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Estimating need and costs of social and affordable housing delivery

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Estimating National Scale Housing Need

This report presents the findings of a research project commissioned by CHIA NSW and Homelessness NSW to provide estimates of the social and affordable housing need for Australia by sub-region and the likely costs to government of delivering housing to meet these needs over the period to 2036. Social and affordable housing needs estimates have been based on an assessment of households currently living in housing stress in the private rental market, that is those paying over 30% of their income in rent, and implied need from homelessness population figures[1]. This produces a current housing need that is in addition to 'met need' which comprises households already housed in social or affordable housing. The resulting housing needs figures have been estimated at SA4 regions across Australia, which accounts for geographic variation in both household structures and household incomes.

For the purposes of this report, housing need is separated into two categories. The first are households deemed to be in need of 'social housing' (implying higher levels of housing subsidy) and includes only households in the bottom income quintile (Q1) for Australia and who are in private rental stress, combined with homelessness figures. The second category relates to households in need of 'affordable housing' (implying lower levels of housing subsidy) which includes households who were assessed as being in housing stress who are in the second income quintile (Q2) for Australia.

Household income thresholds that define the quintiles are differentiated by household type. This is to recognise the fact that family households will likely earn more than singles, but also be seeking a larger and so more expensive housing product. The household income thresholds for the first quintile households (and so the demand for social housing) are $400, $800 and $1,000 per week for singles, couples and families respectively. The household income thresholds for the second quintile (and so the demand for affordable housing) are $500, $1,250 and $1,750 per week for singles, couples and families respectively. The thresholds are based on 2016 census counts, so reflect 2016 incomes. The thresholds also only approximate the actual quintile thresholds as they are based on pre-determined census household income brackets.

Figure 1 below shows the distribution of all Australian households by three key household types and demonstrates how the needs figures are derived from the Q1 and Q2 income quintiles through four stages to produce the estimates of unmet housing need. The unmet social housing need is estimated to be 437,000 while the unmet affordable housing need is estimated to be 213,000 (see Table 1).

Growth in need is projected to 2036 based on regionally differentiated population growth estimates produced by ABS and assumes no shift in the distribution of household types and incomes, i.e. the current profile of both household types and income profiles is assumed to be relatively constant over the 20-year period. It is possible for underlying economic conditions to change, shifting more household out of rental stress (e.g. if household incomes improve or housing costs fall) or more into stress (if incomes deteriorate or housing costs increase). These estimates assume a 20-year delivery program and, as such, would realistically adapt as underlying economic conditions either improve or deteriorate.

[1] See Lawson, J., Pawson, H., Troy, L., van den Nouwelant, R. and Hamilton, C. (2018) *Social housing as infrastructure: an investment pathway*, AHURI Final Report No. 306, Australian Housing and Urban Research Institute Limited, Melbourne, https://www.ahuri.edu.au/research/final-reports/306 for full account of methodology.

Figure 1: Housing need as derived from all households

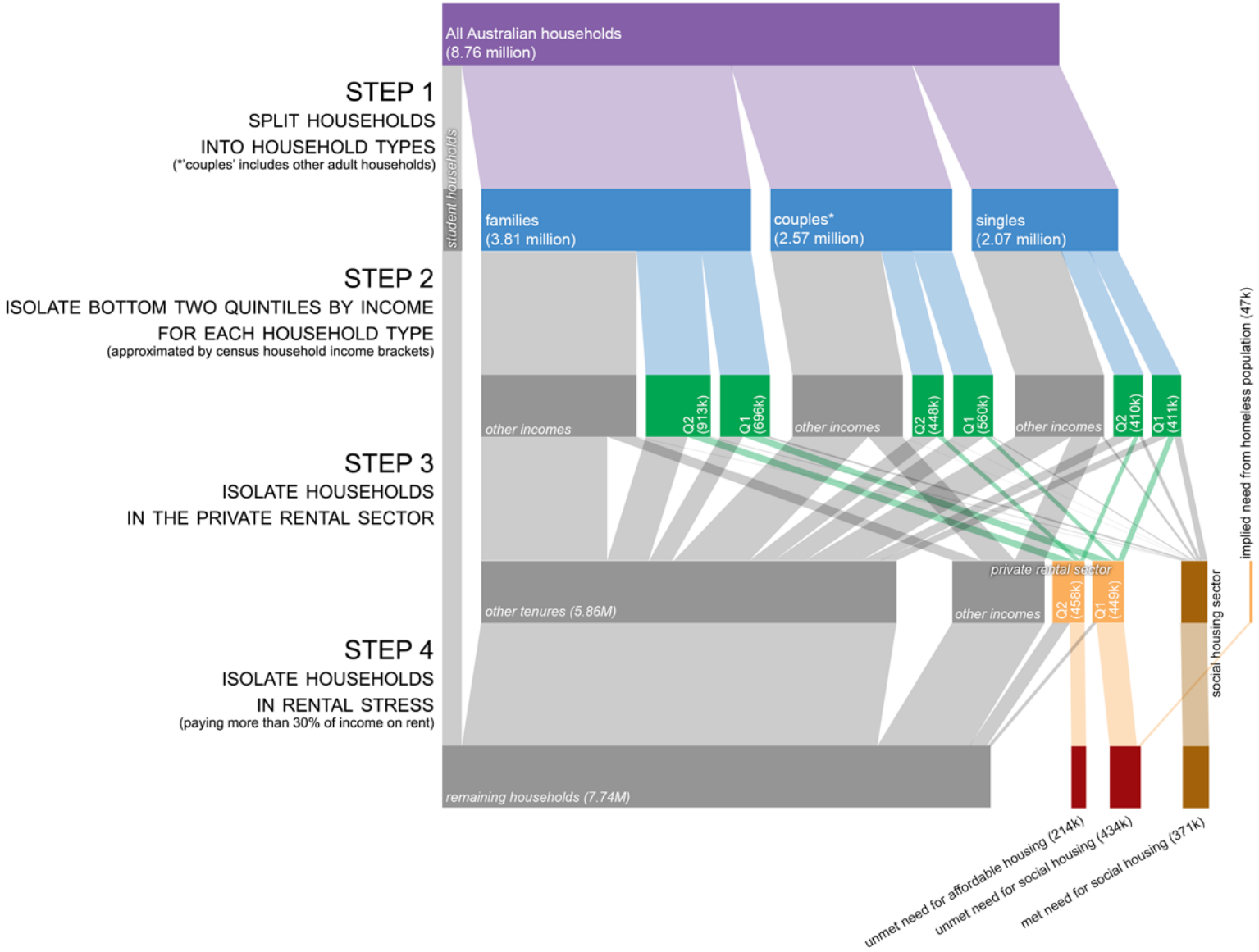


Table 1: Summary of National Social and Affordable Housing Need by Sub-region (households)

	Baseline figures			Current unmet need			Projected unmet need			Total additional need			SH Metrics					AH metrics		
Section of Australia	Current hhds	Projected hhds (to 2036)	Current SH (met need)	Q1 (SH)	Q2 (AH)	Total	Q1 (SH)	Q2 (AH)	Total	SH	AH	Total	Average annual SH needed	Average annual growth rate	% hhds in need	% current need met	% growth that needs to be SH	Average annual AH needed	% hhds in need	% growth that needs to be AH
Greater Sydney	1,704,600	631,400	82,400	80,800	55,300	136,100	60,400	20,500	80,900	141,200	75,800	217,000	7,100	5.1%	9.6%	50.5%	22.4%	3,800	3.2%	12.0%
Rest of NSW	1,034,200	156,600	47,500	56,300	24,100	80,400	15,700	3,600	19,400	72,000	27,700	99,700	3,600	4.7%	10.0%	45.7%	46.0%	1,400	2.3%	17.7%
Greater Melbourne	1,649,100	731,000	43,600	75,300	33,900	109,100	52,700	15,000	67,700	127,900	48,900	176,800	6,400	7.1%	7.2%	36.7%	17.5%	2,400	2.1%	6.7%
Rest of Vic.	568,400	111,600	20,600	28,600	8,800	37,400	9,700	1,700	11,400	38,200	10,600	48,800	1,900	5.4%	8.7%	41.9%	34.3%	500	1.6%	9.5%
Greater Brisbane	826,500	394,900	31,100	43,700	25,800	69,500	35,800	12,300	48,100	79,500	38,100	117,600	4,000	6.5%	9.1%	41.6%	20.1%	1,900	3.1%	9.6%
Rest of Qld	922,300	367,600	34,500	59,000	28,900	87,900	37,200	11,500	48,800	96,200	40,500	136,700	4,800	6.9%	10.1%	36.9%	26.2%	2,000	3.1%	11.0%
Greater Perth	725,300	502,900	23,800	30,300	16,500	46,800	37,500	11,400	48,900	67,800	27,900	95,700	3,400	7.0%	7.5%	44.0%	13.5%	1,400	2.3%	5.5%
Rest of WA	190,300	78,800	14,600	8,900	2,900	11,800	9,700	1,200	10,900	18,600	4,100	22,700	900	4.2%	12.3%	62.1%	23.6%	200	1.5%	5.2%
Greater Adelaide	510,000	127,800	32,700	25,500	8,400	33,900	14,600	2,100	16,700	40,100	10,500	50,500	2,000	4.1%	11.4%	56.2%	31.3%	500	1.6%	8.2%
Rest of SA	153,400	14,700	9,500	7,600	1,900	9,500	1,700	200	1,800	9,300	2,000	11,300	500	3.5%	11.2%	55.5%	63.1%	100	1.2%	13.9%
Greater Hobart	89,200	16,200	5,500	4,700	1,600	6,300	1,800	300	2,100	6,500	1,900	8,500	300	4.0%	11.4%	54.0%	40.4%	100	1.8%	11.8%
Rest of Tas.	117,500	11,200	6,200	6,400	1,700	8,100	1,200	200	1,400	7,600	1,900	9,500	400	4.1%	10.7%	49.3%	67.6%	100	1.5%	17.0%
ACT	148,900	61,500	9,500	3,100	2,400	5,500	5,200	1,000	6,200	8,300	3,400	11,700	400	3.2%	8.5%	75.4%	13.5%	200	1.6%	5.5%
Greater Darwin	47,300	15,000	3,000	1,800	1,200	2,900	1,500	400	1,900	3,300	1,500	4,800	200	3.7%	10.1%	63.2%	21.9%	100	2.5%	10.3%
Rest of NT	24,800	11,900	7,500	5,700	300	6,000	6,400	100	6,500	12,100	400	12,500	600	4.9%	53.3%	56.6%	101.3%	0	1.2%	3.7%
Australia	**8,711,800**	**3,233,100**	**371,900**	**437,600**	**213,700**	**651,200**	**291,100**	**81,600**	**372,700**	**728,600**	**295,200**	**1,023,900**	**36,400**	**5.6%**	**9.2%**	**45.9%**	**22.5%**	**14,800**	**2.5%**	**9.1%**

Figure 2: Social Housing Needs to 2036 by Statistical Area Level 4

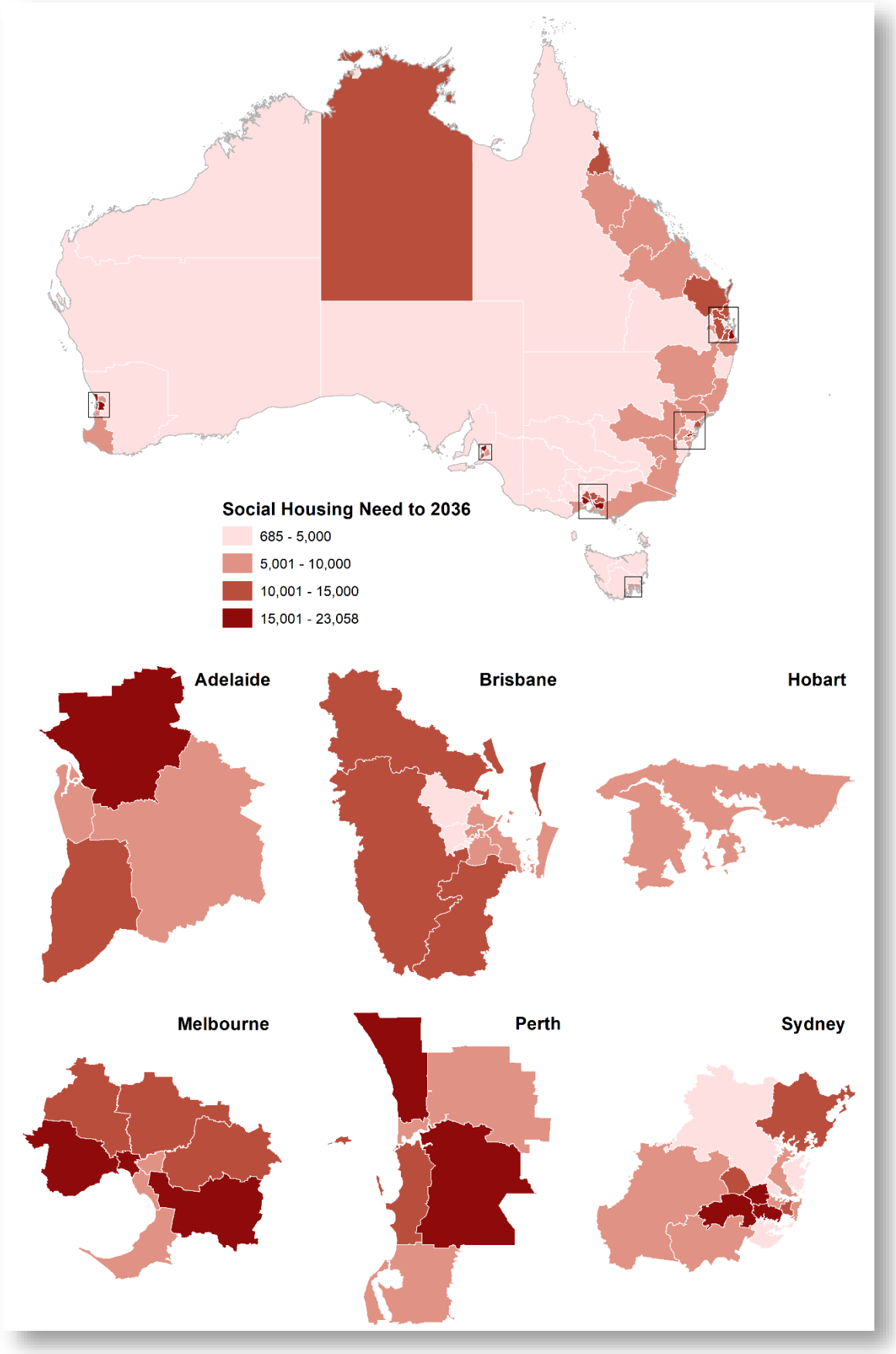
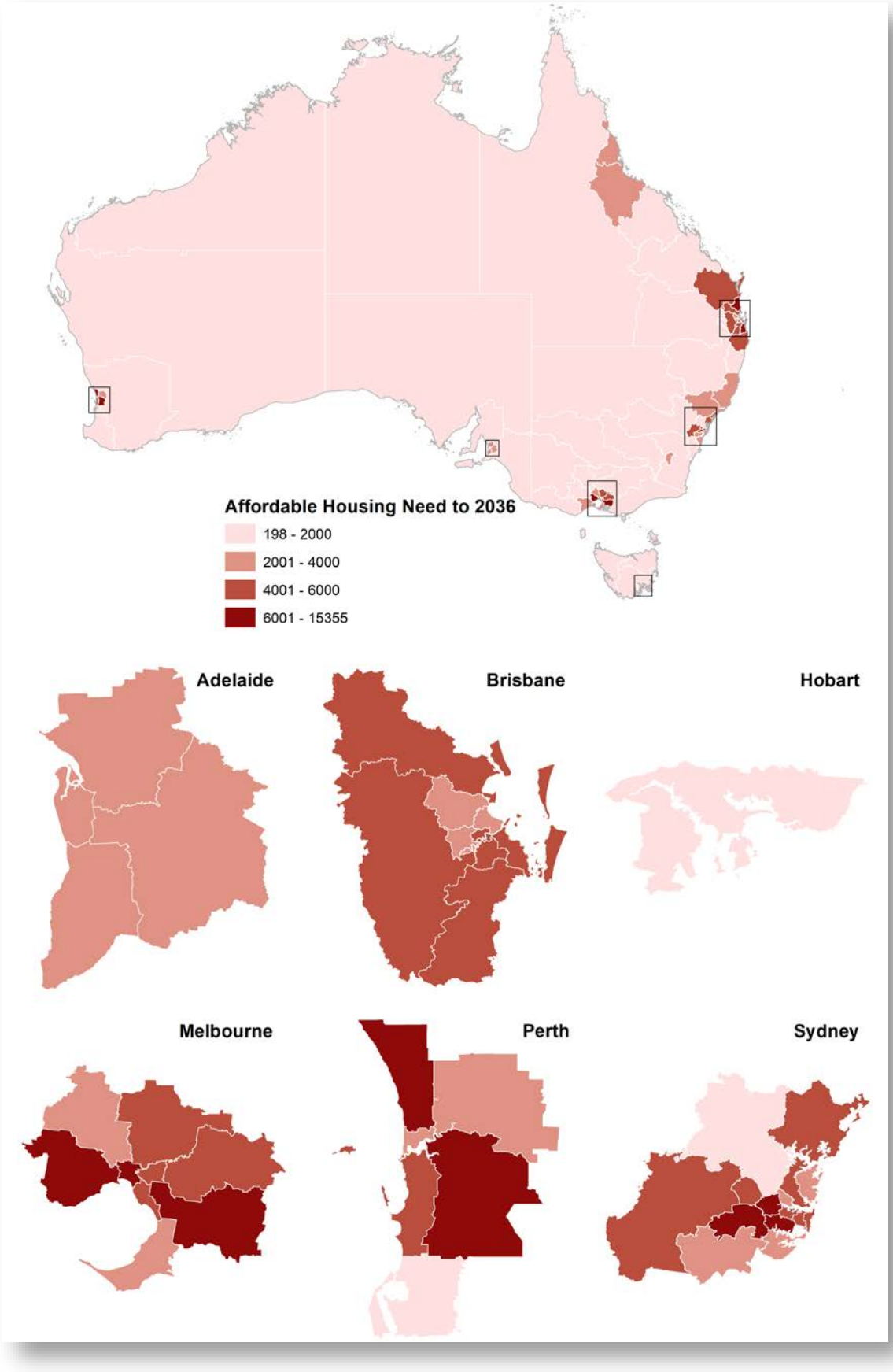


Figure 3: Affordable Housing Needs to 2036 by Statistical Area Level 4



Estimating Cost to Government for Social and Affordable Housing Program Delivery

Cost estimates for social housing needs are based on a program of delivery that reflect increased needs in relation to both the size of housing stock and size of the economy. That is, a consistent *percentage rate* of growth is applied for each year in each SA4 rather than applying an average numerical target. This means subsidy will be lower in the first year of delivery compared with the last but will remain consistent as a share of the overall size of the economy. In contrast, cost estimates for affordable housing are based on a consistent *numerical rate* of provision (i.e. x dwellings per year), as the starting point is assumed to be 0 dwellings, in which case applying a percentage rate of growth is not possible.

Modelling the costs of provision builds on the Affordable Housing Assessment Tool developed as part of previous research[2] and centres around a development feasibility model for affordable housing delivery by not-for-profit entities such as CHPs or government housing agencies. Rental income streams derived from housing need estimates are incorporated to generate a revenue stream to underpin the construction and operation of a social or affordable housing unit, with government subsidy estimates under different funding arrangements included to fill the 'funding gap' between costs of provision and revenue from rents. In addition, a for-profit model has been developed which includes required profit margins and other tax liabilities that community housing providers are exempt from paying. For full details on cost modelling and assumptions, see Lawson et al (2018) [3] and Randolph et al (2018).

Summary of costing methodology

The modelling is based on a cashflow balance, calculated annually for 20 years, and is applied individually for each SA4 region across Australia which allows regionally specific dwelling types, construction costs, needs and tenant profiles to be incorporated into the model. The model incorporates the following steps:

1. **Estimate cost of construction per dwelling per area, based on *Rawlinsons Construction Handbook*[4]**

Dwelling types in each area determined based on the predominant form of housing derived from 2016 Census. Costings have been based on construction either detached, attached, or multi-unit housing. Construction costs are based on Rawlinsons Australian Construction Handbook for the relevant dwelling type, and with rates for each region indexed according to rates provided in Rawlinsons. Affordable and social housing delivery costs are based on medium quality construction equivalent to a standard market product. However, delivery costs for social housing units assumes marginally smaller dwelling sizes an average compared with typical market products (i.e. standard detached house is 120sqm and 2-car garage, compared with social housing dwelling of 100sqm and 1-car garage). Modest allowance has been made for site clearance and landscaping.

2. **Estimate rental payment as 30% of income per household based on income profile of target households in each area**

Rent payments are based on 30% of household incomes estimated from 2016 Census data broken down according to SA4. The average rate of payment in each area, therefore, reflects the variable household profiles of each area. Affordable housing unit rents have been based on the same 30% of income metric, as we have assumed that it is required that these dwellings will need to be affordable to the future occupants, rather than a price determined by the market (i.e. 75% of market rent). Comparison rent figures (also derived from the 2016 Census) were used to estimate the discount to market required for affordable housing dwellings to be affordable to Q2 household income profile.

[2] Randolph, B., Troy, L., Milligan, V. and van den Nouwelant, R. (2018) *Paying for affordable housing in different market contexts*, AHURI Final Report No. 293, Australian Housing and Urban Research Institute Limited, Melbourne, https://www.ahuri.edu.au/research/final-reports/293

[3] Lawson, J., Pawson, H., Troy, L., van den Nouwelant, R. and Hamilton, C. (2018) Social housing as infrastructure: an investment pathway, AHURI Final Report No. 306, Australian Housing and Urban Research Institute Limited, Melbourne, https://www.ahuri.edu.au/research/final-reports/306

[4] Rawlinsons (2018) *Rawlinsons Australian construction handbook*, 36th edition, Rawlinsons Publishing, Perth.

Where 30% of income exceeded the market rent, then market rent was used to generate the income stream. These locations were predominantly regional areas where housing supply is a key affordability issue, rather than simply rent prices.

For social housing dwellings, the value of CRA payments are calculated by estimating the proportion of Q1 households that are likely to be recipients of CRA based on the ABS profile of households in this income band. The lowest rate of payment is assumed and for this reason should be noted that CRA estimates are likely to be lower than actual expenditure. However, the combined rental income amount is similar to figures used by the Affordable Housing Working Group[5]. It is assumed that no Q2 household (affordable housing) would be eligible for CRA payments.

3. **Account for operating expenses for each dwelling, including responsive maintenance, planned maintenance, sinking fund, bad rent, vacancy, management, insurances and rates.**

Maintenance costs are based on a proportion of the construction cost values used in part 1 above, and consequently vary according to location based on dwelling type and cost loadings. Similarly, bad debt and rental vacancy are based on a percentage of estimated rental income stream, which again reflect local household profiles. Insurances, rates and management costs are the same per dwelling across all locations and have been based on estimates used in Randolph et al 2018.

4. **Model costs and income on annual basis across 20 years, accounting for varying rates of inflation and interest.**

An annual cash flow model is used to estimate the surplus or deficit of rental income, less operating expenses for the combined stock of housing for each area. Interest payments are added based on the previous years cash balance, with interest being deducted if cash balances are in the negative. No interest accrual is assumed for any positive cash balance. Both revenue, construction and operating costs can be indexed differently, however for this purpose of this model, a rate of 1.9% has been used for all rates of indexation.

5. **Apply subsidy inputs at relevant points in the cash flow cycle to estimate long term impacts such that a neutral cash flow balance in Net Present Value terms is reached at year 20.**

Policy levers are applied individually to each SA4, but consistently across all regions.

- Finance interest levers are applied by reducing the rate of interest on any negative cash balances by a specified amount.
- Operating subsidies are set individually for each SA4 to find the annual value required for the cash flow model to balance at year 20.
- Similarly, capital grant inputs, which are incorporated at year 1 in the model, are set individually such that a cost neutral point is reached at year 20.
- Market cross-subsidy is applied by increasing the dwelling construction volume by the input percentage (such that housing needs are still met) and input as cash payments in year 1 based on median market values of similar dwelling types in each SA4.
- For-profit investment models estimate a required rate of return based on a percentage of the set input investment value, which is then deducted annually from the cash flow balance.

Levers are turned on an off individually to allow impacts to be understood in combination or individually.

[5] AHWG (Affordable Housing Working Group) (2017) S*upporting the implementation of an affordable housing bond aggregator, Report to the Heads of Treasuries, Council on Federal Financial Relations*, Australian Government, Canberra, https://static.treasury.gov.au/uploads/sites/1/2017/09/170921-AHWG-final-for-publication.pdf

Social Housing Provision

Cost modelling social housing provision for Q1 income households has been based on two different funding scenarios outlined below:

Two models of Social Housing Provision

Cost modelling for social housing provision has been based on two different funding scenarios outlined below:

1. *Operating subsidy model*:
   - Annual operating payment over a period ten years
   - Development funded wholly through private finance (1.5 percentage point discount on interest rate based on commercial rate of 5% interest (i.e. assuming access to NHFIC)

2. *Capital Grant model*:
   - Development costs met by upfront payment (cash and/or land)
   - 1.5 percentage point discount on interest rate based on commercial rate of 5% interest (i.e. assuming access to NHFIC) for any residual debt required.

Operating Subsidy Model (with NHFIC equivalent interest rate discount)

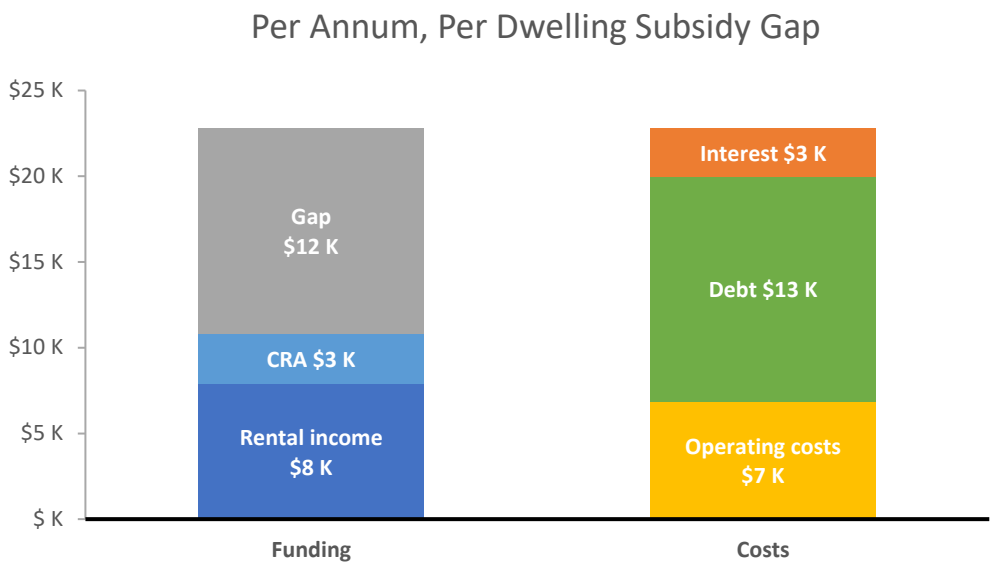
Table 2: Operating Subsidy National Summary Costings

Program Summary	Year 1 NPV Total	Average Per Dwelling Total
Total development costs	$6.4 Billion	$319,000
Total operating costs	$2.8 Billion	$137,000
Rental income	$3.2 Billion	$157,000
Operating subsidy	$4.8 Billion	$240,000
CRA Payments	$1.2 Billion	$59,000
Cost to Government	**$6.0 Billion**	**$299,000**

Table 3: Regional Summary of Costings

GCCSA Area	Average Annual Per Dwelling (GAP)	Total Operating Subsidy	CRA
Greater Sydney	$17.1 K	$1.23 Billion	$257 Million
Rest of NSW	$10.3 K	$.48 Billion	$127 Million
Greater Melbourne	$16.6 K	$.97 Billion	$178 Million
Rest of Vic.	$7.1 K	$.16 Billion	$63 Million
Greater Brisbane	$11.6 K	$.44 Billion	$119 Million
Rest of Qld	$9.2 K	$.43 Billion	$129 Million
Greater Perth	$12.0 K	$.43 Billion	$100 Million
Rest of WA	$8.4 K	$.10 Billion	$36 Million
Greater Adelaide	$9.4 K	$.25 Billion	$82 Million
Rest of SA	$5.4 K	$.04 Billion	$19 Million
Greater Hobart	$12.0 K	$.05 Billion	$13 Million
Rest of Tas.	$7.1 K	$.04 Billion	$15 Million
Australian Capital Territory	$21.3 K	$.13 Billion	$20 Million
Greater Darwin	$11.4 K	$.03 Billion	$7 Million
Rest of NT	$6.3 K	$.04 Billion	$24 Million
Grand Total	**$11.6 K**	**$4.8 Billion**	**$1.2 Billion**

Figure 4: Per annum, per dwelling subsidy gap for social housing operating subsidy model



Capital Grant Model (with NHFIC equivalent interest rate discount)

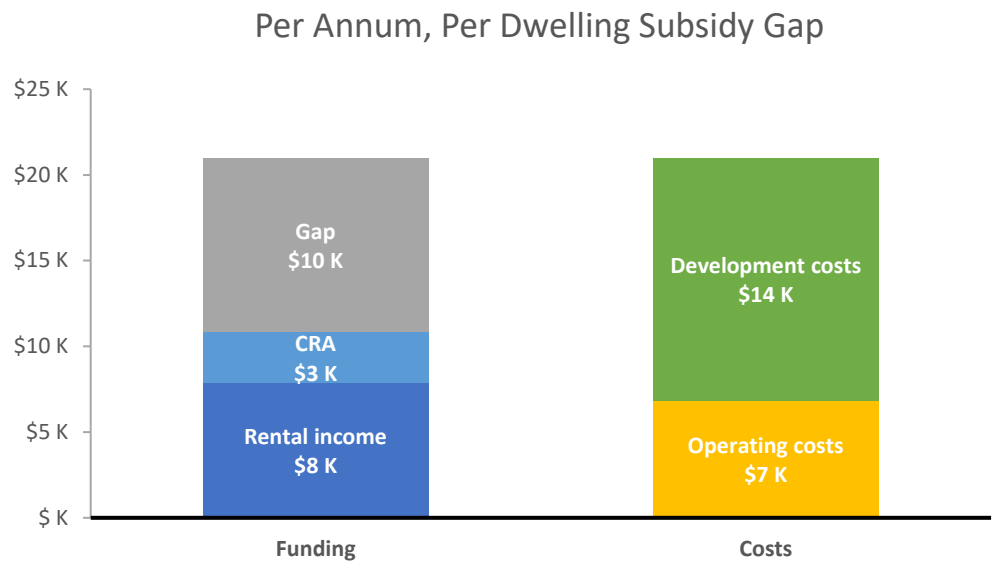
Table 5: Capital Grant National Summary Costings

Program Summary	Year 1 NPV Total	Average Per Dwelling Total
Total development costs	$5.7 Billion	$283,000
Total operating costs	$2.8 Billion	$137,000
Rental income	$3.2 Billion	$157,000
Capital Grants	$4.1 Billion	$203,000
CRA Payments	$1.2 Billion	$59,000
Cost to Government	**$5.3 Billion**	**$262,000**

Table 6: Regional Summary Costings

GCCSA Area	Average Annual Per Dwelling (GAP)	Total Capital Grant	CRA
Greater Sydney	$14.4 K	$1.04 Billion	$257 Million
Rest of NSW	$8.7 K	$.41 Billion	$127 Million
Greater Melbourne	$14.0 K	$.82 Billion	$178 Million
Rest of Vic.	$6.0 K	$.14 Billion	$63 Million
Greater Brisbane	$9.9 K	$.37 Billion	$119 Million
Rest of Qld	$7.8 K	$.37 Billion	$129 Million
Greater Perth	$10.1 K	$.36 Billion	$100 Million
Rest of WA	$7.1 K	$.09 Billion	$36 Million
Greater Adelaide	$7.9 K	$.21 Billion	$82 Million
Rest of SA	$4.6 K	$.03 Billion	$19 Million
Greater Hobart	$10.2 K	$.05 Billion	$13 Million
Rest of Tas.	$6.0 K	$.03 Billion	$15 Million
Australian Capital Territory	$18.0 K	$.11 Billion	$20 Million
Greater Darwin	$9.7 K	$.02 Billion	$7 Million
Rest of NT	$5.3 K	$.04 Billion	$24 Million
Grand Total	**$9.9 K**	**$4.1 Billion**	**$1.2 Billion**

Figure 5: Per annum, per dwelling subsidy gap for social housing capital grant model



Affordable Housing Provision

Cost modelling affordable housing provision for Q2 income households has been based on four different funding scenarios outlined below:

Four models for affordable housing provision

1. *Operating Subsidy model*:
   - Annual operating payment over a period ten years
   - Development funded wholly through private finance (1.5 percentage point discount on interest rate based on commercial rate of 5% interest (i.e. assuming access to NHFIC)

2. *Capital Grant model:*
   - Development costs met by upfront payment (cash and/or land)
   - 1.5 percentage point discount on interest rate based on commercial rate of 5% interest (i.e. assuming access to NHFIC) for any residual debt required.

3. *Mixed Tenure Market Sale Capital Grant model*:
   - Market cross subsidy assumed from a 50:50 market sale/affordable rental development. That is, for every affordable dwelling built, an additional market dwelling is built and sold.
   - Market cross subsidy dwellings sold at median market dwelling price in local area.
   - 1.5 percentage point discount on interest rate based on commercial rate of 5% interest (i.e. assuming access to NHFIC) for any residential debt required

4. *Private Equity Finance Operating Subsidy model*:
   - Assumes 50% equity with gross rate of return of 5%
   - Assumes GST, stamp duty and land tax liable
   - 1.5 percentage point discount on interest rate based on commercial rate of 5% interest (i.e. assuming access to NHFIC) for any residential debt required

The affordable housing needs analysis identified households in the Q2 income quintile that were in private rental stress, as well as estimate the average rent payable by those households at 30% of their incomes. For costing housing delivery, these estimated rents have been compared with a median market rent, and where the median market rent is lower than the affordable rent, the model has assumed no affordable housing will be delivered in this area. This comparison suggests that the market is able to provide housing that is affordable, however the housing needs analysis demonstrates that many households are indeed living in housing stress. It is possible that the availability of suitable housing in these areas will nevertheless remain an issue which affordable housing projects may be able to remedy. However, as no estimates of housing availability have been included in this analysis, these areas have been excluded. The net effect will be to marginally underestimate total need and costs.

Operating Subsidy Model (with NHFIC equivalent interest rate discount)

Table 7: Operating Subsidy National Summary Costings

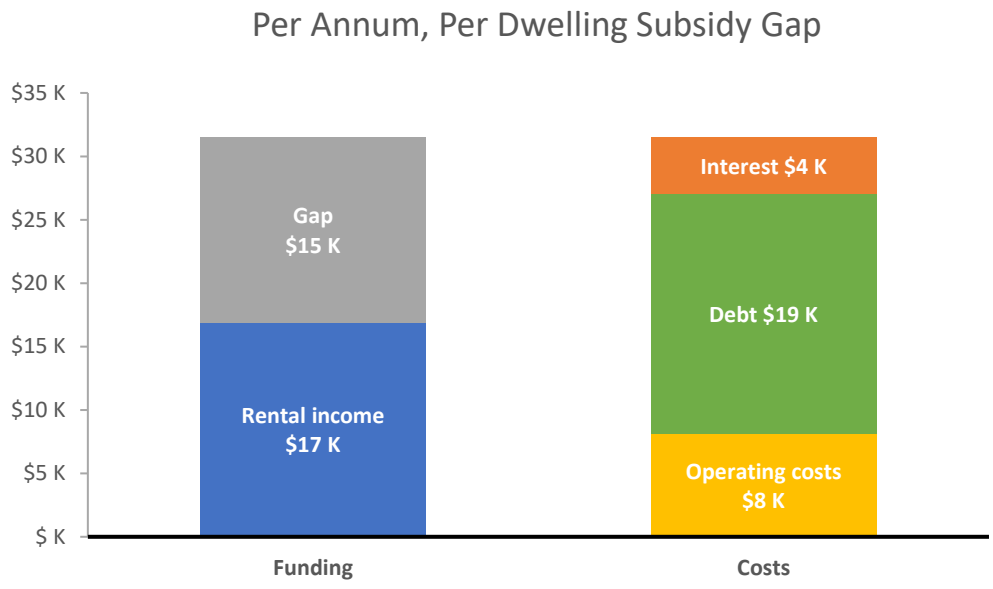
Program Summary	Year 1 NPV Total	Average Per Dwelling Total
Total development costs	$6.2 Billion	$468,000
Total operating costs	$2.2 Billion	$162,000
Rental income	$4.5 Billion	$338,000
Operating subsidy	$3.9 Billion	$292,000
Cost to Government	$3.9 Billion	$292,000

Table 8: Regional Summary Costings

GCCSA Area	Average Annual Per Dwelling (GAP)	Total Operating Subsidy
Greater Sydney	$20.6 K	$1,457 Million
Rest of NSW	$11.2 K	$303 Million
Greater Melbourne	$17.5 K	$831 Million
Rest of Vic.	$6.7 K	$44 Million
Greater Brisbane	$12.0 K	$386 Million
Rest of Qld	$8.8 K	$361 Million
Greater Perth	$12.5 K	$249 Million
Rest of WA	$10.0 K	$24 Million
Greater Adelaide	$9.8 K	$102 Million
Rest of SA	-	-
Greater Hobart	$12.8 K	$25 Million
Rest of Tas.	$6.3 K	$13 Million
Australian Capital Territory	$22.4 K	$76 Million
Greater Darwin	$9.8 K	$15 Million
Rest of NT	$3.3 K	$1 Million
Grand Total	**$13.5 K***	**$3.9 Billion**

* This figure represents the average SA4 gap and is therefore not weighted by the number of dwellings delivered in each SA4. The equivalent gap figure in the chart below is an average of the gap of every dwelling and results in a higher estimate reflecting the disproportionate need for affordable dwellings in higher cost areas.

Figure 6: Per annum, per dwelling subsidy gap for affordable housing operating subsidy model



Capital Grant Model (with NHFIC equivalent interest rate discount)

Table 9: Capital Grant National Summary Costings

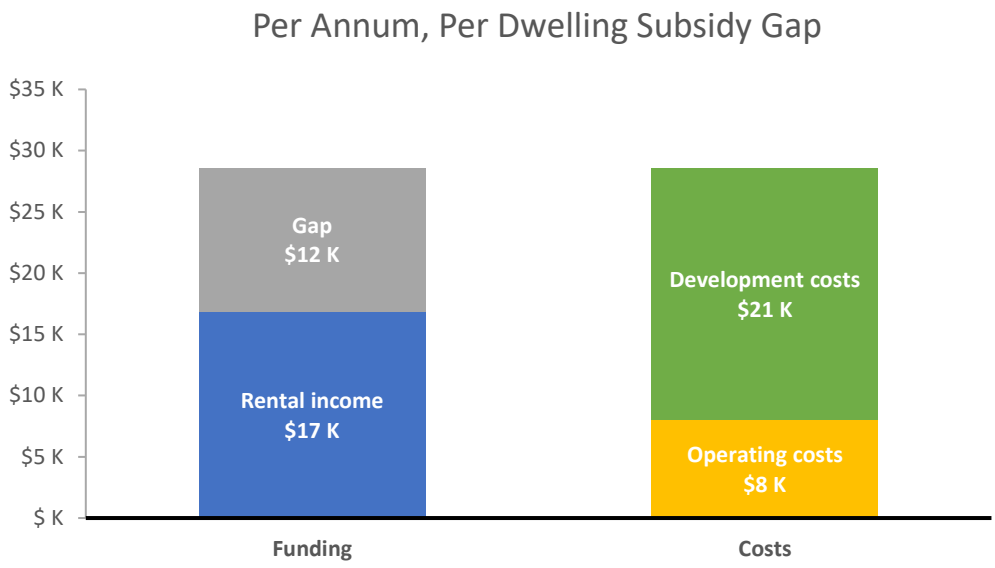
Program Summary	Year 1 NPV Total	Average Per Dwelling Total
Total development costs	$5.7 Billion	$424,000
Total operating costs	$2.2 Billion	$162,000
Rental income	$4.5 Billion	$338,000
Capital Grants	$3.3 Billion	$248,000
Cost to Government	**$3.3 Billion**	**$248,000**

Table 10: Regional Summary Costings

GCCSA Area	Average Annual Per Dwelling (GAP)	Total Capital Grant
Greater Sydney	$17.5 K	$1,236 Million
Rest of NSW	$9.5 K	$257 Million
Greater Melbourne	$14.8 K	$706 Million
Rest of Vic.	$5.7 K	$38 Million
Greater Brisbane	$10.2 K	$329 Million
Rest of Qld	$7.5 K	$307 Million
Greater Perth	$10.6 K	$212 Million
Rest of WA	$8.5 K	$21 Million
Greater Adelaide	$8.4 K	$86 Million
Rest of SA	-	-
Greater Hobart	$10.9 K	$21 Million
Rest of Tas.	$5.4 K	$11 Million
Australian Capital Territory	$19.0 K	$65 Million
Greater Darwin	$8.3 K	$13 Million
Rest of NT	$2.8 K	$1 Million
Grand Total	**$11.4 K***	**$3.3 Billion**

* This figure represents the average SA4 gap and is therefore not weighted by the number of dwellings delivered in each SA4. The equivalent gap figure in the chart below is an average of the gap of every dwelling and results in a higher estimate reflecting the disproportionate need for affordable dwellings in higher cost areas.

Figure 7: Per annum, per dwelling subsidy gap for affordable housing capital grant model



Market Cross Subsidy with Capital Grant Model (with NHFIC equivalent interest rate discount)

Table 11: Capital Grant National Summary Costings

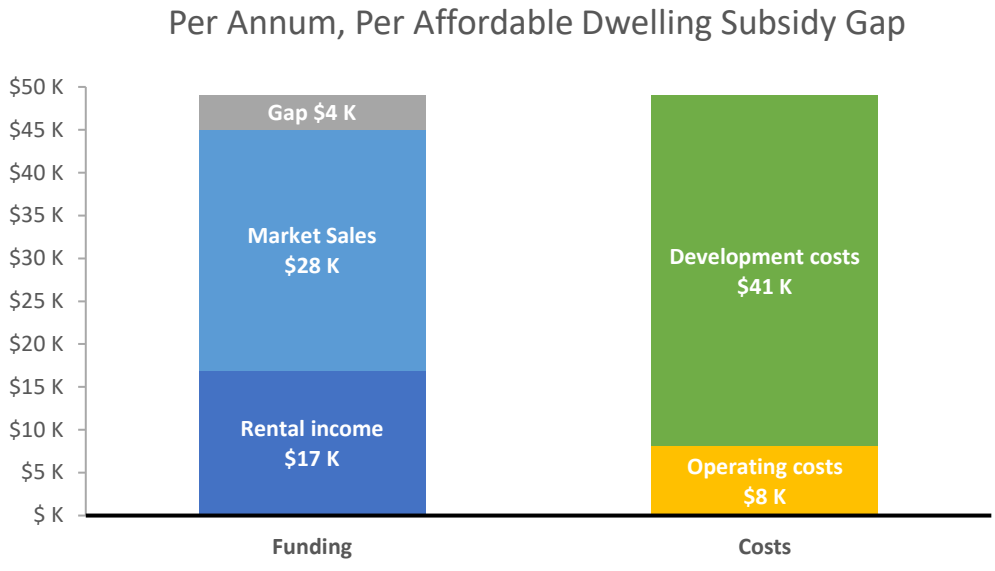
Program Summary	Year 1 NPV Total	Average Per Affordale Dwelling Total
Total development costs*	$10.9 Billion	$819,000
Total operating costs	$2.2 Billion	$162,000
Rental income	$4.5 Billion	$338,000
Capital Grants	$1.1 Billion	$80,000
Market Sales	$7.5 Billion	$562,000
Cost to Government	**$1.1 Billion**	**$80,000**

* Development costs for market dwellings have been apportioned to the affordable dwelling being delivered

Table 12: Regional Summary Costings

GCCSA Area	Average Annual Per Dwelling (GAP)	Total Capital Grant
Greater Sydney	$5.0 K	$345 Million
Rest of NSW	$3.1 K	$94 Million
Greater Melbourne	$6.2 K	$280 Million
Rest of Vic.	$0.9 K	$5 Million
Greater Brisbane	$3.1 K	$104 Million
Rest of Qld	$1.6 K	$73 Million
Greater Perth	$5.4 K	$95 Million
Rest of WA	$1.5 K	$4 Million
Greater Adelaide	$2.9 K	$30 Million
Rest of SA		$ Million
Greater Hobart	$3.4 K	$7 Million
Rest of Tas.	$1.2 K	$3 Million
Australian Capital Territory	$7.6 K	$26 Million
Greater Darwin	$3.2 K	$5 Million
Rest of NT	$0.0 K	$ Million
Grand Total	**$3.7 K**	**$1.1 Billion**

Figure 8: Per annum, per dwelling subsidy gap for affordable housing cross-subsidy, capital grant model



Private Equity For-Profit Model (with NHFIC equivalent interest rate discount)

Table 13: Private Equity National Summary Costings

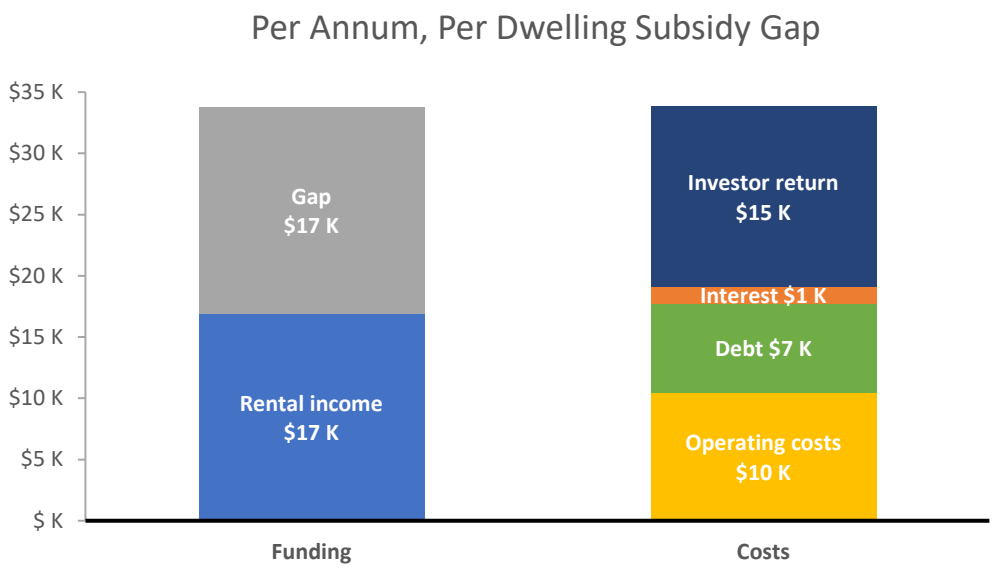
Program Summary	Year 1 NPV Total	Average Per Dwelling Total
Total development costs (incl GST and taxes)	$6.1 Billion	$458,000
Total operating costs	$2.8 Billion	$209,000
Investor return	$3.9 Billion	$295,000
Rental income	$4.5 Billion	$338,000
Operating subsidy	$4.5 Billion	$338,000
Investor Equity	$3.8 Billion	$286,000
Government subsidy	**$4.5 Billion**	**$338,000**

Table 14: Regional Summary Costings

GCCSA Area	Average Annual Per Dwelling (GAP)	Total Operating Subsidy
Greater Sydney	$24.6 K	$1,721 Million
Rest of NSW	$12.8 K	$348 Million
Greater Melbourne	$20.5 K	$973 Million
Rest of Vic.	$7.2 K	$48 Million
Greater Brisbane	$13.6 K	$435 Million
Rest of Qld	$9.9 K	$408 Million
Greater Perth	$13.6 K	$275 Million
Rest of WA	$11.8 K	$29 Million
Greater Adelaide	$10.8 K	$111 Million
Rest of SA		$ Million
Greater Hobart	$15.1 K	$29 Million
Rest of Tas.	$6.5 K	$13 Million
Australian Capital Territory	$26.4 K	$90 Million
Greater Darwin	$10.4 K	$16 Million
Rest of NT	$3.4 K	$1 Million
Grand Total	**$15.6 K***	**$4.5 Billion**

* This figure represents the average SA4 gap and is therefore not weighted by the number of dwellings delivered in each SA4. The equivalent gap figure in the chart below is an average of the gap of every dwelling and results in a higher estimate reflecting the disproportionate need for affordable dwellings in higher cost areas.

Figure 9: Per annum, per dwelling subsidy gap for affordable housing for profit delivery model



Variable geography of funding requirement

The above costings have been based on geographically specific needs and geographically specific development costs. This translates to a highly uneven subsidy requirement which loosely aligns with the different housing market contexts across the country. Unlike broader population incomes, incomes of the bottom quintile households are relatively flat as the are based on the same rates of payments for the various Government pensions. Together this translates to a highly uneven rate of subsidy required to 'fill the gap' in the cost of social housing provision.

Figure 10 below shows the funding gap by SA4 based on the operating subsidy model for the delivery of social housing. Broadly this translates into 4 distinct sub-regions:

1. Sydney and Melbourne;
2. Other capital cities;
3. Regional; and
4. Remote (QLD and WA).

These differences are for the most part underpinned by large difference in market land price as a portion of overall development costs. Figure 11 shows the proportion of development costs that relates to land as opposed to construction with the geography being fundamentally similar the map of the 'funding gap'.

The same geographical variation in land costs also impacts the costs of provision of affordable housing for the Q2 household cohort. In other words, any national subsidy framework to support either social or affordable housing, regardless of actual model adopted, will need to account for these geographic variations in provision.

Figure 10: Operating Subsidy Funding Gap for Social Housing by SA4

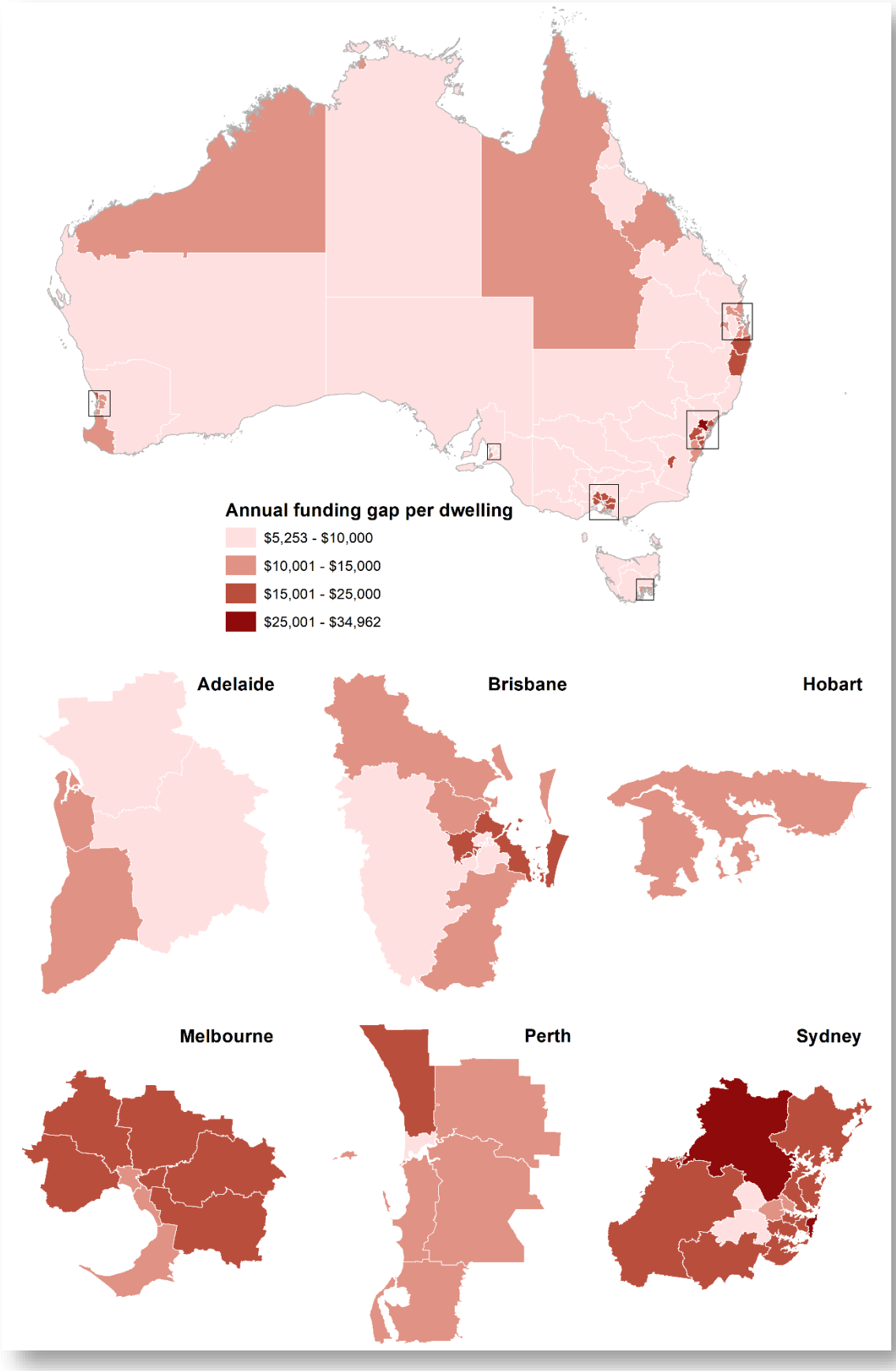


Figure 11: Land costs as percentage of total development costs by SA4