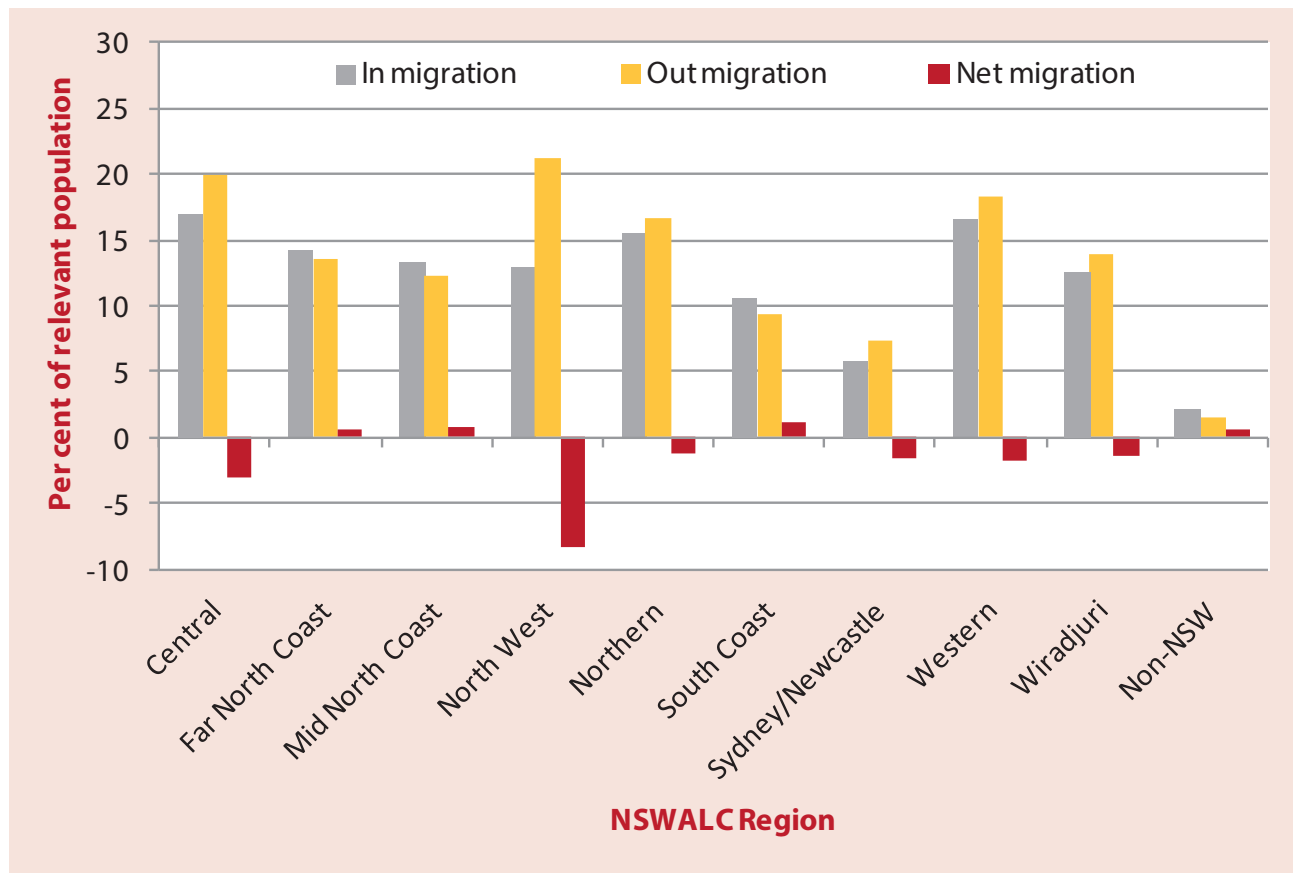
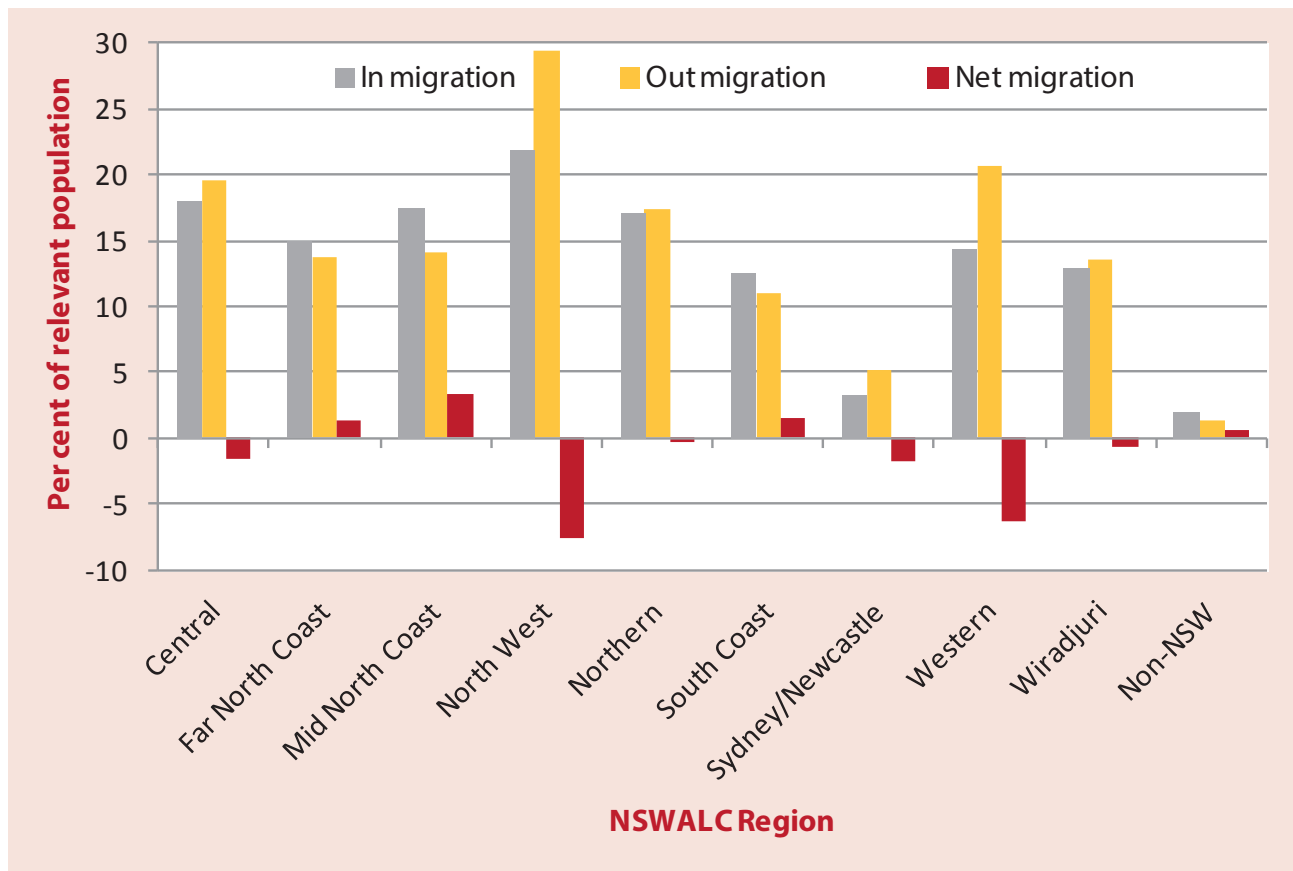


Figure 33b Population flows into and out of NSWALC Regions, non-Aboriginal peoples, 2006 to 2011



The Aboriginal population of NSW:  
Analysis of the 2011 Census



The NSWALC Regions with the highest outflow of both Aboriginal and non-Aboriginal peoples between 2006 and 2011 was the North West region, followed by the Western and Central regions. While there was also a large number of people who migrated into those regions between 2006 and 2011, these regions all experienced net outward migration between 2006 and 2011. In other regions, more Aboriginal (and non-Aboriginal) peoples left the inland parts of NSW between 2006 and 2011 than moved there. Regions with a net population inflow were all along the coast of NSW. In these cases, however, the net population inflow was relatively small as a percentage of the applicable 2006 usual resident population.

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## ***6.2 Source and destination Regions***

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The previous section looked at the flow of the Aboriginal and non-Aboriginal population into and out of the nine NSWALC Regions. While this gives some insight into the net effect of migration on population change (for both Aboriginal and non-Aboriginal peoples), it does not show where people are moving from and to. However, knowing the direction of such population flows can be quite useful for understanding the changing structure of the Aboriginal population, as well as the types of services that these new entrants into the regions are likely to demand.

The following two tables document the main source and destinations regions for those Aboriginal and non-Aboriginal peoples who changes their region of usual residence between 2006 and 2011. Table 3 focuses on destination regions. Specifically, for the nine NSWALC Regions, as well as the rest of Australia (non-NSW) the percentage of the population who left that area between 2006 and 2011 by the NSWALC Region that they ended up in is listed. So, for example, the first column of results shows that 24.0 per cent of the Aboriginal population who were living in the Central NSWALC Region in 2006 but not living there in 2011 ended up migrating to the Wiradjuri region. Around 18.2 per cent of the Central region migrants moved to the North West Region and so on down to the Far North Coast which received only 1.8 per cent of the Central Region migrants.

Table 4 looks at the source regions for the Aboriginal and non-Aboriginal population of NSW who changed their NSWALC Region of usual residence between 2006 and 2011. For the nine NSWALC Regions, as well as the rest of Australia (non-NSW) the percentage of the population who moved into that area between 2006 and 2011, by the NSWALC Region that they came from is listed. The first column of results shows that 27.3 per cent of the Aboriginal population who were living in the Central NSWALC Region in 2011 but not living there in 2006 migrated from the North West region.

The final two columns of results in Table 3 and Table 4 should be interpreted slightly differently to the other nine columns. For the final column in Table 3, the results can be interpreted as the source region of those who left the state over the period. In the final column of Table 4, on the other hand, the results can be interpreted as the destination region of those who entered the state.

The final point to note regarding Tables 3 and 4 is that, for ease of presentation, the nine NSWALC Regions as well as non-NSW are abbreviated in the main body of the tables. The abbreviations are explained in the notes below the paper.

Table 3 Population flows into and out of NSWALC Regions, non-Aboriginal peoples, 2006 to 2011, percentage

Source Regions

	Central	Far North Coast	Mid North Coast	North West	Northern	South Coast	Sydney/ Newcastle	Western	Wiradjuri	Non-NSW
<b>Aboriginal</b>										
	09 - WIR 24.0	10 - RST 55.8	07 - SYN 32.8	01 - CEN 23.0	10 - RST 28.1	10 - RST 53.4	10 - RST 46.5	10 - RST 46.2	10 - RST 42.8	07 - SYN 31.5
	04 - NOW 18.2	07 - SYN 13.4	10 - RST 32.1	05 - NTH 22.7	07 - SYN 22.3	07 - SYN 20.1	03 - MNC 11.6	09 - WIR 23.4	01 - CEN 16.1	09 - WIR 14.6
	07 - SYN 17.6	05 - NTH 12.2	05 - NTH 13.2	10 - RST 19.5	04 - NOW 12.7	09 - WIR 17.5	06 - SOC 11.4	04 - NOW 11.4	07 - SYN 16.0	02 - FNC 12.1
	05 - NTH 14.6	03 - MNC 11.0	02 - FNC 10.2	07 - SYN 9.7	03 - MNC 10.9	03 - MNC 3.7	09 - WIR 9.9	01 - CEN 8.2	06 - SOC 10.2	06 - SOC 11.6
	10 - RST 12.8	09 - WIR 2.6	04 - NOW 3.5	09 - WIR 8.7	01 - CEN 10.0	02 - FNC 1.7	05 - NTH 7.8	05 - NTH 4.5	08 - WES 4.6	05 - NTH 9.0
	03 - MNC 5.4	01 - CEN 2.2	09 - WIR 3.4	08 - WES 5.5	02 - FNC 9.3	05 - NTH 1.5	02 - FNC 5.2	07 - SYN 3.6	03 - MNC 3.3	03 - MNC 8.3
	08 - WES 3.0	04 - NOW 1.8	01 - CEN 2.9	03 - MNC 4.7	09 - WIR 4.1	08 - WES 1.0	01 - CEN 4.3	03 - MNC 1.5	05 - NTH 2.5	08 - WES 4.6
	06 - SOC 2.7	06 - SOC 0.8	06 - SOC 1.8	02 - FNC 4.4	06 - SOC 2.2	04 - NOW 0.9	04 - NOW 2.5	06 - SOC 1.1	04 - NOW 2.3	04 - NOW 4.2
	02 - FNC 1.8	08 - WES 0.1	08 - WES 0.1	06 - SOC 1.7	08 - WES 0.4	01 - CEN 0.0	08 - WES 0.9	02 - FNC 0.2	02 - FNC 2.3	01 - CEN 4.1
<b>Non-Aboriginal</b>										
	09 - WIR 24.5	10 - RST 66.4	07 - SYN 40.8	05 - NTH 36.9	10 - RST 28.7	10 - RST 47.2	10 - RST 60.6	10 - RST 61.8	10 - RST 50.6	07 - SYN 47.6
	07 - SYN 22.3	07 - SYN 13.5	10 - RST 35.3	10 - RST 24.8	07 - SYN 28.5	07 - SYN 31.6	06 - SOC 12.6	09 - WIR 17.6	07 - SYN 19.4	09 - WIR 13.9
	10 - RST 18.8	03 - MNC 7.0	05 - NTH 9.0	01 - CEN 12.0	03 - MNC 12.0	09 - WIR 14.4	03 - MNC 9.8	07 - SYN 5.3	06 - SOC 14.1	06 - SOC 12.7
	05 - NTH 16.0	05 - NTH 7.0	02 - FNC 6.8	07 - SYN 9.2	04 - NOW 9.3	03 - MNC 2.6	09 - WIR 7.2	01 - CEN 4.6	01 - CEN 5.4	02 - FNC 11.5
	04 - NOW 6.5	06 - SOC 2.3	09 - WIR 3.3	09 - WIR 5.3	02 - FNC 7.6	02 - FNC 2.1	05 - NTH 3.8	02 - FNC 2.3	03 - MNC 3.7	03 - MNC 6.5
	06 - SOC 4.4	09 - WIR 2.2	06 - SOC 2.8	03 - MNC 5.1	01 - CEN 6.7	05 - NTH 1.2	02 - FNC 3.8	06 - SOC 2.3	05 - NTH 2.7	05 - NTH 4.6
	03 - MNC 4.3	04 - NOW 0.8	01 - CEN 1.0	02 - FNC 4.2	09 - WIR 4.5	01 - CEN 0.7	01 - CEN 1.5	05 - NTH 2.2	02 - FNC 1.9	08 - WES 1.4
	02 - FNC 2.0	01 - CEN 0.5	04 - NOW 0.7	08 - WES 1.3	06 - SOC 2.4	04 - NOW 0.2	04 - NOW 0.4	03 - MNC 2.2	08 - WES 1.4	01 - CEN 1.1
	08 - WES 1.2	08 - WES 0.2	08 - WES 0.2	06 - SOC 1.2	08 - WES 0.3	08 - WES 0.2	08 - WES 0.3	04 - NOW 1.8	04 - NOW 0.6	04 - NOW 0.8

Notes: 01 - Cen = Central; 02 - FNC = Far North Coast; 03 - MNC = Mid North Coast; 04 - NOW = North West; 05 - NTH = Northern; 06 - SOC = South Coast; 07 - SYN = Sydney/ Newcastle; 08 - WES = Western; 09 - WIR = Wiradjuri; and 10 - RST = Non-NSW

Table 4 Source NSWALC Regions for those who moved into particular source NSWALC Regions between 2006 and 2011, Aboriginal and non-Aboriginal peoples, percentage

**Source Regions**

	Central	Far North Coast	Mid North Coast	North West	Northern	South Coast	Sydney/ Newcastle	Western	Wiradjuri	Non-NSW
<b>Aboriginal</b>										
	04 - NOW 27.3	10 - RST 41.0	07 - SYN 34.0	01 - CEN 29.5	04 - NOW 21.6	07 - SYN 36.3	10 - RST 38.1	10 - RST 38.1	10 - RST 29.2	07 - SYN 33.2
	09 - WIR 26.3	07 - SYN 18.5	10 - RST 23.3	05 - NTH 23.5	10 - RST 21.1	10 - RST 35.1	03 - MNC 13.3	09 - WIR 21.3	07 - SYN 20.6	09 - WIR 16.2
<b>Destination Regions</b>										
	05 - NTH 13.4	05 - NTH 14.4	05 - NTH 13.9	10 - RST 17.1	07 - SYN 19.2	09 - WIR 17.3	05 - NTH 12.3	04 - NOW 18.6	01 - CEN 19.2	02 - FNC 10.8
	07 - SYN 13.1	03 - MNC 11.5	02 - FNC 8.7	07 - SYN 10.6	01 - CEN 13.8	01 - CEN 3.3	09 - WIR 10.8	01 - CEN 10.1	06 - SOC 10.2	06 - SOC 10.7
	10 - RST 12.0	04 - NOW 6.1	01 - CEN 6.1	08 - WES 6.1	03 - MNC 10.4	05 - NTH 3.0	01 - CEN 8.5	07 - SYN 7.5	04 - NOW 7.0	05 - NTH 8.7
	08 - WES 3.2	09 - WIR 4.3	04 - NOW 5.4	09 - WIR 5.1	02 - FNC 8.1	04 - NOW 2.0	06 - SOC 7.1	06 - SOC 2.5	08 - WES 6.2	03 - MNC 7.3
	03 - MNC 2.8	01 - CEN 2.4	09 - WIR 5.1	03 - MNC 4.7	09 - WIR 3.2	03 - MNC 1.8	04 - NOW 4.7	05 - NTH 1.4	05 - NTH 3.7	04 - NOW 5.4
	02 - FNC 1.8	06 - SOC 1.7	06 - SOC 3.1	02 - FNC 2.1	08 - WES 1.4	02 - FNC 0.7	02 - FNC 4.6	03 - MNC 0.2	03 - MNC 2.3	08 - WES 4.2
	06 - SOC 0.0	08 - WES 0.1	08 - WES 0.6	06 - SOC 1.1	06 - SOC 1.1	08 - WES 0.5	08 - WES 0.6	02 - FNC 0.2	02 - FNC 1.5	01 - CEN 3.5
<b>Non-Aboriginal</b>										
	07 - SYN 26.3	10 - RST 55.2	07 - SYN 49.4	05 - NTH 39.8	07 - SYN 28.0	07 - SYN 45.2	10 - RST 57.7	10 - RST 53.8	10 - RST 43.0	07 - SYN 55.4
	09 - WIR 25.0	07 - SYN 23.2	10 - RST 25.8	10 - RST 18.8	10 - RST 26.5	10 - RST 35.8	06 - SOC 12.0	09 - WIR 19.5	07 - SYN 28.3	09 - WIR 12.4
<b>Destination Regions</b>										
	05 - NTH 15.8	03 - MNC 6.7	05 - NTH 8.4	07 - SYN 13.0	04 - NOW 11.8	09 - WIR 13.6	03 - MNC 10.1	07 - SYN 12.7	06 - SOC 13.9	06 - SOC 10.7
	10 - RST 14.7	05 - NTH 6.4	02 - FNC 5.3	01 - CEN 12.7	03 - MNC 10.7	03 - MNC 1.6	09 - WIR 8.0	01 - CEN 3.7	01 - CEN 6.1	02 - FNC 9.0
	04 - NOW 9.0	09 - WIR 3.1	09 - WIR 5.1	09 - WIR 5.2	02 - FNC 7.6	02 - FNC 1.2	05 - NTH 6.1	04 - NOW 2.9	05 - NTH 2.4	03 - MNC 5.2
	06 - SOC 2.9	06 - SOC 3.1	06 - SOC 3.2	02 - FNC 3.8	01 - CEN 7.5	05 - NTH 1.2	02 - FNC 3.1	05 - NTH 2.1	03 - MNC 2.1	05 - NTH 3.6
	03 - MNC 2.6	04 - NOW 1.1	01 - CEN 1.4	03 - MNC 3.6	09 - WIR 5.4	01 - CEN 1.0	01 - CEN 2.2	06 - SOC 2.1	08 - WES 2.0	08 - WES 1.6
	08 - WES 2.2	01 - CEN 0.8	04 - NOW 1.1	08 - WES 1.6	06 - SOC 2.2	08 - WES 0.2	04 - NOW 0.6	02 - FNC 1.8	02 - FNC 1.3	01 - CEN 1.1
	02 - FNC 1.4	08 - WES 0.4	08 - WES 0.3	06 - SOC 1.5	08 - WES 0.5	04 - NOW 0.2	08 - WES 0.2	03 - MNC 1.3	04 - NOW 0.9	04 - NOW 1.0

Notes: 01 - Cen = Central; 02 - FNC = Far North Coast; 03 - MNC = Mid North Coast; 04 - NOW = North West; 05 - NTH = Northern; 06 - SOC = South Coast; 07 - SYN = Sydney/ Newcastle; 08 - WES = Western; 09 - WIR = Wiradjuri; and 10 - RST = Non-NSW

Taking the results from Table 3 and Table 4 together, one of the more obvious findings from the analysis of source and destination regions is that a lot of Aboriginal (and non-Aboriginal) migrants into the NSWALC Regions came from outside of NSW. Apart from the Central and North West regions, the rest of Australia was either the most common or second most common destination and source region of those Aboriginal peoples who left or entered the regions between 2006 and 2011.

While high relative to the other regions, non-NSW was the destination region for a majority of migrants for only two of the nine NSWALC Regions – the Far North Coast and the South Coast. These regions share a long border with Queensland and the ACT respectively. There were no NSWALC Regions where the majority of the inwardly migrating Aboriginal population came from outside the state. Most Aboriginal migrants within the state, therefore, were moving from one NSWALC Region to another. For those who did move within the state, geographic proximity was clearly a driver of where people came from and moved to.

The final point to note from Tables 3 and 4 is that many of those who left the state or entered the state went to or came from the Sydney/Newcastle region. This is despite the fact that this region is one of the few that does not share a border with another State/Territory.

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# Appendix figures and tables

Appendix Figure 1 Map of NSWALC Regions and Local Aboriginal Land Councils (LALCs)





