



Knox Community Access and Equity Profile

Local Communities of Low Socio- Economic Status

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Preamble

What does this Profile comprise?

The Profile presents demographic and social data on low socio-economic communities within Knox. This is one of a number of population groups at risk of being marginalised or disadvantaged to be reviewed within a broader Knox Access and Equity Profile. The Profile aims to improve knowledge of these population groups– who they are, where, and how they live. This will assist with efforts to widen opportunities and drive better outcomes for all members of our community.

Why is it important?

It is important to understand local communities of low socio-economic status if services and interventions are to be targeted at those with limited financial means.

This knowledge can assist with planning and strategies to enhance opportunities for equitable participation in all aspects of social and economic life and improve the wellbeing of all those who are disadvantaged.

1. Summary of Findings

1.1 SEIFA (Socio-Economic Indexes For Areas)

The socio-economic status of Knox is high when compared with other parts of the State and country, but advantage is not evenly spread across the municipality. Statistics hide substantial differences in capacity. The focus of this profile is upon socio-economic disadvantage more broadly *by area* (as measured by ‘SEIFA’¹ an overall area level measure of socio-economic status), and upon low-income households in particular, as a means of identifying the number, location and age of *people* in our community with the least material resources.

- **Index of Relative Disadvantage**
 - No Knox suburb is technically disadvantaged relative to the key national disadvantage benchmark (1000) though Bayswater is our most disadvantaged local area
- **Index of Education and Occupation**
 - Ferntree Gully is most disadvantaged according to the National measure of education and occupation. Boronia and Bayswater also fall below the National average (1000)
- **Index of Economic Resources**
 - Bayswater and Boronia are disadvantaged compared to the Nation on the index measure for economic resources

All suburbs of Knox have clusters of relative disadvantage.

¹ The Socio-Economic Index of Areas (SEIFA)

1.2 Demographics of Disadvantage

Low income households are those that fall into the bottom 25% of incomes across Australia.

In 2011:

- 8600 low income households in Knox
- 1 in 6 households in Knox is 'low income' (<\$600 per week gross),
- 1 in 5 households in Boronia (1600 households) and Bayswater (830 households).

The highest numbers of low-income households in Knox are located in Ferntree Gully, Boronia & Rowville.

Over half of all low-income households in Knox are located in these three suburbs.

There are

- 1500+ low-income households in Ferntree Gully (1700 households) and Boronia (1600 households); and
- 1000+ low-income households in Rowville (1100 households) and Wantirna South (1100 households)
- 80% of low-income households in Knox comprise a lone person or couple only

Four out of five low-income households in Knox are smaller, lone person, or couple only, households.

14,200 people live in low-income households in Knox.

1 in 10 people in Knox live in a low-income household.

Older people aged 65+ are *over-represented* -they account for over 43% of Knox residents that live in low-income households.

1.3 Government Welfare Payments

In 2016:

- Aged Pension rates higher than average in all Knox suburbs (except Wantirna & Wantirna South)
- Disability Pension rates higher than average in the north-east of Knox – Bayswater, Boronia/Basin & FTG/UFTG
- Youth Allowance payments higher than average in Knoxfield/Scoresby

Three in five people on welfare in Knox live in either Ferntree Gully/UFTG (5800 people); Boronia (5700 people) or Rowville (4700 people).

One in five adults in Knox have relied on welfare as the main source of income at some time in the previous two years.

1.4 Social and Financial Disadvantage

The highest number of people experiencing socio-economic disadvantage based on measures of vulnerable families, vulnerable children & selected financial stressors – live in the north-east part of Knox (which incorporates Bayswater, Boronia, The Basin, FTG, UFTG)

1.5 Health and Wellbeing

It is estimated in 2015:

People living in the *most disadvantaged* parts of Knox (areas that fall within the *lowest* 20% of SEIFA scores nationally²) are more likely to suffer a long-term health condition:

- 3x more likely to have diabetes
- 2x as likely to have high blood pressure
- 1 in 5 with a mental health condition compared with 1 in 7 people living in the *least* disadvantaged areas (areas that fall into the *highest* 20% of SEIFA scores nationally³).

They are more likely to be overweight or obese; do little or no exercise; less likely to eat enough fruit and vegetables, and more likely to smoke than their counterparts living in the *least* disadvantaged areas as follows:

- Two thirds overweight or obese (66%) compared with 58%
- Three quarters do little or no exercise (76%) compared with 56%; and
- One in five smoke (21%) compared with 8%.

1.6 Social Engagement and Access

It is estimated in 2010:

- One in seven adults in Knox delayed medical consultation because they could not afford it. This varied from one in ten adults in the south of Knox to as high as one in six in the north-east.
- One in ten in Knox delayed purchasing medication due to finances with the incidence higher in the north-east (one in eight) and lower in the south and north-west (one in thirteen).

In 2011:

- Less than half of Knox's low-income households connected to broadband internet compared to 75% of total households in Knox
- 3x as likely to have NO internet access at all and at risk of being left behind in the digital divide
- One in six has no access to a private vehicle (17% compared with 4% of total Knox households)

² Index of Relative Socio-Economic Disadvantage (IRSD)

³ As above

1.7 Education

In 2011:

People living in low-income households in Knox

- Half as likely to be university qualified (15% compared to 27%)
- 3 in 5 with no qualification, tertiary or trade

In 2015:

- Children in Bayswater are 3x as likely to be developmentally vulnerable in their first year of school than those living in Lysterfield.
- Bayswater and Boronia have the highest *proportion* of developmentally vulnerable children in Knox in 2015 (though mid-range relative to all areas in Australia)
- The highest *number* of these developmentally vulnerable children live in Rowville (25 of 112 in total in Knox)

1.8 Employment

In 2011:

People living in low-income households in Knox and in the workforce:

- 82% employed compared with 95% of Knox's total labour force
- Nearly four times as likely to be unemployed (18%) compared with 5%
- Half as likely to be working full-time (27%) as the resident workforce in Knox overall (61%)
- 50% working part-time compared to 30% of Knox's resident workforce
- Half working as labourers, technicians/trades or in sales compared with 30% of Knox's employed residents generally

1.9 Housing

In 2011:

Low income householders in Knox

- Over half own their own home outright probably due to the high incidence of older people in low-income households
- Twice as likely to live in units or flats (23%) than Knox households generally (12%)
- 4x as likely to live in social housing (8% compared with 2%)
- 80 low-income households living in caravan/cabin accommodation

The highest numbers of lower income households in Knox that are in housing stress are located in Ferntree Gully, Rowville & Boronia

- 3 in 5 Knox households in housing stress (mortgage or renting) are located in these three suburbs.
- 575 lower income households in Rowville in mortgage stress
- 550 lower income households in Boronia in rental stress.

The highest *rates* of housing stress exist in;

- Mortgage Stress - Bayswater, with a higher than average rate (13.8%)
- Rental Stress - the north- east part of Knox (UFTG, Boronia & FTG) *and* also in the South (Lysterfield & Rowville) where rates are higher than average

2. Data sources

SEIFA focuses on *places*; low-income data focuses on *people*.

SEIFA, as an area measure of socio-economic status highlights geographic areas that appear to be relatively disadvantaged and provide a focus for further analysis. It reveals nothing of how many people are affected, who they are, how old and so on which is vital for planning.

As a result, the profile also relies on other measures of disadvantage, particularly those relating to **income and financial capacity**– since income either underpins, or is the outcome of, other aspects related to disadvantage. Low household income, in particular, is a useful proxy measure of disadvantage since other aspects of socio-economic status, such as education and employment, correlate strongly with income. Importantly, it provides access to the demographics of the people that live in households with the least access to income and other resources.

The key data sources used include;

- The **Census (2011)**. While this is now six years old, this is the most recent census data available. It is used to review the characteristics of low-income households and the people that live in them, including age, type of household, housing situation, accessibility (internet and motor vehicle), educational and employment status and how these may differ from the wider population to create or reinforce disadvantage or restrict opportunities;
- **Centrelink benefits data** (September, 2016). More recent, rigorous data to supplement Census data and establish a more contemporary distribution and composition (based on payment type) of those that are solely or largely dependent on government income.
- The **SEIFA** suite of four summary measures around different aspects of socio-economic status (advantage/disadvantage; education and occupation; or economic resources). Also based on combining 2011 Census variables;
- **National Health Survey, 2014-15** (ABS) and **Victorian Population Health Survey, 2014** to review health and wellbeing against socio-economic status; and
- **Personal and financial stressors** (modelled estimates) data, 2010, PHIDU

Wherever possible, data compares Knox against regional, metropolitan or State data to establish context, before focusing on small areas, whether regions or suburbs within Knox in order to pinpoint localised vulnerability.

3. Definitions

Low income households for the purpose of this profile is defined as households falling into approximately the bottom 25 % of incomes nationally.

In 2011 low income households are benchmarked as those with a combined gross income of below \$600 per week before tax.

4. Context

Refer Appendix A for an overview of Knox's relative strengths and emerging vulnerabilities around personal economic capacity identified during the State of Knox analysis, 2016.

5. Socio-economic status of areas (SEIFA)

Socio Economic Indexes For Areas (SEIFA) is a suite of four area level summary measures that assist in understanding the level of social and economic wellbeing of an area. The SEIFA is based on the Census, and is usually produced two years post Census date to allow for complex processing. SEIFA 2016 is due for release in 2018.

Each index summarises a different subset of Census variables and focuses on a different aspect of socio-economic advantage or disadvantage, whether more broadly, or specific to the economic, educational or occupational characteristics relating to the people, families and dwellings in an area.

All geographic areas in Australia are given an index score. These are ranked from highest to lowest (most *advantaged* to most *disadvantaged*), and standardised so that the average score across Australia is 1000⁴. The index score essentially indicates how each area fares relative to other areas. **Scores lower than 1000 indicate relatively disadvantaged areas.**

The ranking is variously divided for different research applications by *percentile* (into 100 equal groups of geographic areas), *decile* (10 equal groups) or *quintile* (5 equal groups). For example, the percentage of children that are developmentally vulnerable by area may be graphed against socio-economic quintile- where quintile 1 represents the 20% *most* disadvantaged areas (lowest index scores) and quintile 5, the 20% *least* disadvantaged areas (highest index scores). Similarly, an area ranked at the 96 percentile indicates relatively greater advantage than the 96 percent of areas ranked below it.

The four indexes point to the areas where the wealthy, the disadvantaged, the unskilled or the highly educated live. The four SEIFA indexes are:

Figure 5.1 The Four SEIFA Indexes

Index		Focus
Index of Relative Socio-Economic Disadvantage	IRSD	<p>Derived from Census variables related to disadvantage</p> <p>eg low-income, low educational attainment, high unemployment, proportion of workforce in relatively unskilled occupations, dwellings without motor vehicles</p> <p>Focus on disadvantaged areas – derived from Census variables related to disadvantage only</p>

⁴ With the middle two thirds of scores falling within 900 and 1100 based around the 1000 average.

Index of Relative Socio-Economic Advantage and Disadvantage	IRSAD	<p>A continuum of advantage (high values) to disadvantage (low values) derived from Census variables related to both advantage and disadvantage</p> <p>eg low-income households, people with tertiary education</p> <p>Focus on advantaged OR disadvantaged areas</p>
Index of Economic Resources	IER	<p>Focuses on Census variables around the income, housing expenditure and assets of households</p> <p>Focus on financial aspects of advantage/disadvantage</p>
Index of Education and Occupation	IEO	<p>Includes Census variables relating to the educational and occupational characteristics of communities</p> <p>eg proportion of people with a higher qualification or those employed in a skilled occupation</p> <p>Focus on education/occupation</p>

Source: Australian Bureau of Statistics

At an LGA level, Knox's community is relatively advantaged. It ranks in deciles 9 or 10 (the top 10 to 20 percent) of Australia's most advantaged local government areas on each of the measures, where Decile 1 groups the *most* disadvantaged areas, and Decile 10, groups the *least* disadvantaged.

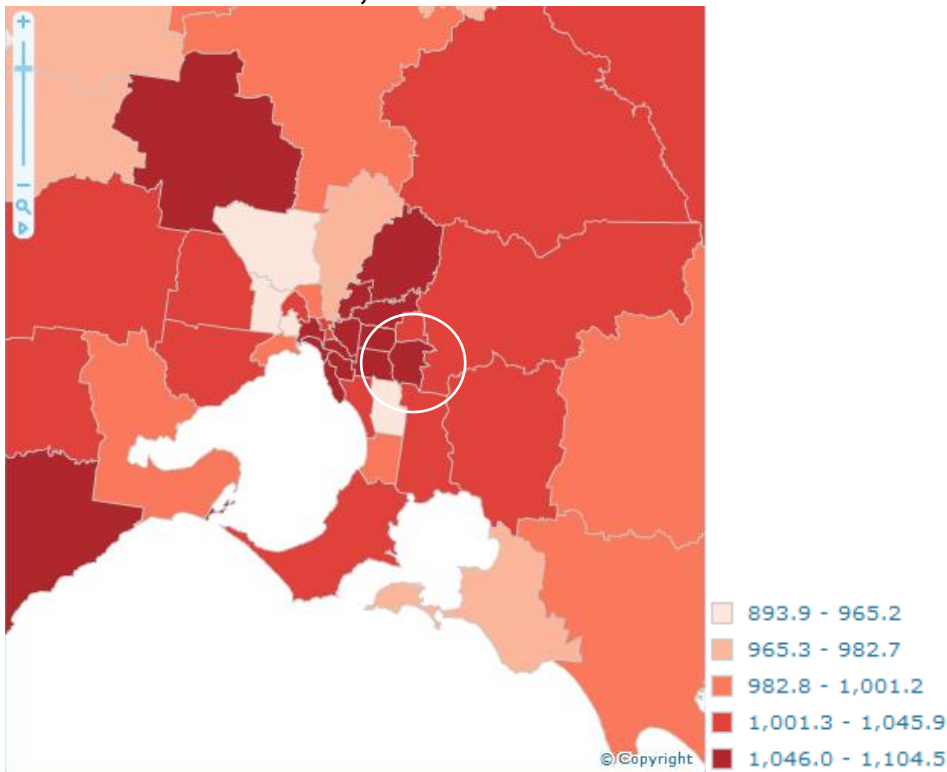
Figure 5.2 SEIFA Indexes, Knox, 2011

Index	Score	Rank within Australia (Decile)
Index of Relative Socio-Economic Disadvantage	1049	9
Index of Relative Socio-Economic Advantage and Disadvantage	1039	9
Index of Economic Resources	1048	10
Index of Education and Occupation	1048	10

Source: 2011 Census (ABS)

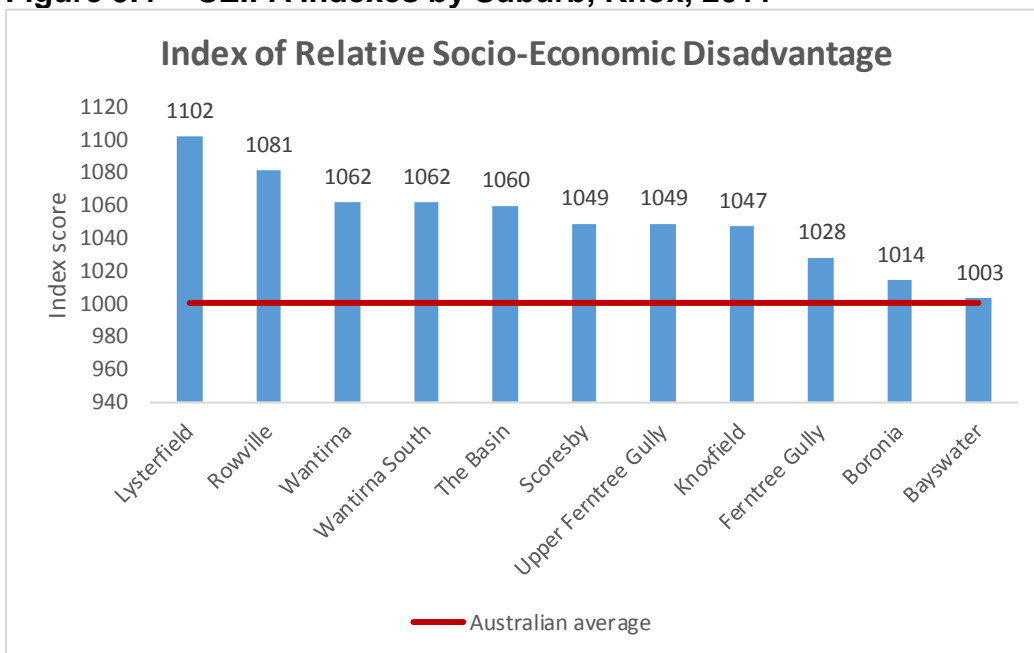
The following map illustrates Knox's relatively advantaged status as per the Index of Relative Disadvantage (IRSAD) compared with metropolitan Melbourne.

Figure 5.3 Index of Relative Socio-Economic Disadvantage, metropolitan Melbourne, 2011

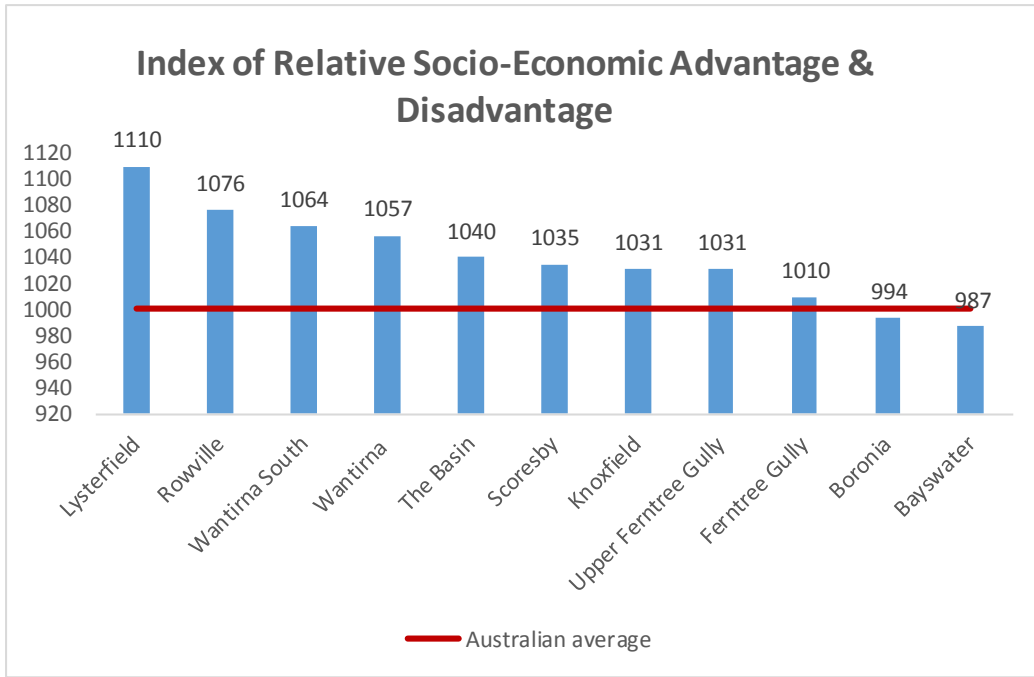


The larger a geographic area, however, the greater the diversity that can be ‘masked’ when the data is rolled into a single index score. The following categorises Knox suburbs according to the different indexes, illustrating the range of diversity of areas within Knox. In each case, suburbs are shown compared against the national average benchmark (red line).

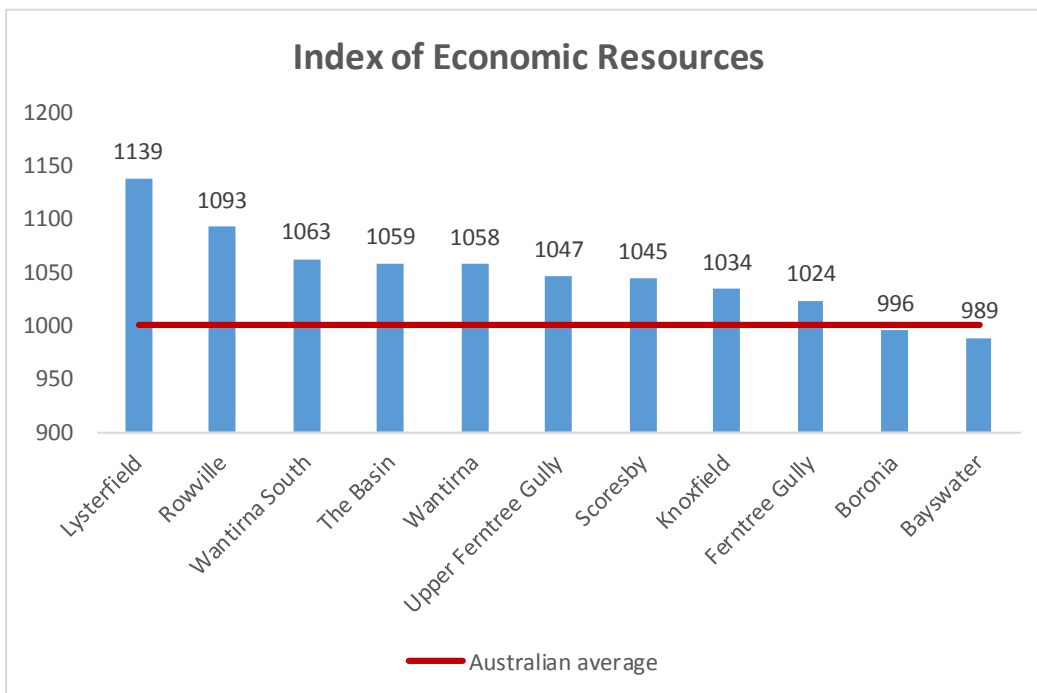
Figure 5.4 SEIFA Indexes by Suburb, Knox, 2011



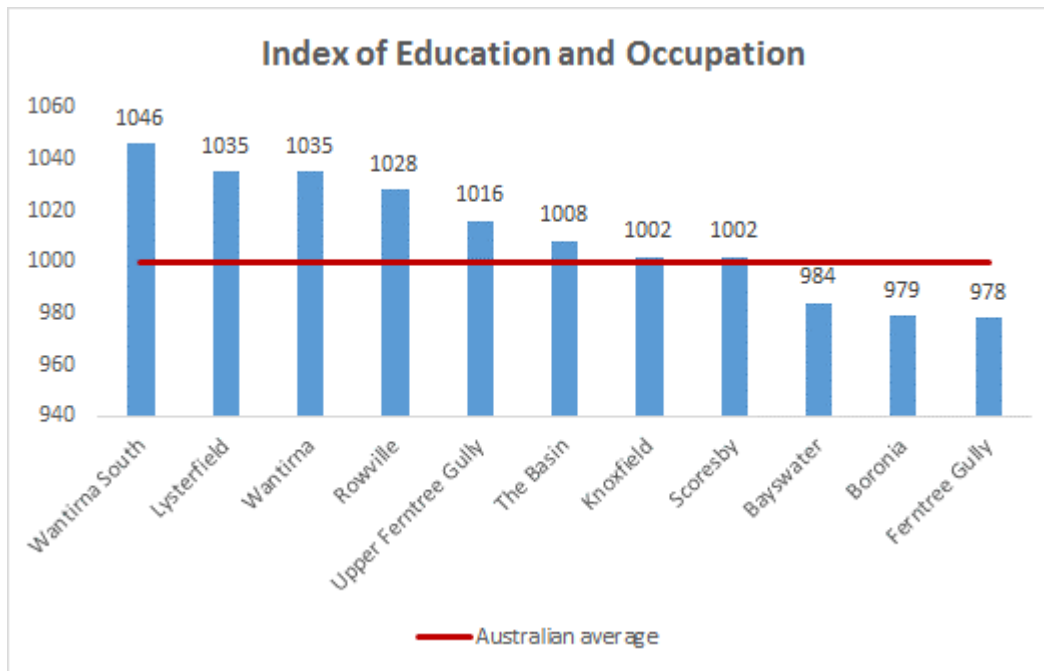
Source: 2011 Census (ABS)



Source: 2011 Census (ABS)



Source: 2011 Census (ABS)



Source: 2011 Census (ABS)

- The four indexes are correlated given each has a relationship with socio economic conditions– so areas that score highly on one index tend to score highly on all of them (though not always).
- **Lysterfield is Knox’s most advantaged suburb; and Bayswater, the most disadvantaged area, on three of the four indexes** – Disadvantage (IRSD); its ranking on the Advantage/Disadvantage continuum (IRSAD); and Economic Resources (IER).

This pattern differs for the fourth – the Index of Education and Occupation (IEO).

- **Wantirna South** has the highest index score (which ranks it at the 78 percentile of the Australian suburb ranking ie it is relatively more advantaged with regard to education and occupational characteristics (such as the incidence of people with higher qualifications or working in skilled occupations), than 78% of Australia’s suburbs⁵
- **Ferntree Gully** is most disadvantaged and, along with **Boronia** and **Bayswater**, which also have index scores below 1000, deemed as ‘disadvantaged’ relative to the national average. These areas rank at around the 50 percentile in the nationwide ranking of suburbs.
- While there are four indexes, the **Index of Relative Socio-Economic Disadvantage (IRSD)** is particularly valuable (and recommended by the ABS) for ranking and identifying disadvantaged areas. The definition of disadvantage is broadest and more stringent than that underpinning the advantage/disadvantage index as it incorporates a greater number of individual

⁵ 22% are ranked higher and so relatively more advantaged.

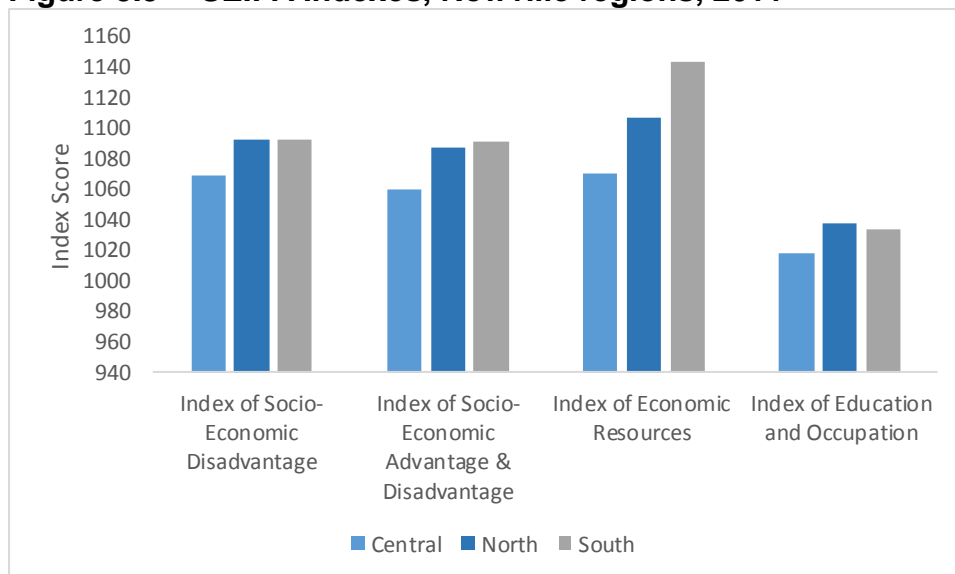
variables related to disadvantage, for example fluency in English⁶. Similarly, the Indexes of Economic Resources and Education and Occupation are even more specific as to the scope of disadvantage.

- Appendix B sets out the scores and national decile and percentile rankings for each Knox suburb on each of the four SEIFA indexes.

Even within suburbs, however, there is considerable diversity. Figure 5.5 illustrates socio-economic variation within the suburb of Rowville for each of the four SEIFA indexes; Figure 5.6 maps the Index of Relative Disadvantage by small areas (approximate population averaging 400), within Knox suburb boundaries.

Both highlight the fact **that a suburb deemed as relatively advantaged using SEIFA area indexes, will also contain clusters of disadvantage and people that are relatively ‘less advantaged’ or ‘disadvantaged’, and vice versa.**

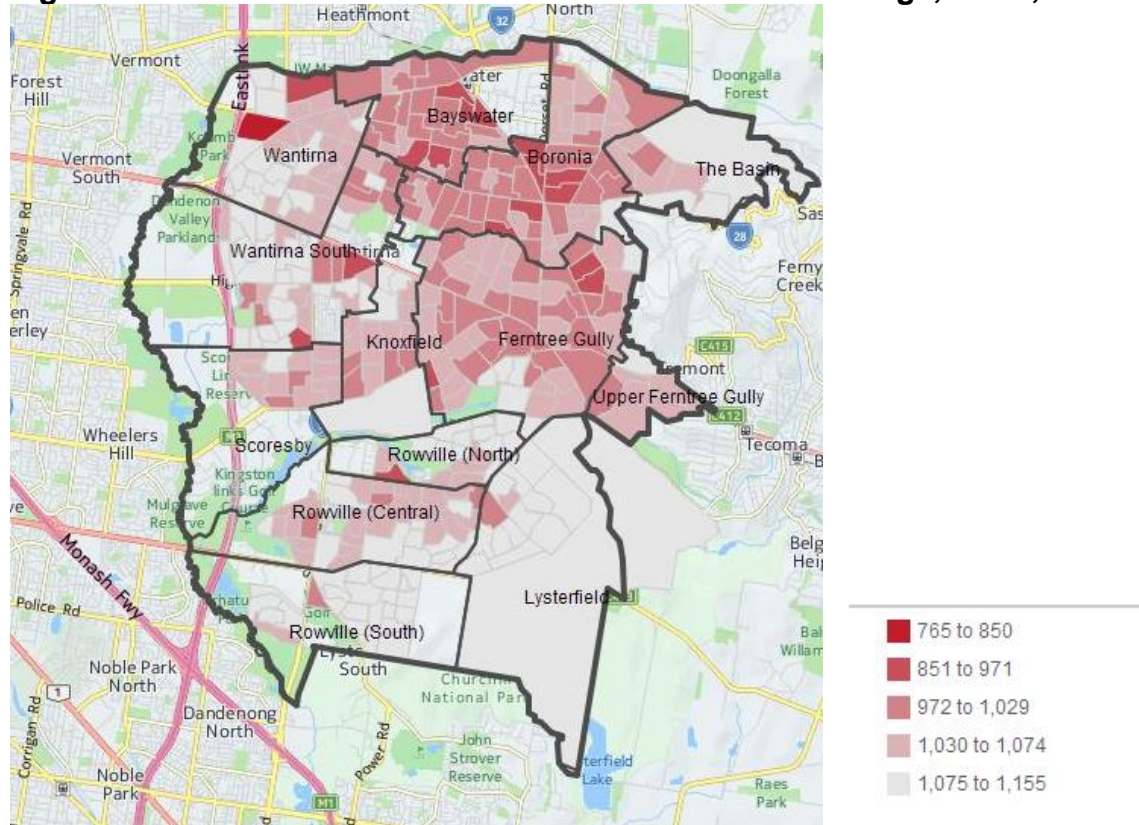
Figure 5.5 SEIFA Indexes, Rowville regions, 2011



Source: 2011 Census (ABS)

⁶ The advantage/disadvantage index is useful for regression modelling where a relatively limited definition of disadvantage provides more scope for the analyst to examine individual variables not included in the Index.

Figure 5.6 Index of Relative Socio-Economic Disadvantage, Knox, 2011



6. The demographics of disadvantage

It is important to note that SEIFA indexes apply at an area level.

They are useful for exploring the relationship between socio-economic status and various health and educational outcomes in order to identify *areas* that require funding and services. The indexes are assigned to *areas* and not individuals – so are indicative of the *collective* socio-economic characteristics of the people living in an area.

SEIFA essentially represents an ‘average’ of all people living in an area. As illustrated above, socio-economic status of people within an area varies considerably and using SEIFA as a proxy measure of individual advantage or disadvantage, will misclassify many people⁷ and possibly result in mistaken assumptions.

A SEIFA score alone cannot explain *why* an area is advantaged or disadvantaged, nor anything about *how many* people or *who* they are – age, gender, living arrangements etc – vital in understanding the complexion of disadvantage. Its value lies in highlighting geographic areas that appear to be relatively disadvantaged and provide a focus for further analysis.

As a result, the remainder of the profile will focus primarily on income – low income households and reliance on welfare payments, for example - as a proxy measure of

⁷ This is an example of an ‘ecological fallacy’ where interpretation of statistical data about the group to which individuals belong is used to draw conclusions about individuals.

disadvantage⁸ and insight into the composition of Knox's low socio-economic status (SES) community. Key indicators of socio-economic status such as education and employment, correlate strongly with income, as does health status, social engagement and access to services and housing. The profile will overview the socio-economic characteristics of low-income households and the people that live in them. Who are they? Where do they live? How, and to what extent, do they differ from the wider community in terms of education, health, housing, employment status? This is important to understand if services and interventions are to be targeted at those with limited financial means.

Using the income construct as the defining variable will also enable insight into the demographics – the numbers, location and 'face' of disadvantage in Knox.

6.1 Low income households

Household income is a key indicator of socio-economic status. This is impacted by the number of paid workers in the household; the number unemployed or on other income support benefits, and the type of employment undertaken by household members.

Low income households are those identified in the 2011 Census as receiving less than \$600 per week from all sources including pensions and allowances (before tax) in 2011.

Note that this data is not equivalised. Households vary in size, so that some households will have a greater number of dependents living on this income than others.

For this reason, Census data is supplemented with data on government welfare recipients as a more contemporary (2016) and precise lens on the location of the disadvantaged in Knox (Refer Section 7, Welfare recipients).

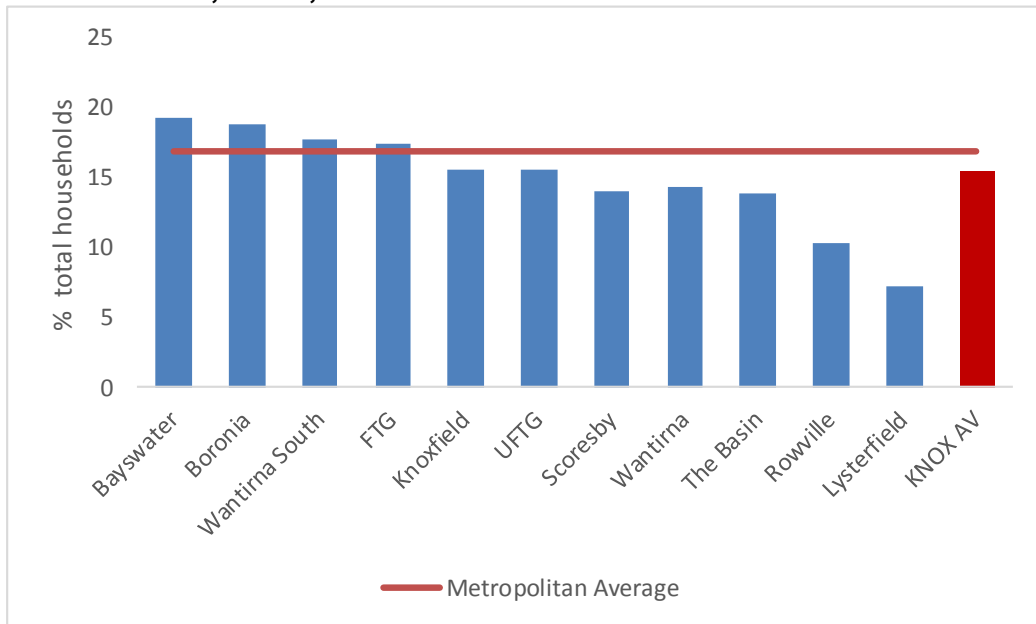
Census 2011 data, while ageing, remains valuable for gaining insight into the characteristics of people living in low-income households in Knox.

Based on the 2011 benchmark of a combined gross income of less than \$600 per week, Figures 6.1 to 6.4 chart the distribution of low-income households across Knox by number, percentage and spatially.

There are **8,600 low-income households** in Knox (2011)

⁸ Other indicators of disadvantage appropriate to specific population groups – for example children in disadvantaged families – will be included in specific sections of the Community Access and Equity Profile as it develops.

Figure 6.1 Percentage of low income households (<\$600 per week) by suburb, Knox, 2011



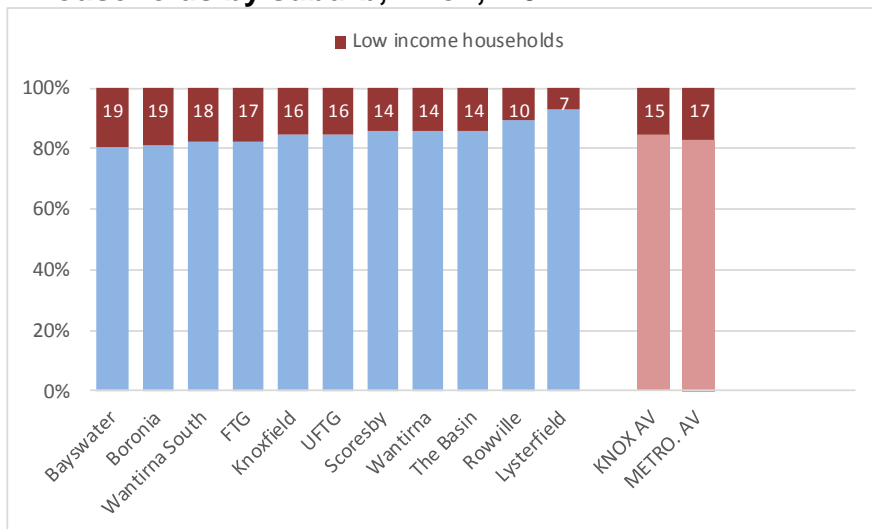
Source: 2011 Census (ABS)

- **Knox has a smaller proportion of low-income households than metropolitan Melbourne, on average.**

In 2011, approximately **one in six** (15.4%) of **Knox households** were classified as 'low income'. This compares with 16.9% of all households in Melbourne.

- The majority of households in Knox are *not* low income as highlighted in Figure 6.2, below, though the incidence of low-income households varies considerably across the municipality.

Figure 6.2 Low income households (<\$600 per week) as a percentage of total households by suburb, Knox, 2011

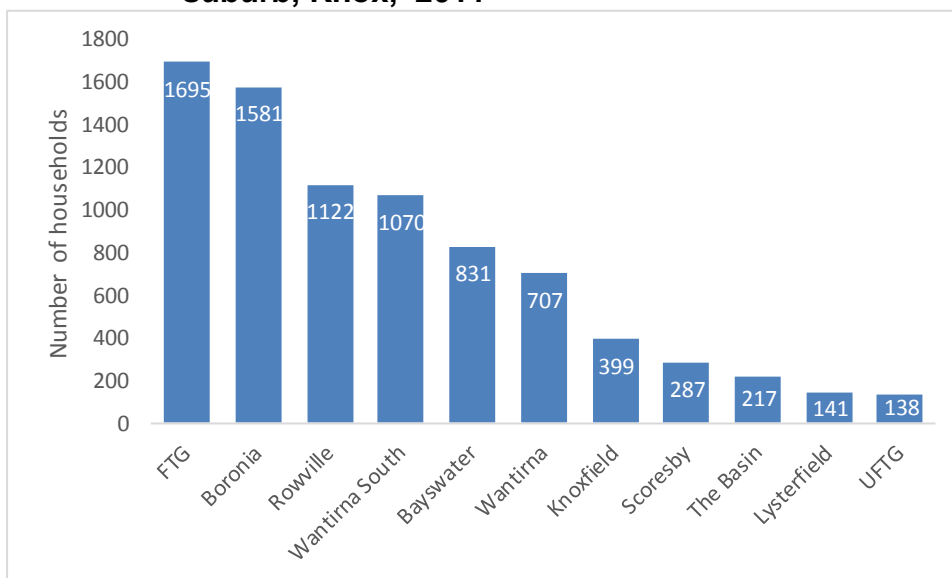


Source: 2011 Census (ABS)

- The prevalence of low-income households in Knox varies from 7% of households in Lysterfield to almost three times that rate in Bayswater and Boronia (19% each).
- The proportion of low-income households is higher than the metropolitan average of 16.9% in **Bayswater (19.3%), Boronia (18.8%), Wantirna South (17.8%) and Ferntree Gully (17.4%)**.

When the data is reworked on the basis of *number* of low-income households, however, the outcome changes (Figure 6.3)

Figure 6.3 Number of low income households (<\$600 per week) by suburb, Knox, 2011

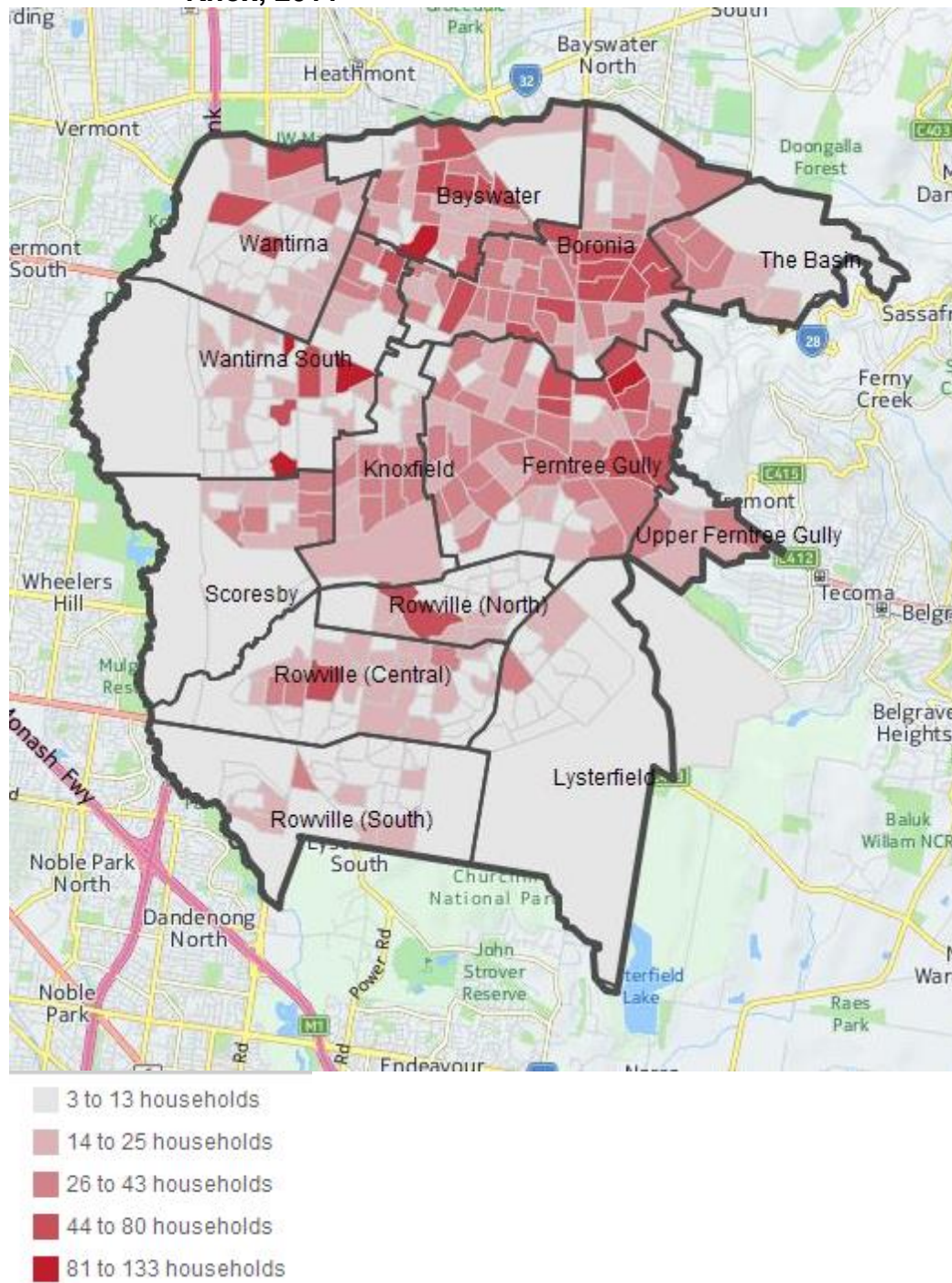


Source: 2011 Census (ABS)

- The **highest numbers of low-income households in Knox** are located in **Ferntree Gully, Boronia and Rowville**. Over half of Knox's low-income households are located in these three suburbs.

Figure 6.4 below, illustrates the location of highest numbers of low-income households across Knox by small area (approximate population averaging 400) to identify spatial patterns distribution of disadvantage across Knox. The maps are shaded to show concentrations of communities of low socio-economic status based on low-income.

Figure 6.4 Location of low income households (<\$600 per week) by number, Knox, 2011



6.2 People living in low income households

There are **14,150 people** living in low-income households in Knox (2011). This equates to about one in ten people living in Knox.

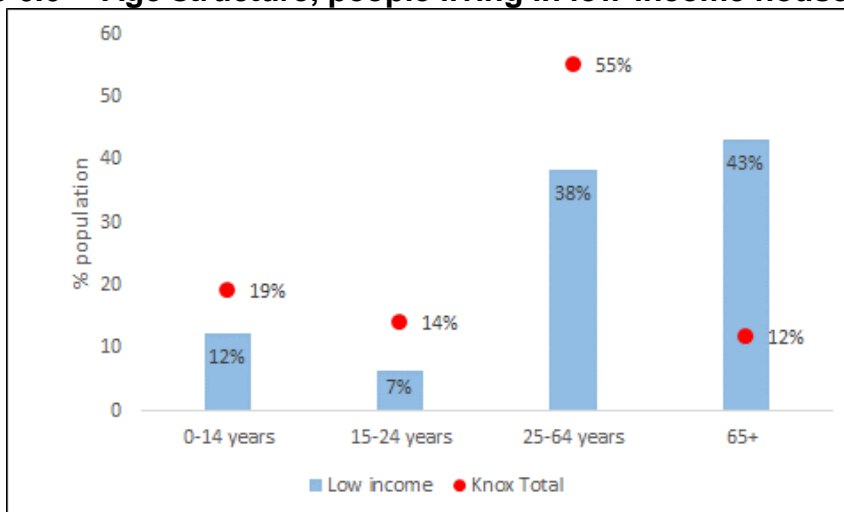
Figure 6.5 People living in low-income households by age and number, Knox 2011

Age group	Number
0-14 years	1733
15-24 years	922
25-64 years	5397
65+ years	6094
TOTAL	14,150

Source: 2011 Census (ABS)

- The age breakdown of the residents tells much of the story of low-income households in an area. The following chart illustrates the age breakdown of people living in low-income households in Knox compared with the age structure of the population for Knox overall (red dot).

Figure 6.6 Age structure, people living in low-income households, Knox 2011



Source: 2011 Census (ABS)

- **Low income in Knox is predominantly associated with age.**
The chart indicates that older people (65+ years) are over-represented relative to their prevalence in the community. While making up 12% of Knox's population in 2011, the 65+ cohort accounted for over 40% of people living in low-income households. This probably reflects a high proportion of older people reliant on government pensions as their principle source of income.

The fact that the largest component of Knox's low SES residents are older residents is reinforced by the concentration of the low-income cohort in smaller, lone person or couple only households as indicated below.

Figure 6.7 Low-income households by household type, Knox 2011

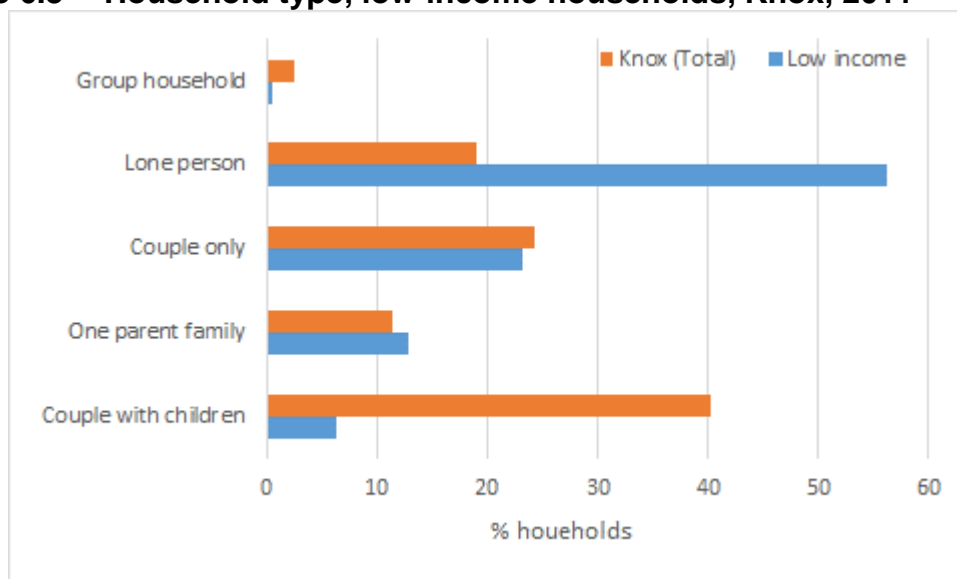
Household type	Number	%
Couple with children	540	6.3
One parent family	1101	12.8
Couple only	1995	23.2
Lone person	4844	56.3
Group household	37	0.4
Other family	83	1.0
Total	8600	100%

Source: 2011 Census (ABS)

- Of 8,600 low income households in Knox, **over half are lone person** households. **A further quarter are couple only** households. A concentration of low income households in smaller household types – couple only and lone person – is illustrative of an area with many pensioners on low incomes.
- This plays out in a lower average household size of 1.62 for low-income households in Knox compared with 2.51 for households across Knox as a whole.

Figure 6.8 below, compares the household/family type of low-income households with total households in Knox.

Figure 6.8 Household type, low-income households, Knox, 2011



Source: 2011 Census (ABS)

- This confirms a much lower proportion of couple families with children and a greater emphasis on lone person households among low-income community in Knox. Couples with children comprised only 6.3% of low-income households compared with 40.3% of total households in Knox.
- In contrast, lone person households which make up over half (56%) of all low-income households, compares with 19% of total households in Knox.
- A slightly higher than average proportion of low income households are one parent families (13% compared with 11% of all households in Knox)
- Around a quarter of low income households in Knox comprise of couples without children, similar to the proportion found for all households in Knox.
- The number of low income households in Knox increased by 1700+ between 2006 and 2011 – with **over half of the increase** (1070 households) being lone person households.
- The number of low income family households increased by 340 over the same period (one parent families by 230 and couples with children by 110)

The next section will focus on recent (2016) data on government welfare payment recipients in order to refine understanding of the number, location and composition of the low SES community in Knox.

7. Welfare recipients

A key indicator of financial disadvantage is receipt of government welfare payments.

The following table summarises the rate of Centrelink payments made to Knox residents compared with the metropolitan average (June, 2016). Knox's position within a ranking of the 31 metropolitan Melbourne municipalities (from *highest* to *lowest* rate of welfare recipients), is also shown.

Figure 7.1 Centrelink payment by rate and type, Knox and metropolitan Melbourne, June, 2016

	Age Pension (as % popn. 65+ years)	Disability Support Pension (as % total popn.)	Single Parenting Payment (% females 20-45 years) ⁹	Youth Allowance (as % popn. 20-24 years)	Newstart Allowance (as % popn. 15-64 years)
Knox	71.5% (17,209)	2.6% (4119)	4.3% 1138)	17% (2054)	3.3% (3546)
Metropolitan average	64.4%	2.7%	3.9%	19.5%	3.7%
Metropolitan ranking	12	19	12	21	*

Source: Social Statistics using Centrelink benefits data, June 2016; Population estimates as at June, 2016 from Victoria In Future population by age, Victorian municipalities, 2011-2031¹⁰

- Knox has a **higher than average rate of aged pension dependence** (71.4% of the eligible population compared with 64.4% across metropolitan Melbourne, on average). This is consistent with the Census 2011 finding that people aged 65+ years account for over 40% of people living in low-income households in Knox.
- Knox also has a **higher rate of (female) sole parent pensioners @ 4.3%** compared with 3.9% metropolitan-wide.
- **Knox ranks at the 12th highest rate of the 31 metropolitan areas for receipt of both the aged pension and (female) sole parent payments.**

⁹ Using females 20-45 as the base given that the vast majority of payments are to women.

¹⁰ All rates using Social Statistics methodology with exception of Newstart where rate is calculated based on % of working age population 15-64 years similar to that used by PHIDU (popn. 16-64). Note – VIF data is only available by 15-65 year breakdown. Note also Metropolitan population as at June 2016 taken from Victoria in Future 2016. * Figure can be determined from data for all metro municipalities which would need to be calculated and then ranked.

7.1 Small area data

The following table details receipt of welfare payments (as at *September, 2016*)- by the number of recipients living in each Knox suburb.

The 'Top 3' suburbs, in terms of **number** of payments for each of the main benefit types, is highlighted (highest number in blue, second highest in red and third highest in green).

This is followed by a summary of the total number of Centrelink payments made to each suburb of Knox and the percentage that each makes to the Knox total.

Finally, a series of graphs that convert the number of payments into a **rate** (as a percentage of population) per suburb, is provided. This will enable a comparison of demographic characteristics between different parts of Knox.

This illustrates a somewhat different picture of the location and distribution of disadvantage in Knox.

Figure 7.2 Centrelink payment by number and benefit type, Knox suburbs¹¹, September, 2016

	Bayswater	Boronia/ The Basin	FTG/UFTG	Knoxfield- Scoresby	Lysterfield	Rowville	Wantirna	Wantirna South	Knox TOTAL
Age Pension	1613	3264	3470	1707	344	2907	1725	2326	17,356
Disability Support Pension	439	985	1003	309	93	597	314	361	4101
Single Parenting Payment	133	298	252	92	25	135	84	80	1099
Youth Allowance	171	326	329	252	56	445	173	253	2005
Newstart Allowance	376	822	736	321	55	577	278	287	3452

Source: DSS Payment Demographics September 2016;

¹¹ Statistical Local Areas

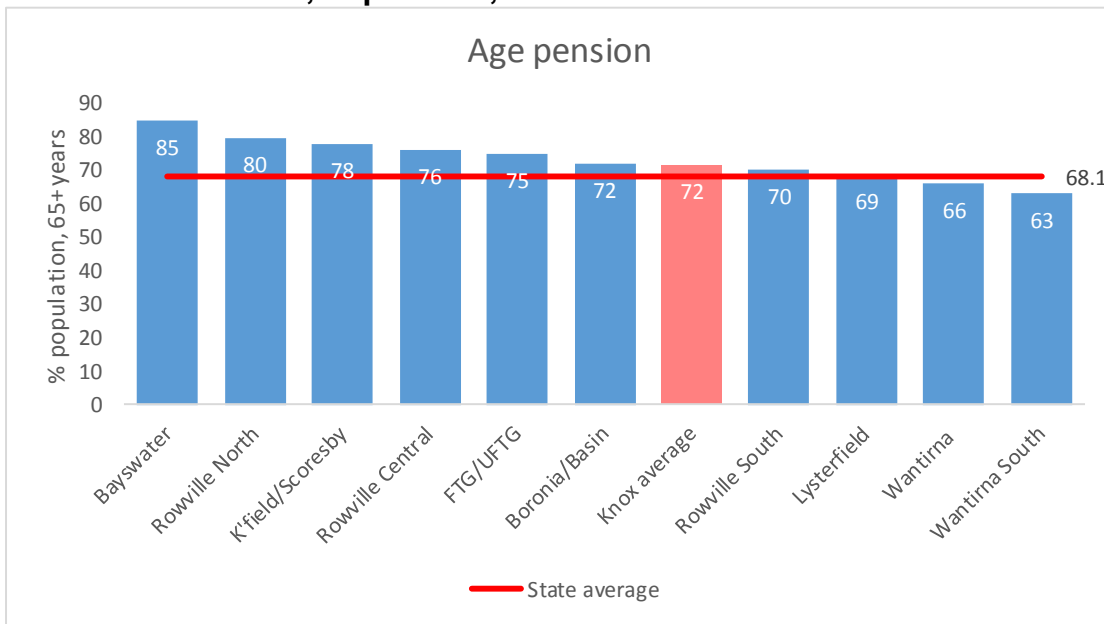
Figure 7.3 Centrelink payments, Knox - total number and percentage of Knox total by suburb, September, 2016

	Bayswater	Boronia/The Basin	FTG/UFTG	Knoxfield-Scoresby	Lysterfield	Rowville	Wantirna	Wantirna South	Knox TOTAL
TOTAL welfare recipients	2732	5695	5790	2681	573	4661	2574	3307	28013
% Knox total	9.7%	20.3%	20.7%	9.6%	2.0%	16.5%	9.2%	11.8%	100%

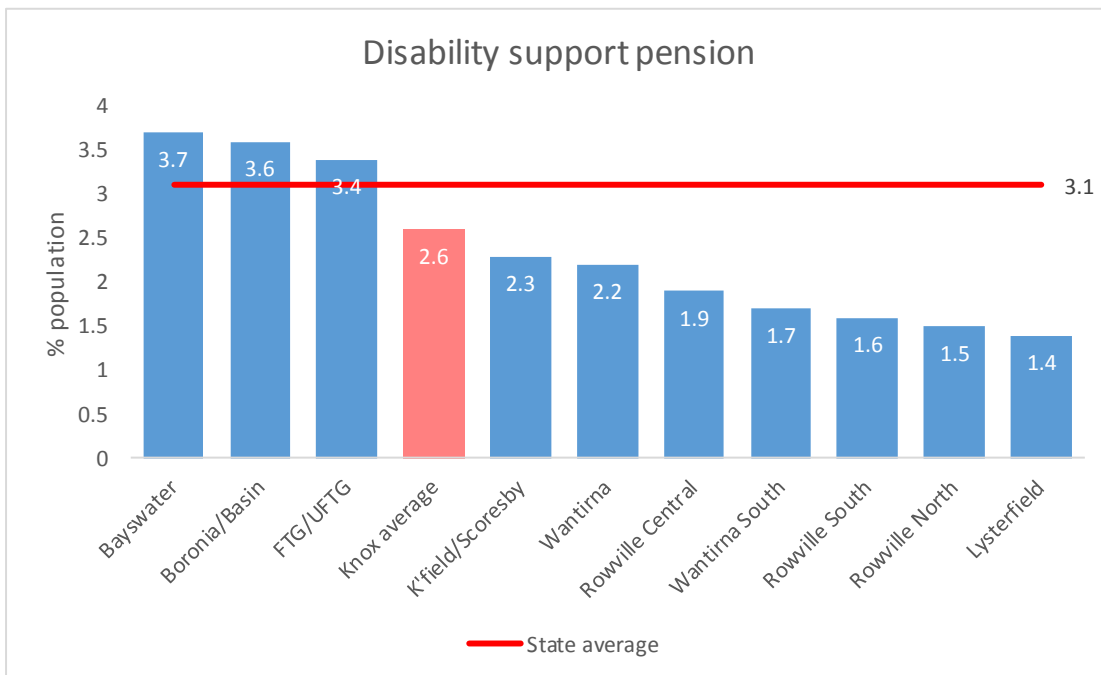
Source: DSS Payment Demographics September 2016

- The highest **numbers** of welfare recipients in Knox live in **Ferntree Gully/Upper Ferntree Gully** (21% of all Knox welfare recipients); **Boronia/The Basin** (20%) and **Rowville** (17%). **Three in five welfare recipients in Knox live in one of these three areas.**
- Further analysis of the data indicates that in Rowville, half of the welfare recipients in that suburb are located in Rowville Central. This accords with SEIFA data dealt with earlier which highlighted this area of Rowville as having relatively lower socio-economic status. Refer Appendix B for number of payments by type for different parts of Rowville.

Figure 7.4 Rate (% of population) of welfare payments by Knox suburb, September, 2016¹²

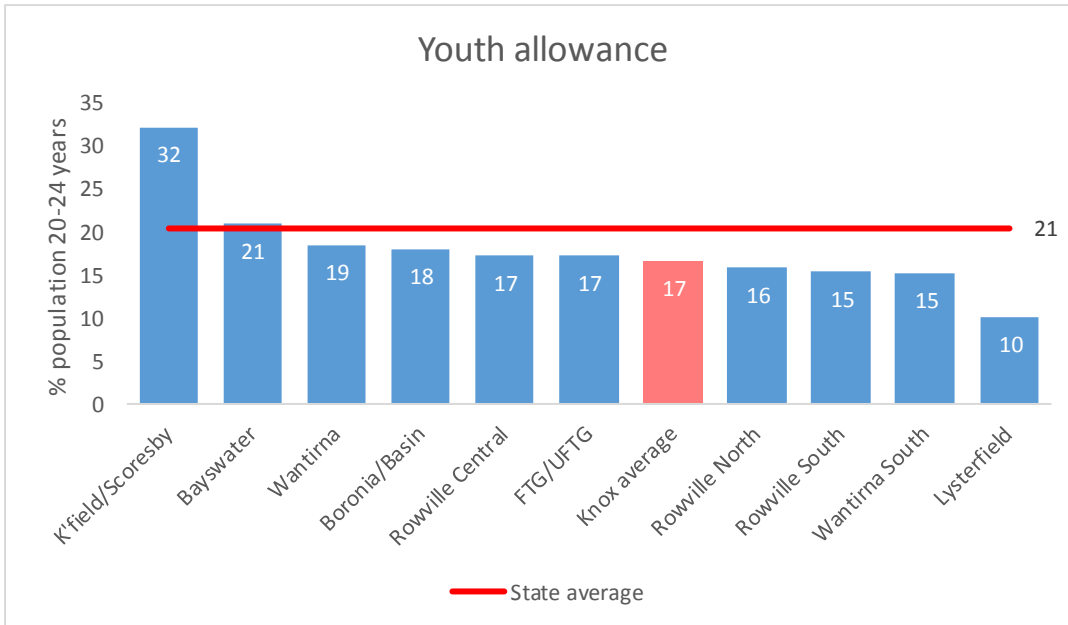


Source: DSS Payment Demographics September 2016; id Population Forecast, population by Suburb, June 2016

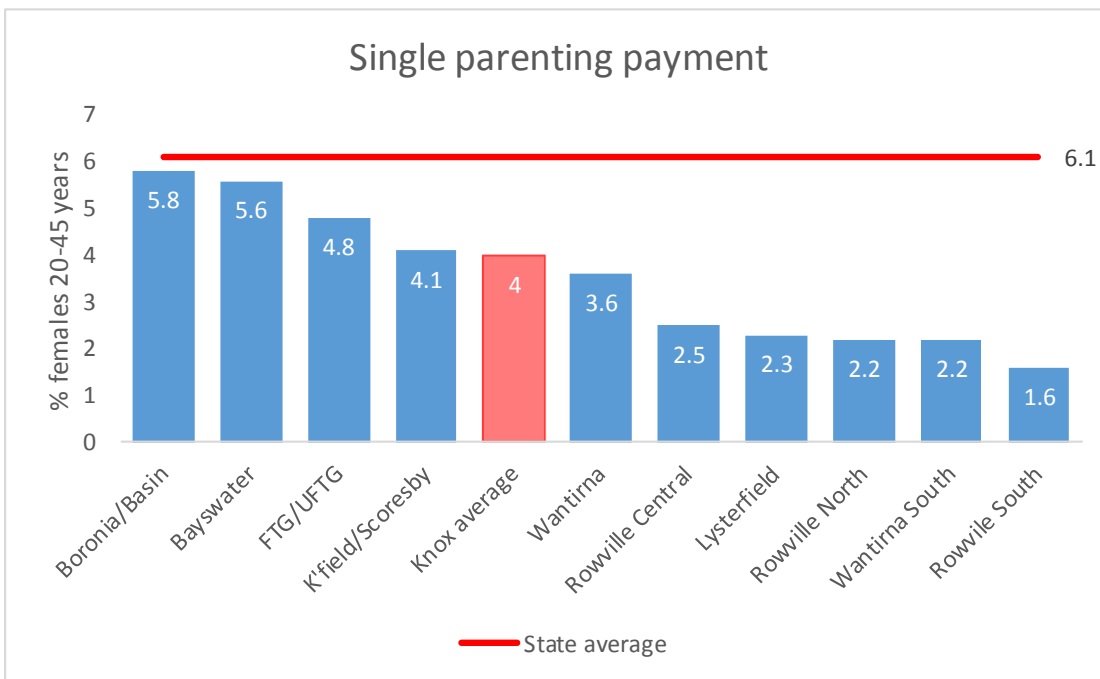


Source: DSS Payment Demographics September 2016; id Population Forecast, population by Suburb, June 2016

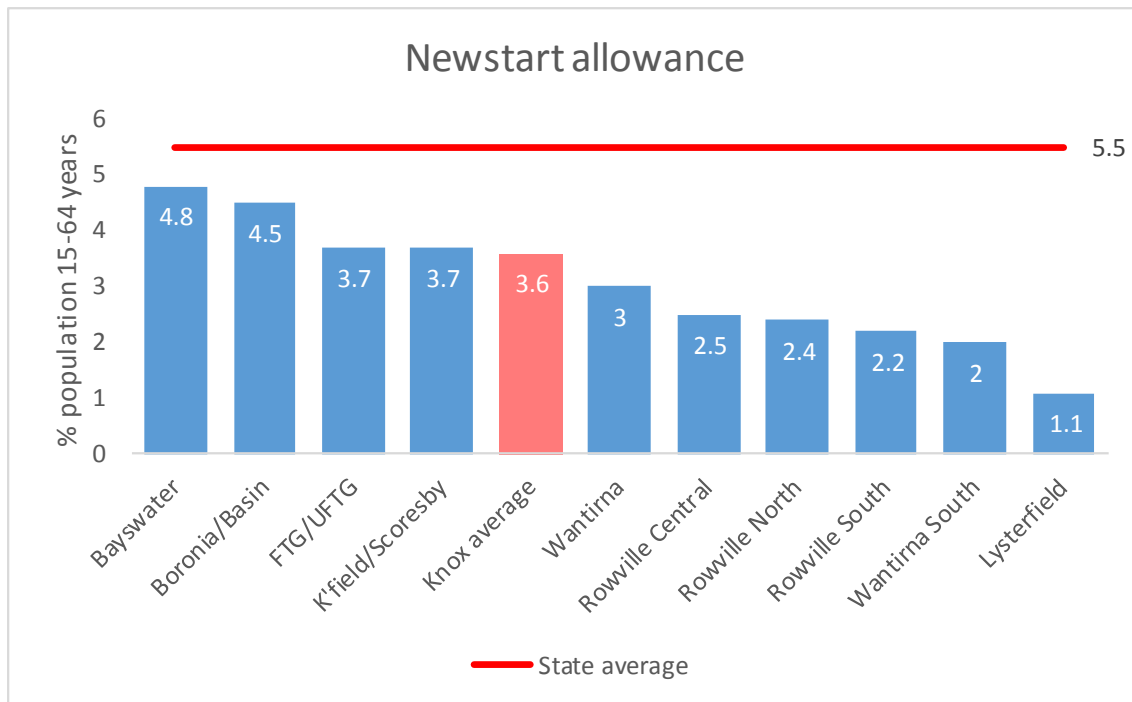
¹² June 2016 base population used in all calculations as per.id population forecast.



Source: DSS Payment Demographics September 2016; id Population Forecast, population by Suburb, June 2016



Source: DSS Payment Demographics September 2016; id Population Forecast, population by Suburb, June 2016



Source: DSS Payment Demographics September 2016; id Population Forecast, population by Suburb, June 2016

- While Figure 7.3 indicates that the *number* of welfare recipients is lower in **Bayswater** than other parts of Knox, it has the highest or second highest *rate* of welfare payments for all benefit types in Knox.
- The **rate of aged pension payments is higher than the State average in all suburbs of Knox** with the exception of Wantirna and Wantirna South.
- The **rate of disability support pension payments is highest, and above State average in the north-east of Knox – Bayswater, Boronia/Basin and FTG/UFTG.**
- Rates of **single parenting** and **Newstart** payments, though highest in the same three suburbs of Knox, are still lower than the average, statewide.
- The rate of **youth allowance** payments is considerably higher than average in Knoxfield/Scoresby.

8. Other indicators of disadvantage

The following table summarises selected measures of social and financial context and disadvantage for Knox, compared to the metropolitan average. Knox's position within a ranking of the **31** metropolitan Melbourne municipalities (from *highest* to *lowest* for each measure), is also shown. Small area data and mapping follows, illustrating the differential distribution of disadvantage within Knox.

Figure 8.1 Indicators of financial disadvantage, Knox – regional and metropolitan context

	Equivalised median income ¹³ (2011)	People 15+ years with low income <\$400 per week (2011)	Females with low income <\$400 per week (2011)	Males with low income <\$400 per week (2011)	Unemployment rate ¹⁴ (Sept. 2015)	Long term unemployed beneficiaries ¹⁵ (June 2014)	Youth unemployed beneficiaries (young people 16-24 years) (June 2014)	% food insecurity ¹⁶ (2011)	Low income, welfare dependent families with children (2012) ¹⁷	% highly disadvantaged SA1's ¹⁸
Knox	\$1401	37.8%	46.5%	28.5%	5%	3.2%	4.6%	6.3%	6.5%	2.8%
Eastern metropolitan Region	\$1427	38.5%	45.7%	30.7%	5.1%			4.5%	5.3%	3.2%
Metropolitan average	\$1378	38.8%	46.1%	31.1%	6.2%	3.8%	5.9%	4.2%	8.1%	15.8%
Metropolitan ranking	10	15						7	18	7

Source: LGA Profiles by Area, DHHS (2015); Social Atlas of Australia: Local Government Areas, PHIDU (2016)

¹³ Household income adjusted by the application of an equivalence scale to allow comparison of income levels between households of different size and composition.

¹⁴ % labour force which is unemployed

¹⁵ People in receipt of unemployment benefit (Newstart or Youth Allowance) paid by Centrelink for more than 6 months

¹⁶ % people who ran out of food in the last 12 months and could not afford to buy more. This indicator identifies the population at risk of poor diet and nutrition due to financial incapacity to purchase food.

¹⁷ Families with children under 16 years, income under \$33,761 per annum, and receiving Family Tax Benefit A **as a percentage of total families CHECK**

¹⁸ SA1 = Statistical Area comprising average population of 400. Based on having an IRSD score within the most disadvantaged 20% of SA1s in Victoria.

- Knox generally has more favourable results on most measures of financial disadvantage –income, unemployment, prevalence of highly disadvantaged areas and welfare dependency than the Melbourne average. Food insecurity, a measure of financial incapacity to purchase food, is higher than average.

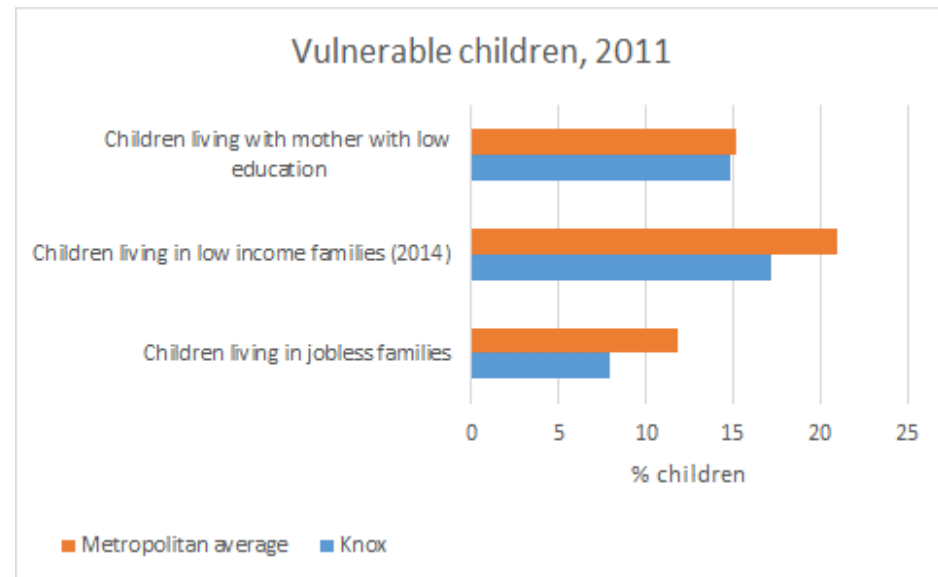
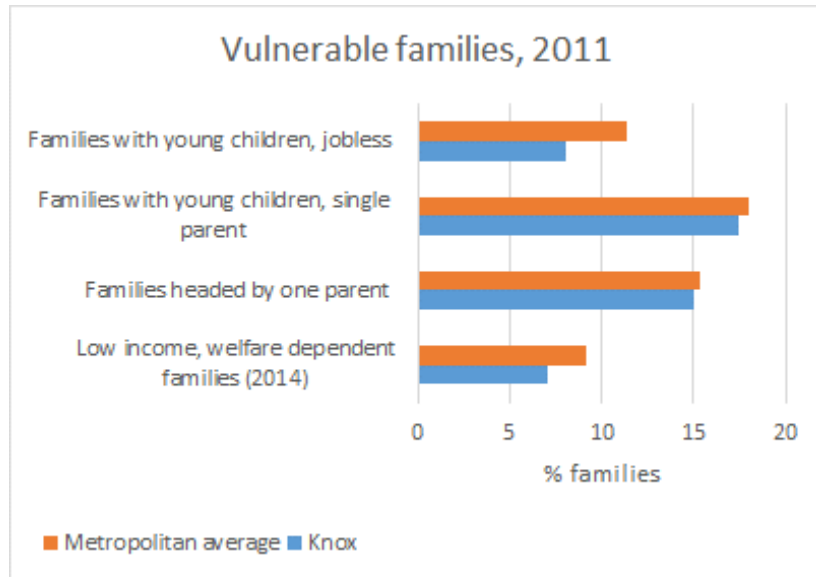
Figure 8.2 Indicators of disadvantage, Knox, 2011 – vulnerable families and children

	Low income, welfare dependent families with children (2014) ¹⁹	Families headed by one parent	% one parent families headed by female	% families with children <15 years that are single parent	% families with children <15 years that are jobless	% children <15 years living in jobless families	% children <16 years living in low income families (2014)	% children <15 years living in families where mother has low educational attainment ²⁰	Single parents aged under 25 years
Knox	7.1%	15%	82.5%	17.4%	8%	7.9%	17.2%	14.8%	0.8%
Eastern metropolitan Region		13.9%	82.3%						
Metropolitan average	9.1%	15.3%	82.9%	18%	11.4%	11.8%	21%	15.2%	1% (VIC)

Source: Centrelink data as reported by - Low income families with children (PHIDU); Census data as reported by -% families headed by one parent & proportion who are female (DHHS LGA Profiles); families with children <15 years that are single parent, jobless; children <15 years living in jobless families or with a mother with low educational attainment (: PHIDU Social Atlas of Australia: Local Government Areas (2016)).

¹⁹ Families with children under 16 years, income under \$36,276 per annum, and receiving Family Tax Benefit A as a percentage of total families. Income benchmark based on Poverty Lines; Australia, June quarter, 2013

²⁰ Female parent's highest level of schooling Year 10 or below



- Knox has a similar rate of single parent families as metropolitan Melbourne but a generally lower rate of low-income, welfare dependent families, jobless families with children, or children living in jobless families. This is consistent with the more favourable results in Knox in relation to income and unemployment noted in Figure 8.1, above.
- Rates of children living in families where the mother has low educational attainment, or living with a single parent aged under 25 years, both of which increase the likelihood of financial and social disadvantage, are also slightly better (lower) than average in Knox. In the case of the latter, research has found that lower parental education, particularly among mothers, impacts adolescent achievement and aspirations, with strong potential to influence the life course of their children.

The following data refers to people aged over 18 years living in households that experience financial stress. Most of the variables are based on modelled estimates²¹ from the 2010 General Social Survey (ABS) to assess aspects impacting community strength, both positive (eg volunteering and tolerance of cultural diversity), and negative (financial stress and disadvantage)²².

Data is presented as an age standardised²³ rate per 100 population to eliminate the effect of differences in population age structures and enable comparison between different geographic areas.

²¹ A modelled estimate can be interpreted as a likely value for a ‘typical’ area with those characteristics. Relationships observed at a national level between the characteristic of interest and known characteristics is assumed to also hold at the small area level. While the technique is robust it is not based on data collected so should be treated as *indicative* of the likely social dimensions present in an area with these demographic and socioeconomic characteristics.

²² Compiled by PHIDU

²³ Standard population is the Australian population,

Figure 8.3 Indicators of disadvantage, Knox – Financial stressors (modelled estimates), rate per 100²⁴, 2010

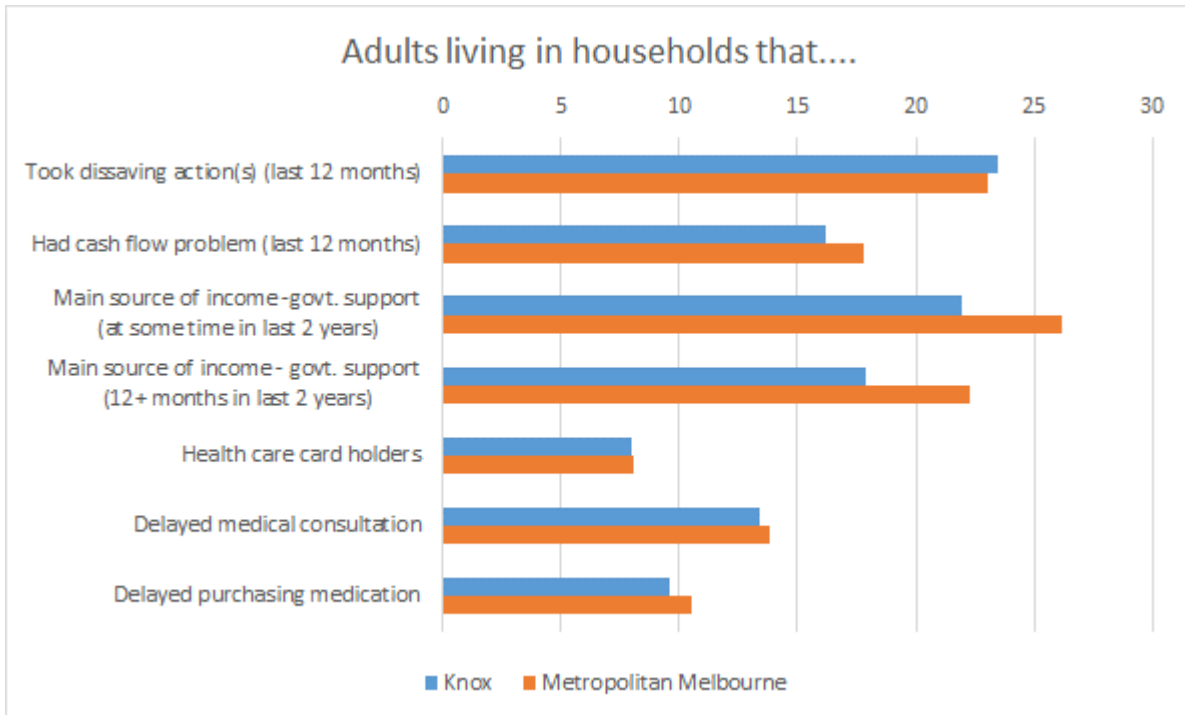
	Ability to raise \$2000 in 2 days in an emergency (2011-12) ²⁵	Adults whose household took at least one dissaving ²⁶ action in last 12 months	Adults whose household had at least one cash flow problem in the last 12 months	Adults who had government support as their main source of income at some time in the last 2 years	Adults who had government support as their main source of income for 12 months or more, within the past 2 years	Health Care Card holders (2014)	Adults who delayed medical consultation because they could not afford it	Adults who delayed purchasing medication because they could not afford it
Knox	86.2	23.5	16.2	21.9	17.9	8%	13.4	9.6
Metropolitan Melbourne	86.1	23	17.8	26.2	22.3	8.1%	13.8	10.5

Source: Social Atlas of Australia: Local Government Areas, PHIDU (2016)

²⁴ With exception of Health Care Card Holders, expressed as %

²⁵ 2011-12 Victorian Population Health Survey

²⁶ Any action where spending is greater than income thereby reducing already accumulated savings or leading to borrowing to finance the expenditure. Examples include reducing home loan repayments, increasing balance owed on credit cards, selling shares or other assets, taking out a personal loan etc.



Social Atlas of Australia: Local Government Areas, PHIDU (2016)

- Other indicators of **financial stress or potential stressors** are generally less prevalent in Knox with the exception of adults whose household had taken at least one dissaving action in the last 12 months.

This refers to any action where spending is greater than income, thereby reducing already accumulated savings or leading to borrowing to finance the expenditure. Examples include reducing home loan repayments, increasing balance owed on credit cards, selling shares or other assets, taking out a personal loan etc.

- Even with a somewhat better experience in relation to financial stress(ors), particularly a considerably reduced reliance on government support as the main source of income, it is sobering to learn that;
 - **one in five adults in Knox have relied on welfare as the main source of income** at some time in the previous two years;
 - one in seven **delayed medical consultation**; and
 - one in ten **delayed purchasing medication**, because they could not afford it.

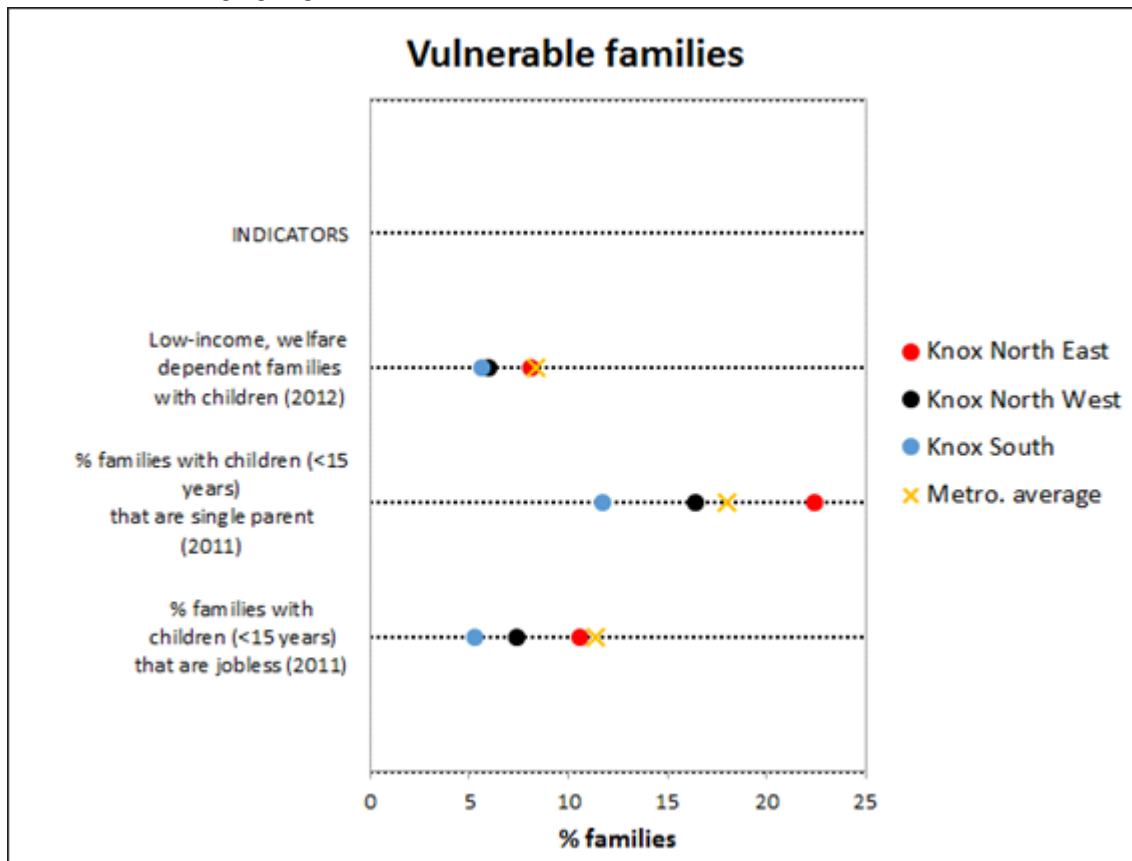
8.1 Small area data

Knox, as a whole, has relatively more favourable results on most measures of financial disadvantage; with regard to the prevalence of vulnerable families and children; and according to other measures of financial stress and potential stressors. However, there are differences within Knox.

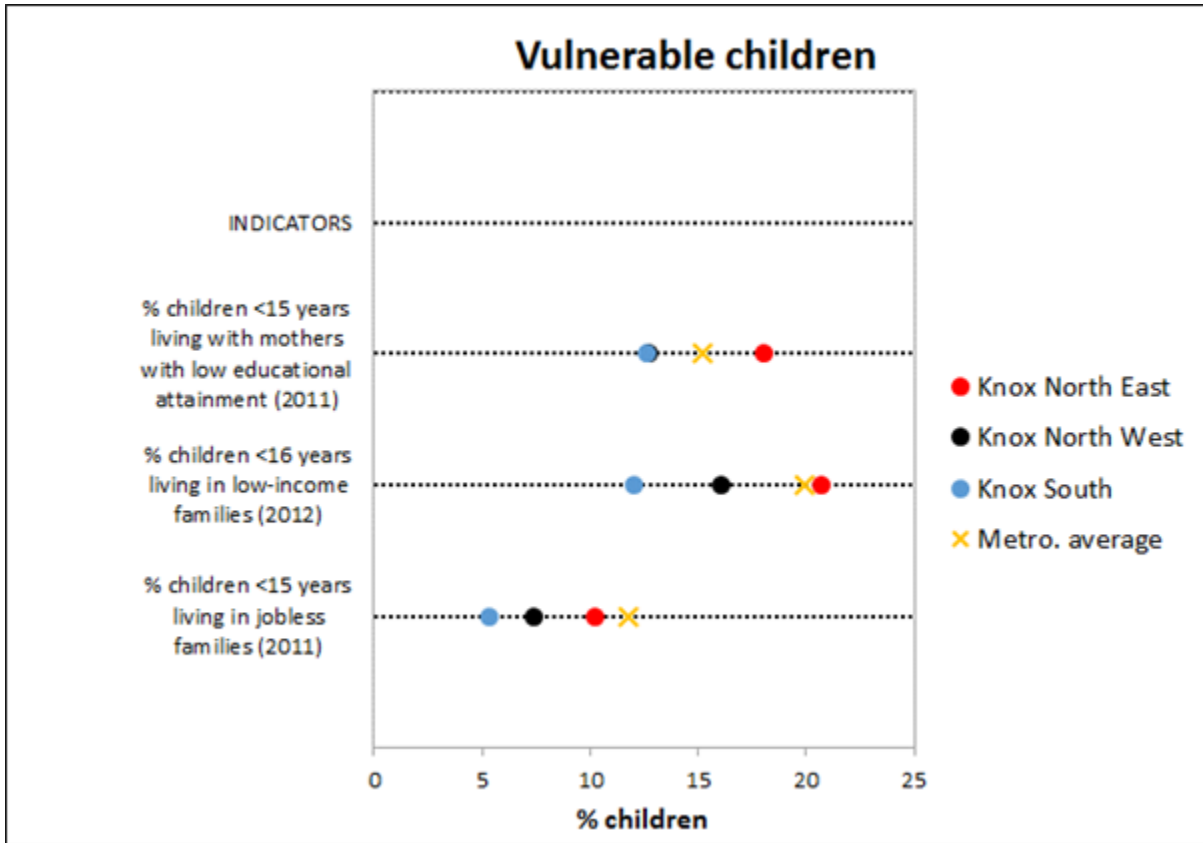
The following data documents this variation, highlighting spatial concentrations of socio-economic disadvantage. The smallest spatial unit for which much of this data is available is by Statistical Local Area (SLA), which in urban areas generally comprise of groups of suburbs. Knox is covered by three SLA's

- Knox North East – Bayswater, Boronia, The Basin, Ferntree Gully, Upper Ferntree Gully;
- Knox North West- Wantirna, Wantirna South and those parts of Scoresby and Knoxfield that are north of Ferntree Gully Road; and
- Knox South- Rowville, Lysterfield and those parts of Scoresby and Knoxfield that are south of Ferntree Gully Road.

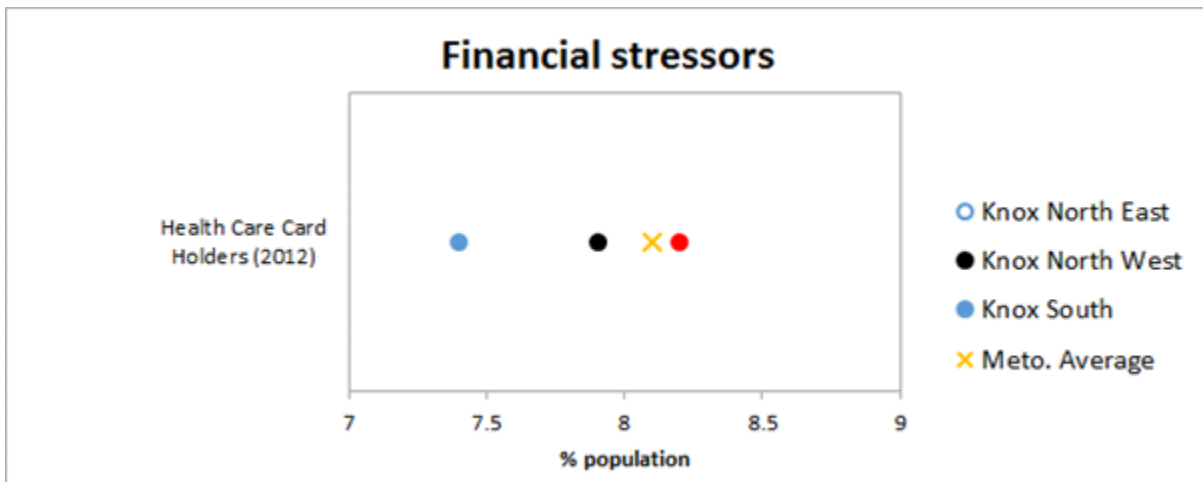
Figure 8.4 Indicators of disadvantage rates (% population), Knox regions, 2010-2012



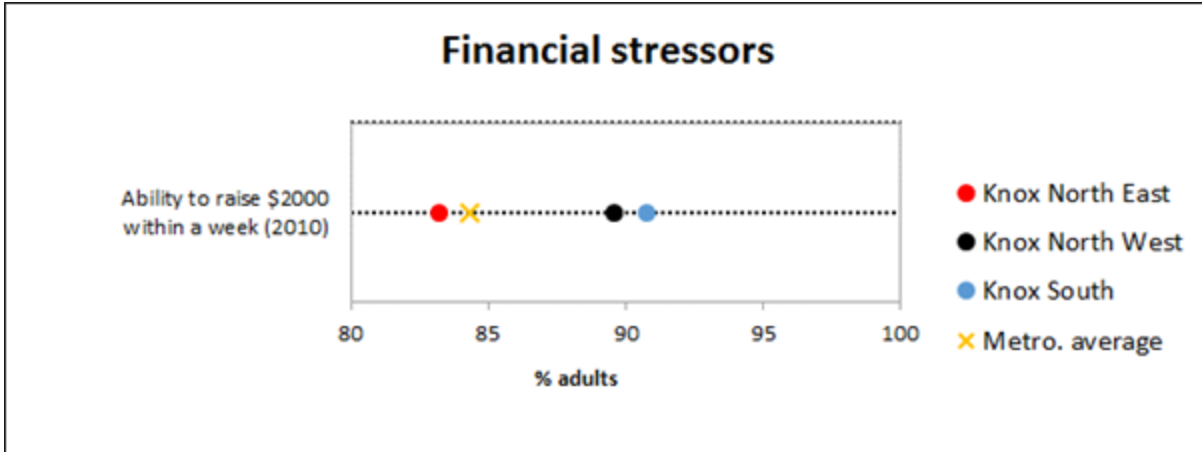
Social Atlas of Australia: Local Government Areas, PHIDU (2016)



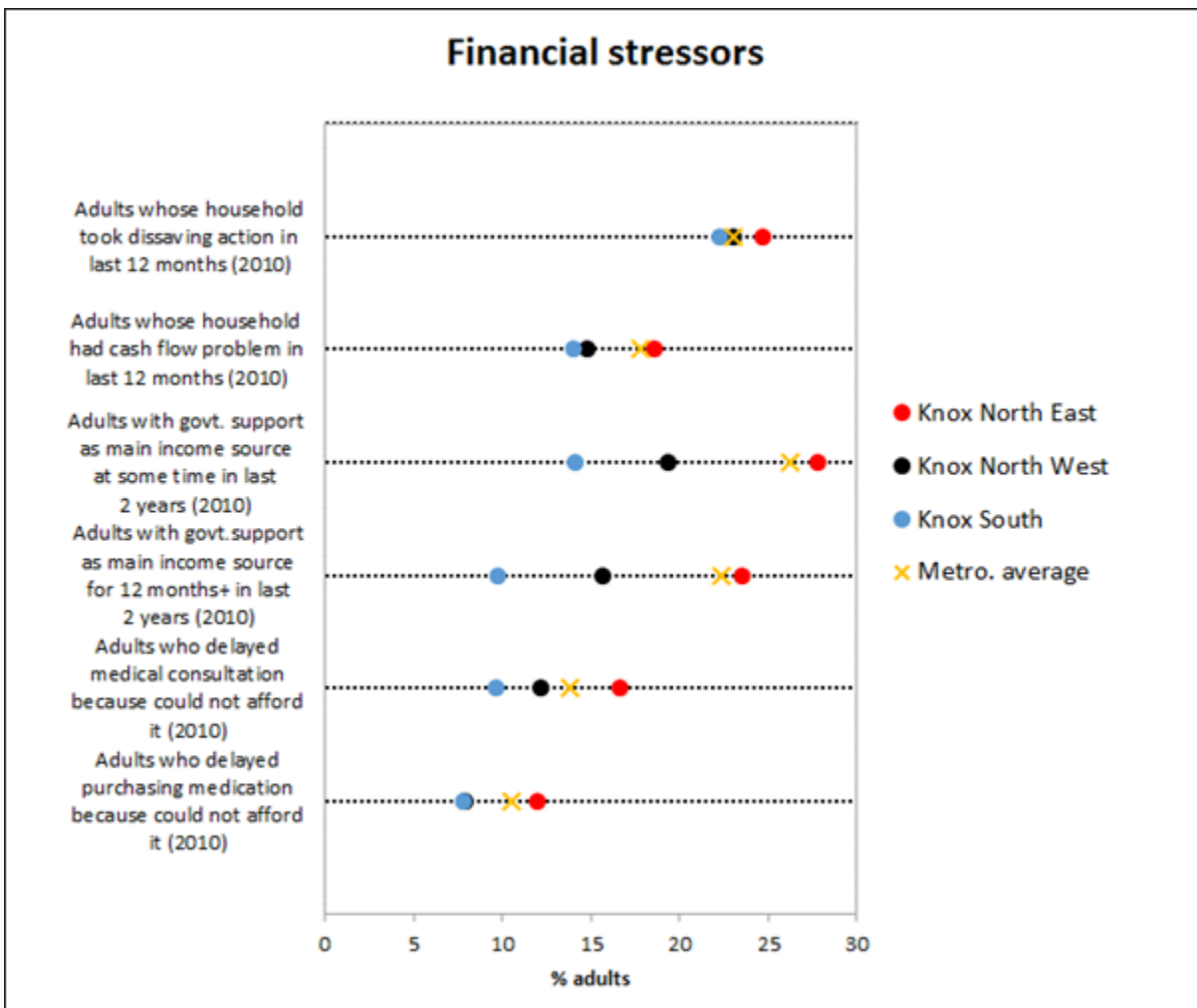
Social Atlas of Australia: Local Government Areas, PHIDU (2016)



Social Atlas of Australia: Local Government Areas, PHIDU (2016)



Social Atlas of Australia: Local Government Areas, PHIDU (2016)



Social Atlas of Australia: Local Government Areas, PHIDU (2016)

Figure 8.5 Indicators of disadvantage by population number, Knox regions, 2010-2012

	Knox North East	Knox North West	Knox South
Vulnerable families			
Low income, welfare dependent families with children (2012)	1445	748	631
% families with children <15 years that are single parent (2011)	1455	701	587
% families with children <15 years that are jobless (2011)	685	315	266
Vulnerable children			
% children <15 years living in jobless families (2011)	1115	528	458
% children <16 years living in low income families (2012)	2540	1292	1148
% children <15 years living in families where mother has low educational attainment ²⁷ (2011)	1975	908	1088
Financial stressors			
Ability to raise \$2000 within a week (2010)	43610	33370	28546
Adults whose household took at least one	12944	8476	7401

²⁷ Female parent's highest level of schooling Year 10 or below

dissaving ²⁸ action in last 12 months (2010)			
Adults whose household had at least one cash flow problem in the last 12 months (2010)	9752	5448	4783
Adults who had government support as their main source of income at some time in the last 2 years (2010)	14462	7062	3843
Adults who had government support as their main source of income for 12 months or more, within the past 2 years (2010)	12228	5713	2526
Health Care Card holders (2010)	4658	3068	2841
Adults who delayed medical consultation because they could not afford it (2010)	8723	4560	3235
Adults who delayed purchasing medication because they could not afford it (2010)	6262	2953	2681

Social Atlas of Australia: Local Government Areas, PHIDU (2016)

- Clearly, the **greatest number of people experiencing socio-economic disadvantage** in relation to all social and economic disadvantage indicators assessed - vulnerable families, vulnerable children and financial stressors -**live in the north-east region of Knox.**

²⁸ Any action where spending is greater than income thereby reducing already accumulated savings or leading to borrowing to finance the expenditure. Examples include reducing home loan repayments, increasing balance owed on credit cards, selling shares or other assets, taking out a personal loan etc.

9. Socio-economic profile of low SES areas

There is a range of poor outcomes associated with low socio-economic status.

While low income and indicators of reduced economic capacity were used as a benchmark for identifying low SES households in Knox, the following data investigates the health, social connection, education, employment and housing arrangements of the people that live in those households, relative to the wider population or people that are less disadvantaged.

9.1 Health and wellbeing

Socio-economic disadvantage is associated with poorer health.

People living in the lowest socio-economic areas are more likely to have poor health and to have higher rates of illness, disability and death than people who live in the highest socio-economic areas.

It is said that if all Australians had the same death rates as the 20% of Australians living in the highest socio-economic areas²⁹, there would have been over 54,000 fewer deaths in the nation between 2009-11.³⁰

Similarly, social and economic characteristics shape the likelihood of engaging in health risk behaviours

The following data illustrates the relationship between socio-economic status and health. Good health is not shared equally among people and varies across socio-economic groups.

Health data is presented for people living in the *most* disadvantaged areas (in the bottom 20% of Index of Relative Disadvantage (IRSD) scores – Quintile 1), compared with those living in the *least* disadvantaged areas (in the top 20% of the IRSD Index scores – Quintile 5).

These categories largely correspond with the values shown in the map of IRSD scores across Knox, below³¹ (Figure 9.1). Small areas with the two darkest shadings have scores within the range of the bottom 20% of IRSD index scores nationally³² (most disadvantaged), while small areas shaded in grey have scores within the range of the top 20% of IRSD scores nationally³³ (least disadvantaged).

It could be expected that the relationship between socio-economic status and health evident nationally, as documented in the table below (Figure 9.2), would be replicated at a local level. The differences in health and likelihood of behaviours that undermine health evident nationally, are likely to hold true locally.

²⁹ Quintile 5, or ranked in the top 20% of scores on the Index of Relative Socio-economic disadvantage (IRSD). Refer earlier discussion, Section 2, 'Socio-economic status of areas'

³⁰ Reference TBA

³¹ While .id calculate IRSD categories separately for each client based on the range of values in the area, advice is that these are close to the national quintiles. Refer Appendix C for comparison of values.

³² 121-931

³³ 1081-1193

Figure 9.1 Index of Relative Socio-Economic Disadvantage, Knox, 2011

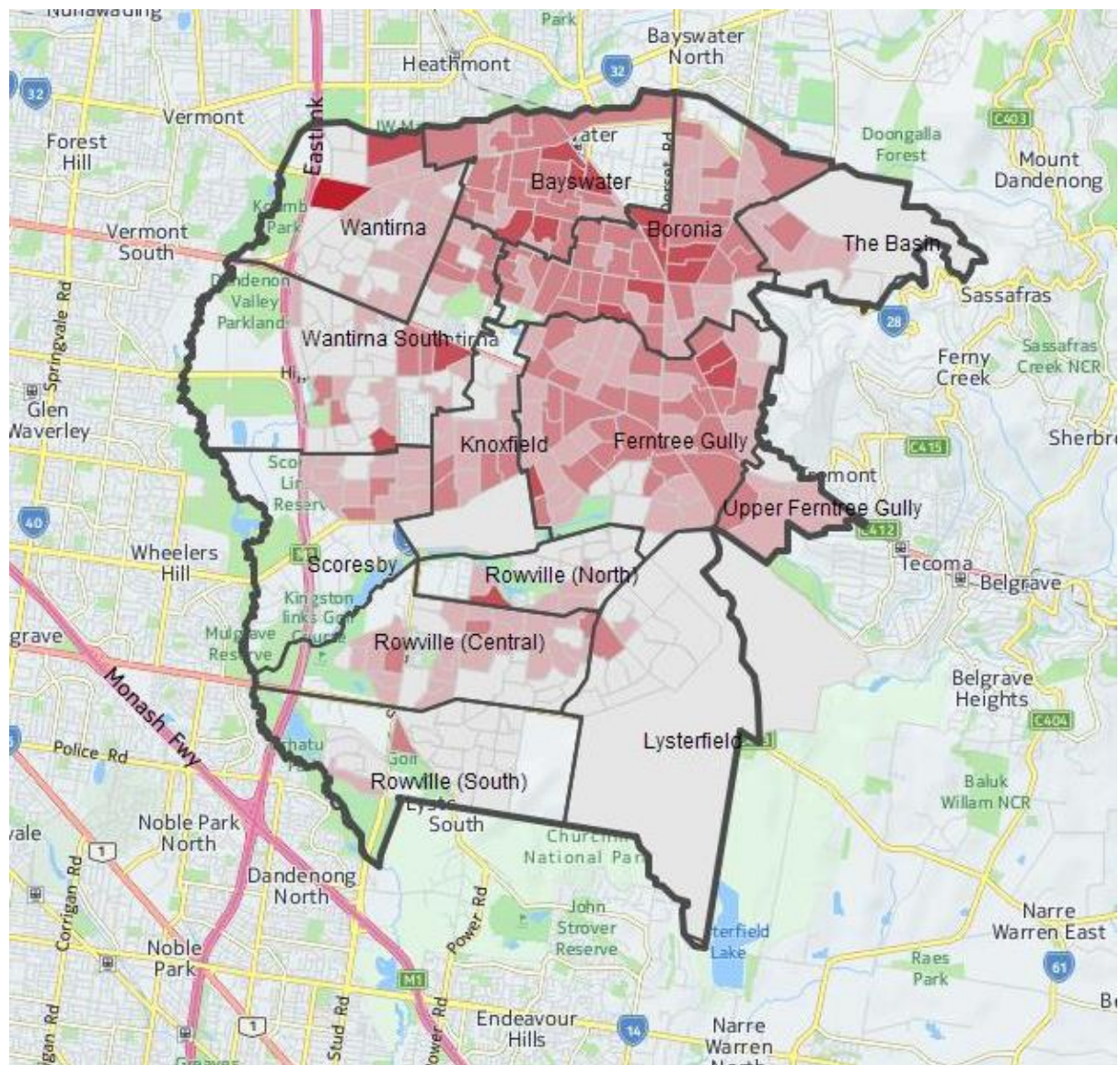




Figure 9.2 Health status by socio-economic status, Australia, 2014-15 (All people)




	Most disadvantaged (lowest 20%)	Least disadvantaged (highest 20%) Fifth quintile	Total population (national average)
Long-term health condition			
Arthritis	19.7	12.1%	15.3%
Asthma	12.8	9.8%	10.8%
Back problems	18.9	15.9%	16.2%
Diabetes	8.2%	3.1%	5.1%
Hypertension	14.9	8.5%	11.3%
Self-reported health 'poor' or 'fair' (NB: 2011-12 NHS)			14.4%
Private health insurance*	34%	77%	
Mental & behavioural problems³⁴  	21.5%	15%	17.5%

Source: ABS National Health Survey, 2014-15; *Patient Experiences in Australia: Summary of Findings, 2015-16 (ABS)

³⁴ Includes organic mental problems, alcohol & drug problems, mood (affective) problems, anxiety-related problems and other mental and behavioural problems

- In 2014-15, **people living in areas of lowest socio-economic status³⁵ had a higher prevalence of all types of long-term health conditions** compared with national averages for the total population.
- Prevalence of chronic conditions among those living in areas of *lowest* socio-economic status is even higher when compared with people living in areas of *highest* socio-economic status³⁶. The **prevalence of diabetes**, for example, is nearly three times as high (8.2% compared with 3.1%) and the prevalence of **high blood pressure** (hypertension) nearly double.
- **One in five (21.5%) of people living in areas of lowest socio-economic status have mental health conditions**, compared with 15% of people living in the *least disadvantaged* areas (and 17.5% of the total population, on average)
- There are pockets of Boronia, Bayswater, Ferntree Gully, Wantirna South, Wantirna and Rowville within the range of the bottom 20% of IRSD scores nationally (most/highly disadvantaged). It is likely that the long term health of residents living in these areas, is less robust in terms of chronic health conditions and mental health, than is found in less disadvantaged areas within Knox. (among the most advantaged or higher SES population)



Figure 9.3 Health risk factors & behaviours by socio-economic status, population 18+ years, Australia, 2014-15

	Most disadvantaged (lowest 20%) First quintile	Least disadvantaged (highest 20%) Fifth quintile	Total population (national average)
No/low levels of exercise³⁷ 	76.1	55.8%	66.2%
Smoke daily 	21.4%	8%	14.5%
Very high psychological distress (NB: 2011-12 NHS) 			10.8%

³⁵ Based on lowest 20% of SEIFA Index scores (most disadvantaged)

³⁶ Based on highest 20% of SEIFA Index scores (least disadvantaged)

³⁷ Based on exercise undertaken for fitness, sport or recreation in the last week.

Overweight or obese³⁸	66.4%	58%	63.4%
Lifetime risky alcohol use³⁹	15.2%	20.2%	17.4%
Single occasion risky alcohol use⁴⁰	37.7%	48.4%	44%
Inadequate fruit consumption 	53.8%	46.6%	50.2%
Inadequate vegetable consumption 	93.6%	92.2%	92.9%
High blood pressure	25.5%	20.8%	23%

Source: ABS National Health Survey, 2014

- In 2014-15, adults living in areas of *lowest* socio-economic status were **more likely to be overweight or obese** compared with the national average and more particularly, with those living in the *least disadvantaged* areas (66.4% of adults compared with 63.4% nationally and 58% of those living in areas of highest socio-economic status).
- **Over three quarters** (76.1%) of adults living in areas of *lowest* socio-economic status did **little or no exercise** compared with the national average (66.2%) and around half of adults living in areas of *least disadvantage* (55.8%). They were more likely to have **inadequate fruit and vegetable intake** compared with the national average or those living in more advantaged locations.
- While **significantly more likely to smoke daily** (21.4% compared with a national average of 14.5% and 8% of adults living in areas of highest socio-economic status), adults that live in areas of *lowest* socio-economic status are **less likely to participate in risky alcohol use**, either at single occasion, or lifetime risk levels. In this instance **risky alcohol use is lower** among those with the *lowest* socio-economic status than is found in the adult population on average, or the most advantaged or highest SES population, in particular.

³⁸ Based on BMI derived from height and weight measurements

³⁹ National Health and Medical Research Council (NHMRC) guidelines. Lifetime risk= more than 2 standard drinks per day, on average

⁴⁰ As above. Short-term risk- more than 4 standard drinks on a single occasion in past year

- Geographically, there are pockets of Boronia, Bayswater, Ferntree Gully, Wantirna South, Wantirna and Rowville within the range of the bottom 20% of IRSD scores nationally (most/highly disadvantaged).

It is likely that the tendency of behaviours that undermine health – including lack of physical activity, inadequate fruit and vegetable consumption, overweight/obesity and smoking – is more prevalent than is found in the most advantaged, highest SES areas of Knox.

The Victorian Population Health Survey, 2014 also found a strong relationship between socio-economic status and prevalence of modifiable health risks (using income as the measure of socio-economic status).

Figure 9.4 Prevalence of modifiable health risk behaviours by socio-economic status (household income), 2014

	Household income						Victorian average	
	<\$40,000		\$40-\$100,000		>\$100,000		Male	Female
	Male	Female	Male	Female	Male	Female		
Current smoker	23.2%	19.8%	15%	12.5%	10.9%	7.5%	14.7%	11.6%
Nutrition								
Meet fruit & veg. guidelines	1.6%*	6.7%	2.1%	7.6%	2.1%	9.3%	1.7%	6.9%
Consume sugar-sweetened soft drinks daily	21%	9.8%	16.4%	8.4%	13.5%	5.4%	15.3%	7.2%
Consume take-away meals or snacks 3+ times a week	4.1%*	**	2.7%	1%*	1.9%*	0.6%*	2.8%	0.9%
Body weight								
Pre-obese (overweight)	33%	25.5%	40.4%	25.7%	40.8%	25.3%	38.4%	24.3%
Obese	24.5%	22.1%	18.7%	18.3%	18.6%	14.4%	20.4%	17.2%
Physical activity								

Adequate physical activity	37.2%	31.7%	45.1%	40.4%	49.4%	47.4%	44.1%	38.6%
Alcohol use								
Lifetime risk of alcohol-related harm	53.1%	36.3%	68.3%	50.9%	80.2%	64.2%	69.3%	49.7%
Single occasion risk	40.8%	22.9%	53.5%		64.4%	39.1%	54.7%	30.9%
Mental health								
Psychological distress	26.3%	26.1%	8.7%*	14.6%	7%	17.7%	10.3%	15.1%

Source: Victorian Population Health Survey, 2014 *Relative Standard Error 25-50%, should be interpreted with caution; ** Random Standard Error +50%, too unreliable to use

- Low socio-economic status** (as indicated by low annual household income, <\$40,000 per annum) is associated statistically with a;

 - significantly **higher prevalence of smoking** among *men and women*;
 - significantly **higher %** of men and women that did **not comply with either fruit or vegetable consumption** guidelines;
 - significantly higher % of *men* that **consume sugar-sweetened soft drinks** daily.
 - significantly **higher % of obesity** among *men and women*;
 - lesser likelihood of engaging in **adequate physical activity** among *men and women* (and a significantly higher % of men and women who are **sedentary**);
 - significantly **lower lifetime risk** from regular, excessive consumption of alcohol, **or the risk of alcohol-related injury on a single occasion** of alcohol consumption. Contrary to other health risk behaviours which are more prevalent among low SES communities, alcohol-related harm increases with increasing household income among both *men and women*. More advantaged populations are more inclined to long term alcohol harms – this is thought to be related to more drinking occasions. Review of the data indicates that populations of ‘mid-range’ socio-economic status have higher risk of single occasion risk such as injury, violence and crime.
 - significantly higher risk of **psychological distress** among *men and women* living in low income households.
- Daily fruit and vegetable intake is a proxy measure of the quality of a person’s diet while evidence shows that consumption of sugar-sweetened soft drinks has significantly contributed to obesity.

Poor nutrition as indicated by inadequate daily fruit and vegetable intake and daily intake of soft drinks; and lack of physical activity - *increase* with declining household income. These factors not only contribute to weight gain, but increased risk of chronic health problems.

Obesity, also correlated with low income is a significant risk factor for hypertension, cardiovascular disease, diabetes, some cancers, disability and premature death.

9.2 Social engagement and access

People living in the most disadvantaged areas may be vulnerable to risk factors for social exclusion, such as limited access to services such as medical consultation and transport which potentially lead to isolation from broader society.

Figure 8.3 above, highlighted some of the cost barriers that affect those living in areas of greatest socio-economic disadvantage, with one in seven adults in Knox delaying a medical consultation, and one in ten, delaying purchase of medication because they could not afford it. Review of data from the Patient Experiences in Australia Survey, 2015-16 reinforces this tendency in findings that more than a quarter (27%) of people living in areas of greatest socio-economic disadvantage delayed or avoided visiting a dental professional when required, due to cost, compared to 11% of people living in the least disadvantaged areas.

Reduced access to treatment for short-term illnesses, preventative health practices and management of long term health conditions, may impact opportunities for social interaction through work or community activities.

Similarly, the ability of people to access services and employment is strongly influenced by access to transport.

Local data on social participation among people living in low-income households is relatively scarce, but measures around internet access and access to a motor vehicle provide some indication. For example, people living in households without broadband availability are disadvantaged and at risk of being left behind in the 'digital divide' as both government and the private sector increasingly conducts business on line. Those with fewer transport options have a reduced ability to access society's goods including services, employment and education.

Clearly on these measures of social capacity, people in Knox living in low-income households, are relatively disadvantaged based on Figure 9.5, below.

Figure 9.5 Social access indicators, low-income households, Knox, 2011

Social access indicator	Low income households		Total Knox households
	Number	%	
Number of households with broadband connection	4124	47.5%	75.9%
No internet connection	3713	42.8%	14.4%
Number of households with access to a motor vehicle	6919	79.6%	92.1%
No motor vehicle	1438	16.6%	4.2%
Number of households with access to more than one motor vehicle	1960	22.5%	63.9%

Source: 2011 Census (ABS)

- In 2011, 47.5% of low-income households in Knox had broadband internet connectivity compared with 75.9% of Knox households generally. Almost **half of low-income households have no internet connection** at all (broadband or dial up) (43% compared with 14%)
- Typically, in Australia, internet access is correlated with age and income. Given that over 40% of people living in low-income households in Knox is aged over 65 years (Section 6.2), it is not known to what degree reduced internet access is a function of age, rather than income.
- One in six low-income households has **no private vehicle access** (17% compared with 4% of Knox households in general). While this may not be such a concern if public transport is available, it remains an indication of greater restriction in transport options and access to all of society's opportunities.⁴¹

9.3 Education

Education increases opportunities for choice of occupation and for income and job security. It also equips people with the skills and ability to control many aspects of their lives- key factors that influence wellbeing throughout the life course. For example, participation in schooling is a major protective factor across a range of risk factors, including substance misuse, unemployment and homelessness.

Families or individuals that are socio-economically disadvantaged are more challenged by the financial costs associated with education. Family attitudes towards the value of education may also inhibit people from low socio-economic backgrounds from continuing their education. As a result, there is greater risk of poor transition to further education and training for those coming from a family with lower socio-economic status.

Post school qualifications is one of the most important indicators of socio-economic status due to its high correlation with income. Nationally, those without qualifications

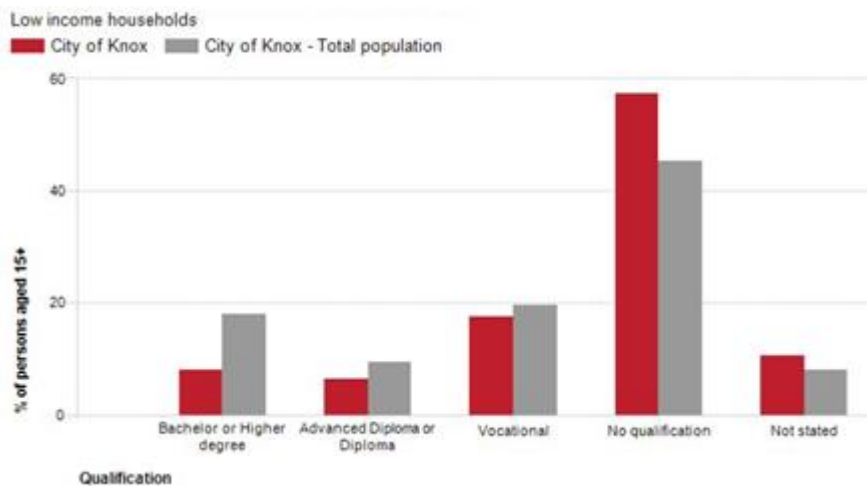
⁴¹ Access to a private vehicle is one of the measures incorporated into the SEIFA index of socio-economic disadvantage as a variable relevant to disadvantage.

are more likely to have low incomes. Locally, this is demonstrated in Knox in the data following.

Figure 9.6 Post school qualifications, people (15+ years) living in low-income households, Knox, 2011

Qualification level	People in low-income households		Total population
	Number	%	
Bachelor degree or higher	1016	8%	17.9%
Diploma	825	6.5%	9.3%
Vocational	2222	17.5%	19.5%
No post-school qualification	7287	57.4%	45.2%

Source: 2011 Census (ABS)



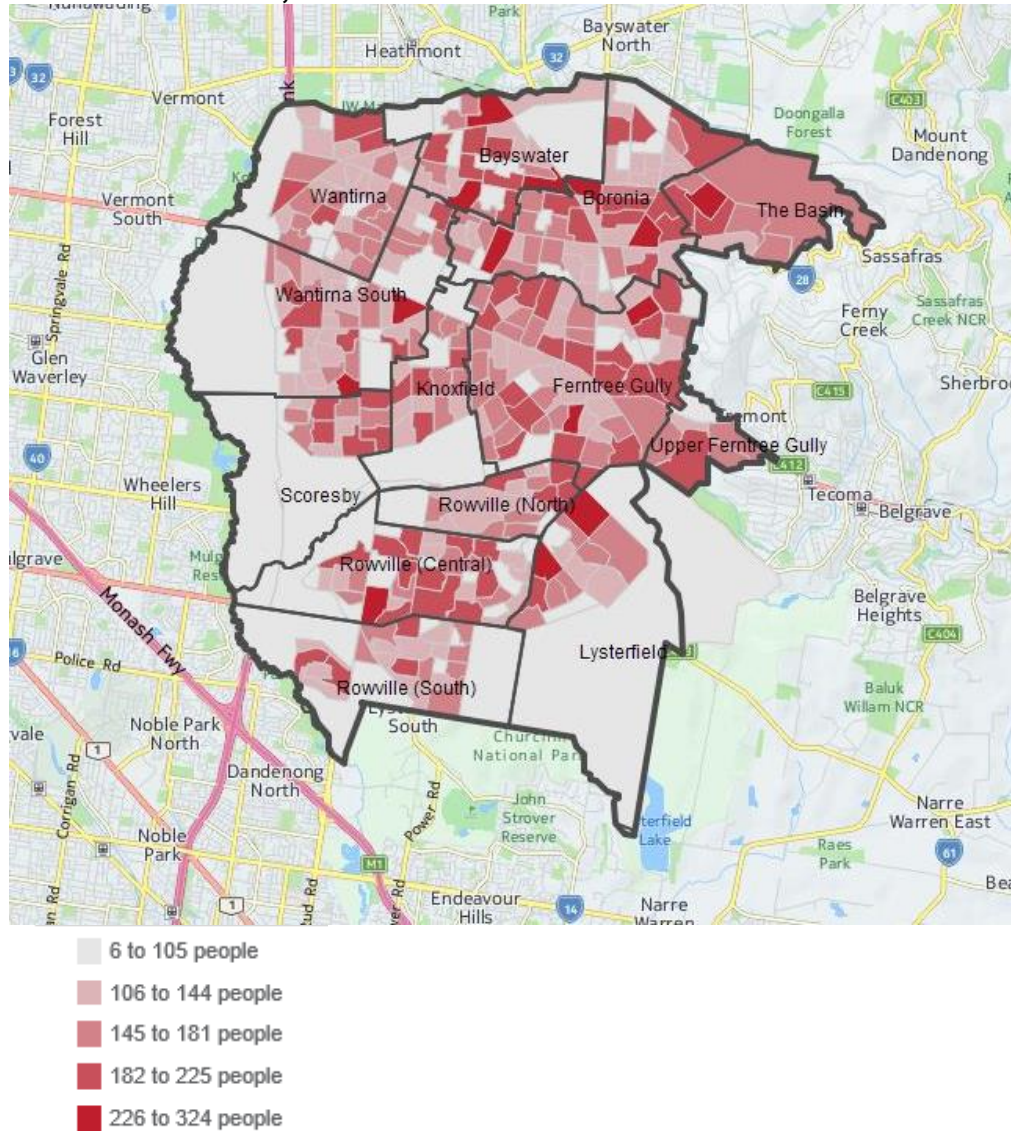
Source: 2011 Census (ABS)

- People that live in low-income households in Knox are **half as likely to have a university level qualification** (diploma, degree or higher) as people in Knox in general (15% compared with 27%).
- Indicators suggest that Knox's educational status while improving, remains less favourable than the Melbourne average. For example, a higher share of Knox's population over the age of 15 years is without any post-school qualification (45% compared with 42% metropolitan-wide in 2011). This is exacerbated among people living in low-income households, where **nearly 60% have no formal post-school qualification, tertiary or vocational (trade)**.
- As with internet access this may be influenced by the large proportion of people aged over 65 years in Knox's low income cohort (43%).

The following map illustrates the distribution of people without qualifications in Knox.

There is a high correlation between this and the distribution of low-income households (Figure 6.4, Section 6.1 Low income households), reinforcing the relationship between lack of qualifications and income.

Figure 9.7 Location of people (15+ years) without qualifications (number), Knox, 2011



The relationship between lack of educational qualifications and low income (as a measure of socio-economic disadvantage) can become inter-generational. Disadvantaged families or individuals may be unable to meet the cost of further education, or family attitudes towards the value of education may inhibit educational achievement or aspirations.

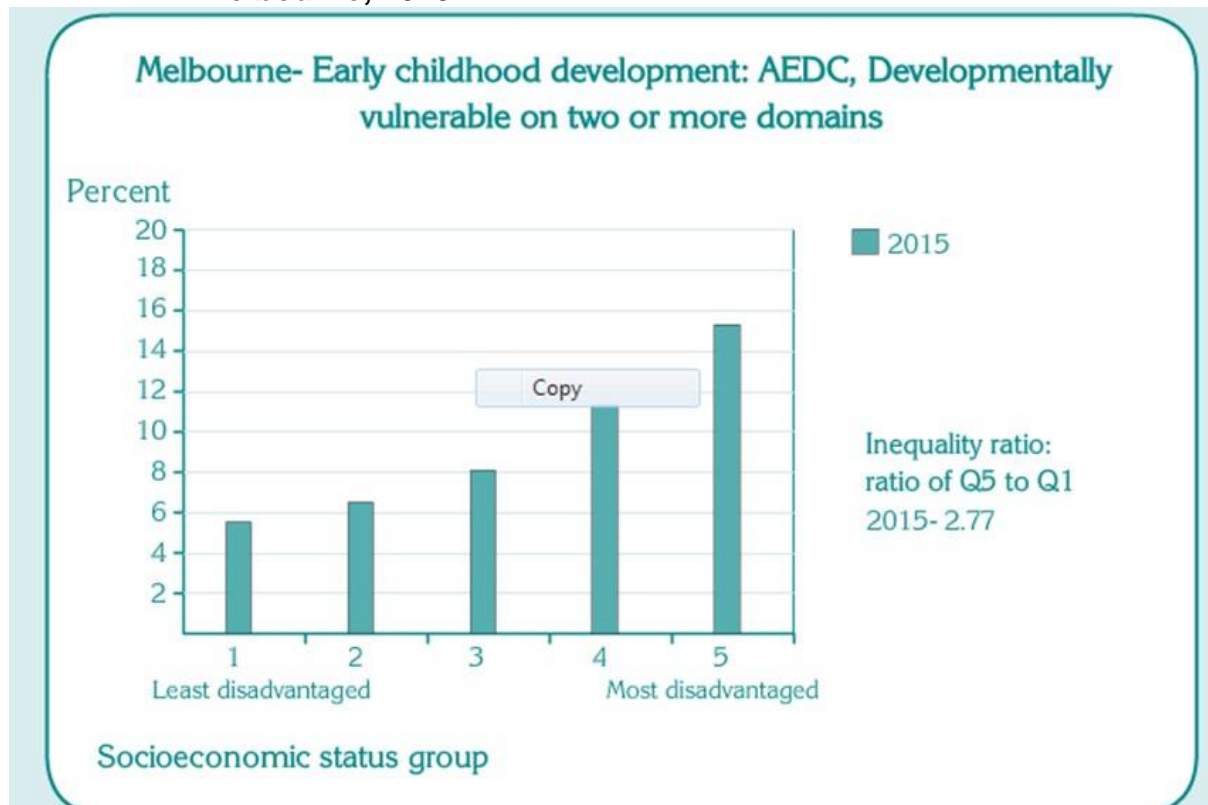
For example, data from the **Australian Early Development Census (AEDC)**, taken in the first year of school to assess early childhood development outcomes,⁴² shows

⁴² Five areas of early childhood development are assessed – physical health and wellbeing; social competence; emotional maturity; language and cognitive (school-based) skills; and communication skills and general knowledge.

strong correlation between socio-economic status and the percentage of children that are vulnerable on two or more development domains.

Figure 9.8 below charts the percentage of vulnerable children⁴³ in metropolitan Melbourne against socio-economic status based on the SEIFA Index of Relative Disadvantage (IRSD)⁴⁴.

Figure 9.8 Socio-economic status and early childhood development, Melbourne, 2015



Source: Social Atlas of Australia, Inequality Graphs (PHIDU)

- **The percentage of vulnerable children increases with socio-economic disadvantage.**

Comparing the rate in the most disadvantaged areas⁴⁵ to that in the least disadvantaged area⁴⁶ yields an 'inequality ratio'. In this case, an inequality ratio of 2.77 means that children in the *most* disadvantaged areas in Melbourne in 2015 are 2.77 times more likely to be developmentally vulnerable of two or more of the five AEDC domains than those living in the *least* disadvantaged areas.

⁴³ Vulnerable on two or more of the five domains

⁴⁴ Refer Section 5 for a discussion of SEIFA (Socio-economic Indexes For Areas)

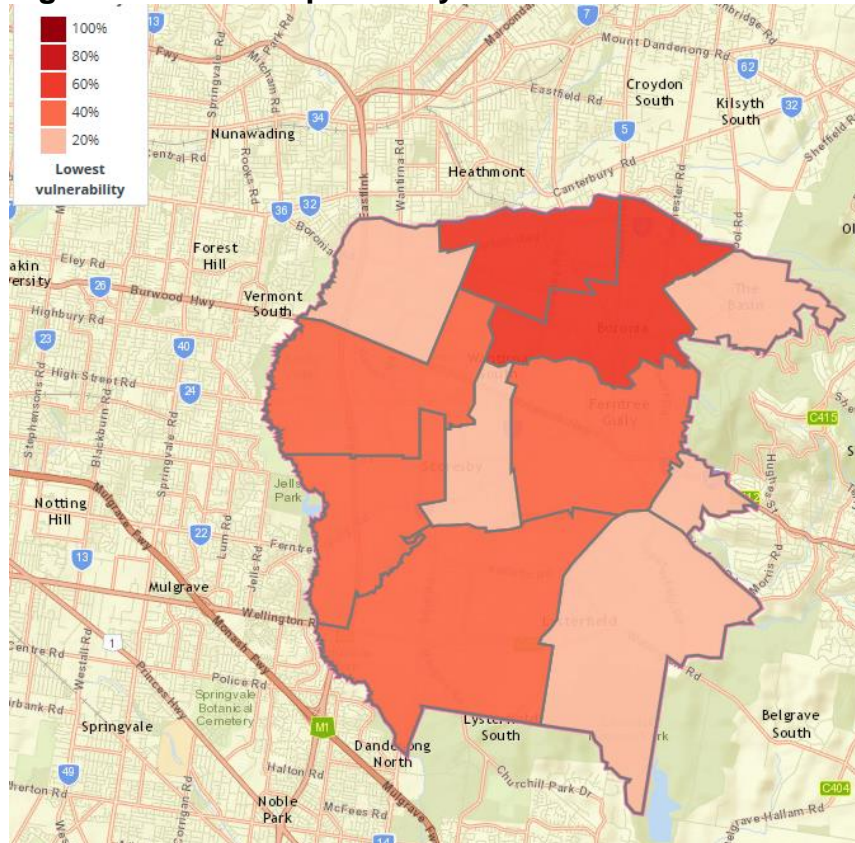
⁴⁵ Quintile 5 – 20% of areas with the lowest IRSD scores

⁴⁶ Quintile 1 – 20% of areas with the highest IRSD scores

This is a key measure of disadvantage since the AEDC domains have been shown to predict later health, wellbeing and academic success.⁴⁷

Figure 9.9 below, illustrates variation in childhood developmental vulnerability in Knox and shows how Knox suburbs fare relative to the rest of Australia in terms of the 'quintile'⁴⁸ into which it falls (from Quintile 1 – 20% of areas with the lowest rates of vulnerability to Quintile 5 -20% of areas with the highest rates of vulnerability). Areas shaded in lighter shades have lower proportions of developmentally vulnerable children and darker shadings have higher proportions.

Figure 9.9 Developmentally vulnerable on two or more domains, Knox, 2015



- **Bayswater and Boronia** have the highest proportion of developmentally vulnerable children in Knox (though are located mid-range relative to rates found across all areas in Australia) and rates are lower than the national average (Figure 9.11).

Translation of this into a *rate* (percentage) and *number* of children involved by Knox suburb, is shown in the table below.

⁴⁷ AEDI national report 2015: A snapshot of early childhood development in Australia (Canberra: Department of Education and Training, 2016)

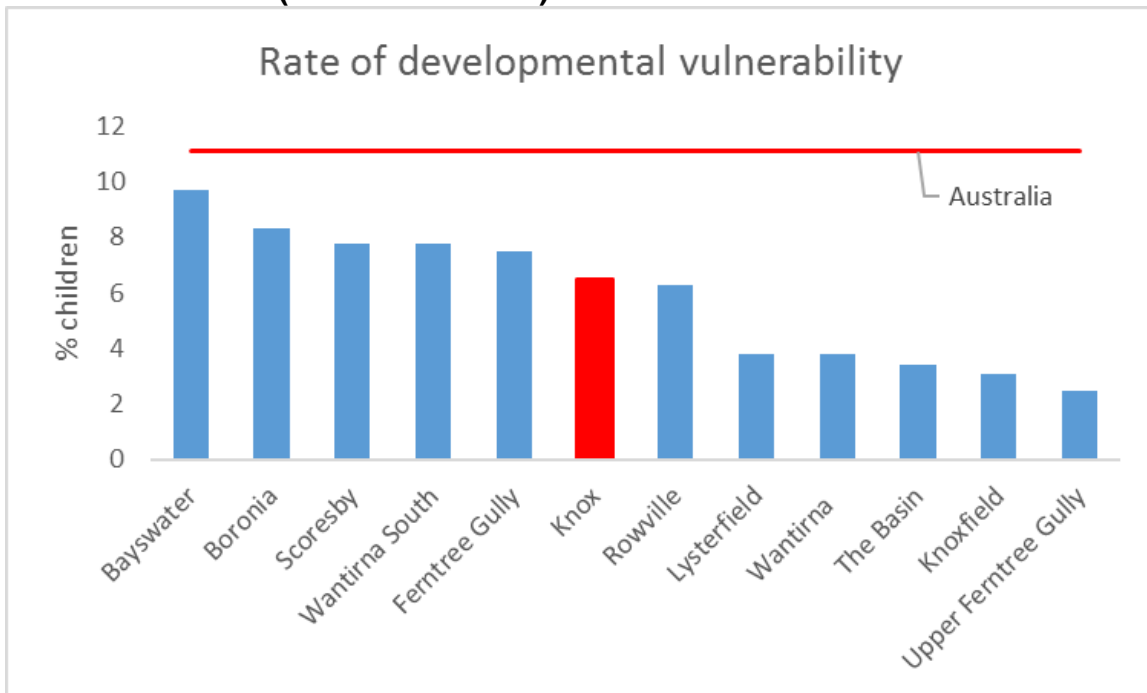
⁴⁸ The division of geographic areas ranked from lowest to highest (*lowest* vulnerability to *highest* vulnerability) into five equal groups where Quintile 1 represents the 20% areas with the lowest vulnerability (lowest % of vulnerable children) and Quintile 5, the 20% areas with the highest vulnerability (the highest % of vulnerable children)

Figure 9.10 Developmentally vulnerable, two or more domains (AEDC), Knox suburbs, 2015

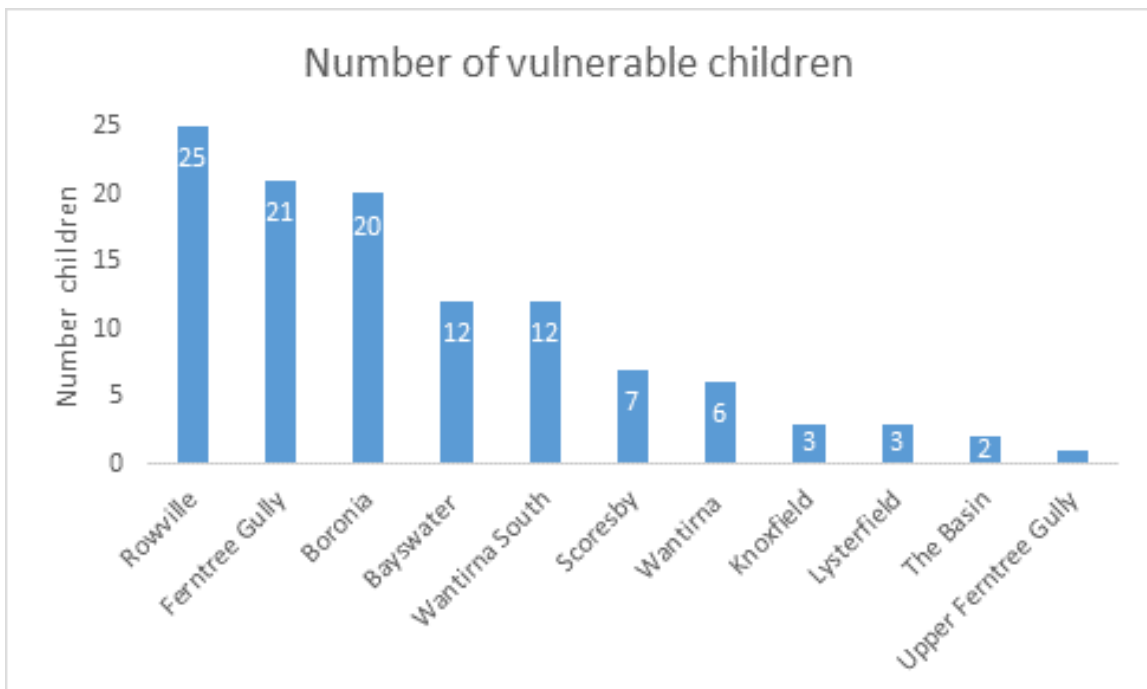
Suburb	% children	Number of children
Bayswater	9.7%	12
Boronia	8.3%	20
Ferntree Gully	7.5%	21
Knoxfield	3.1%	3
Lysterfield	3.8%	3
Rowville	6.3%	25
Scoresby	7.8%	7
The Basin	3.4%	2
Upper Ferntree Gully	2.5%	1
Wantirna	3.8%	6
Wantirna South	7.8%	12
Total Knox	6.5%	112
Victorian average	9.9%	6,707
Australian average	11.1%	

Source: Australian Early Development Census, 2015

Figure 9.11 Developmental vulnerability, two or more domains, Knox suburbs, 2015 (rate and number)



Source: Australian Early Development Census, 2015



Source: Australian Early Development Census, 2015

- There are **112 children in Knox that are developmentally vulnerable** on two or more domains, with the greatest numbers located in **Rowville, Ferntree Gully** and **Boronia**. These areas together, account for 60% of developmentally vulnerable children in Knox.

9.4 Employment

Participating in the workforce is important for social inclusion and economic independence.

Employment statistics are an important indicator of socio-economic status. As income is usually linked to employment, low incomes are usually correlated with high unemployment and low workforce participation. This is impacted by the education and skill base of the population, which, as seen in the previous section, is compromised among people living in low-income households in Knox (and elsewhere). Employment not only directly impacts economic capacity and resilience, but other outcomes indirectly, including personal wellbeing and housing opportunity.

The following data compares a range of employment indicators for the Knox **resident labour force living in low-income households** compared with the resident labour force overall. Resident labour force refers to those employed (full or part-time), or actively looking for work (unemployed). It excludes those not in the labour force, including retirees.

Lower workforce participation and higher unemployment in the workforce living in low-income households, locally, is evident.

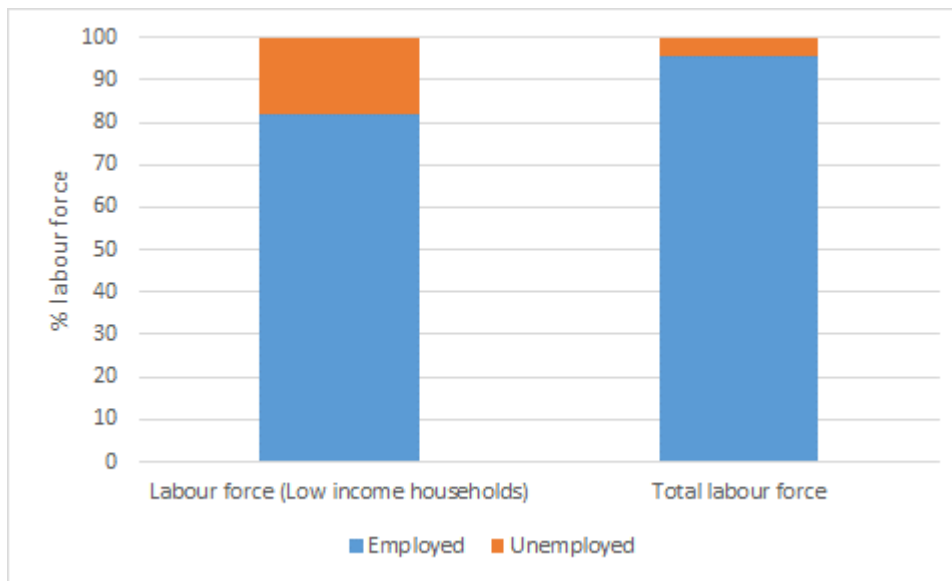
Figure 9.12 Employment indicators, resident labour force (15+ years) living in low income households , Knox, 2011

Employment indicator	Labour force living in low-income households		Total Knox labour force
	Number	%	
Labour force participation ⁴⁹	3314	26.3%	69.2%
Employed	2721	82.1%	95.4%
-Employed full-time	881	26.6%	60.9%
-Employed part-time	1689	51%	29.4%
Unemployed (unemployment rate)	593	17.9%	4.6%
Total labour force	3314	100%	100%

Source: 2011 Census (ABS)

⁴⁹ Labour force participation = employed, full or part-time or unemployed, looking for work, as a percentage of population

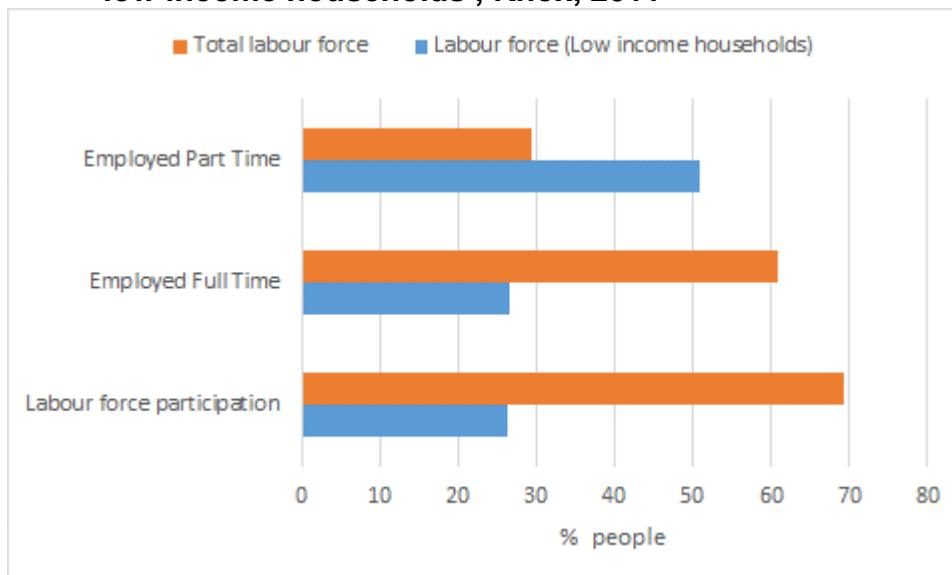
Figure 9.13 Resident labour force status, low-income households, Knox, 2011



Source: 2011 Census (ABS)

- The Knox labour force living in low income households are ***less likely to be employed*** (82% compared with 95% of the total labour force in Knox) and considerably ***more likely to be unemployed*** (18% compared with 5%)

Figure 9.14 Employment indicators, resident labour force (15+ years) living in low income households , Knox, 2011



Source: 2011 Census (ABS)

- **Labour force participation** among those living in low-income households is **considerably lower** than is found in Knox generally (26% compared with 69%). However, this will be impacted by the high number of retirees living in low-income households (over 40% of all people living in low-income households in Knox, refer Section 6.2).
- Those living in low-income households that are in the labour force are **half as likely to be working full time** (27% compared with 61%) and **more likely to work part-time** (51% compared with 29%).

Lower incomes tend to correlate with lower skilled occupations (eg labourers).

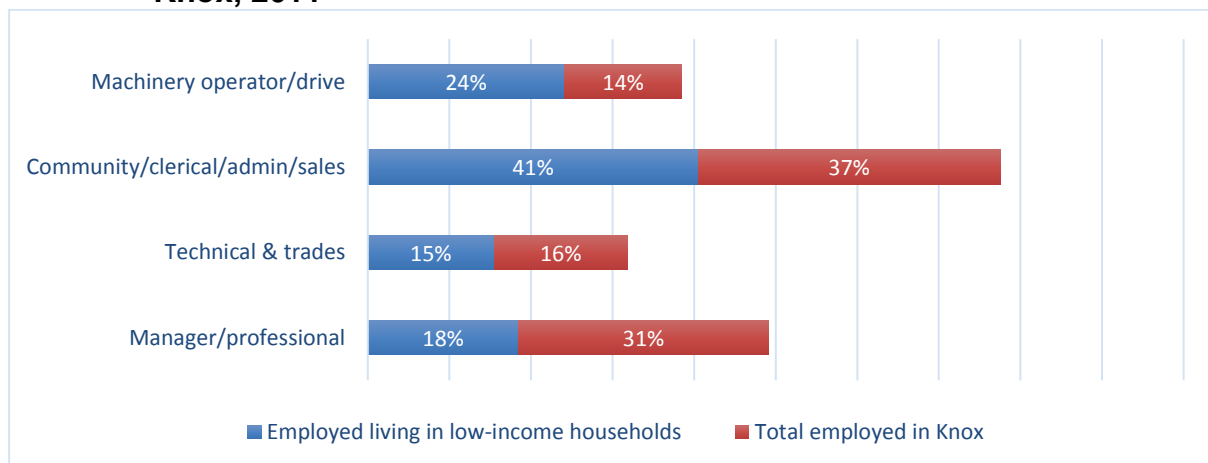
The occupational profile of employees living in low-income households compared with that for the whole of Knox confirms a focus on lower skilled occupations.

Figure 9.15 Occupation, workers 15+ years, living in low-income households, Knox, 2011

Occupation	Employed living in low-income households		Total Knox employed
	Number	%	
Managers	192	7.2	11.3
Professionals	299	11.3	19.3
Technicians & trades	411	15.5	16.3
Community & personal services	359	13.5	8.8
Clerical & admin	344	12.9	17.2
Sales	374	14.1	11
Machinery operators and drivers	190	7.2	6.1
Labourers	450	16.9	8.3
Inadequately described	38	1.4	1.7

Source: 2011 Census (ABS)

Figure 9.16 Occupation, workers 15+ years, living in low-income households, Knox, 2011



Source: 2011 Census (ABS); NB excludes 'inadequately described'

- Employed residents in Knox that live in low-income households are **more likely to be working in less skilled occupations** such as labouring and *less likely* to be employed in managerial and professional occupations.
- The three most common occupations were labourers (17%), technicians and trades workers (15%) and sales (14%). In combination these occupations accounted for almost 50% of employed people living in low-income households.

9.5 Housing

Housing tenure provides insight into socio-economic status.

Housing security and tenure has consistently been associated with health and wellbeing inequalities and vulnerability. Households with the least access to income and other resources are more likely to experience housing stress.

Data on the housing tenure of low-income households in Knox is set out in Figure 9.17, followed by data on locational differences in the experience of housing stress, whether rental or mortgage stress.

NB Data on housing tenure is as per the definitions used in the rest of this profile - households that fall into approximately the bottom 25% of incomes across Australia, (n= 8,600 in Knox, 2011). Information on housing stress is based on households in the bottom 40% of the equivalised income⁵⁰ distribution as is usual practice for evaluating housing stress (n= 16,200 in Knox, 2011).

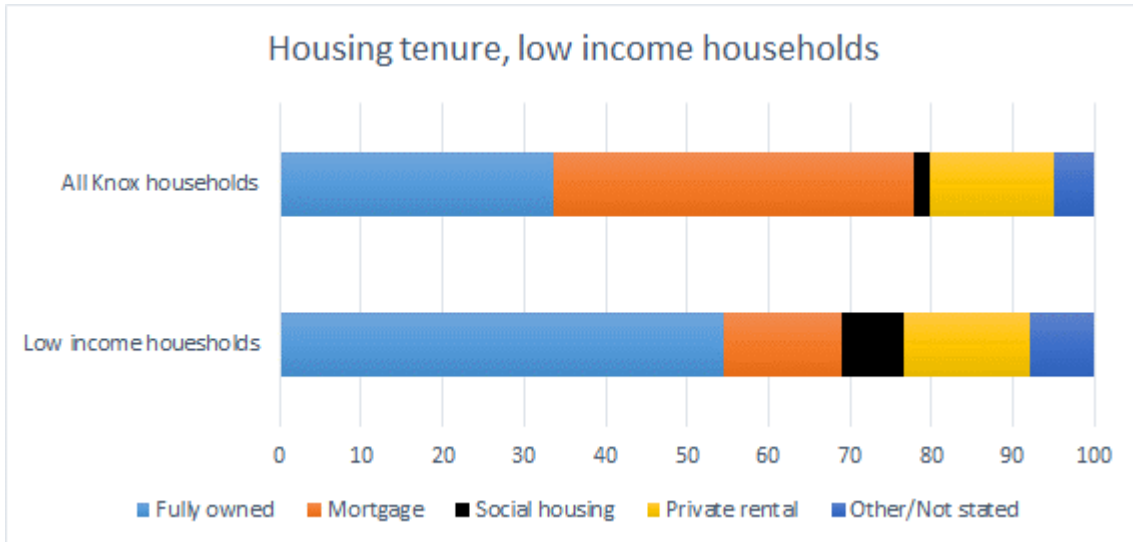
Low-income households for the purpose of this profile is defined as households falling into approximately the bottom 25 % of incomes across Australia.

Figure 9.17 Housing tenure, low income households, Knox, 2011

Housing tenure	Low income households		Total Knox households
	Number of households	%	
Own outright	4740	54.6	33.7
Own with mortgage	1257	14.5	44.1
Social housing	660	7.6	2.1
Other landlord	1340	15.4	15.1
Other	343	3.9	1.4
Not stated	345	4	3.6

Source: 2011 Census (ABS)

⁵⁰ Equivalised incomes = income adjusted using equivalence factors to remove the effect of household size and composition on income.



Source: 2011 Census (ABS)

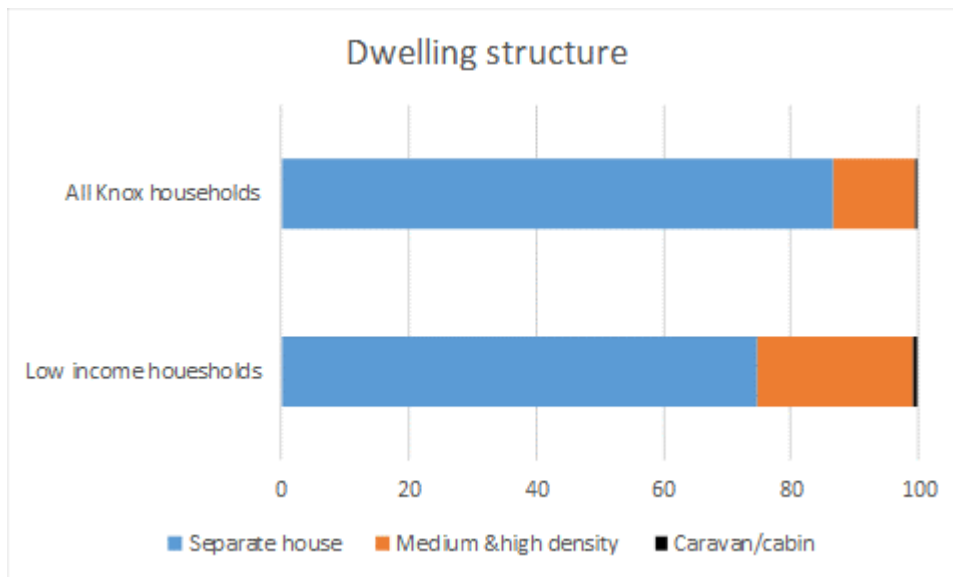
- Low- income households in Knox have a **higher incidence of full home ownership**.

Low-income householders are considerably more likely than average to own their own home outright (55% compared with 34% across Knox overall) and *less* likely to hold a mortgage (15% compared with 44%). This is most likely due to the high proportion of older people in the cohort (43% of people living in low-income households in Knox are aged 65+ years, refer Section 6.2).

This group, having paid off a housing loan during their time in the workforce may now be reliant on reduced income sources such as the aged pension or superannuation, deeming their household as low-income.

- Low-income households also have a **higher incidence of rental tenure**, particularly of **social housing** - at a rate almost four times as high as is found in the general community (7.6% of low-income households compared with 2.1% of all households in Knox).

Lower income households have less capacity to obtain finance or service the financial commitment associated with home purchase and so are more inclined to rent.

Figure 9.18 Living arrangements, low- income households

Source: 2011 Census (ABS)

- Low-income households are more likely to be located in higher density dwellings in Knox. This may reflect more affordable housing or the type of social housing or rental stock available. It may also reflect downsizing among retiree households that are ageing in place given the skewing of the profile of low-income households towards people aged 65+ years (over 40% of people in low-income households in Knox).
- In 2011, three quarters of low- income households lived in detached housing and one quarter in medium/high density accommodation. Low- income households were twice as likely to be living in higher density units and flats (23% compared with 12% of total Knox households)
- Seventy-eight low- income households live in caravan/cabin accommodation.

Housing stress

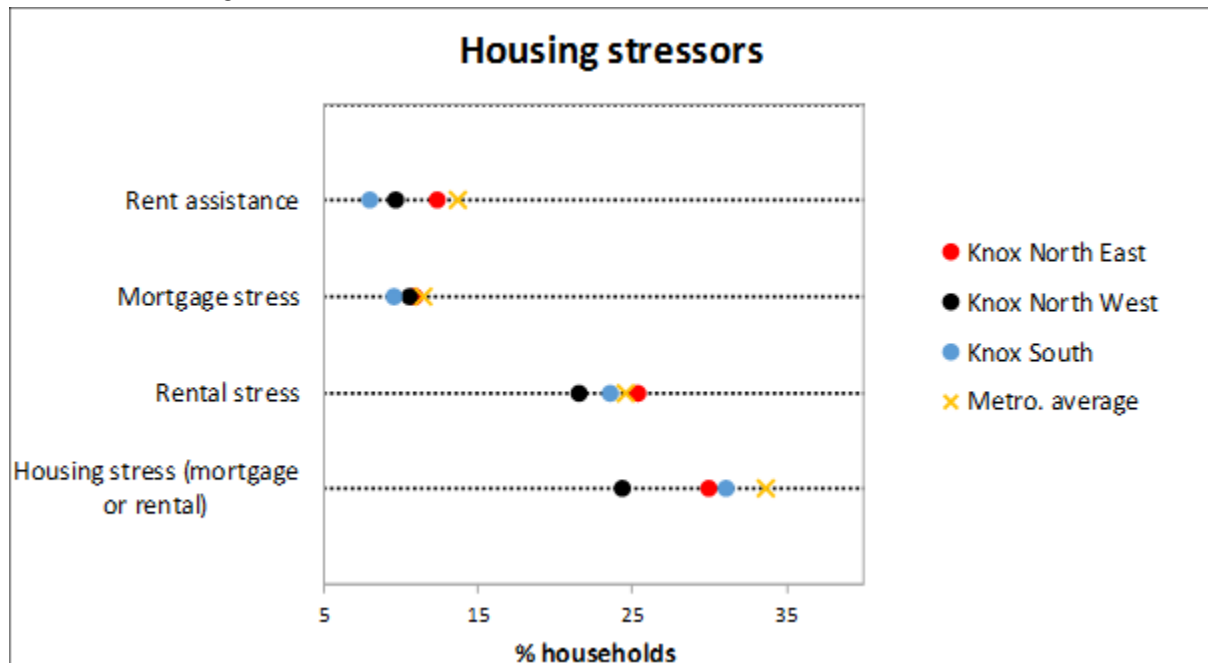
The following data relates to low-income households that experience financial stress in relation to housing. Housing stress is defined as per the NATSEM (National Centre for Social and Economic Modelling) model as households in the lowest 40% of incomes that are paying more than 30% of their usual gross weekly income on housing (whether mortgage or rent).

Figure 9.19 Indicators of housing stress, Knox, 2011

	Households in receipt of Govt rent assistance June 2012	Social Housing (Government Housing Authority) 2011	Low income households with mortgage stress (2011) ⁵¹	Low income households with rental stress (2011) ⁵²	Low income households under financial stress from mortgage or rent (2011)
Knox	10.5%	1.8%	10.4%	24.1%	28.7%
Metropolitan average	13.7%	2.6%	11.5%	24.6%	33.6%

Source: Social Atlas of Australia: Local Government Areas, PHIDU (2016)

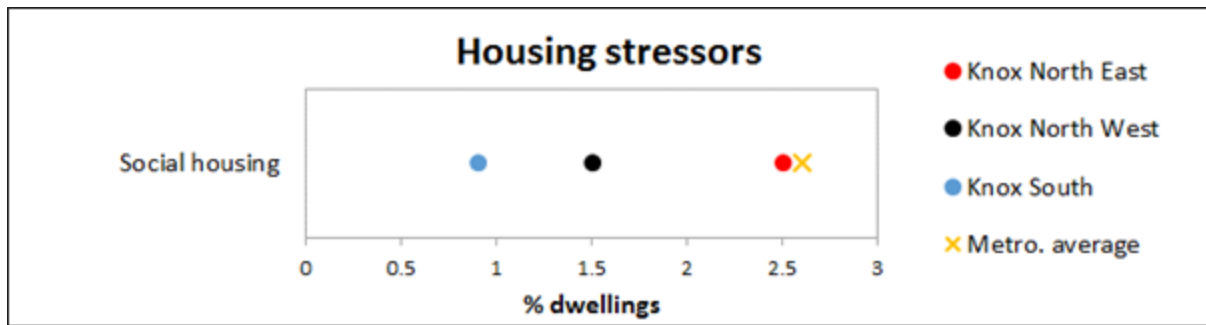
- Measures of housing stress and vulnerability are lower in Knox overall compared with the metropolitan average. Measures vary geographically within Knox, however, as may be observed from data below on regional rates and numbers by suburb.

Figure 9.20 Indicators of housing stress (% households), Knox regions, 2010-2012

Source: Social Atlas of Australia: Local Government Areas, PHIDU (2016)

⁵¹ Low income households (households in bottom 40% of income distribution) with mortgage stress

⁵² Low income households (households in the bottom 40% of income distribution) with rental stress



Source: Social Atlas of Australia: Local Government Areas, PHIDU (2016)

Figure 9.21 Indicators of housing stress by population number, Knox regions, 2011

	Knox North East	Knox North West	Knox South
Households in receipt of Govt. rent assistance June 2012	2951	1473	1019
Social Housing (Government Housing Authority) 2011	606	227	117
Low income households with mortgage stress (2011) ⁵³	1134	645	654
Low income households with rental stress (2011) ⁵⁴	1317	537	348
Low income households under financial stress from mortgage or rent (2011)	2451	1182	1002

Source: Social Atlas of Australia: Local Government Areas, PHIDU (2016)

- Knox North East (Bayswater, Boronia, The Basin, Ferntree Gully, Upper Ferntree Gully) has the highest number of households experiencing various housing stressors.

⁵³ Low income households (households in bottom 40% of income distribution) with mortgage stress

⁵⁴ Low income households (households in the bottom 40% of income distribution with rental stress)

Small area data

The following table details the number of households experiencing various forms of housing stress that are located in each Knox suburb.

The 'Top 3' suburbs, in terms of **number** of households experiencing housing stress is highlighted (highest number in blue, second highest in red and third highest in green).

Data on mortgage and rental stress provides a good indication of the areas in Knox where households may be having problems meeting their housing commitments, whether this be struggling to afford to buy their dwelling or spending a large proportion of their income to service a mortgage or rent.

This is followed by a summary of the total number of low income households in each suburb that are under financial stress from mortgage or rent in 2011, and the percentage that each contributes to the Knox total.

Finally, a series of graphs that convert the number of households into a **rate** (as a percentage of all households with a mortgage or renting) per suburb to enable a comparison of demographic characteristics between different parts of Knox, is provided.

This illustrates a somewhat different picture of the location and distribution of housing stress and disadvantage in Knox.

Figure 9.22 Housing stress, Knox suburbs⁵⁵, 2011

	Bayswater	Boronia	The Basin	FTG	UFTG	Knoxfield	Scoresby	Lysterfield	Rowville	Wantirna	Wantirna South	Knox TOTAL
Low income households with mortgage stress (2011) ⁵⁶	217	353	79	493	36	112	101	88	576	193	259	2520
Low income households with rental stress (2011) ⁵⁷	274	536	40	448	38	109	76	37	343	166	206	2235
Low income households under financial stress from mortgage or rent (2011)	490	889	119	940	74	221	178	125	919	359	465	4755
Low income households under financial stress from mortgage or rent (2011) as % Knox TOTAL	10.3%	18.7%	2.5%	19.8%	1.6%	4.6%	3.7%	2.6%	19.3%	7.5%	9.7%	100%

Source: 2011 Census (ABS)

- **Ferntree Gully, Rowville and Boronia** have the highest number of lower income households⁵⁸ experiencing housing stress, whether due to mortgage or rental commitments, each with around 900 households.
- Together these three suburbs account for 60% of total lower income households in housing stress in Knox.

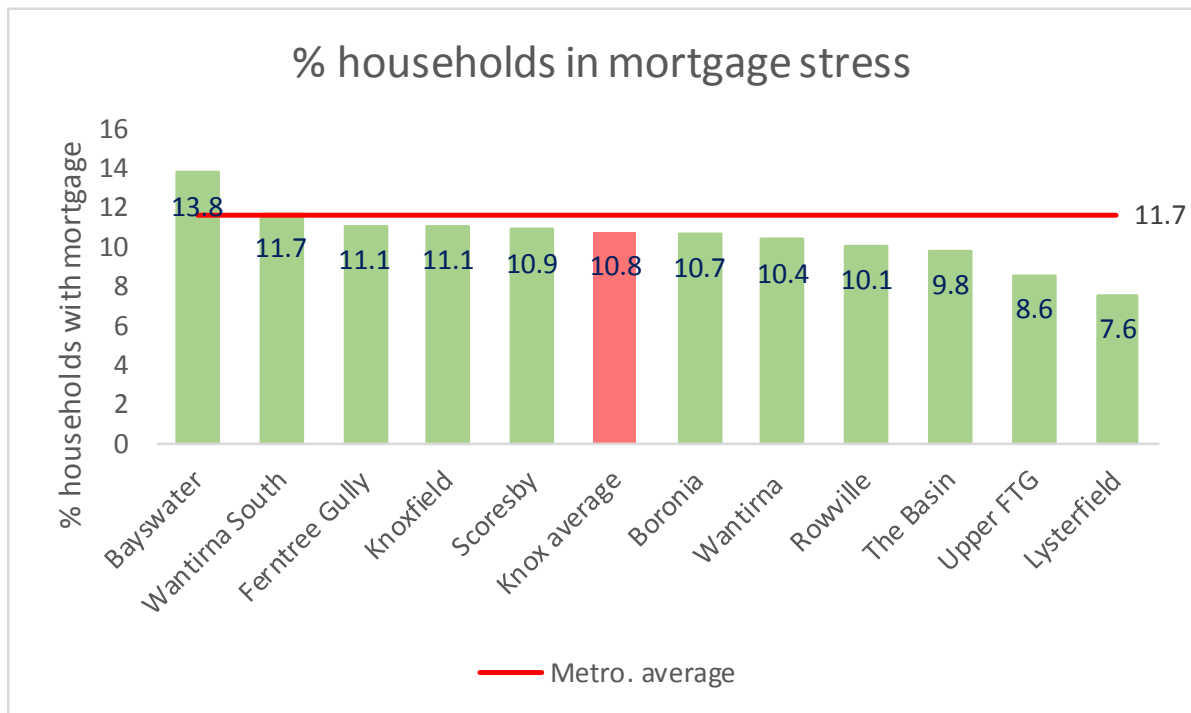
⁵⁵ Statistical Local Areas

⁵⁶ Low income households (households in bottom 40% of income distribution) with mortgage stress

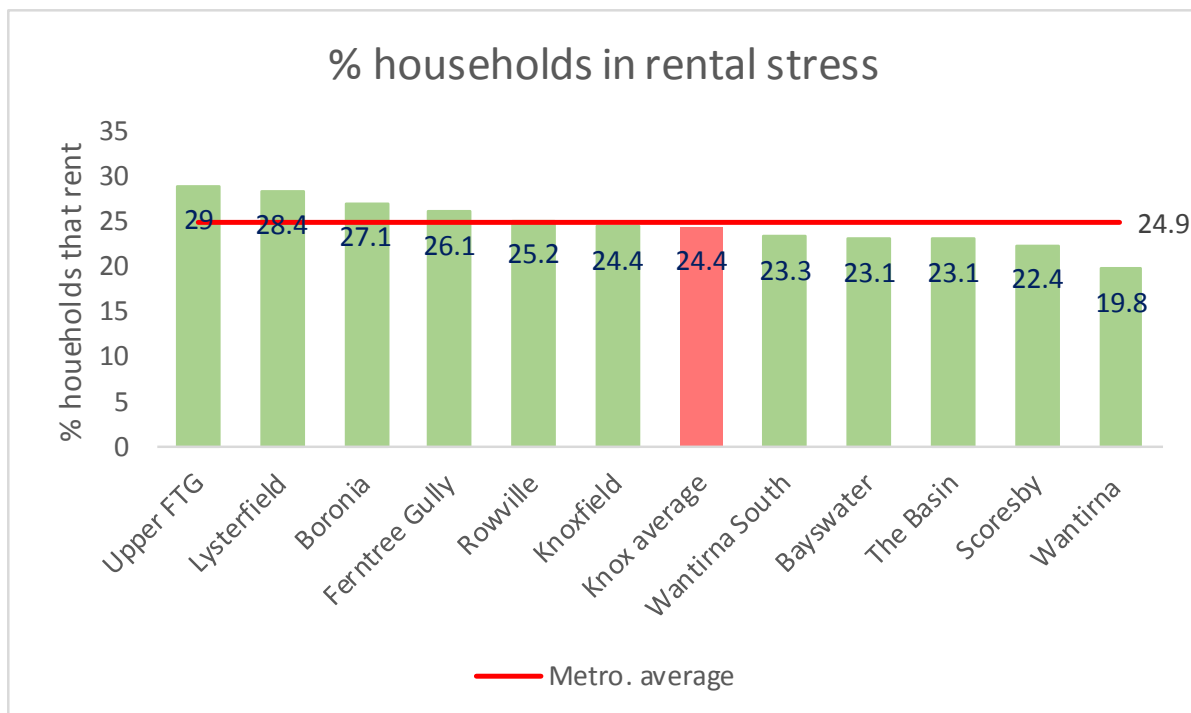
⁵⁷ Low income households (households in the bottom 40% of income distribution with rental stress

⁵⁸ Bottom 40% of national income distribution

Figure 9.23 Rate (% of households) experiencing housing stress by Knox suburb, 2011



Source: 2011 Census (ABS)



Source: 2011 Census (ABS)

- While the number of households is lower compared with other parts of Knox, **Bayswater** had the highest *proportion or rate* of households experiencing mortgage stress and at a rate that is **higher than the metropolitan average** in 2011. Bayswater is the only suburb of Knox where this is the case.
- The rate of rental stress **is highest, and above the metropolitan average** in the **north-east** –Upper Ferntree Gully, Boronia and Boronia, **and** also in the **south** – Lysterfield and Rowville.

Appendix A Personal economic capacity – strengths and vulnerabilities

Knox is characterised by

- Consistently higher than average workforce participation ⁵⁹ and employment (a workforce participation rate of 66.8% compared with 62.5% Melbourne-wide according to the 2011 Census;
- Consistently lower than average unemployment @ 4.5% at September, 2016 compared with a metropolitan average of 5.6%; lower long-term and youth unemployment;
- Higher than average equivalised⁶⁰ household income;
- A lower incidence of welfare recipients and welfare-dependent families;
- Consistently higher than the metropolitan average median personal and family income; and
- Relative advantage according to the SEIFA Index- a measure of relative socio-economic advantage and disadvantage of areas using information from the Census (to be discussed below)

However, regardless of the relative advantage of Knox overall, some signs of vulnerability have emerged, while advantage is not evenly spread and there are identifiable groups that are relatively disadvantaged. The data below indicates some challenges to Knox's relative strength around personal and economic capacity and wellbeing;

- **An increase in low(er) income households.** The percentage of lower income households in Knox in the *lowest 40%* of Australia's income distribution⁶¹ increased from 31.7% to 33.3% between the 2006 and 2011 Censuses. This includes an increase in percentage of the most vulnerable and disadvantaged households in the *lowest 10%* from 6.2% to 6.8%.

Population ageing and the higher than average dependence of older Knox residents on the Aged Pension, is only part of the story. Older households (65+) account for 40% (7000) of **lower** income⁶² households in Knox. The remaining 60% (10,300) mostly comprise families with children (4,200) and lone parent families (2,400). While 75% of older, lower income households own their own homes outright, younger, lower income households are much less likely to do so and have the added pressure of meeting housing costs, reducing their ability to spend on other essentials such as food and health.

- Change in the income profile of Knox is also evident in the most significant change between 2006 and 2011 being the increase in the number of households

⁵⁹ Irrespective of gender or age group

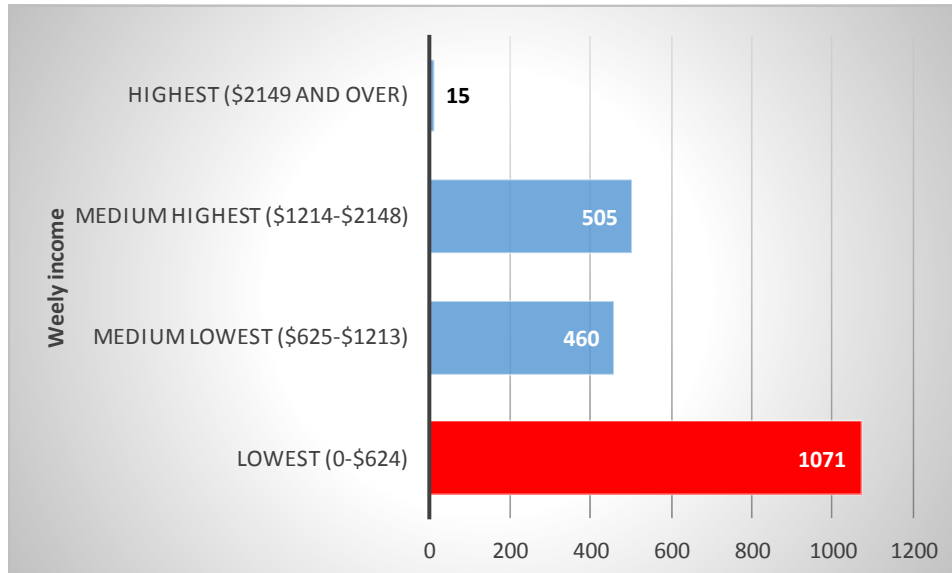
⁶⁰ Income standardised to allow for direct comparison of purchasing power regardless of household size

⁶¹ Based on equivalised household income ie adjusted to remove the effect of household size on income. The 40% figure is traditionally used as an indication of 'lower' income in the context of assessing housing affordability. Different definitions of low income households are used for different purposes by the ABS and others,.

⁶² Based on lowest 40%

in Knox in the *lowest income quartile* (lowest 25%)⁶³ - **an increase of 1070 households**. Change in the highest income quartile was negligible (15 households).

Figure Change in household income quartile, Knox, 2006 to 2011



- **Slower than average income growth.** Knox has been characterised by consistently higher than average household, personal and family income compared with the metropolitan average. Median household income is now much closer to the Melbourne average, increasing by 21% between 2006 and 2011 to \$805. This compares with a 24% increase across Melbourne for a median weekly income of \$802 in 2011;
- **Growth in welfare dependency rates.** This includes an increasing share of households receiving rent assistance (from 9.6% of Knox households in 2009, compared with 11.6% in 2014) and upward movement in the percentage and number of **welfare dependent**, low-income families⁶⁴. This has increased from 6.6% of families in 2009, to 6.8% in 2012 and 7.1% (**nearly 3000 families**) by 2014. This is consistent with the growth in number of lower income households.

Families that are solely or largely dependent on government income, with the least access to income and other material resources, are more likely to have lower achievements in education; to experience housing stress, and have poorer physical and mental health⁶⁵

⁶³ Household income quartiles based on the distribution of incomes in Knox relative to Victoria. Income quartiles for Victoria are created by ranking household incomes from lowest to highest and dividing into four equal groups (quartiles). Use of income quartiles as a constant, enables comparison of the proportion of households in each quartile, independent of inflation.

⁶⁴ Low income families with children under 16 years of age, with income under \$36,276 (2011) and in receipt of Family Tax Benefit A

⁶⁵ Barnett M. Economic disadvantage in complex family systems: expansion of family stress models, *Clinical Child Family Psychology Review*, 2008: 11(3): 145-61

Welfare dependency, however, remains consistently lower than average (with the notable exception of the Age Pension).

- **Ongoing and emerging indicators of financial stress.**

- food insecurity – a *higher* than average rate of the adult population in Knox report running out of food in the previous 12 months and being unable to buy more⁶⁶ (6.3% compared with a metropolitan average of 6.1%, state average 4.6% and a regional average of 4.1% in 2011-12). The rate of food insecurity (estimated at **5,300 adults**) excludes dependent children living in food stressed households. The true extent of adverse impacts on nutrition, health and wellbeing due to food stress would be higher if dependent children were included;
- ability to respond to an emergency – a key indicator of financial stress is the ability to raise \$2000 in two days. Those who are unable to do so are considered to have a low level of resources and at risk of having a negative event turn catastrophic e.g. a car breakdown leading to job loss.

This measure declined from 90.3% of Knox adults in 2008 to 86.2% in 2011-12). Data reveals a *negative* shift from a consistent, long standing and *higher* than average share of the population in previous surveys in 2004, 2006 and 2008, to a *comparable level* to the average most recently⁶⁷ (86.2% in Knox compared with 86.1% metropolitan-wide, 2011-12)

⁶⁶ A lack of financial capacity to purchase food may result in poor diets and nutrition and lower levels of health and wellbeing overall.

⁶⁷ A symptom of financial stress in the inability to raise a moderate sum of money to deal with an emergency such as an unexpected bill.

Appendix B SEIFA Indexes, Knox suburbs, 2011

Suburb	Index of Relative Socio-Economic Disadvantage			Index of Relative Socio-Economic Advantage and Disadvantage			Index of Economic Resources			Index of Education and Occupation		
	Score	Decile	Percentile	Score	Decile	Percentile	Score	Decile	Percentile	Score	Decile	Percentile
Bayswater	1003	5	47	987	5	45	989	4	37	984	6	52
Boronia	1014	6	53	994	5	49	996	4	40	979	5	50
Ferntree Gully	1028	7	61	1010	6	54	1024	6	55	978	5	49
Knoxfield	1047	8	73	1031	7	68	1034	6	60	1002	7	61
Scoresby	1049	8	74	1035	7	70	1045	7	67	1002	6	60
Lysterfield	1102	10	96	1110	10	95	1139	10	98	1035	8	74
Rowville	1081	9	89	1076	9	87	1093	9	89	1028	8	71
Upper FTG	1049	8	74	1031	7	68	1047	7	68	1016	7	66
The Basin	1060	8	79	1040	8	72	1059	8	74	1008	7	63
Wantirna	1062	9	81	1057	8	79	1058	8	73	1035	8	74
Wantirna South	1062	9	81	1064	9	82	1063	8	73	1046	8	78
KNOX	1049	9	90	1039	9	87	1048	10	91	1048	10	91

Appendix C SEIFA quintiles

Knox Quintiles	National Quintiles
765-850	121-931
851-971	931-997
972-1029	997-1041
1030-1074	1041-1081
1075-1155	1081-1193