Architects in South Australia – a view from the census

Prepared by Gill Matthewson
ARCHITECTS IN SOUTH AUSTRALIA
A VIEW FROM CENSUS DATA

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This report is part 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 South Australia 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 or members of professional associations. 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.

Overall findings

The report finds the following:

- Overall, South Australia’s architecture profession is growing but its position is not as strong as that in some of the larger states.
- Architects are increasing their presence in the state in relative numbers compared to the overall population.
- Architects are increasingly employees and employers rather than independent workers.
- In 2011, fewer architects seemed to be working long hours than in the past.
- South Australia lags behind the rest of the country in terms of the representation of women in the profession.
- South Australia has lower income levels than architects in the rest of Australia.

Detailed findings

Number of architects

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

<table>
<thead>
<tr>
<th>Year</th>
<th>South Australia</th>
<th>All Australia</th>
<th>SA % of Aus</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>632</td>
<td>11,442</td>
<td>5.6%</td>
</tr>
<tr>
<td>2006</td>
<td>695</td>
<td>13,285</td>
<td>5.2%</td>
</tr>
<tr>
<td>2011</td>
<td>814</td>
<td>14,973</td>
<td>5.4%</td>
</tr>
<tr>
<td>2001 to 2011 growth</td>
<td>29%</td>
<td>33%</td>
<td></td>
</tr>
</tbody>
</table>

While Australia as a whole showed a steady growth in the number of architects for the ten-year period, South Australia experienced less growth in the first five-year period, then surged over the next Census period, but did not quite catch up with the national rate of growth – 29% for the state and 33% for the country.
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:

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 South Australia that growth figure was 18%, suggesting that the state’s ability to support architects grew strongly over the period. However, Figure 1 also shows that, taken overall, the state has markedly fewer architects per head of population compared to all of Australia: roughly a quarter less. This suggests that South Australia (with its smaller population base and economy) can support fewer architects. Indeed, Susan Shannon et al argue that the volume of graduates in the state more than exceeds the South Australian profession’s capacity to absorb them. The above data supports their argument as over the last 20 years South Australian graduates have formed 8% of the country’s total, but they have graduated into a profession that forms barely 6% of the nation’s population of architects (Table 1).

Age profile of architects

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

The first point to note is that, in both South Australia and all Australia, the proportion of architects under the age of 40 increased over the ten-year period (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. However, the second point to note is that the proportion of architects over the age of 60 (in greens) also increased – particularly so in South Australia. In 2001 architects in this age group were 8% of the Australian architect population; by 2011 they comprised 15% in South Australia and 13% for the whole of the country. 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 half the architect population; by 2011 this proportion had dropped to around 40% (36% 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 the numbers for that cohort in 2006 and 2001 respectively).
The South Australia figures jump around more than those for the whole country (due to smaller numbers overall in the state), but both charts show the same 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. In 2001 in South Australia, 76 people aged 35–39 called themselves architects; in 2011 when these people were 45–49 there were 68. While this is not a large number, it is an 11% drop and the smallest difference. By 2011, nearly a third of those architects who were 45–49 years old in 2001 (and 55–59 in 2011) in South Australia have disappeared. Taken across the country, the percentage drops were smaller than those for South Australia, but nonetheless represent a significant loss of experienced architects.

Gender is a factor in the number of architects by age group. Table 2 details the increasing number of women in the architecture workforce over the ten-year period. Of note, South Australia lags behind all Australia for the percentage of women.

Table 2: Number of architects by gender

<table>
<thead>
<tr>
<th>Year</th>
<th>South Australia</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>All Australia</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>% Female</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>% Female</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>518</td>
<td>114</td>
<td>632</td>
<td>18%</td>
<td>8,987</td>
<td>2,296</td>
<td>11,442</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>569</td>
<td>126</td>
<td>695</td>
<td>18%</td>
<td>10,199</td>
<td>3,086</td>
<td>13,285</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>629</td>
<td>185</td>
<td>814</td>
<td>23%</td>
<td>10,828</td>
<td>4,144</td>
<td>14,973</td>
<td>28%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4 shows the breakdown of the data by age group and gender. (Figures for all Australia have been scaled down to match the South Australia figures; the scaling point is the number of men aged 25–29).
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, South Australia is increasingly misaligned with the rest of the country for both men and women. The figures from the 2001 Census show relatively small amounts of difference, but the 2011 Census shows wide variation between the figures for South Australia and those for all Australia. This is particularly so for women, and especially younger women. Of note, South Australia’s Schools of Architecture have been graduating a smaller proportion of women graduates recently than they did at the turn of the century: the three-year average in 2000 was 39%; in 2010 that figure was 31%. This would then affect the number of young women entering the architecture workforce in the state. Third, despite the drop-out rate of architects after age 45 visible in Figure 3, the actual number of older architects has grown over the ten-year period, contributing to their increased ‘piece of the pie’, as shown in 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 bands are for standard working hours of 35–40 hours a week.

![Figure 5: Hours per week worked, South Australia and all Australia](image)

There is little difference between South Australia and all Australia for hours worked per week. 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.

![Figure 6: Hours per week worked, by gender, all Australia](image)

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 rather than long hours given that the proportion of men working part-time increased only slightly over the ten-year period (11% of men worked 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**

<table>
<thead>
<tr>
<th></th>
<th>South Australia</th>
<th>All Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee</td>
<td>357 399 497</td>
<td>6,451 7,781 9,323</td>
</tr>
<tr>
<td>Own account worker</td>
<td>171 120 145</td>
<td>2,768 1,638 2,102</td>
</tr>
<tr>
<td>Employer</td>
<td>100 170 142</td>
<td>2,070 3,701 3,394</td>
</tr>
</tbody>
</table>

**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 and is similar for both South Australia and all of Australia. To an extent this would be expected given the increasing proportion of younger people in the workforce as seen in Figure 2.

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 South Australia and the whole country. This, however, may be affected by 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. To compare 2006 and 2011, it is best to combine the figures for these two categories. In South Australia the numbers drop by just three people; in all Australia the figures are very similar between the two Census years but show a slight growth of 3%. It is possible that this lacklustre growth – compared to the growth in overall numbers seen in Table 1 and Figure 1 – can be attributed to the downturn after the 2008 Global Financial Crisis, which may have made small practices less viable and resulted 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 demonstrates clearly that architects in South Australia on average earned less than those in Australia taken as a whole. By 2011, nearly half (47%) of Census-identified architects in Australia were earning more than $1,600 a week (orange plus red...
segments), but in South Australia that proportion was six percentage points less at 41%. Conversely, Australia-wide, 20% were earning less than $1,000 a week, but 25% were doing so in South Australia.

Figure 9: Architects by income, South Australia and all Australia

Income, of course, varies with age. Figure 10 shows the breakdown by age for 2011 (income brackets have been amalgamated because small numbers in a category can cause distortions).

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

Australia-wide, income increases with age, peaking in the 45–59 age bands. In South Australia, there is much more fluctuation and the top red band never exceeds that of all Australia, except for those who are in the over 65 years band. However, there are just 54 people in this age group in the state compared with 849 in the country as a whole, so with each person representing nearly 2% of the cohort, it is easy for the proportional figure to shift dramatically.

Summary

This report has explored what might be read from data about architects from three Censuses for South Australia 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. Curiously, as a group, architects are getting both older and younger, with mid-career/middle-aged architects not keeping pace proportionally with the other age groups. The increasing number 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. 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. This was particularly so for South
Australia, which lags behind the rest of the country in terms of the representation of women architects. 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. South Australia is one of the smaller states in the nation and consequently has a smaller number of architects (just 6% of the total). However, even on a per capita basis, its number of architects is less than Australia as a whole. This may suggest that the state’s economy is not able to support architecture firms to the same extent as other states. This interpretation is also supported by the lower income levels of architects in South Australia.

Overall, South Australia’s architecture profession is growing but its position is not as strong as some of the larger states.

NOTES

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.
5 There were 704 graduates in 2000 and 975 in 2010. Numbers from Architecture Schools of Australasia Handbook, 2001 and 2012 editions.
7 South Australia is not shown because there is a small number of women in the state, which tends to distort the numbers.