



Association of Consulting Architects
The Business of Architecture

Architects in Queensland – a view from the census

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an ACA resource

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ARCHITECTS IN QUEENSLAND A VIEW FROM CENSUS DATA

Prepared by Gill Matthewson

This report is an extension of the ACA State of the Profession research project, led by John Held and Sue Phillips of ACA – SA and funded through a grant from the Architectural Practice Board of South Australia.

Census data

This report is based on the analysis of customised data about those who identified themselves as architects (occupation code Architect, ANZSCO 232111) in Queensland in the 2001, 2006 and 2011 Australian Bureau of Statistics Censuses of Population and Housing.

Census data includes all those who describe their occupation as ‘architect’, whether or not they are registered.¹ Because of this, Census figures are more inclusive than other counts of professional participation and, internationally, researchers in architecture consider them to be ‘reasonably accurate’ data for the architecture workforce.²

Overall findings

The report finds the following:

- Overall, the population of architects in Queensland has increased between each Census, but the percentage of architects in the state’s population is less than the percentage in Australia as a whole.
- The age profile of architects has changed over the ten years but less so in Queensland.
- Queensland has a lower proportion of women architects than the rest of the country.
- In 2011, fewer architects seemed to be working long hours than in the past – state and country-wide.
- Architects are increasingly employees rather than employers.
- Architects in Queensland earn slightly more than the national averages.

Detailed findings

Number of architects

As expected, the population of architects fluctuates across the three Censuses, as shown in Table 1:

Table 1: Number of architects

Year	Queensland	All Australia	QLD % of Aus
2001	1,705	11,442	15%
2006	2,165	13,285	16%
2011	2,296	14,973	15%
2001 to 2011 growth	35%	33%	

Both the state and the country show increases in the numbers of architects for the ten-year period, although in Queensland that growth was slightly higher. In Australia as a whole, architect numbers grew by a third from 2001 to 2011, and the state’s growth in numbers was just over that figure at 35%. For the country, growth was stronger in the first five-year period and weaker over the next Census period. Queensland, however, exaggerated that pattern with a 27% increase in the first Census period compared with 18% for the country; and a more subdued 6% increase from 2006 to 2011 compared to 13% for all Australia. Queensland architects constitute 15% of the country’s architects.

Perhaps a more important figure is how those straight numbers of architects relate to the overall population, which has, of course, also increased between Censuses. Dividing the number of architects into the total population gives the number of architects per 100,000 people, shown in Figure 1:

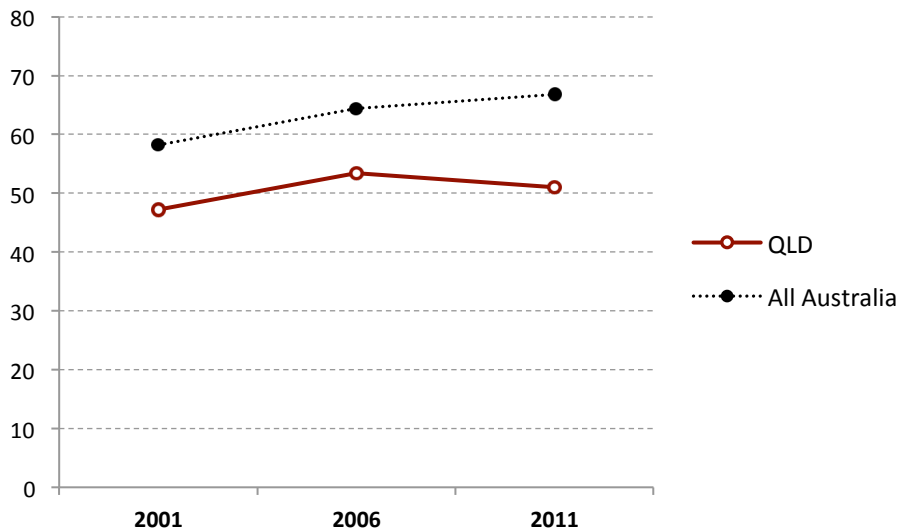


Figure 1: Number of architects for every 100,000 people³

By this measure, there was more subdued growth than that shown in Table 1, but with Australia still supporting 15% more architects per capita in 2011 than it did in 2001. For Queensland, however, the numbers were much more subdued, with the state actually supporting fewer architects in 2011 than it did in 2006. Figure 1 also shows that, taken overall, the state has markedly fewer architects per head of population compared to all of Australia, a gap that grew to roughly a quarter less in 2011.⁴ This suggests that Queensland (with its smaller population base and economy) can support fewer architects.

The age profile of architects

Figure 2 shows the distribution of architects in Queensland by age across the three Censuses.

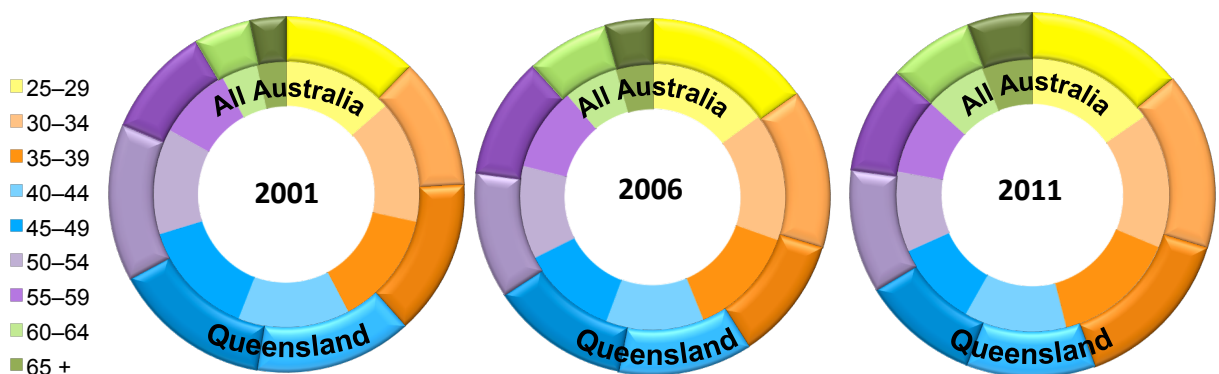


Figure 2: Architects by Age Group

The first point to note is that the proportion of architects under the age of 40 increased over the ten-year period in both Queensland and all Australia (depicted in yellow and oranges in Figure 2). This is not surprising given that the number of architecture graduates increased by 40% from 2000 to 2010.⁵ Queensland lags behind the national average but still shows the same pattern.

However, the second point to note is that the proportion of architects over the age of 60 (in greens) also increased, for the state and the country. In 2001 architects of this age were 8% of the Australian and Queensland architect populations; by 2011 they comprised 13%. This means that the proportion of architects in the middle band between 40 and 60 (in blues and purples) decreased. In 2001 this age group constituted around half the architect population; by 2011 this proportion had dropped to around 40% for the country (42% for the state). The actual number of architects in this age group has not necessarily dropped, but they make up a smaller proportion of the architecture workforce.

What happens, then, to architects in the Census as they age? Architects who were 25–29 in the 2001 Census would appear in the 2011 Census in the 35–39 age group (and in the 30–34 age group in 2006). Figure 3 shows the number of architects aligned by age groups (the solid red line indicates their age in 2011, the green and blue lines the numbers for that cohort in 2006 and 2001 respectively).

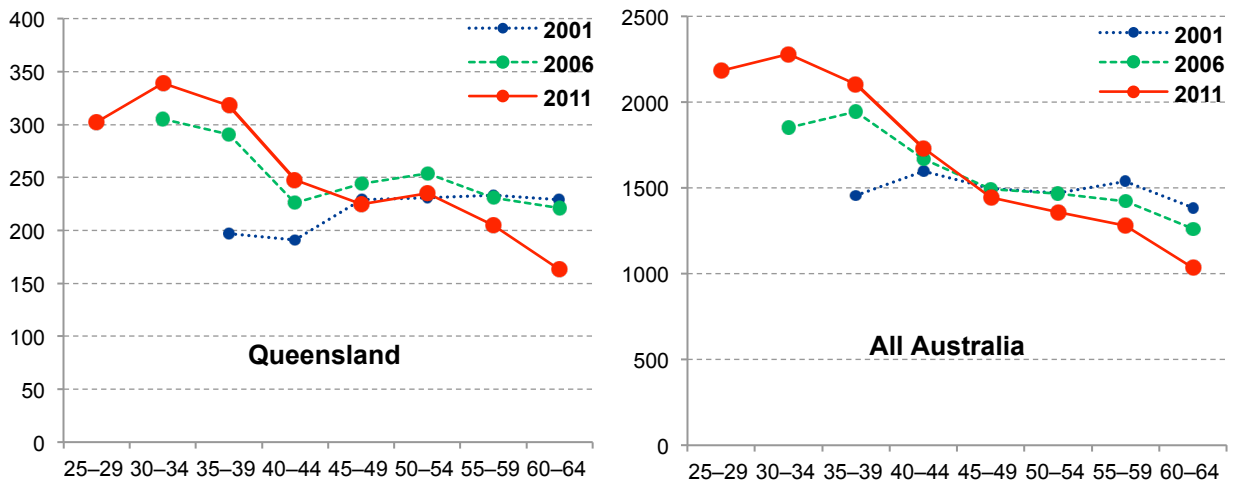


Figure 3: Loss and gain of architects from Census to Census

The All Australia graph shows a strong pattern: before architects reach their 40s, numbers increase, presumably due to mature graduates entering the workforce as well as international arrivals. However, at some time in their 40s a number of architects stop labelling themselves as such in the Census. Queensland figures jump around more than those for the whole country (due to smaller numbers overall in the state) but nonetheless shows the same pattern. In 2001, 197 people in Queensland aged 25–29 called themselves architects; in 2006, when these people were 30–35, there were 226 of them; and in 2011 when aged 35–39 the figure grew to 248. Conversely, by 2011 nearly one-quarter of those who were 50–54 years old in 2001 in Australia have disappeared. The drop was more for Queensland (29%) and across the country represents a significant numerical loss of experienced architects.

Gender is a factor in the number of architects by age group. Table 2 details the increasing numbers of women in the architecture workforce over the ten-year period. Of note, Queensland lags behind national figures for the percentage of women by 3–5 percentage points. Queensland’s Schools of Architecture graduated a slightly lower proportion of women graduates than the national average (the Queensland average for the ten years 2000–2009 was 40%, and for the country 41%⁶).

Table 2: Number of architects by gender

Year	Queensland				All Australia			
	Male	Female	Total	% Female	Male	Female	Total	% Female
2001	1,450	255	1,705	15%	8,987	2,296	11,442	20%
2006	1,734	431	2,165	20%	10,199	3,086	13,285	23%
2011	1,758	538	2,296	23%	10,828	4,144	14,973	28%

Figure 4 shows the breakdown of the data by age group and gender. (Figures for all Australia have been scaled down to match the Queensland figures; the scaling point is the number of men age 25–29).

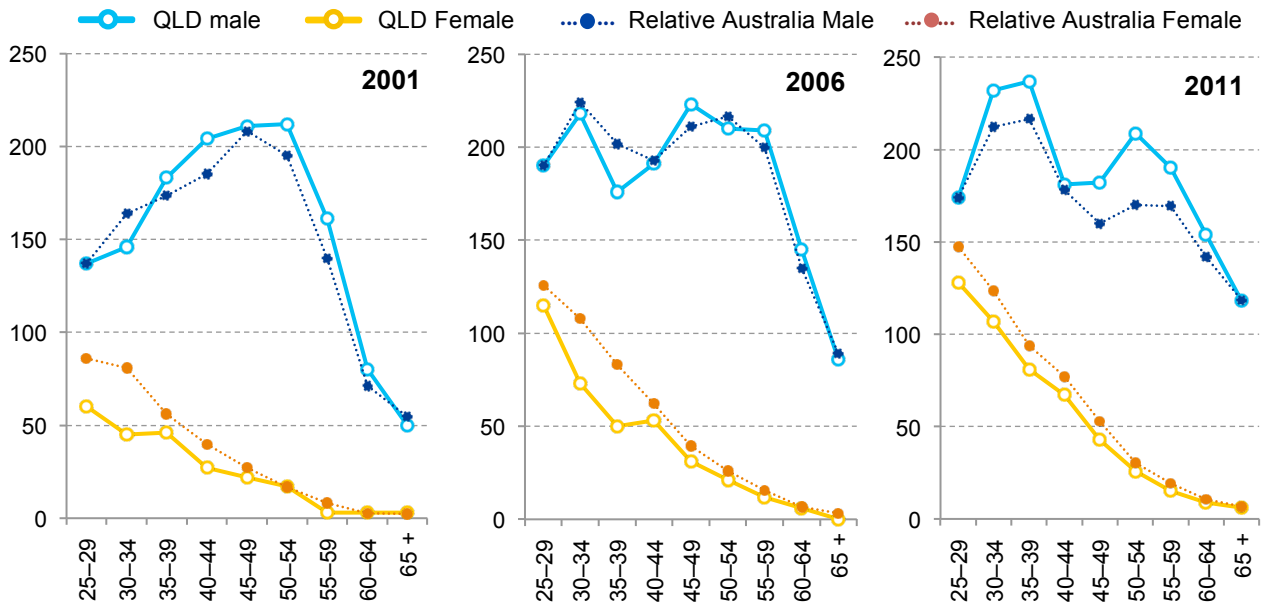


Figure 4: Number of architects by age group and gender, Queensland and relative to all Australia

Figure 4 reveals some notable patterns. First, in all cases women are concentrated in the younger age groups and the men more evenly spread; women have an almost straight line 'downhill' from a high point in the youngest category of 25–29. Second, Queensland shows variable patterns of alignment with the national relative numbers. The state has higher relative numbers of male architects and lower numbers of female. Third, despite the drop-out rate of architects after age 45 shown in Figure 3, the actual number of older architects has grown over the ten-year period (with the 55 and over group nearly doubling in Queensland from 2001–2011), contributing to their increased piece of the pie (see Figure 2).

Hours of work

Long hours are generally considered endemic in architecture, but this is a pattern that appears to have changed over time. Figure 5 shows the proportion of architects working particular hours. The red bands indicate a work week in excess of 40 hours, and the blue and green bands are for those working part-time (less than 35 hours a week); the orange/yellow bands are for standard working hours of 35–40 hours a week.

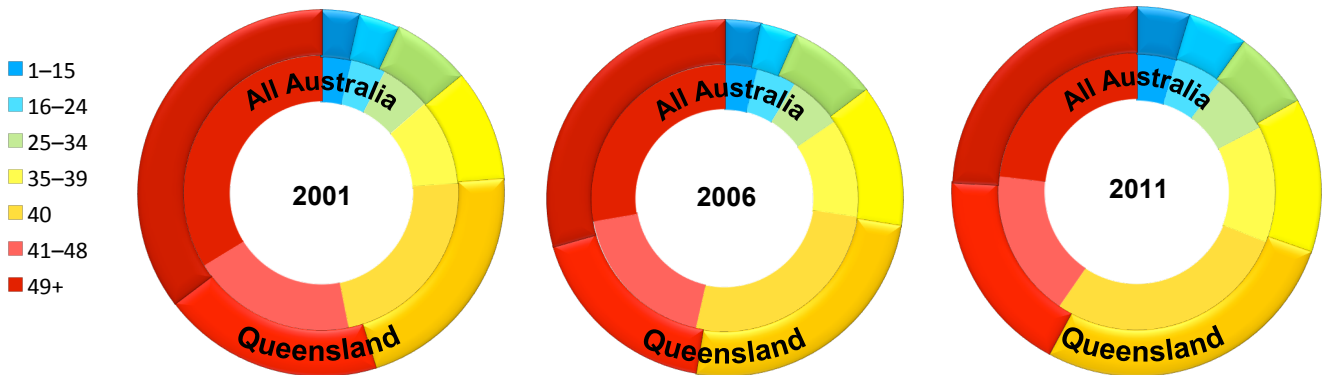


Figure 5: Hours per week worked, Queensland and all Australia

There is little difference between Queensland and all Australia for hours worked per week although Queensland architects appear to work slightly longer hours. However, there is a strong trend visible across the Censuses. In 2001, more than half of all architects worked in excess of 40 hours a week, with more than a third of all architects working in excess of 48 hours a week (such hours are defined as 'long' in employment literature). However, by 2011, this proportion had dropped: around 40% reported working more than 40 hours a week, and the group that worked more than 48 hours a week had dropped to under a quarter. In addition, the proportion of part-time workers increased, with 14% working part-time in 2001 and 17% in 2011.

The changing demographic of architects is likely to be contributing to this shift. Figure 6 shows the difference between men and women for hours worked for all Australia.⁷

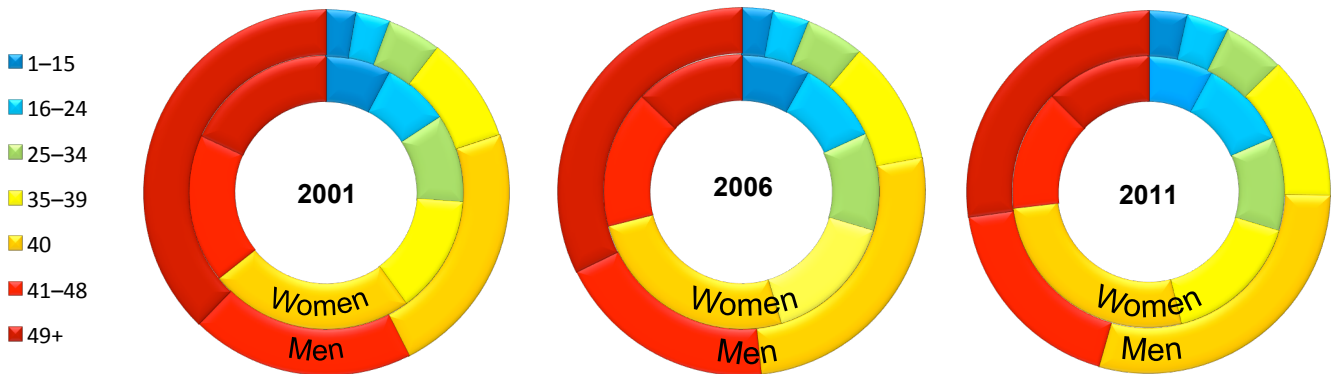


Figure 6: Hours per week worked, by gender, all Australia

The dramatic difference between men and women in terms of hours worked is a result of the wider societal pattern whereby mothers are much more likely to reduce their hours to accommodate children. Nonetheless, the drop-off in the proportion of those working in excess of 40 hours a week noted in Figure 5 is still visible in Figure 6 for both men and women. This is a significant shift for men to working standard hours, given that the proportion of men working part-time increased only slightly over the ten-year period (11% of men part-time in 2001 and 13% in 2011).

Employment situation

The Census asks for information on whether someone is an employee, employer or an independent operator (such as sole practitioner or contractor). In the 2001 and 2006 Censuses, the latter were termed ‘own account worker’. In the 2011 Census, two new terms were used: ‘Owner managers of unincorporated enterprises’ and ‘Owner managers of incorporated enterprises’. This distinction has affected some of the information presented in Table 3 and graphically in Figure 7.

Table 3: Architects by employment situation

	Queensland			All Australia		
	2001	2006	2011	2001	2006	2011
Employee	1,003	1,360	1,499	6,451	7,781	9,323
Own account worker	383	216	260	2,768	1,638	2,102
Employer	311	569	515	2,070	3,701	3,394

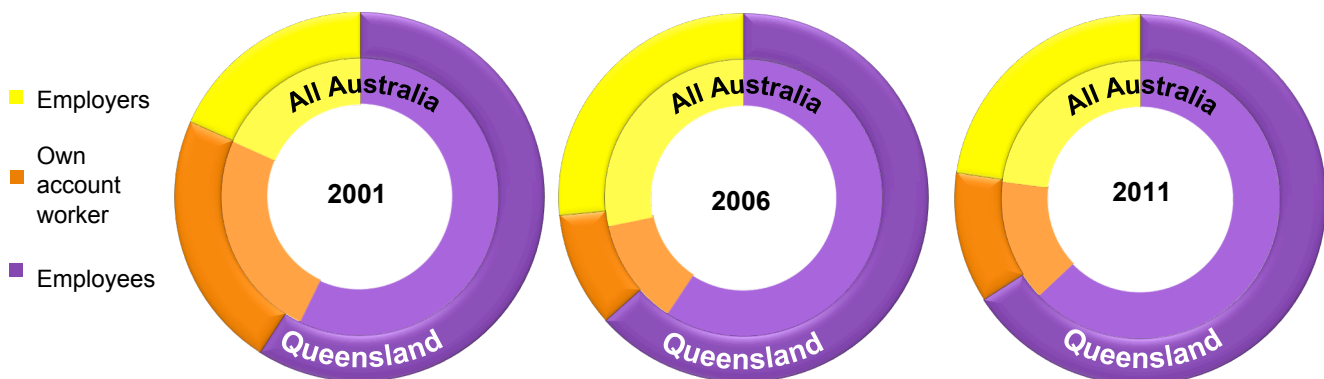


Figure 7: Architects by employment situation

Over the ten-year period, the proportion of those who were employees has steadily increased from 57% to 63% of the architecture population in Australia. To an extent this would be expected given the increasing proportion of younger people in the workforce seen in Figure 2. Queensland was 3–4 percentage points above the national average in all Censuses so that by 2011 employed architects were two-thirds of the Queensland architects.

The figures for employers and ‘own account workers’ fluctuate with a high for the former and a low for the latter in 2006 in both Queensland and the whole country. This, however, may be due to the change in description between the 2006 and 2011 Censuses. In 2006, a sole practitioner or partnership who employed just one person might have described themselves as employers, but in 2011 they would be

categorised by the legal basis of their business, which (as a small business) is more likely to be an ‘unincorporated enterprise’. In that case, although the 2001 and 2006 Censuses can be compared, a 2006 and 2011 comparison needs to be treated with caution. Between 2001 and 2006 there is a marked drop in the number of own account workers and a large increase in employers. This was possibly a response to the ‘boom’ period for architecture in the middle of the 2000s with practices of all sizes employing staff. The changes between 2006 and 2011 suggest a drop in the proportion of employers. It is possible that this can be attributed to the downturn after the 2008 Global Financial Crisis, which may have made small practices less viable and result in practices consolidating. However, the differing ways of categorising between these two Censuses mean that this is a tentative connection.

Income

Income information was sought for all full-time architecture workers; the Census gathers this in terms of income per week. Figure 9 gives the information for 2006 and 2011 (2001 is omitted because the income ranges differ from the later two Censuses).

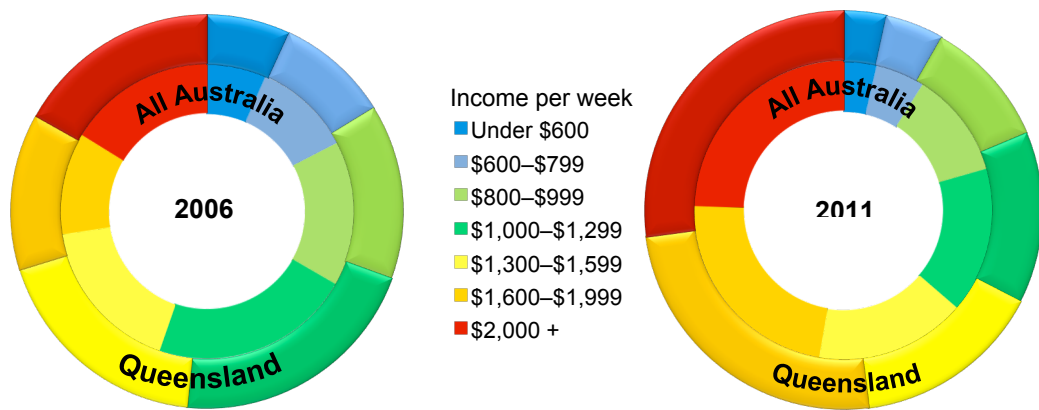


Figure 9: Architects by income, Queensland and all Australia

Figure 9 demonstrates that architects in Queensland on average earn more than the national averages. By 2011, nearly half (47.3%) of Census-identified architects in Australia were earning more than \$1,600 a week (orange plus red segments), and in Queensland that proportion exceeded 50%. In addition, 20.5% were earning less than \$1,000 a week in Australia as a whole, but 18.7% were doing so in Queensland.

Income, of course, varies with age. Figure 10 shows the breakdown by age for 2011.⁸

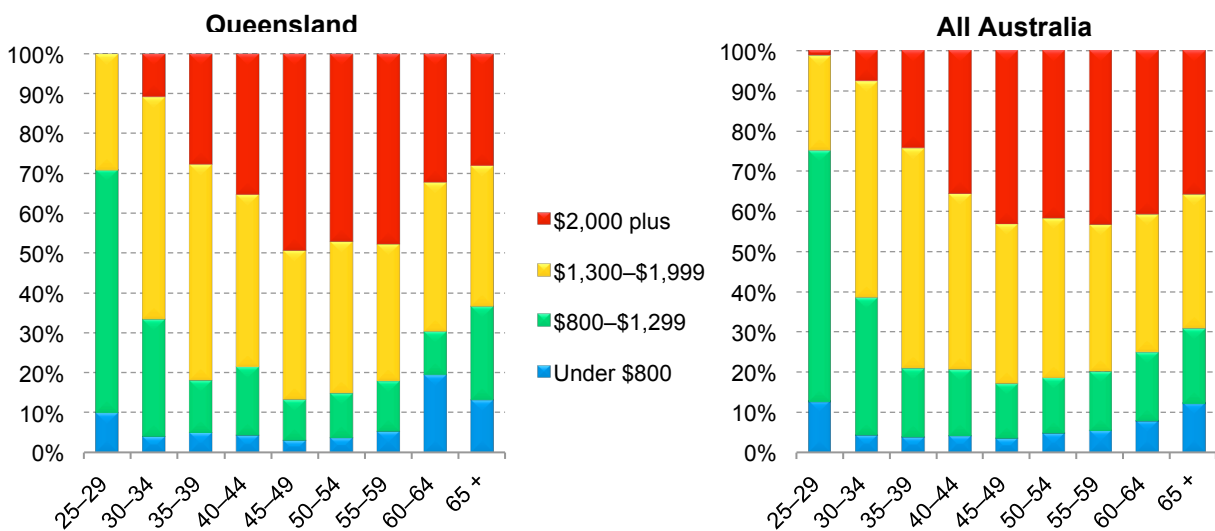


Figure 10: Proportion of age group in earnings brackets by age, Queensland and all Australia 2011

Australia-wide, income increases with age, peaking in the 45–59 age bands. In Queensland, the overall pattern mirrors that of all Australia. However, the pattern of Queensland architects earning more than all Australian architects visible in Figure 9 shows up again with a greater percentage in each age group

earning more except for those aged 60 and over. It is possible that the relative scarcity of architects in the state, observable in Figure 1, has meant that higher rates of pay are maintained.

Summary

This report has explored what might be read from data about architects from three Censuses for Queensland compared to the rest of Australia. Data such as this helps articulate and indicate broad patterns.

The first of these patterns is that architects are increasing their presence in the community in relative numbers, but less so in Queensland. Curiously, as a group, architects are getting both older and younger – nation-wide and in Queensland – with mid-career/middle-aged architects not keeping pace proportionally with the other age groups. The increasing numbers of graduates can perhaps explain the growth in the number of younger architects. The reasons for the increasing proportion of older architects are less clear, especially as the data also records the departure of older architects. However, since the 1970s there have been increasing numbers of architects overall.

Architects are increasingly employees and employers rather than independent workers, particularly in Queensland. This may reflect the increasing complexity of buildings and the need for teams to work on them, although the data is a little too variable because the method for categorising employers and independent workers in the Census has recently changed. Of interest, fewer architects seem to be working long hours than in the past. While this might suggest those in the profession are moving towards a better work–life balance, the still weak representation of women in the profession might indicate otherwise. The slowing down of the pace of work in the wake of the 2008 financial crisis may be another possible explanation for this drop in hours worked.

The Census data strongly indicates that architecture is very dependent on the economy. Queensland is a less populous state than New South Wales and Victoria and consequently has a smaller number of architects (15% of the total). However, even on a per capita basis, its number of architects in 2011 was markedly less than Australia as a whole. This relative scarcity of architects has possibly maintained higher income levels for architects in Queensland.

Overall, Queensland’s architects constitute a profession that appears to be maintaining healthy income levels.

¹ Indeed, each Census includes a very small number of 15–19 year olds who identify themselves as architects – at that age they are unlikely to meet any acceptable notion of an architect. However, this number of people is very small.

² Robert Gutman, *Architectural Practice: A Critical View* (Princeton, NJ: Princeton Architectural Press, 1988), 23; Annmarie Adams and Peta Tancred, *Designing Women: Gender and the Architectural Profession* (Toronto: University of Toronto Press, 2000), 3.

³ Population data from ABS, ‘Estimated Residents Population, State and Territories,’ *Australian Bureau of Statistics*, 2013, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.0Jun%202014?OpenDocument>

⁴ The Australian Capital Territory, New South Wales and Victoria all have a higher than average number of architects per head of population.

⁵ There were 704 graduates in 2000 and 975 in 2010. Numbers from *Architecture Schools of Australasia* (Barton, ACT: Australian Institute of Architects National Office), 2001 and 2012 editions.

⁶ Figures calculated by author from *Architecture Schools of Australasia*, 2000–2011 editions.

⁷ State data not shown because there are relatively small numbers of women in each state, which would tend to distort the proportions.

⁸ Income brackets have been amalgamated because small numbers in a category can cause distortions.