Hidden disadvantage in the ACT:
REPORT FOR ACT
ANTI-POVERTY WEEK

OCTOBER 2017

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About NATSEM/IGPA

The National Centre for Social and Economic Modelling (NATSEM) was established on 1 January 1993, and supports its activities through research grants, commissioned research and longer term contracts for policy analysis and model development and maintenance. In January 2014, the Institute for Governance and Policy Analysis (IGPA) at the University of Canberra was established to harness the research strengths of NATSEM and the ANZSOG Institute for Governance (ANZSIG). The aim of this Institute is to create and sustain an international class research institution for the study and practice of governance and public policy. The Institute has a strong social mission committed to the production of leading edge research and research driven education programs with genuine public value and, by implication, policy impact. The integration of ANZSIG and NATSEM has created exciting opportunities for the development of cutting edge research in public policy analysis through combining expertise in qualitative and quantitative methods, micro-simulation and policy modelling and evaluation.

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Suggested citation

## Acronyms

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<thead>
<tr>
<th>Acronym</th>
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<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<td>ACT</td>
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<td>ANZSIG</td>
<td>ANZSOG Institute for Governance</td>
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Disadvantage isn’t often seen as an issue in Canberra. Aren’t we the territory with the highest median income of all States and Territories? And one of the highest education levels? This may be true, but these statistics hide the fact that there are a sizeable number of people, children and households in the ACT experiencing disadvantage in terms of measures such as income, education, and housing affordability. One way to identify hidden disadvantage in the ACT is to drill down into small areas\(^1\) of the ACT, as we have done in this report using the latest data from the 2016 Census of Population and Housing from the ABS.

In one of every ten small areas in the ACT, the proportion of persons living in low income households is higher than the average for Australian capital cities. For 16 per cent of ACT small areas the proportion of children living in low income households is higher than the capital city average. We also find that 23 per cent of small areas in the ACT had a higher proportion of persons living in a sole parent family in low income households than the national average, and more than 16 per cent of areas have households paying more than the Australian capital city average of gross income on rent. Further, around 8 per cent of small areas in the ACT had a proportion of persons who did not complete year 10 that was higher than the average for Australian capital cities. More concerning was the analysis of multiple disadvantage. Nearly one in five small areas of the ACT were higher than the capital city average on two or more indicators of disadvantage; and one in 10 were higher on three or more indicators.

What we show in this report is that there are pockets of disadvantage in the ACT that are usually hidden by statistics produced at larger area levels. In this report we don’t show where these pockets are, so as not to stigmatise them. While highlighting pockets of disadvantage, these report findings also reveal one of the ACT’s strengths by showing the diversity that exists within our neighbourhoods. In comparison to some other cities, disadvantage in Canberra does not tend to be concentrated in particular suburbs or regions. This, in part, reflects the location of smaller-scale public housing throughout Canberra’s suburbs and town centres – often referred to as ‘salt and peppering’. This is aimed at supporting liveable local communities and achieving

\(^1\) The small areas used in this report are the Australian Bureau of Statistics (ABS) Statistical Area Level 1 (SA1). SA1s have an average of 150 households and there are 1146 SA1s across the ACT. See the Appendix for a description of these geographies.
positive social and economic outcomes not only for tenants but also for the community more broadly (ACT Government – Public Housing Renewal Taskforce, 2017a). Another strength of our community is the level of collaboration between the government, community, business, and research sectors in the ACT, working together to address disadvantage. For Anti-Poverty Week 2017, a group of ACT community sector organisations engaged NATSEM to help build a better understanding of disadvantage in the ACT today. This research collaboration will assist in the development of services, policies and advocacy aimed at supporting people living with disadvantage and reducing levels of disadvantage in the ACT.
1. INTRODUCTION

While the ACT is normally perceived as a “public service town”, in fact, in the 2011 census, 55 per cent of the 214,000 people working in the ACT, or nearly 119,000 people, worked in private industry, with 76,000 (36%) working in the Australian Government and 19,000 (nearly 9%) working in the ACT Government.\(^2\)

One of the common misperceptions about Canberra is that nobody here is disadvantaged. While this perception continues outside Canberra, most Canberrans know someone who lives near them who may be on a low income; struggling with rent payments; or who is long-term unemployed. The problem in Canberra is not that there is no disadvantage, but that it is hidden in the general advantage of Canberra suburbs. Anyone working with people experiencing disadvantage in the ACT will be able to tell that there is significant hidden disadvantage in Canberra.

For Anti-Poverty Week in 2013, the ACT Community Services Directorate and community sector organisations got together to dispel the myth that there was no disadvantage in the ACT by using 2011 census data at the suburb level (Tanton, Vidyattama and Mohanty, 2013). This work was conducted by the National Centre for Social and Economic Modelling (NATSEM) at the University of Canberra. The report showed that there were people experiencing disadvantage in the ACT, but that disadvantage in the ACT was masked when looking at averages for an area. The 2013 report based on 2011 census data identified 21,528 people living in poverty in the ACT.

With some of the 2016 census data now available, it is an opportune time to update this report for Anti-Poverty Week in 2017. Because not all the data are available, the indicators examined in this report are:

- Number and proportion of people in low income households (where the adjusted household income is based on number of people in the house and this is less than $25,999 per year);\(^3\)

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2 Data on industry of employment from the 2016 census has not been released at the time of publication.

3 Household income is adjusted for the number of people in the house or is equivalised, which means it is divided by an equivalising factor. This factor is one for the first adult; 0.5 for each additional household resident aged over 15; and 0.3 for each household resident aged under 15 (Please see Appendix One).
- Number and proportion of dependent children aged 0-14 years living in low income households (using the same income cut-off as above);
- Number and proportion of persons living in a sole parent family in low income households (using the same income cut-off as above);
- Median rent payments in an area as a proportion of median income;
- Number and proportion of persons no longer in school and not completed year 10.

All these indicators were extracted from the 2016 census data for very small areas (Statistical Area Level 1 or SA1) – these areas have an average of around 150 households in the ACT. These areas were then graphed against the capital city average, to show how many areas in the ACT have greater levels of disadvantage compared to the capital city average. The capital city average was used so that we aren’t comparing areas in the ACT with areas in remote Australia – we are comparing areas in the ACT with the average of Sydney, Melbourne, Brisbane, Adelaide, Perth, Darwin, Hobart and Canberra.

This method relies on using the smallest area possible from the ABS data without the data being confidentialised, as using larger areas hides the disadvantage in the ACT. An example is that if there are 150 households in an area with a household income of $100,000 per year, and one household with a household income of $10,000 per year, the average income for the 151 households is $99,407 per year, so the impact of this one very low income household is masked by the high incomes in the area.

2. LOW INCOME HOUSEHOLDS

The proportion of people and children living in low income households are important measures of socioeconomic disadvantage. Low incomes means essential goods and services like food, heating, and clothing may not be affordable. For children, living in a low income household may mean not having access to books, computers and the internet, so educational development can be affected. Abello et al. (2015) argued that people in low income households have a greater likelihood of persistent disadvantage, intergenerational disadvantage and income inequality.
Overall, there were 37,213 people living in low income households in the ACT in 2016, representing 11 per cent of the total ACT population. This figure was lower than the average for other capital cities in Australia (20%). Looking at small areas in the ACT (Figure 1), it can be seen that there are many small areas in Canberra that have low income rates above the capital city average. About 10 per cent of small areas in the ACT had a proportion of people living in low income households that was above the capital city average. One small area in the ACT had more than 60 per cent of people living in a low income household.

Figure 1: Proportion of persons in low income households for small areas in the ACT, 2016

Source: Manipulation of 2016 census data

When looking at results for children aged 0-14 years, there were 7,867 children living in low income households in the ACT representing 12 per cent of total ACT children in this age group. This figure was lower than the average for other Australian capital cities (21%). Looking at the data for small areas in the ACT, comparing to Figure 1, it can be seen from Figure 2 that there were more areas with a relatively high
proportion of children living in low income households than for all persons. A total of 16.1 per cent of small areas in the ACT had a higher proportion of children aged 0-14 years in low income households compared to the capital city average. This may indicate that children living in low income households might live in areas where other children in low income households live, or this may simply reflect that it is likely that there is more than one child within a household. There were six small areas in the ACT where the proportion of children living in low income households was 50 per cent or more.

Figure 2: Proportion of children in low income households for small areas in the ACT, 2016

![Proportion of children in low income households for small areas in the ACT, 2016](source: Manipulation of 2016 census data)

Another important socioeconomic disadvantage indicator is the proportion of persons living in a sole parent family in low income households. There were 8,751 people living in sole parent family in low income households, representing around 3 per cent of the ACT population. This was slightly lower than the proportion in capital cities in Australia (4%).
Figure 3 shows the proportion of people living in a sole parent family in low income households for small areas in the ACT. Around 23 per cent of small areas in the ACT were above the Australian capital city mean. There were two areas where the proportion of people living in a sole parent family in low income households was greater than 15 per cent.

Figure 3: Proportion of persons living in a sole parent family in low income households by small area in the ACT, 2016

Source: Manipulation of 2016 census data
3. RENT AS A PROPORTION OF INCOME

Rents are a large cost of living in the ACT. Data from the 2016 census shows that the ACT has some of the highest rents in Australia, only behind New South Wales. Analysis by the ACT Government for their Housing Strategy shows that an affordable rental payment for a household earning up to $55,000 per year is $321 per week (ACT Government – Your Say, 2017b).

Figure 4 shows the median rent by State and Territory. The ACT has one of the highest median rents, just below that of New South Wales. This means that for many low income earners in the ACT, rental payments may be unaffordable.

Anglicare’s Rental Affordability Snapshot for 2017 showed an extreme lack of affordable housing for low income families in Canberra. On the weekend that the study was conducted in Canberra, of 1,280 private rentals advertised, only 38 were available at a price that wouldn’t put a family living on income support payments into housing stress; and 80 houses were available that wouldn’t put a household on the minimum wage into housing stress (Anglicare, 2017).
Housing affordability has been an important issue in the ACT since the final quarter of 2012 and is just behind Sydney and Melbourne in terms of affordability (Housing Industry Association, 2016). The ACT Government has recently recognised this, and has started a review of their housing affordability strategy (ACT Government – Your Say, 2017b).

Tanton and Phillips (2013) argue that incorporating income in a measure of housing affordability is essential as higher income households can afford higher housing costs. For low income families, renting is often the only available option as they do not have the financial stability or wealth to be able to buy a house. This means there needs to be affordable rental housing for low income families in our city.

One way to take income into account in a measure of housing affordability is to use a measure of rental stress, which uses households paying more than 30 per cent of their income on housing as a basis. This measure can then also add a low income cutoff, so the proportion of households paying more than 30 per cent of their income on housing and in the bottom 40 per cent of an income distribution (Nepal et al., 2010). Another way is to calculate how many years of an annual median income is required to buy a median priced house in an area.

Unfortunately, housing stress using a 30/40 rule cannot be calculated from the publically available data from the 2016 census as individual household level data are required, and incomes are grouped on the census, and then only available for areas, not households. However, with some estimation of median income in an area based on the income ranges available, we are able to calculate the ratio of median rent to median income for each small area from the publically available census data. This is the closest we can get to a measure of housing stress using the publically available data.

Figure 5 shows that there were 161 small areas in the ACT (16 per cent) that were paying more of their gross income on rent than the capital city average of 23.2 per cent, with two small areas in the ACT paying an average of 40 per cent of gross income on rent. This is much higher than the widely accepted 30 per cent of income on rent. There were 23 small areas in the ACT (2.3 per cent) that were paying more than 30 per cent of their gross income on rent.
4. NO LONGER IN SCHOOL AND NOT COMPLETED YEAR 10

The National Youth Participation Requirement (NYPR) harmonised the compulsory school age across all states and territories. Under this requirement, it is compulsory for all young people to participate in schooling until they complete year 10 and for them to continue to participate in a combination of education, training or employment (defined as at least 25 hours per week) until they reach the age of 17. Therefore, for this indicator, we have used the proportion of people aged 15 and over who did not complete Year 10 and no longer participate in school as a measure of educational disadvantage.

There were 14,980 people aged 15 and over who did not complete year 10 and are no longer at school representing 5 per cent of the population in the ACT. This rate was about half of the average for all capital cities in Australia. When looking at this indicator for small areas in Canberra (Figure 6), there were around 8 per cent of small
areas in the ACT where the proportion of persons who did not complete year 10 was higher than the average of Australian capital cities. Some of these areas had average values above 20 per cent.

Figure 6: Proportion of persons who did not complete Year 10 and are not at school, by small area in the ACT, 2016

Source: Manipulation of 2016 census data

5. AREAS WITH MULTIPLE DISADVANTAGE

Multiple disadvantage is when a household experiences a number of different stressors, for example, low income; low education; and high rent. Multiple disadvantage is particularly harmful to families as it is very difficult to recover from. Much research has focussed on the impact of multiple disadvantage on families - see, for example, ABS (2004), Tanton et al (2010) and Miranti, Daly and Tanton (2015).
Figure 7 shows the proportion of small areas which recorded higher rates than the Australian capital city average in each of the five indicators of disadvantage explained earlier, which are: (i) proportion of people living in low income households; (ii) proportion of children living in low income households; (iii) proportion of persons living in a sole parent family in low income households, (iv) proportion of people who did not complete year 10 and are not at school; and (v) median rent payments in an area as a proportion of median income. Figure 7 shows that 62 per cent of small areas in the ACT had no indicators of disadvantage above the capital city average.

A total of 38 per cent of small areas in the ACT had at least one indicator of disadvantage where the rate was above the capital city average. Further, there were areas experiencing multiple disadvantage (two or more indicators above the capital city average) and they represented 18.9 per cent of total small areas in the ACT. At the extreme, there were two areas that experienced higher than capital city average levels on all five measures of disadvantage.

Figure 7. Proportion of areas with multiple disadvantages, by small area in the ACT, 2016

Source: Manipulation of 2016 census data
6. DISCUSSION

This analysis of small areas in Canberra confirms what all Canberrans know – that while Canberra is a beautiful place to live, and there are some wonderful benefits of living in Canberra, disadvantage does exist. People are doing it tough in Canberra, as they are in any Australian city. It’s just that this is hidden when we look at information on the ACT overall, or even when we look at suburbs. Disadvantage in Canberra is exposed when we look at very small areas, as we have done in this report.

When we do this, we find that there are about 10 per cent of small areas in Canberra that had a proportion of people living in low income households that was above the capital city average. In one area in Canberra, 60 per cent of people were living in low income households. A total of about 37,000 people, or 11 per cent of the Canberra population, were living in low income households.

For children, the result was slightly worse, with 12 per cent of children across the ACT living in low income households. In 16.1 per cent of small areas in the ACT the childhood low income rate was higher than the capital city average, and there were six areas across the ACT where more than 50 per cent of the children were living in low income households.

In around 23 per cent of small areas in the ACT the proportion of persons living in a sole parent family in low income households was above the Australian capital city average. This was much higher than we found for persons in low income households (10%) and children (16.1%). This suggests that sole parent families in the ACT are doing it particularly tough in the ACT.

Our analysis confirms what we all know about the ACT – affordable housing is a big issue, with rents the second highest of all States and Territories. There were 161 small areas in the ACT (16%) paying more of their gross income on rent than the capital city average of 23.2 per cent, with 23 small areas in the ACT paying more than 30 per cent of gross income on rent. This indicates rental stress, and possible financial stress in terms of income available to spend on food, clothes, heating, and children’ education expenses.

Only 5 per cent of the population had no year 10 and were not still at school, compared to the Australian capital city average of 10 per cent. Only around 8 per cent of small areas in the ACT had a proportion of persons who did not complete year 10
that was higher than the average of Australian capital cities. This compares to 10 per cent of areas for people in low income households; 16.1 per cent for children in low income households; and 23 per cent for persons in a sole parent family in low income households. However, some of these areas had no year 10 average values approaching 30 per cent.

Finally, when looking at multiple indicators of disadvantage, nearly one in five small areas in the ACT experienced more than two indicators of disadvantage; and one in 10 experienced three or more. These are the areas of hidden disadvantage in the ACT that are likely to need the greatest support. We haven’t shown where they are in this report on purpose, to avoid these areas being stigmatised as disadvantaged. The purpose of this report is to show that there is disadvantage in the ACT, that it is largely hidden, and that this needs to inform the development of policies and services aimed at supporting people living with disadvantage and reducing disadvantage in the ACT.

7. CONCLUSIONS

Canberra is a great place to live if you have money, education, and secure and affordable housing. Without these, Canberra still has a strong sense of community and quality support services, but daily life can be a struggle. High rentals means not much money is left for other essentials, let alone occasional luxuries. Low income households struggle to pay rent, and may struggle to get a job if they also have low education. While we may expect to see levels of disadvantage in large cities like Sydney or Melbourne, many people don’t expect to see it in Canberra, where on average incomes are high. Yet our analysis shows that it is there, in pockets that are spread across Canberra.

For Anti-Poverty Week 2017, our analysis shows that Canberra is not exempt from needing to address poverty and disadvantage in our city. We aren’t all rich, or even middle income. Many areas in Canberra have a higher proportion of people living in low income households than the average of capital cities in Australia. On average, across the whole of Canberra, we look good with high incomes and high education. However, dig a little deeper into our suburbs, and pockets of disadvantage, while scattered, exist that match and exceed Australian capital city averages.
REFERENCES


ACT Government – Public Housing Renewal Taskforce (2017a), *Frequently Asked Questions*, retrieved from


Housing Industry Association (2016), *Housing Affordability Worsens in ACT*, retrieved from
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APPENDIX ONE: DEFINITIONS OF ALL THE MEASURES

Overall Method

Data were extracted from 2016 Tablebuilder provided by the ABS. The data were extracted for the geography Statistical Area Level 1 across the ACT, the second smallest geography available on the Tablebuilder system used to extract the data. Mesh blocks are the smallest area for which data are available. Mesh blocks have around 40 households in them, and there are 6,392 mesh blocks across the ACT.

The problem with using mesh blocks is that they are so small that the ABS has to randomise cells to ensure confidentiality. This means data for many areas across the ACT were not reliable enough, so the SA1 geography was used for this analysis. SA1’s have an average of around 150 households in them and there are 1146 SA1’s across the ACT with 93 of them with no population.

When looking at very small areas, if the numerator is very small, then a small change in the denominator can cause a large change in a per cent. For example, if there are 10 people in an area and one is on a low income, then another one on low income adds 10 per cent to the low income rate. This can lead to significant instability. For this reason, any areas with less than 30 units (people/children) in them are removed from our analysis. This also means industrial areas in the ACT, like Mitchell and Fyshwick, are excluded. A total of 128 areas were removed from our analysis due to low population. However, for the child level analysis the excluded areas increased to 231 SA1s as we used the number of children as the criteria, rather than the population.

Another adjustment was that any households with a not stated income were excluded from both our numerator and denominator as we don’t know what their income is – they may be in our low income category; and they may not. If we include them in our denominator for the calculation of a per cent, then we should also include some of them in the low income numerator, otherwise we are under-estimating the rate. The safest treatment for these households is to exclude them from both the numerator and denominator of our calculation. At the end, after applying the exclusion criteria, there were 915-1,028 small areas with valid data we used in this report, depending on type of indicator we investigated. The percentage of small areas in a
specific indicator to total small areas of ACT is calculated based on the total number of areas with valid data.

All indicators at small area levels were compared to an average of all capital cities in Australia. These capital cities were Sydney, Melbourne, Brisbane, Adelaide, Perth, Darwin, Hobart and Canberra. This means that small areas in the ACT are not being compared to an average that includes remote areas of Australia – we are comparing like with like areas.

**Number and proportion of people and children living in low Income households**

In the 2013 report, a poverty rate was used for this indicator. Poverty rates are calculated using the proportion of people in households earning less than half the median equivalised disposable income. For this report, this information was not available yet, so we have used the proportion of low income households. Further information on how we have derived the indicator for this report is in the appendix, but the result from the 2016 Census indicator is not comparable to the 2011 Census indicator, which used a true poverty rate, rather than a low income rate.

The low income measure uses the proportion of people and children aged 0 – 14 years living in households with equivalised total income of less than $500 per week. This cutoff is used because poverty rates normally use half the median income as a cutoff for poverty; however incomes are grouped in the census, so an exact income for a household cannot be calculated. Using the Census, we were able to estimate the median equivalised gross household income across Australia as $854, giving a half median income of $427. Based on this, we identified low income households as those with the equivalised income on the census ranges were less than $500 per week.

Because income is normally shared across a household, all poverty analysis uses number of people living in households with income below a certain cutoff (in our case, $500). Also, because income is shared across the household, the number of people in the household is important – so an income of $50,000 for a lone person household is not equivalent to an income of $50,000 shared between two parents and two children. Household income is therefore equivalised, which means it is divided by an equivalising factor. This factor is one for the first adult; 0.5 for each additional household resident aged over 15; and 0.3 for each household resident aged under 15.
The formula for calculating the low income person ratio is:

\[
\text{Low Income Person Rate} = \frac{\text{Number of people in the area living in households where the equivalised income is less than $500 per week}}{\text{Total number of people living in households with a valid income in the area}}
\]

The low income children rate is calculated as:

\[
\text{Low Income Children rate} = \frac{\text{Number of children in the area aged 0 – 14 living in households where the equivalised income is less than $500 per week}}{\text{Total number of children aged 0 – 14 living in households with a valid income in the area}}
\]

**Proportion of people living in a sole parent family in low income households**

This indicator was calculated in a similar way to the other two income indicators, using the same income cut-off of $500 per week. The formula was:

\[
\text{Low Income Sole Parent Person rate} = \frac{\text{Number of people in the area living in a sole parent family where the household equivalised income is less than $500 per week}}{\text{Total number of people living in households with a valid income in the area}}
\]

**Rent as a proportion of Income**

This indicator calculates the median rent for an area, which is available in $ amounts on the 2016 census, and divides this by the median income for the area approximated using the grouped census income data.4

The median rent and income were used because both income and rent are highly skewed distributions, so a median is more appropriate summary indicator to use than a mean which is affected by the few very high incomes and rents. The median rent was calculated by extracting the rents in $ amounts from the census, and then identifying the $ rent that contains the middle observation (\(n/2\) where \(n\) is the total number of observations in the area).

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4 Please note that Figure 4 calculates only median rent at state/territory level.
The median income was calculated in a similar way, except the income ranges were much larger than the $1 ranges used for the rent variable. Therefore, the median group was identified; and the median income was approximated by identifying how far up the group the median income was.

The rent as a proportion of income was then calculated as the median rent divided by the median income.

*Proportion of persons who did not complete year 10 and no longer in school*

This indicator used the highest level of schooling completed variable from the 2016 Census. The way this variable is collected means students in year 10 can potentially be included as they haven’t yet completed year 10. The definition is therefore those who have not completed year 10 and are not at school.

The calculation is:

\[
\text{Proportion not completed year 10 and no longer at school} = \frac{\text{Number of people who have not completed year 10 and are not at school}}{\text{Number of people aged over 15 who are no longer at school}}
\]