bankwest | Curtin University

BANKWEST CURTIN ECONOMICS CENTRE

HOUSING AFFORDABILITY

The real costs of housing in WA

Focus on Western Australia Report Series, No.2
April 2014

About the Centre

The Bankwest Curtin Economics Centre is an independent economic and social research organisation located within the Curtin Business School at Curtin University. The centre was established in 2012 through the generous support from Bankwest (a division of the Commonwealth Bank of Australia), with a core mission to examine the key economic and social policy issues that contribute to the sustainability of Western Australia and the wellbeing of WA households.

The Bankwest Curtin Economics Centre is the first research organisation of its kind in Western Australia, and draws great strength and credibility from its partnership with Bankwest, Curtin University and the Western Australian government.

The centre brings a unique philosophy to research on the major economic issues facing the state. By bringing together experts from the research, policy and business communities at all stages of the process – from framing and conceptualising research questions, through the conduct of research, to the communication and implementation of research findings – we ensure that our research is relevant, fit for purpose, and makes a genuine difference to the lives of Australians, both in WA and nationally.

The centre is able to capitalise on Curtin University's reputation for excellence in economic modelling, forecasting, public policy research, trade and industrial economics and spatial sciences. Centre researchers have specific expertise in economic forecasting, quantitative modelling, micro-data analysis and economic and social policy evaluation. The centre also derives great value from its close association with experts from the corporate, business, public and not-for-profit sectors.

Contents

My housing story

List of figures

List of tables

List of tables

Introduction

The cost of housing in Western Australia has been a recurrent theme in discussions in West Australian homes, businesses and the policy environment. A long held perception is that housing affordability in the state has spiralled out of control, with rents along with house prices escalating at a rate that many households find hard to keep pace with. To what extent is this true, and which households feel the greatest financial pressure from housing costs?

Being able to afford a home can mean many things to people. At a very basic level, it provides shelter, but to many it provides a home, somewhere to raise a family, to build memories and dreams, and a nest egg that can mean the difference between a modest and comfortable retirement.

More and more Australians are paying a higher proportion of their income both to enter and remain in the housing market. Indeed, many find it difficult to enter into home ownership at all, particularly among the younger generations.

While the resource boom in Western Australia has benefited many, high housing prices can provide one of the greatest barriers to many more accessing these benefits. Housing is a major consideration for families looking to move to the west. House prices that are high relative to the income you can earn from the job opportunities available in WA can create disincentives to skilled workers seeking to make the move to the region and enhance the state's stock of human capital and its productivity potential.

This second report in the Bankwest Curtin Economics Centre's *Focus on Western Australia* report series explores the real costs of housing in Western Australia. Using the latest data available, this report seeks to provide explanations for the perceived rising trends in the state's housing costs. It shows how affordable housing options vary spatially, and examines the degree to which the housing market in the state is meeting the aspirations of West Australian households on different incomes, and with different characteristics and needs.

The report includes findings from a special survey commissioned by the Centre that sheds new light on the trade-offs WA householders have made to afford their current home. The report invites discussion on how to improve the situation and the policy interventions required to promote greater access to affordable housing in the state.

Housing

in the West:
the current picture

Housing in the West: the current picture

To provide some context to the issue of housing affordability in this *Focus on Western Australia* report, we start with some aggregate evidence on the trajectory of housing costs in Perth over the last fifteen years. In particular, we review the rate of increase of housing costs and the price of established houses in Perth since the start of the 1990s, borrowing from the first *Focus on Western Australia* report on Sharing The Boom.

Moving from this aggregated analysis, we then turn to provide a more detailed snapshot of the spatial distribution of house prices in metropolitan Perth using transactions data for established houses and units over the last quarter of 2013. Using data provided by the Real Estate Institute of Western Australia (REIWA), we are able to map the variation in the median price of established housing for each suburb in metropolitan Perth. The analysis is further extended to cover housing transactions for the major regional centres in Western Australia.

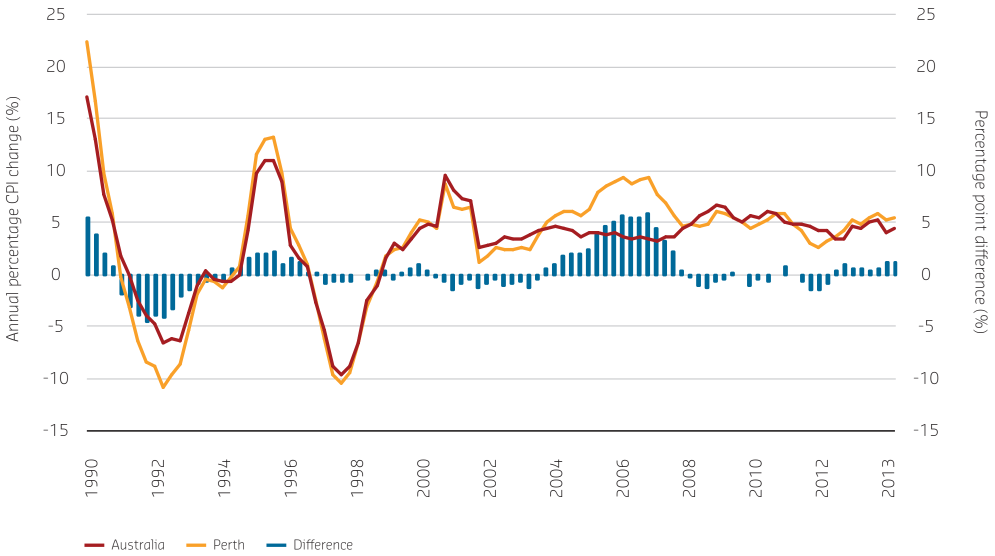
The evolution of housing costs

It will be no surprise to many in Perth that house prices in the West – and housing costs more generally – grew at a rate considerably greater than for the rest of Australia over the course of the resources boom. Up to 2003, house price inflation in Perth tracked reasonably closely to the Australian average. However, overall housing costs increased in Perth for the next four years (to around 2007) at a rate consistently above the national average – by up to an extra five percentage points annually compared with rest of Australia (Figure 1).

As shown in the Sharing The Boom report, the rate of change in established house prices in Perth was especially high over the boom period (Figure 2) with annual percentage changes well in excess of 20 per cent not uncommon.

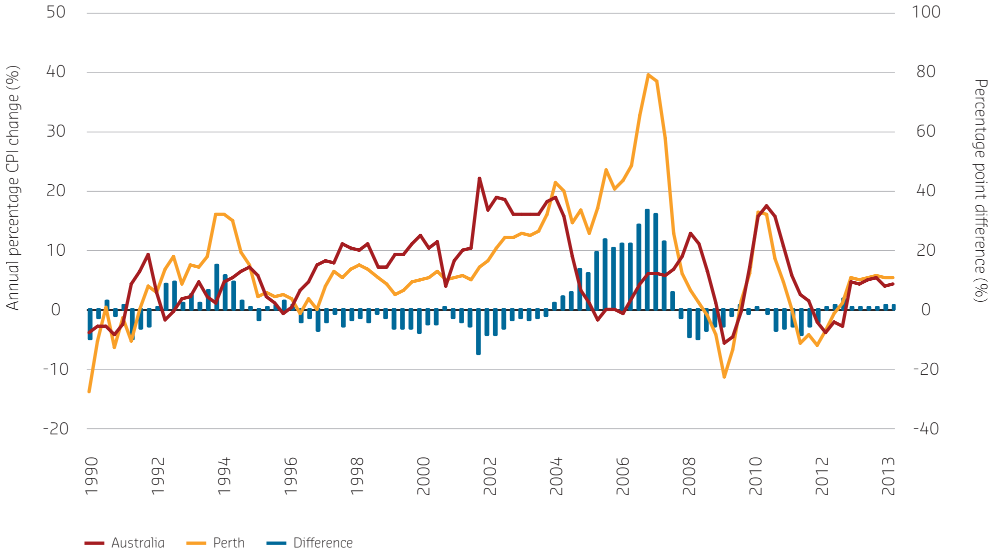
The family home represents the major financial asset held by many WA households, and for long-time owner occupiers the appreciation in the value of their housing stock has been significant. However, as the remainder of this *Focus on Western Australia* report will show, the accumulation of annual price changes over this period has also intensified the issue of housing affordability, with the problem becoming progressively more extreme for some population groups in the state.

Figure 1 Percentage change in housing cost CPI for Perth and Australia, 1990–2013



Note: Housing costs comprise: rents, new dwelling purchases, maintenance and utilities.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 6401.0

Figure 2 Percentage change in established house price for Perth and Australia, 1990–2013



Source: BANKWEST CURTIN ECONOMICS CENTRE | Costello, Fraser and MacDonald (2013).

The spatial distribution of house prices in WA

We begin by describing a broad picture of the housing market in Western Australia using data from REIWA on housing transactions over the fourth quarter of 2013. These data have been allocated to twenty five homogeneous sub-regional areas within Perth and twelve WA regional urban centres that REIWA define as operating as distinct housing market areas.

Using REIWA's data for the last quarter of 2013, we map (in Figure 3) the median value of property transactions for suburbs within each sub-regional area. The median transactions price is indicated by shades of blue, with darker shades indicating progressively higher property sales prices.

Our analysis emphasises the great diversity of prices within the Perth metropolitan area. The median price of an established house in the Perth metropolitan area was $545,000. The lowest median price was $302,500 in Camillo, near Kelmscott, while the highest was $2,840,000 in Peppermint Grove. It is generally the case that established houses located in the inner city, along the river, and adjacent to the coastline fetch higher prices (the darkest shades in Figure 3). It is also generally the case that houses within a 10 kilometre radius from the city centre (as represented by the General Post Office in Forrest Place) are more costly than those outside this ring.

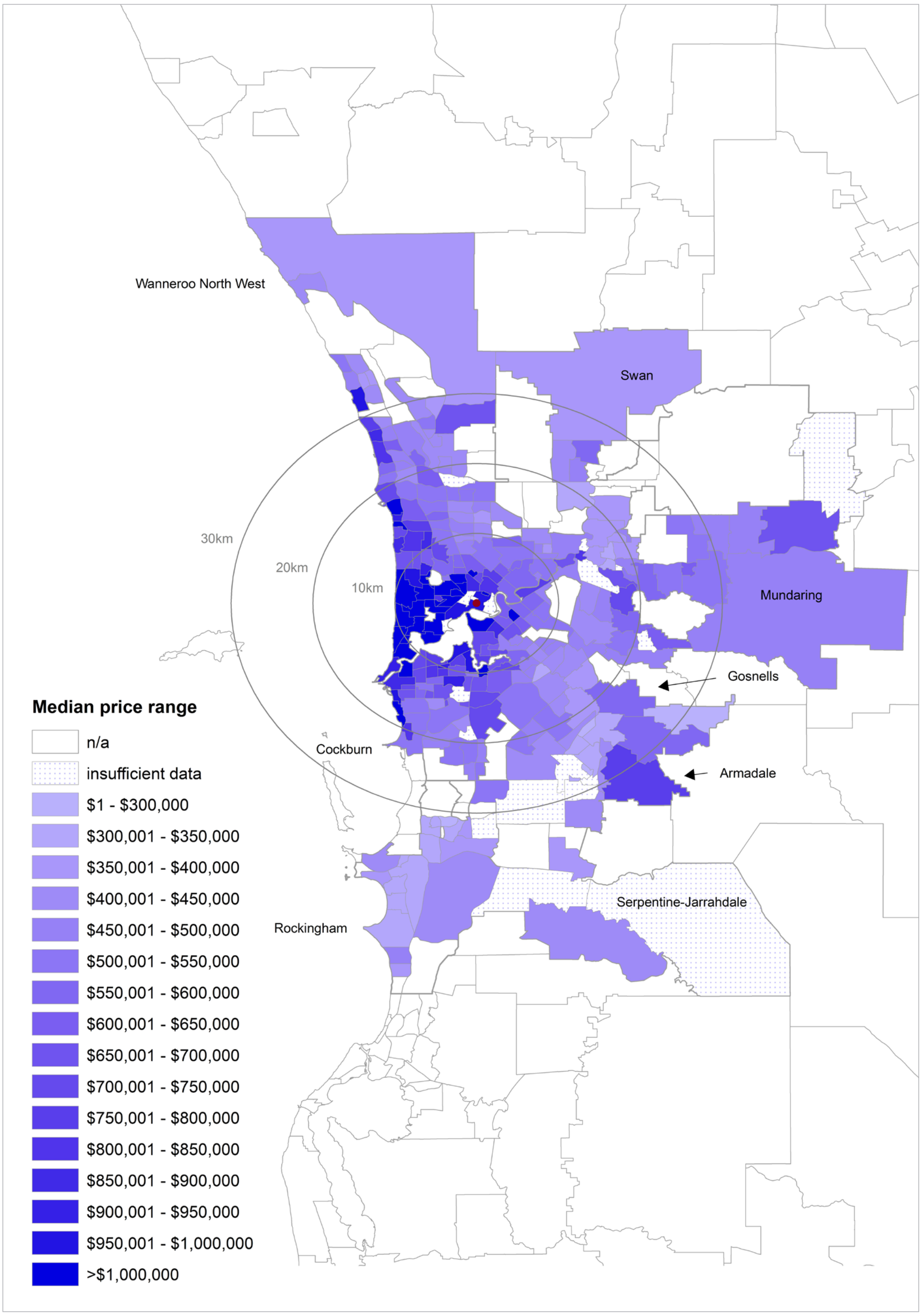
In terms of multi-residential units, the median price in the last quarter of 2013 was $450,000. The lowest median price, ignoring suburbs with less than 3 transactions, was Orelia, in Kwinana, at $190,000, while the highest median price was Mount Pleasant at $717,000. Generally speaking, the prices of units are lower than those for houses, as can be gleaned by a lighter overall shade in Figure 4.

We next turn our attention to regional WA (Figure 5), where REIWA sales data are available for the major regional urban centres. To give some idea of the financial circumstances of residents in these areas, we superimpose on the map in Figure 5 the spatial distribution of median gross household income at the suburban level.

As is shown clearly, the higher priced regional urban centres are concentrated in the mining provinces of Karratha and Port Hedland and tourism locations such as Broome. Cities in the South West also tend to command higher house prices at the median level.

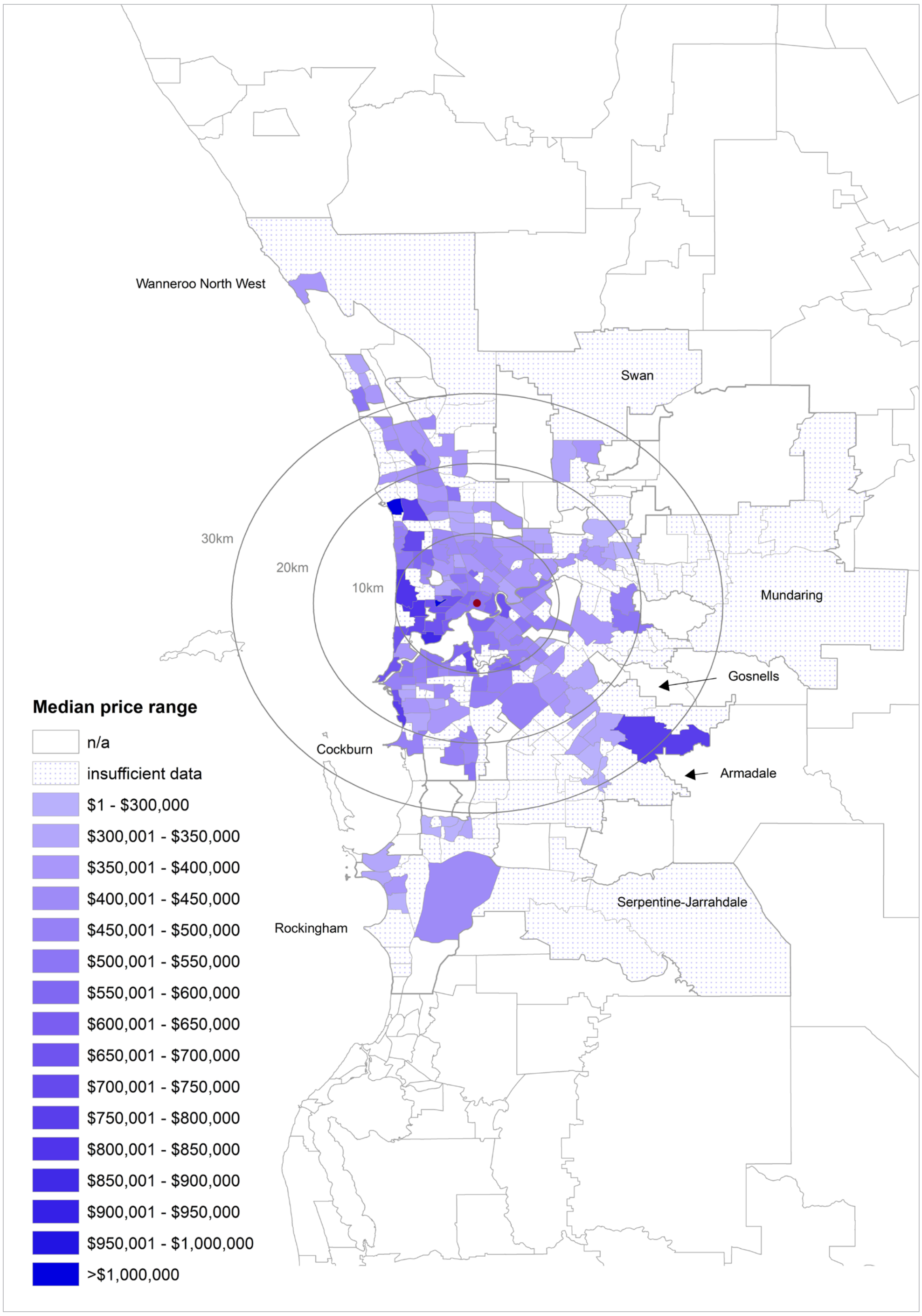
Regional centres with higher house prices are generally associated with higher levels of household income, although this is by no means universally the case.

Figure 3 Median price of all established houses: by Perth metropolitan suburb, 2013(Q4) prices



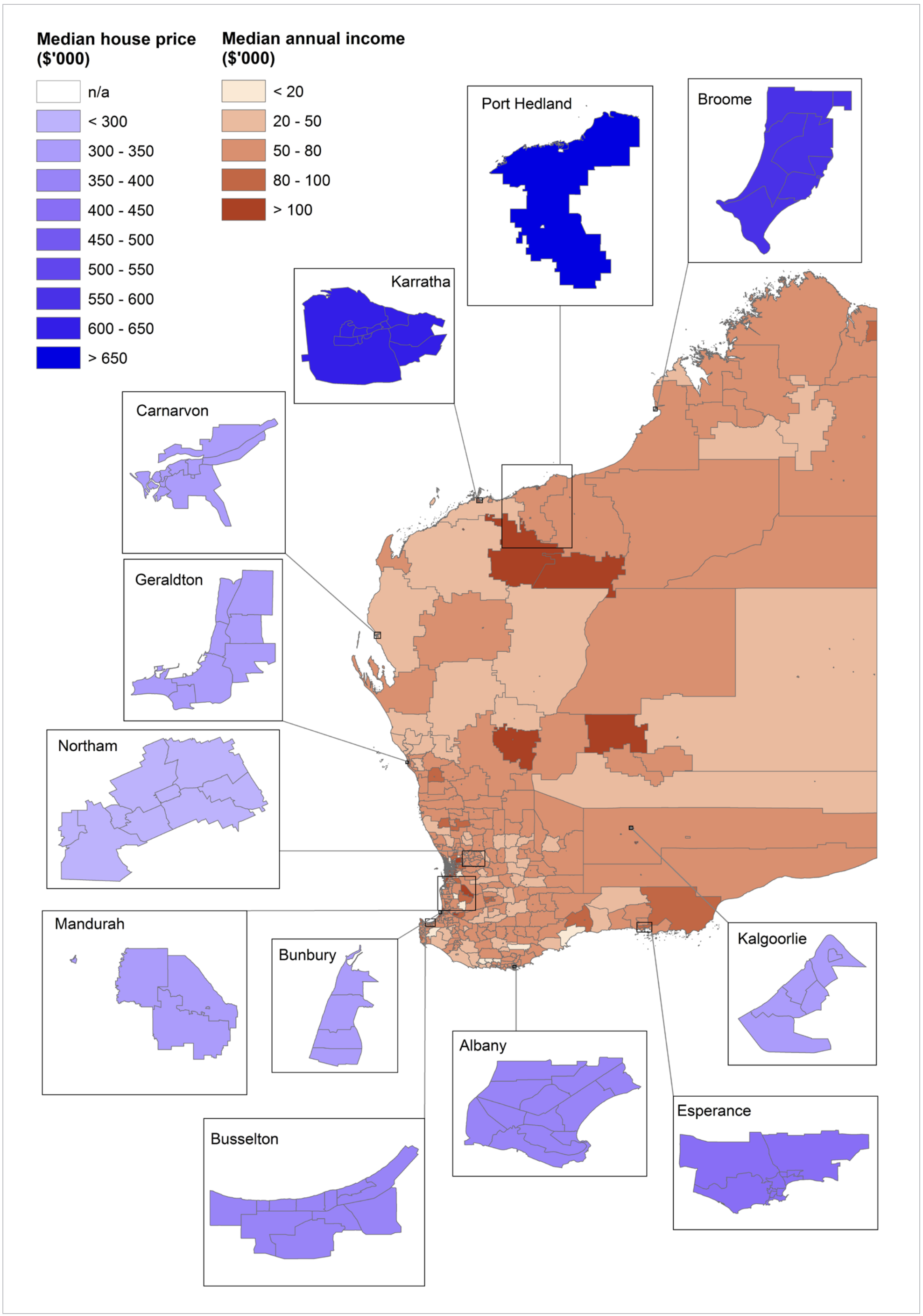
Note: House prices are 2013(Q4) median prices for all established houses for each REIWA regional sub-market.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

Figure 4 Median prices of all multi-residential units: by Perth metropolitan suburb, 2013(Q4) prices



Note: Unit prices are the 2013(Q4) median price for all multi-residential units for each REIWA sub-regional housing market.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

Figure 5 Median price of established houses: by WA regional centres, 2013(Q4) prices



Note: House prices are the 2013(Q4) median price for established three bedroom housing for each REIWA regional centre. Income is median total household annual gross income by sub-regional market, imputed from Census 2011 and uprated to 2013 $s.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

Housing

affordability in WA: who can afford what, and where?

Housing affordability in WA: who can afford what, and where?

What is housing affordability? It is a complex term and should ideally incorporate more than simply the relationship between direct housing costs (mortgages and rents) and household income. A fuller definition should include the financial impact of housing on households through mortgage or rental payments, maintenance costs, running costs (energy, water and rates for example) and commuting costs. Affordable living is a term commonly used to encompass additional costs related to housing consumption. However, a complete measure of housing affordability should also encompass the less tangible outcomes of housing choice such as the way housing and neighbourhood quality affect overall household wellbeing.

Notwithstanding these caveats, housing affordability is traditionally reported through a number of relatively broad indicators:

- Price-to-income ratios report the price of a property as a multiple of a measure of annual household income – for example, the 'median multiple' describes how many years of median household income would cover the price of the median property.
- Housing cost burdens show housing costs (mortgages, rents) as a fraction of household income – for example, the HIA-CBA affordability measure is based on households devoting 30 per cent of income to housing costs.
- Housing stress measures further focus on those who are financially constrained – a common standard defines households to be in housing stress if they pay over 30 per cent of their income in housing costs and are in the bottom 40 per cent of the distribution of household income.

Existing housing affordability indicators

Housing affordability in Australia is regularly tracked at a macro scale by a number of industry groups which use house price, household incomes and mortgage repayment ratios to produce various measures of affordability. Broadly, all indicators have observed improvements in housing affordability across the country since 2010, while recent improvements during 2013 may be attributed to reductions in interest rates, declines in median house prices in some markets and real earnings growth over the past year.

The **HIA-Commonwealth Bank of Australia Housing Affordability Index** is a popular national indicator of affordability published quarterly by the Housing Industry Association (HIA), and compares the average incomes of buyers with the 'qualifying income' sufficient for them to 'affordably' service a loan to purchase the median priced property[1]. Higher values of this index suggest greater housing affordability. Strictly, it measures mortgage affordability for each capital city and balance of state under normal deposit and interest rate assumptions.

Nationally, the HIA-CBA indicator has shown a rising trend of improved affordability since mid-2010, peaking at a level of 75.1 in September 2013 but with a decline of around half a percentage point to 74.7 according to December 2013 figures. Perth (at 71.5) is now shown to be the second least affordable city in the country behind Sydney (at 60.2), with Melbourne having improved 3.9 points to 74.4 over the last quarter of 2013. This suggests that the average buyer's income in Perth is currently below

[1] Incomes data for the HIA-CBA affordability index are taken from the Average Weekly Ordinary Time Earnings (AWOTE) series as reported by the ABS (Cat. No 6302.0). The median property price is calculated using data from quarterly additions to CBA's own loan book. 'Qualifying income' is calculated as the average income sufficient to service a loan for a median priced property with mortgage costs coming to no more than 30 per cent of income under normal deposit and interest rate assumptions.

72 per cent of the level required to affordably meet repayments on a median priced house in the city. It should be noted that this reversal comes after a generally improving trend in the HIA-CBA index for Western Australia since the start of 2010, but does reinforce the importance of strategies that continue to bear down on high housing costs in the state.

Regional WA is shown to be little more affordable than Perth on HIA-CBA measures, declining 5.5 points over the last quarter to a 75.4. This places WA as the third least affordable state outside capital cities for mortgaged property, behind regional NSW (at 70.8) and regional Victoria (at 72.9). Victoria actually showed the greatest improvement in non-metropolitan markets with an increase in housing affordability of 3.1 points over the last quarter, followed by regional Queensland (up 2.7 points to 87.7), South Australia (up 2.6 to 76.9) and regional Tasmania (up 1.3 to 93.7). Regional NSW declined over the same period by 2.9 points to 70.8. (HIA Economics Group, 2013).

The **Adelaide Bank/Real Estate Institute of Australia (REIA) Housing Affordability Report** produces a Home Loan Affordability Indicator (HLAI), calculated as the ratio of average loan repayments to median family incomes, to characterise housing affordability. According to this measure, housing cost burdens fell across all states and territories "with the proportion of income required to meet loan repayments decreasing 1.2 percentage points to 29.8%" (Real Estate Institute of Australia and Adelaide Bank, 2013).

Housing costs for Western Australia for September 2013 were estimated at 39.4 per cent of median family incomes, up from 35.8 per cent in 2012 (Table 1). A smaller proportion of West Australian households' income was also required to service home loan repayments, decreasing from 27.9 per cent to 25.4 per cent a week. Reductions in interest rates account for the decrease in average monthly loan repayments (down by $128 per month to $2,028) when compared to the same time last year (Table 2). This is despite a 3.1 per cent increase in the average loan size ($326,940) over the past 12 months.

Table 1 Summary measures of housing affordability: by state/territory, 2013

Housing affordability *summary measures*	HLAI: Home Loan Affordability Indicator *by state, 2013*		Average HLAI from 1996–2013 *by state*		Pct family income to meet loan repayments *by state*		Pct family income to meet median rents *by state*	
State/territory	index	rank	average index	rank	pct	rank	pct	rank
ACT	50.5	1	48.1	1	19.8	1	18.4	1
Tasmania	40.7	2	42.5	3	24.6	2	25.5	5
Western Australia	39.4	3	38.6	5	25.4	3	25.8	6
South Australia	37.7	4	40.0	4	26.5	4	23.2	2
Queensland	36.2	6	34.1	7	27.0	5	23.9	4
Northern Territory	36.8	5	42.7	2	27.2	6	35.8	8
Victoria	32.4	7	34.3	6	30.0	7	23.2	2
New South Wales	29.6	8	29.6	8	33.8	8	28.3	7
AUSTRALIA	33.5		33.5		29.8		25.6	

Note: Data are for the September 2013 quarter.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Real Estate Institute of Australia and Adelaide Bank (2013).

Table 2 **Summary income and housing costs: by state/territory, 2013**

Income and housing costs *summary measures*	Median weekly household income *by state, 2013*		Average monthly loan repayment *by state, 2013*		Average housing loan *by state, 2013*		Total number of housing loans *by state, 2013*	
State/territory	index	rank	average index	rank	pct	rank	pct	rank
New South Wales	1,519	5	2,226	1	358,843	1	28,619	1
Northern Territory	1,872	2	2,204	2	355,398	2	744	8
ACT	2,445	1	2,100	3	338,567	3	1,925	6
Western Australia	1,841	3	2,028	4	326,940	4	15,322	4
Victoria	1,488	6	1,991	5	321,083	5	27,334	2
Queensland	1,525	4	1,826	6	294,423	6	21,302	3
South Australia	1,382	7	1,589	7	256,219	7	6,940	5
Tasmania	1,266	8	1,349	8	217,549	8	1,830	7
AUSTRALIA	1,541		1,993		321,295		104,016	

Note: Data are for the September 2013 quarter.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Real Estate Institute of Australia and Adelaide Bank (2013).

The **BIS Shrapnel Home Loan Affordability Index** measures mortgage repayments on 75 per cent of the capital city median house price as a percentage of state household disposable income (BIS Shrapnel, 2013). A typical housing loan is assumed to be a 25-year loan for 75 per cent of the median house price. Improved housing affordability is represented by a decrease in the indicator. BIS Shrapnel (2013) also found an improvement in housing affordability across capital cities since 2010. Similar to the HIA report, these increases were attributed to reductions in house prices, cuts to interest rates and income growth. In relation to Perth, BIS Shrapnel (2013) observed an upturn in the housing market during 2012/2013 which it attributes to an increase in housing supply in response to record levels of overseas and interstate migration during the second stage of the state's resource boom.

Macro indicators do not generally report on housing affordability as it relates to the rental market. One exception comes from **Real Estate Institute of Western Australia** (REIWA, 2013) which reports that the median weekly rental costs for a three bedroom home in December 2013 was $470 per week, compared to $450 for a two bedroom unit. This reflects an eight per cent rise in the rental cost of a three bedroom home between 2012 and 2013. The proportion of family income used to cover housing costs for those in the rental market (25.8 per cent) was fractionally higher than by home owners (25.4 per cent) – a trend which is generally not seen in other states, except in Tasmania and the Northern Territory (Real Estate Institute of Australia and Adelaide Bank, 2013).

During the September 2013 quarter, first home buyers constituted a smaller portion of the Australian housing owner-occupied market (13.6 per cent) compared to the long-run average (19.9 per cent) collected by the Australian Bureau of Statistics. Although the number of loans fell during this quarter, Western Australia recorded an increase in first home buyer loans of 11.8 per cent compared to the same time in the previous year. The national average home loan for first home buyers also decreased 0.6 per cent to $288,033 when compared to September 2012, with only Western

Australia and Tasmania recording increases of 7.0 and 2.2 per cent respectively. During this time, the home loan size to first home buyers in Western Australia increased from $296,300 in September 2012 to $317,000 in the September 2013 quarter (Real Estate Institute of Australia and Adelaide Bank, 2013).

The **Bankwest First Time Buyer Deposit Report** (CoreData Consulting, 2013) estimates the time it would take a first home buyer to save a 20 per cent deposit. The CoreData measure uses data from the Australian Bureau of Statistics, the Reserve Bank of Australia and Residex for local incomes and median house prices as well as the availability of the first home buyers grant. The most recent estimates suggest that a first time purchaser in WA would take an average of 3.8 years to save a 20 per cent deposit towards the purchase of a median priced house during 2013, which is less than the Australian average of 4.2 years. First time buyers in Sydney, for instance, are predicted to need to save for 6.3 years to accumulate enough for a 20 per cent deposit. Units are more affordable than house purchases in Perth, and first time buyer couples are estimated to need 3.6 years to accumulate the deposit to purchase a median priced unit.

While changes to the Australian housing market have been heading in the direction of increasing affordability, a comparison to other nations created a more critical perspective. The recent **Demographia International Housing Affordability Survey** ranked Australia among the least affordable housing markets in the world on the basis of a ratings system which ranks median multiples into four categories from affordable (corresponding to a median multiple of 3.0 and below) to severely unaffordable (5.1 and above) (Demographia, 2014). As shown in Table 3, all Australian capital cities have a median multiple of 5.3 or above and are regarded by the Demographia survey as being 'severely unaffordable'.

We consider the Demographia affordability rating scale to be unreasonably severe in the Australian context. Using a methodology that translates progressively higher percentages of household income devoted to housing costs into equivalent median multiples under standard mortgage loan assumptions, Table 3 presents a ratings scale for Australia that aligns more with the benchmarks in other affordability reports (for example, HIA-CBA, 2013 and AMP.NATSEM, 2011).

Table 3 Housing affordability ratings

Rating	Median multiple	Example of property value at given multiple for $80k household income	Equivalent maximum housing cost burdens (per cent of income on housing costs)	
			5.5% interest	7.5% interest
Affordable	less than 4.5	$320k house for $80k income (at 4.0)	30 per cent	36 per cent
Moderately unaffordable	4.5 to 6	$440k house for $80k income (at 5.5)	40 per cent	48 per cent
Not affordable	6 to 7.5	$520k house for $80k income (at 6.5)	50 per cent	61 per cent
Severely unaffordable	greater than 7.5	$640k house for $80k income (at 8.0)	>50 per cent	>61 per cent

Note: Median multiples calculations are based on a standard mortgage loaned over a 25 year term with deposit of 10 per cent assuming interest rates of 5.5 per cent and, for comparison, 7.5 per cent.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations based on AMP.NATSEM (2011) methodology.

It should be noted that affordability ratings based directly on median multiples are highly sensitive to the prevailing market interest rate and deposit assumptions. As a comparison, Table 3 shows the degree to which housing cost burdens vary for a given median multiple according to the underlying interest rate assumptions used in calculating the necessary mortgage repayments. As is shown clearly, the mortgage repayments on a property priced at 4.5 times household income (the first row of Table 3) become significantly less affordable in terms of the equivalent housing cost burden, rising from 30 per cent to 36 per cent of household income for a 2 percentage point rise in interest rates to 7.5 per cent.

Table 4 and Table 5 apply these affordability ratings to Real Estate Institute of Australia (REIA) data on median incomes and house prices for 2013, and show predominantly low levels of affordability across the country for new entrants to the housing market. Sydney and Melbourne are rated 'severely unaffordable' among capital cities on this metric (Table 4), matching the HIA/CBA rankings. Perth, Darwin and Adelaide are rated 'not affordable' with Brisbane, Hobart and Canberra 'moderately unaffordable'.

Table 4 **Capital cities' median house price-to-income ratios: 2013(Q3)**

Capital city	Median income ($)	Median house price ($)	Median multiple	Median multiple category
Sydney	80,500	722,700	9.0	Severely unaffordable
Melbourne	70,800	595,500	8.4	Severely unaffordable
Darwin	103,600	673,500	6.5	Not affordable
Adelaide	61,800	392,000	6.3	Not affordable
Perth	84,800	508,000	6.0	Not affordable
Brisbane	75,900	442,100	5.8	Moderately unaffordable
Hobart	59,500	322,800	5.4	Moderately unaffordable
Canberra	106,400	562,200	5.3	Moderately unaffordable
AUSTRALIA			6.5	

Note: Data are for the September 2013 quarter.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Real Estate Institute of Australia (REIA) with authors' affordability ratings.

Table 5 **WA regional median housing price-to-income ratios: 2013(Q3)**

Regional centre	Median income *2013, $*	Median house price *2013, $*	Median multiple		Median multiple category for 2013	Direction of change
			2012	2013		
Perth	84,800	508,000	5.9	6.0	Not affordable	↓
Bunbury	77,200	380,000	4.8	4.9	Moderately unaffordable	↓
Geraldton	71,500	379,000	5.6	5.3	Moderately unaffordable	↑
Karratha	166,800	679,000	4.9	4.1	Affordable	↑
Mandurah	57,600	390,000	7.0	6.8	Not affordable	↑
Port Hedland	163,700	818,000	6.4	5.0	Moderately unaffordable	↑
WESTERN AUSTRALIA				6.5		

Note: Median multiples are calculated as the ratio of the median house price to median household gross income.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Real Estate Institute of Australia (REIWA).

Among regional centres across Western Australia (Table 5), Karratha is rated 'affordable' and Port Hedland 'moderately unaffordable', with Mandurah rated 'not affordable'. However, the very strong caveat with these ratings (indeed with all published measures summarised in this section) is that affordability compares average/median incomes to average/median property prices within a locality. Karratha rates as 'affordable' because of an extremely high median income, despite the median property price being proportionately very high relative to other regional centres (and out of reach for anyone on low to moderate incomes).

This example goes a long way to highlighting the limitations with many existing summary measures of housing affordability, and the imperative to examine housing costs at a finer granularity that explicitly accounts for differences in household circumstances and housing needs.

In other words, we need to consider much more carefully the personal housing stories of West Australians, and this is the key point of departure for this *Focus on Western Australia* report.

A better way to look at housing affordability

The popularity of broad or aggregate measures in debates regarding housing affordability in Australia shouldn't disguise the limitations and weaknesses in relying on such simplistic and undifferentiated indicators. Confining the measurement of affordability either to single indicator, or to a broad aggregate measure over the whole of the state, can be misleading in a number of respects and of limited value when seeking to identify those who may be under genuine financial pressure from high housing costs.

One of the key limitations with existing measures of housing affordability is that they don't adequately represent the circumstances faced by many families who struggle to gain entry to the housing market. Affordability measures generally focus on the 'typical' (median or average) household and the typical (median) property, and tend not to account for variations in the price and type of property that first home buyers and those on low to moderate incomes would demand relative to those on higher incomes. Neither do such measures typically recognise the spatial differentiation of house price gradients across suburbs within larger sub-regional markets, giving rise to clusters of potentially affordable housing to lower income households in areas with higher property value.

A commitment of more than 30 per cent of household income to mortgage or rental costs has become the common benchmark to differentiate those with a 'significant' housing cost burden. However, this measure has been criticised as a 'one size fits all' approach that fails to recognise the particular circumstances of households when assessing affordability[2]. Households may pay less than 30 per cent and still have significant housing affordability issues, depending on their individual characteristics and commitments, and there are certainly households who are comfortably able to pay more than 30 per cent.

2 See for example The Housing We'd Choose: A study for Perth and Peel published by the Department of Housing and Rowley and Ong (2012) Housing stress, housing affordability and household wellbeing in Australia. AHURI Final Report Series. Australian Housing and Urban Research Institute, Melbourne.

When discussing housing affordability, one should not ignore the potential impact of high housing costs on household formation. Examples include young adults living at home who are unable to leave because they don't have sufficient income for a place of their own; young couples who want to move in together but lack the deposit to purchase a house or the income to sustain rental payments; or an individual who is prevented from moving to a location with significant employment opportunities by a lack of affordable accommodation.

Many existing households have been forced to make housing trade-offs, particularly in terms of location, perhaps moving out of their existing communities to more affordable locations on the urban periphery. These locations may reduce mortgage or rental payments but attract additional commuting costs and, given such housing is generally larger in size, significant running costs. Trade-offs are often made in terms of neighbourhood quality with cheaper areas lacking many of the amenities households desire. Other households may have made trade-offs in terms of housing quality allowing them to keep down mortgage or rental costs but perhaps resulting in a lower quality of life.

For this report we take a more nuanced look at the question of affordable housing from the perspective of individuals and families in WA – and not just the 'typical' family. Specifically, the following approaches are adopted to tailor affordability measures to suit households' specific circumstances:

- Affordability ratios are calculated for different house price, property type and income combinations (for example, by matching households in the lower quartile of the income distribution to houses in the lower quartile price band alongside the typical median price-to-income ratios)
- The report calculates the proportion of affordable suburbs within each sub-regional housing market in the Perth metropolitan area, to provide a more refined measure affordable housing options
- The depth of housing cost burden and housing stress measures are calculated by comparing patterns of affordability for housing costs at different proportions of equivalised household income
- Disaggregate housing cost burden/stress measures by demographic characteristics (to identify groups under particular pressure from high housing costs) and over time (to highlight groups for whom housing affordability issues have intensified)
- Supplement secondary data analysis with a specially designed housing affordability survey to enrich our understanding of housing affordability in WA, and draw out the personal stories of West Australians and their housing experiences.

This differentiated approach is critical to provide an evidence base from which to design effective housing market solutions that respect the different circumstances of West Australian households.

How do housing cost shares in Western Australia compare to the rest of Australia?

To provide a comparative picture of what Australian households are actually paying in housing costs, we examine ABS data on median mortgage costs as a proportion of household disposable income, and how this has changed across states and territories and their respective capital cities and balances over the last eight years (Table 6).

Calculations using data from the ABS Survey of Income and Housing reveal that mortgage holders in capital cities commit a higher proportion of their disposable income to repayments than those living in the balance of each state and territory. This has remained largely unchanged across the period. As an exception to this rule, households living in regional Queensland track closely to mortgage shares paid in the state capital, Brisbane.

Table 6 **Mortgage cost burdens by state and territory: 2003–04 to 2011–12**

Housing cost burdens *Mortgage holders*	Median mortgage cost burden *Mortgage costs as a proportion of h/h disposable income*					Change 2003–04 to 2011–12	Rankings by state/ territory and region		
City or state/ territory region	2003–04	2005–06	2007–08	2009–10	2011–12	ppt change	2003–04	2011–12	ppt change
Sydney	29%	29%	29%	29%	28%	-0.8%	1	1	13
Brisbane	22%	24%	23%	23%	26%	+4.9%	6	2	3
Balance of New South Wales	21%	24%	24%	25%	26%	+4.7%	7	3	4
Perth	23%	24%	24%	27%	26%	+2.9%	3	4	8
Melbourne	23%	25%	25%	24%	25%	+1.9%	2	5	10
Balance of Western Australia	19%	20%	19%	22%	25%	+5.7%	9	6	1
Balance of Queensland	22%	25%	24%	26%	25%	+2.9%	5	7	7
ACT and NT	23%	21%	27%	23%	24%	+1.1%	4	8	12
Balance of South Australia	18%	24%	22%	20%	23%	+4.4%	11	9	5
Adelaide	21%	22%	23%	24%	22%	+1.2%	8	10	11
Balance of Tasmania	17%	18%	18%	21%	22%	+5.5%	13	11	2
Balance of Victoria	19%	21%	22%	21%	22%	+3.3%	10	12	6
Hobart	18%	20%	24%	19%	21%	+2.8%	12	13	9
AUSTRALIA	23%	24%	25%	25%	25%	+2.8%			

Note: Calculations are for those household who have a mortgage.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing, 2003–04 to 2011–12.

Sydney has ranked consistently first when it comes to the burden of mortgage costs across 2003–04 to 2011–12, with very little variation from median levels of 29 per cent of household income. The resources boom has driven a big movement in housing cost shares in regional Western Australia, with the median burden of mortgage costs increasing from 19 per cent in 2003–04 to 25 per cent in 2011–12, an increase of almost six percentage points, and a movement in ranking from 9th to 6th place, placing this region above the ACT and NT.

Median mortgage costs have also increased in Perth, but at a rate lower than Brisbane and all balances of state and territory regions. In 2003–04, the median mortgage costs as a proportion of household disposable income were 23 per cent for Perth home owners, this has increased slightly to 26 per cent in 2011–12, shifting Perth from 3rd to 4th place. This is likely due to income rises across this period offsetting house price increases to a large extent for the west's capital.

Table 7 **Rental cost burdens by state and territory: 2003–04 to 2011–12**

Housing cost burdens *Renters*	Median rental cost burden *Rental costs as a proportion of h/h disposable income*					Change 2003–04 to 2011–12	Rankings by state/ territory and region		
City or state/ territory region	2003–04	2005–06	2007–08	2009–10	2011–12	ppt change	2003–04	2011–12	ppt change
Sydney	25%	26%	25%	27%	29%	+3.8%	1	1	5
Hobart	21%	21%	20%	23%	28%	+7.2%	10	2	1
Balance of New South Wales	22%	24%	22%	24%	27%	+5.1%	8	3	3
Adelaide	23%	24%	23%	22%	26%	+2.7%	5	4	7
Melbourne	25%	23%	22%	24%	25%	+0.6%	2	5	12
Brisbane	24%	24%	23%	24%	25%	+1.4%	3	6	10
Balance of Tasmania	18%	20%	21%	22%	25%	+6.5%	12	7	2
Balance of Queensland	23%	24%	23%	26%	24%	+1.6%	7	8	9
Perth	21%	21%	21%	24%	24%	+3.3%	9	9	6
ACT and NT	24%	19%	21%	22%	24%	+0.9%	4	10	11
Balance of South Australia	19%	20%	21%	21%	24%	+4.1%	11	11	4
Balance of Victoria	23%	23%	20%	21%	23%	-0.1%	6	12	13
Balance of Western Australia	18%	19%	17%	19%	20%	+2.6%	13	13	8
AUSTRALIA	23%	24%	23%	24%	26%	+2.5%			

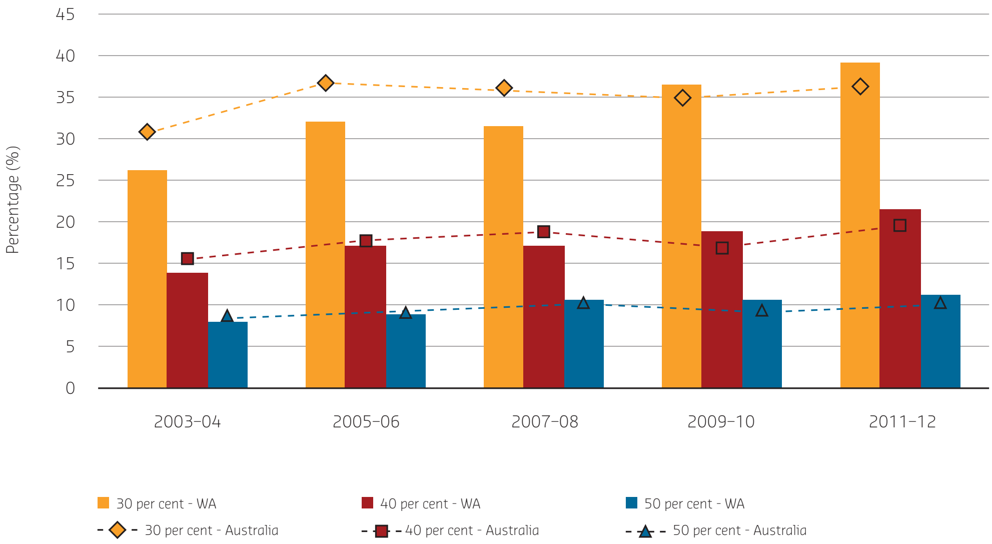
Note: Calculations are for all household who are renting.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing, 2003–04 to 2011–12.

Turning to rental cost burdens, those households who rent generally commit similar proportions of their income towards housing costs than those who are paying off a mortgage (Table 7). Sydney again ranks the highest in median rental cost burden, with Sydneysiders paying on average 29 per cent of their disposable income in rent. Over the past eight years, Hobart renters have experienced the largest increase in rental costs, averaging 21 per cent of disposable income in 2003–04, increasing to 28 per cent in 2011–12. Those living in the balance of Tasmania have seen similar rises, from 18 to 25 per cent.

For West Australian renters, those living in Perth have had a small increase in rental cost burdens, from 21 to 24 per cent, however, compared to other states and territories, Perth remains ranked 9th in the rental cost burden stakes. The Balance of WA has also remained relatively unchanged – currently 20 per cent of disposable income going towards rent on average, ranked last out of all states and territories. However, it is important to note that the data underlying this analysis does not survey households living in remote and very remote parts of Australia, which, despite their smaller population, will often have higher housing cost burdens.

To unpack housing costs further, we compare the proportion of households in Western Australia that pay more than 30, 40 and 50 per cent of their disposable incomes on direct housing costs with equivalent measures for the rest of Australia.

Figure 6 **Mortgage cost shares for WA and Australia: 2003–04 to 2011–12**



Note: Calculations are for those household who have a mortgage.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing, 2003–04 to 2011–12.

WA has overtaken the rest of Australia in regards to how much on average is being spent on mortgage costs, with nearly 40 per cent of all owner-occupier households devoting more than 30 per cent of their incomes towards mortgage repayments (Figure 6). Eight years earlier, only one in four WA households were paying more than 30 per cent towards housing costs in 2003–04, whereas over 30 per cent of households in the rest of Australia were paying this proportion.

The proportion of households paying more than 40 per cent in disposable income has also been increasing for WA, from 13 per cent in 2003–04 to 23 per cent in 2011–12. Those paying more than 50 per cent have also increased significantly, from around 7 to 12 per cent.

But interestingly, rent cost burden is typically lower than the rest of Australia - although the gap has been closing rapidly since 2009–10 (Figure 7). In 2003–04, 17 per cent of WA households were paying more than 30 per cent of their disposable income in rent, whereas almost 30 per cent of households in the rest of Australia were living with this rental burden. West Australian households had almost caught up to national trends by 2011–12, with around 30 per cent of households paying more than 30 per cent in rent, compared with 36 per cent of households in the rest of Australia. This has also been a trend for those paying in excess of 40 and 50 per cent of disposable income in rent. While WA households are still below the rest of Australia on this measure, the gap has been closing.

Figure 7 Rental cost shares for WA and Australia: 2003–04 to 2011–12

Note: Calculations are for those household who are renting.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing, 2003–04 to 2011–12.

On the basis of these broad measures of affordability, housing costs in WA do not appear to be out of line with the rest of Australia when aggregated to capital city and balance of state. However, these results do mask regional variation and differences that may appear in remote or very remote areas in WA compared to other regions in Australia. They also do not distinguish between households on high or modest incomes, and for WA, wages have been growing at a rate more than 20 per cent above the national average since 2003 (see the 'Sharing the Boom' *Focus on Western Australia* Report No.1).

Who faces the greatest housing cost shares in WA?

In this section of the report we look to extend the analysis of housing cost shares for WA households by looking at the level housing cost burdens of different renting and home buyer groups over time.

Not surprisingly, lone person households contribute a significantly greater share of income to mortgage repayments than any other household type (Table 8), with this share intensifying over time. For example, the median contribution to mortgage payments among lone person households in 2003–04 came to around 30 per cent of household income. By 2011–12 this had increased to 39 per cent. This group has also experienced a large increase in the proportion paying more than 30 per cent of their disposable income in mortgage costs – rising nearly 28 percentage points from 46 per cent in 2003–04 to 74 per cent in 2011–12.

Table 8 **Mortgage cost burdens in Western Australia by household type, 2003-04 to 2011-12**

Housing cost burdens *Mortgage holders*	Median mortgage cost burden *Mortgage as a proportion of h/h disposable income*					Change 2003-04 to 2011-12	Proportion of households with mortage costs more than 30% of h/h disposable income		
By household characteristics	2003-04	2005-06	2007-08	2009-10	2011-12	ppt change	2003-04	2011-12	ppt change
Family composition									
Couple only	21%	25%	21%	23%	23%	+1.9	20%	31%	+11.1
Couple with children	20%	20%	22%	25%	24%	+4.0	22%	33%	+10.5
One parent with children	18%	24%	27%	22%	27%	+8.6	30%	45%	+14.6
Lone person	30%	34%	37%	31%	39%	+9.1	46%	74%	+27.8
Other households	17%	21%	15%	20%	13%	-4.2	24%	21%	-3.0
Age of head of household									
<24	18%	30%	39%	31%	26%	+7.9	30%	42%	+12.4
25-34	25%	25%	29%	30%	32%	+6.9	32%	55%	+22.9
35-44	22%	23%	23%	26%	26%	+4.0	23%	43%	+19.3
45-54	18%	21%	18%	21%	20%	+2.2	19%	25%	+6.1
55-64	23%	20%	19%	20%	22%	-0.7	41%	37%	-4.1
65+	24%	28%	27%	21%	19%	-5.4	29%	26%	-2.5
Gender of head of household									
Male	21%	22%	23%	25%	25%	+3.5	25%	39%	+14.3
Female	24%	24%	24%	25%	25%	+1.0	30%	39%	+9.4
Home owner status									
First home buyer (3 years or less)	19%	20%	20%	23%	23%	+3.9	22%	34%	+11.3
Changeover buyer (3 years or less)	25%	30%	34%	33%	32%	+7.0	35%	56%	+20.7
Settled homeowner (> 3 years)	24%	27%	31%	28%	26%	+2.4	29%	48%	+18.3
Household income quintile									
First quintile (poorest)	42%	49%	53%	64%	64%	+22.2	61%	74%	+12.8
Second quintile	27%	31%	32%	28%	43%	+16.0	39%	55%	+16.2
Third quintile	26%	25%	27%	29%	30%	+3.8	19%	44%	+24.3
Fourth quintile	21%	23%	21%	25%	25%	+4.8	25%	35%	+10.0
Fifth quintile (richest)	16%	17%	16%	18%	19%	+2.2	18%	23%	+5.5
ALL WESTERN AUSTRALIA	22%	23%	23%	25%	25%	+3.8	26%	39%	+13.0

Note: Calculations are for those household who have a mortgage.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing, 2003-04 to 2011-12.

> "One of the biggest concerns to emerge from this analysis is the situation faced by older families in rental accommodation, many of whom have seen rental costs intensify substantially over time."

Single parent families have also experienced a large increase in mortgage cost burdens. In 2003–04 the median mortgage cost as a proportion of disposable household income was 18 per cent for single parent families; by 2011–12 this was 27 per cent.

Mortgage cost pressures have clearly increased substantially for younger householders. For example, the median mortgage cost share paid by those aged 25 to 44 rose nearly 7 per cent to 32 per cent over the last decade, with 55 per cent committing more than 30 per cent of income to housing costs in 2011–12 (up 23 percentage points since 2003–04).

Changeover buyers - those who have sold up and purchased a new house in the last three years - have also increased their median cost burden, with many more paying more than 30 per cent of income in mortgage repayments each week – a shift from one in three to over one in two households. This suggests that while these households have increased their mortgage burden, they have chosen to do so, even though for some the resulting repayments may not easily remain within their means.

Taking into account income, those in the bottom quintile (the lowest 20 per cent of incomes) have experienced the biggest change in the median cost burden over the past eight years. This has increased from 42 per cent in 2003–04 to 64 per cent in 2011–12. The majority of these households are already paying in excess of 30 per cent in mortgage repayments (61 per cent), and this has also increased to almost three-quarters of all low income households.

For WA renters, it is the bottom quintile again that has seen rental cost burden over time. These households were seeing on average 26 per cent of their disposable income go towards rental payments in 2003–04 – this has grown to 38 per cent by 2011–12 (Table 9). However, it is those households in the second lowest quintile that have seen rental costs intensify over the period, with just under one-quarter of these households paying more than 30 per cent of their income in rent in 2003–04, whereas in 2011–12 this had doubled to 43 per cent of households.

While median rental costs for single parents have remained relatively constant over time at around 25 per cent, the proportion paying more than 30 per cent of disposable income in rent has risen from 29 to 42 per cent in eight years. These findings are reflected in the patterns observed for female headed households, with more than 39 per cent now paying more than 30 per cent in rent – an increase from 25 per cent eight years earlier.

One of the biggest concerns to emerge from this analysis is the situation faced by older families in rental accommodation, many of whom have seen rental costs intensify substantially over time. Only 12 per cent of baby boomer households committed more than 30 per cent of their income towards rent in 2003–04; this figure had tripled to 38 per cent in 2011–12.

Table 9 Rental cost burdens in Western Australia by household type, 2003–04 to 2011–12

Housing cost burdens *Renters*	Median rental cost burden *Rental costs as a proportion of h/h disposable income*					Change 2003–04 to 2011–12	Proportion of households with rental costs more than 30% of h/h disposable income		
By household characteristics	2003–04	2005–06	2007–08	2009–10	2011–12	ppt change	2003–04	2011–12	ppt change
Family composition									
Couple only	17%	18%	14%	21%	22%	+4.6	15%	19%	+4.1
Couple with children	16%	16%	17%	20%	21%	+5.8	13%	29%	+16.2
One parent with children	25%	24%	21%	27%	25%	+0.7	29%	42%	+13.6
Lone person	24%	23%	24%	26%	27%	+3.1	24%	43%	+19.0
Other households	17%	15%	16%	19%	24%	+7.2	12%	21%	+9.7
Other one/multi households	18%	22%	15%	19%	19%	+1.0	12%	16%	+3.7
Age of head of household									
<24	18%	21%	17%	24%	24%	+6.2	24%	28%	+3.9
25–34	19%	18%	19%	23%	22%	+2.9	15%	33%	+17.4
35–44	23%	20%	18%	22%	23%	-0.2	22%	27%	+5.0
45–54	19%	19%	21%	21%	23%	+4.1	16%	34%	+17.1
55–64	18%	22%	22%	24%	24%	+5.5	12%	38%	+25.7
65+	22%	25%	22%	22%	24%	+2.2	21%	26%	+5.5
Gender of head of household									
Male	18%	20%	18%	21%	22%	+4.1	14%	26%	+11.5
Female	23%	22%	22%	25%	25%	+1.6	25%	39%	+14.4
Household income quintile									
First quintile (poorest)	26%	28%	30%	28%	38%	+12.0	40%	56%	+16.1
Second quintile	24%	24%	24%	26%	28%	+4.4	23%	43%	+19.2
Third quintile	21%	20%	19%	26%	22%	+0.8	12%	19%	+6.5
Fourth quintile	17%	16%	16%	19%	19%	+2.1	6%	14%	+8.2
Fifth quintile (richest)	12%	12%	12%	14%	14%	+1.7	5%	13%	+8.2
ALL WESTERN AUSTRALIA	21%	21%	19%	22%	23%	+2.4	19%	31%	+12.1

Note: Calculations are for all household who are renting.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing, 2003-04 to 2011-12.

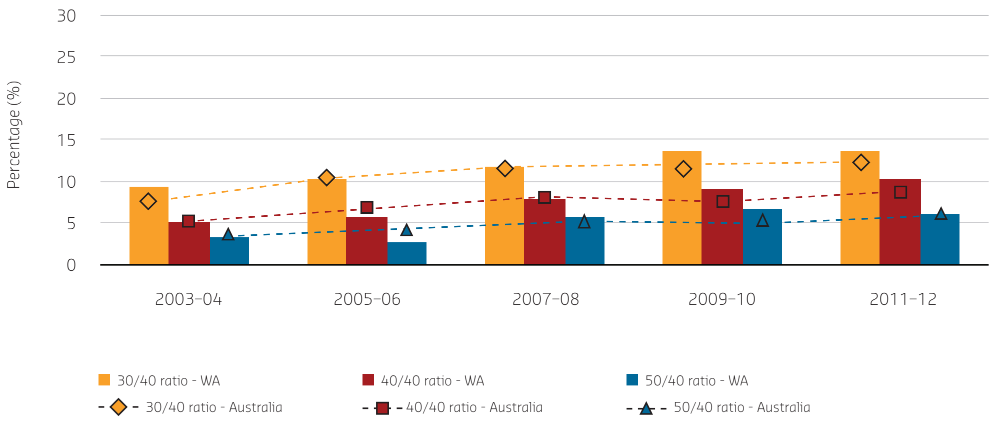
Housing stress in Western Australia

The previous section examined raw housing cost burdens in WA over time and compared these to other states and their respective capitals and balances. This section takes a closer look at the circumstances of low income households in what's often termed 'housing stress' – that is, households who have relatively low incomes, yet high housing costs. A number of housing stress measures are examined:

- 30/40 ratio – those households in the bottom two quintiles of the income distribution paying more than 30 per cent in housing costs;
- 40/40 ratio – those households in the bottom two quintiles of the income distribution paying more than 40 per cent in housing costs; and
- 50/40 ratio – those households in the bottom two quintiles of the income distribution paying more than 50 per cent in housing costs.

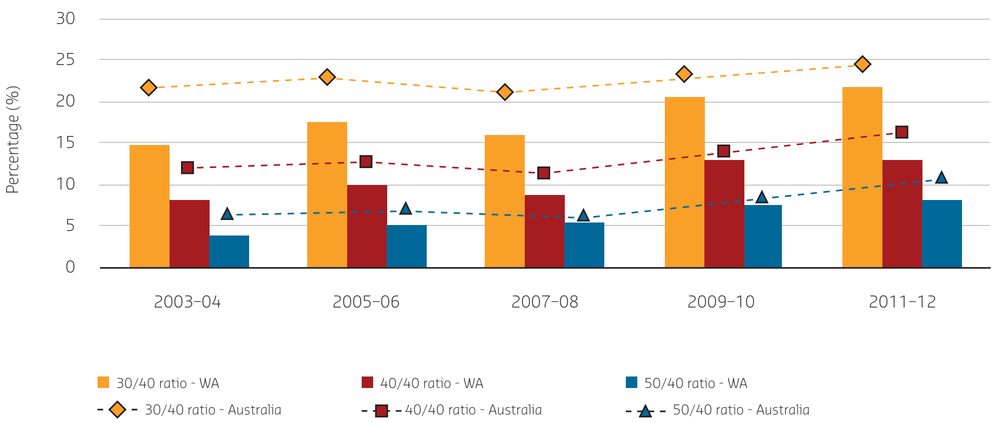
Figure 8 shows the proportion of WA households facing different levels of mortgage stress and compares these to the rest of Australia over time. WA households in the bottom two quintiles have historically tracked relatively closely to those in the rest of Australia in terms of various degrees of mortgage stress, but with rates a little higher over the last four years. The proportion of households in the bottom two quintiles of the income distribution and paying more than 30 per cent in mortgage repayments has been increasing over time for both WA and the rest of Australia, from just under one in ten in 2003–04 to around 13 per cent 2011–12. The proportion of households experiencing greater forms of housing stress (40/40 and 50/40) has also slowly increased across the period, and currently around 10 per cent of low income households in WA are paying more than 40 per cent in mortgage costs.

Figure 8 Mortgage 'stress' measures for WA and Australia: 2003–04 to 2011–12



Note: Calculations are for all household who have a mortgage.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing, 2003–04 to 2011–12.

Figure 9 Rental 'stress' measures for WA and Australia: 2003–04 to 2011–12



Note: Calculations are for those household who are renting.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing, 2003–04 to 2011–12.

The proportion of households in severe rental stress has nearly doubled to around 8 per cent over the last decade in WA.

Turning to rental stress, greater differences between WA and the rest of Australia are observed (Figure 9) across the full population. A greater proportion of renter households in the rest of Australia are more likely to be in housing stress across all three measures than households in WA. In a result that is cause for some concern, the proportion of households in severe (50/40) rental stress has nearly doubled to around 8 per cent over the last decade in both WA and the rest of Australia.

Table 10 and Table 11 disaggregate housing stress measures further by various household characteristics in order to provide more focus on those households who are facing most housing stress in WA. The results are striking.

Single parent households with a mortgage and with incomes in the bottom 40 per cent of the WA income distribution are more likely to be in housing stress than any other group (Table 10). In 2011–12, 28 per cent of single parent low income households were paying more than 30 per cent each week in mortgage repayments. This compares to only 10 per cent of couple-only households. Single parents in WA are three times as likely to be in severe housing stress (paying more than 50 per cent of income towards housing costs) than any other household group. Again, aligning with these results are the greater proportion of households headed by a female that are experiencing high levels of housing stress – one in five compared with only one in ten of households headed by a male.

Table 10 Mortgage 'stress' measures for Western Australia by household type: 2003-04 to 2011-12

Housing affordability measures *WA mortgage holders, 2011-12*	Proportion of h/h with more than x% of income committed to housing costs			Proportion of h/h with more than x% of income on housing costs and h/h income in lowest 40%			Number of households
By household characteristics	>30%	>40%	>50%	30/40	40/40	50/40	
Family composition							
Couple only	31%	16%	8%	10%	9%	5%	66,900
Couple with children	33%	16%	8%	16%	11%	6%	145,200
One parent with children	45%	32%	22%	28%	24%	18%	13,400
Lone person	74%	48%	24%	10%	7%	5%	47,900
Other households	21%	9%	3%	9%	9%	3%	14,900
Age of head of household							
<24	42%	19%	19%	8%	6%	6%	4,400
25-34	55%	30%	17%	16%	11%	6%	62,800
35-44	43%	22%	12%	15%	12%	8%	98,200
45-54	25%	15%	7%	12%	10%	5%	82,800
55-64	37%	23%	11%	12%	8%	5%	33,400
65+	26%	16%	0%	3%	0%	0%	6,600
Gender of head of household							
Male	39%	20%	10%	11%	8%	5%	198,700
Female	39%	24%	14%	20%	15%	9%	89,600
Home owner status							
First home buyer (3 years or less)	34%	19%	8%	13%	10%	6%	197,500
Changeover buyer (3 years or less)	56%	33%	24%	14%	12%	9%	39,700
Settled homeowner (>3 years)	48%	22%	13%	15%	9%	6%	51,000
Household income quintile							
First quintile (poorest)	74%	65%	45%	74%	65%	45%	18,600
Second quintile	55%	38%	20%	55%	38%	20%	45,900
Third quintile	44%	23%	13%	-	-	-	62,700
Fourth quintile	35%	16%	9%	-	-	-	75,300
Fifth quintile (richest)	23%	6%	0%	-	-	-	85,700
All Western Australia	39%	21%	11%	14%	10%	6%	288,200

Note: Calculations are for those household who have a mortgage.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing, 2003-04 to 2011-12.

For those households renting, single parents again stand out as the low income group with the highest proportion in housing stress (Table 11). More than one in three single parent households are paying more than 30 per cent in rent, whilst living on a modest income, and one in five are paying more than 40 per cent. Low income lone person households also identify with having high rates of rental stress, with over 23 per cent paying above 30 per cent of their weekly disposable income in rent, and 16 per cent paying above 40 per cent. Low income couple with children households are in a similar predicament – 23 per cent paying above 30 per cent and 10 per cent paying above 40 per cent.

Of note again are those households headed by a baby boomer and renting, with 37 per cent paying above 30 per cent; 25 per cent above 40 per cent and 22 per cent in severe rental stress, paying above 50 per cent of their already modest income on housing costs.

Table 11 Rental 'stress' measures for Western Australia by household type: 2003-04 to 2011-12

Housing affordability measures *WA renters, 2011-12*	Proportion of h/h with more than x% of income committed to housing costs			Proportion of h/h with more than x% of income on housing costs and h/h income in lowest 40%			Number of households
By household characteristics	>30%	>40%	>50%	30/40	40/40	50/40	
Family composition							
Couple only	19%	7%	5%	14%	7%	5%	56,600
Couple with children	29%	14%	8%	23%	10%	6%	74,300
One parent with children	42%	24%	13%	37%	24%	13%	26,200
Lone person	43%	20%	10%	23%	16%	10%	72,700
Group households	21%	16%	6%	21%	16%	6%	15,100
Other one/multi households	16%	14%	12%	15%	14%	12%	18,300
Age of head of household							
<24	28%	14%	8%	22%	14%	8%	31,300
25-34	33%	12%	6%	21%	10%	6%	75,800
35-44	27%	14%	7%	18%	11%	5%	61,800
45-54	34%	22%	13%	19%	15%	11%	39,500
55-64	38%	25%	22%	37%	25%	22%	22,500
65+	26%	12%	5%	24%	12%	5%	32,500
Gender of head of household							
Male	26%	10%	6%	16%	8%	5%	168,000
Female	39%	24%	13%	32%	21%	13%	95,400
Household income quintile							
First quintile (poorest)	56%	46%	33%	56%	46%	33%	18,600
Second quintile	43%	14%	5%	43%	14%	5%	45,900
Third quintile	19%	5%	1%	-	-	-	62,700
Fourth quintile	14%	2%	0%	-	-	-	75,300
Fifth quintile (richest)	13%	4%	2%	-	-	-	85,700
All Western Australia	31%	15%	9%	22%	13%	8%	263,400

Note: Calculations are for those household who are renting.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing, 2003-04 to 2011-12.

Which properties can WA households afford, and where?

In this section we look at the degree to which housing affordability varies locally, by examining mortgage and rental cost variations across the twenty five homogeneous sub-regional areas within Perth and twelve WA regional urban centres defined by REIWA to operate as a distinct housing market area.

To examine the local affordability of housing across the state, we refine a common indicator of housing affordability – the 'price-to-income' ratio – to compare the typical sales price of properties in each sub-regional market across Perth and WA with the incomes of households who live in those areas. Simply put, the price-to-income measure is the sales price of a dwelling divided by a measure of household income, the latter being a major determinant of the amount a prospective buyer is able to commit to the purchase.

Whilst it is accepted that a simplistic price-income indicator cannot by its nature capture other factors affecting affordability, such as capacity to borrow, it is often used as it is intuitive and contains only two variables for which data are relatively easy to compile.

Some interesting results emerge when we refine this measure by addressing two of its commonly identified shortcomings. First, price-to-income ratios are usually calculated using median incomes and house prices – the so-called 'median multiple'. Although the use of the median is preferable to the average (being less susceptible to the effects of extreme observations), it is far less appropriate when looking at the housing costs that apply for households on lower incomes – a segment we wish to better understand with respect to affordability. For this reason we also consider price-income ratios in which the lower quartile house or unit is compared with the lower quartile level of income.

Second, a limitation of comparisons between capital cities and broader regional centres is that they are not able to identify the more affordable pockets of areas within each capital city or regional centre themselves. This is typically due to a lack of data on the spatial distribution of household income. To overcome this limitation, we make use of Census 2011 data to impute localised median and lower quartile incomes for households residing in each WA suburb. This allows us to estimate price-to-income ratios for separate sub-regional housing market areas in the Perth planning region, as well as for the 12 urban centres in regional WA.

Established housing costs

We begin with the 'median multiples' or price-income ratios for established house sales at the median price and median household income for the 25 sub-markets within Perth and 12 regional urban centres (Table 12). The underlying presumption is that a household with median income might target properties at the median price level. Naturally, more sub-markets would become affordable should they target the lower end of the price range.

Table 12 **Median price-income ratios for established houses: by WA sub-region, 2013(Q4)**

Sub-regional housing market area *Perth planning region*	Median household gross annual income *by sub-region, 2013 $s*		Median sales price of established house *by sub-region, 2013 $s*		Median price-to-income ratio *by sub-region*	
Sub-region	median income	rank	median sales price	rank	ratio	rank
Western Suburbs	111,500	1	1,450,000	1	13.0	1
Fremantle	78,000	19	775,000	5	9.9	2
Vincent/Stirling SE	96,600	5	868,500	2	9.0	3
Stirling West	94,600	6	845,000	3	8.9	4
South Perth/Victoria Park	87,100	11	740,000	7	8.5	5
Melville	91,900	7	775,000	5	8.4	6
Perth City	101,500	2	840,000	4	8.3	7
Belmont	71,200	23	565,000	11	7.9	8
Stirling East	66,800	25	528,500	15	7.9	9
Bassendean/Bayswater	72,000	22	568,000	10	7.9	10
Canning	74,400	20	555,000	12	7.5	11
Joondalup South	98,400	4	637,500	8	6.5	12
Cockburn	85,700	12	550,000	13	6.4	13
Mundaring	91,000	9	547,500	14	6.0	14
Wanneroo South	79,200	16	475,000	18	6.0	15
Kalamunda	84,500	13	505,000	16	6.0	16
Gosnells	79,300	15	462,000	19	5.8	17
Joondalup North	101,000	3	586,750	9	5.8	18
Swan	79,000	17	455,000	20	5.8	19
Rockingham	78,900	18	435,000	23	5.5	20
Armadale	73,000	21	400,000	24	5.5	21
Wanneroo North East	91,900	8	500,000	17	5.4	22
Kwinana	68,300	24	370,000	25	5.4	23
Wanneroo North West	83,400	14	445,000	21	5.3	24
Serpentine-Jarrahdale	90,200	10	445,000	21	4.9	25
Perth Planning Region	83,000		545,000		6.6	
Mandurah/Murray	44,600	13	400,000	5	9.0	1
Busselton Urban Area	55,300	9	433,500	4	7.8	2
Albany Urban Area	51,200	12	370,000	8	7.2	3
Broome Urban Area	83,500	4	600,000	3	7.2	4
Geraldton/Greenough	52,200	11	372,500	7	7.1	5
Esperance Urban Area	63,100	7	391,500	6	6.2	6
Port Hedland	149,500	2	900,000	1	6.0	7
Carnarvon Urban Area	53,800	10	315,500	11	5.9	8
Bunbury Greater	64,400	6	370,000	8	5.7	9
Northam	57,200	8	265,000	13	4.6	10
Karratha Urban Area	156,500	1	700,000	2	4.5	11
Balance of Regional WA	68,500	5	300,000	12	4.4	12
Kalgoorlie/Boulder	109,200	3	350,000	10	3.2	13
Regional WA	68,600		380,000		5.5	

Note: Sales price is the 2013(Q4) median price for all types of established housing for each REIWA sub-regional housing market area.
Income is median total household annual gross income by sub-regional market, imputed from Census 2011 and uprated to 2013 $s.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

Table 13 **Lower quartile price-income ratios for established houses: by WA housing sub-region, 2013(Q4)**

Sub-regional housing market area *Perth planning region*	LQ household gross annual income *by sub-region, 2013 $s*		LQ sales price of established house *by sub-region, 2013 $s*		LQ price-to-income ratio *by sub-region*		
Sub-region	LQ h/h income	rank	LQ sales price	rank	ratio	LQ rank	med rank
Western Suburbs	50,600	3	1,125,500	1	22.2	1	1
Fremantle	33,400	25	650,000	6	19.4	2	2
Vincent/Stirling SE	44,900	8	734,750	3	16.3	3	3
Perth City	53,700	2	822,000	2	15.3	4	7
Melville	43,300	14	655,000	5	15.1	5	6
Stirling West	44,200	11	661,500	4	15.0	6	4
Belmont	33,600	24	500,000	10	14.9	7	8
South Perth/Victoria Park	43,700	12	637,000	7	14.6	8	5
Bassendean/Bayswater	36,900	22	500,000	10	13.5	9	10
Stirling East	34,400	23	446,000	15	13.0	10	9
Canning	37,600	20	470,000	14	12.5	11	11
Cockburn	43,100	15	485,000	12	11.3	12	13
Joondalup South	50,500	5	550,000	8	10.9	13	12
Mundaring	46,800	7	480,000	13	10.3	14	14
Kalamunda	44,300	10	445,000	16	10.1	15	16
Wanneroo South	43,300	13	423,250	18	9.8	16	15
Rockingham	39,200	18	370,000	23	9.4	17	20
Joondalup North	54,200	1	511,500	9	9.4	18	18
Swan	42,600	17	398,000	20	9.3	19	19
Gosnells	42,900	16	390,000	22	9.1	20	17
Wanneroo North West	44,900	9	395,000	21	8.8	21	24
Wanneroo North East	50,500	4	440,000	17	8.7	22	22
Kwinana	37,200	21	313,000	25	8.4	23	23
Serpentine-Jarrahdale	48,400	6	407,000	19	8.4	24	25
Armadale	39,100	19	325,000	24	8.3	25	21
Perth Planning Regions	**42,300**		**438,000**		**10.4**		
Mandurah/Murray	23,900	13	324,000	5	13.6	1	1
Busselton Urban Area	30,600	9	375,750	4	12.3	2	2
Geraldton/Greenough	26,500	12	307,750	8	11.6	3	5
Albany Urban Area	27,400	11	310,000	7	11.3	4	3
Broome Urban Area	45,300	4	500,000	3	11.0	5	4
Bunbury Greater	32,200	7	315,000	6	9.8	6	9
Esperance Urban Area	32,600	6	292,500	9	9.0	7	6
Carnarvon Urban Area	31,400	8	273,750	11	8.7	8	8
Port Hedland	86,700	2	730,000	1	8.4	9	7
Northam	30,200	10	220,250	12	7.3	10	10
Karratha Urban Area	107,400	1	594,250	2	5.5	11	11
Balance of Regional WA	35,100	5	190,000	13	5.4	12	12
Kalgoorlie/Boulder	60,900	3	286,500	10	4.7	13	13
Regional WA	**34,700**		**289,963**		**8.4**		

Note: Sales price is the 2013(Q4) lower quartile (P25) price for all types of established housing for each REIWA sub-regional housing market area. Income is lower quartile (P25) total household annual gross income by sub-regional market, imputed from Census 2011 and uprated to 2013 $s.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

The three most expensive sub-markets in terms of median house price are all located north of the river – Western Suburbs ($1.45 million), Vincent/Stirling South East ($868,500), and Stirling West ($845,000).

Western Suburbs has the highest price-to-income ratio of 13.0, suggesting that it is the least affordable when it comes to the purchase of median priced established houses. This is despite households in its collective suburbs having the highest median income ($111,500). Western Suburbs has a ratio that is also markedly higher than the next least affordable sub-market, Fremantle, which has a ratio of 9.9. Fremantle is in the top five sub-regions in terms of median house price but its median income is towards the bottom of the range. By contrast, the inland southeastern market of Serpentine-Jarrahdale at the fringe of the Perth planning region has the lowest price-income ratio. Median house prices ($445,000) are among the lowest there while median household income ($90,200) is above average.

If we apply the housing affordability rating in Table 4 to the median price-income ratios for WA housing regions, Serpentine-Jarrahdale would be rated as “affordable” and nine sub-markets as “moderately unaffordable” (in descending order of affordability within the overall rating, Wanneroo North West, Kwinana, Wanneroo North East, Armadale, Rockingham, Swan, Joondalup North, Gosnells, Kalamunda, Wanneroo South and Mundaring). Remaining sub-markets would rate as “not affordable” (Cockburn, Canning and Joondalup South) or “severely unaffordable” (including Bassendean/Bayswater, Perth City, Fremantle and Western Suburbs).

To see if there is some relief for low income households we calculate price-to-income ratios using the lower quartile level of income, where households in this category are assumed to target an established house at the lower quartile price level (Table 13). The price-to-income ratio rankings are very similar to that of the median multiples. Western Suburbs and Fremantle remain the least affordable markets while Serpentine-Jarrahdale is the second most affordable behind Armadale.

However, while rankings are similar between the median and lower quartile price-to-income ratios, the cost burden of owning a home is significantly higher for households on lower quartile incomes, for whom the lower quartile property rates as “severely unaffordable” in all sub-markets. Take for example the sub-market of Joondalup South, selected as it falls in the middle of the price-income range. The ratio calculated for the median priced house with median income is 6.5, which is 12th highest among the 25 sub-markets. In contrast the ratio that compares a house priced in the lower quartile with households on lower quartile income is 10.9, which is 13th highest.

This is not to say that there are no affordable properties available to the lower income household in Perth metropolitan areas. However, it does strongly suggest that the housing market provides far fewer affordable properties to new entrants at lower price points.

As a whole, regional WA is more affordable than the Perth planning region from a price-income perspective, at both the median and lower quartile levels. Among regional centres, the least affordable is the coastal commuter sub-market of Mandurah/Murray, around 75 km south of Perth. Newer developments around the

Peel Inlet have contributed to a fifth highest median house price of $400,000 and also the fifth highest lower quartile price of $324,000. Household incomes though are low, at $44,600 at the median level and $23,900 at the lower quartile, both the lowest among the 12 regional urban centres.

At both the median and lower quartile levels, the top five regional urban centres are higher, or less affordable, than the Perth planning region. The gold mining city of Kalgoorlie/Boulder is the most affordable regional centre within WA, driven more by low house prices than by household income.

One might be led to believe that the resources boom would make the Pilbara a seriously unaffordable place to own a home. Indeed, consider the median price of a house in Port Hedland at the end of 2013. At $900,000, it is similar to upmarket Perth suburbs of Fremantle and Winthrop. On rankings alone, though there might be a case for Port Hedland (the site of BHP Billiton's port) to support a mid-range price-to-income ratio, we find Karratha (the Pilbara base of Rio Tinto Iron Ore's operations) to be relatively more affordable. However, the magnitudes of the ratios deem Karratha to be 'affordable' at the median level but 'moderately unaffordable' at the lower quartile level according to our affordability rating. Karratha's lower quartile house price of $594,250 is, in fact, higher than the Perth metropolitan median price of $545,000.

Multi-residential unit sales

The lower price points for multi-residential units compared to established houses along with the perception of 'urban living/modern lifestyle' has advanced this category as a viable alternative for an increasing proportion of the population.

At both the median price/median income and lower quartile price/lower quartile income levels (Table 14 and Table 15), the least affordable sub-market for unit sales is Fremantle, echoing the finding for established houses where Fremantle is the second least affordable sub-market in the Perth planning region. Fremantle is an historic port city with well-maintained colonial homes that can fetch high prices. In the last decade developers have seen the potential of fragments of land in the area especially along the river, and acted by building several high quality, low rise units. Now, the median price of units in North Fremantle is $687,500, much higher than units in West Perth. By contrast, annual household incomes in Fremantle are low – $78,000 at the median level (19th highest out of 25) and $33,400 at the lower quartile level (25th out of 25). Not dissimilar to the finding for houses, the most affordable sub-market for units is Kwinana.

Table 14 **Median price-income ratios for multi-residential units: by WA housing sub-region, 2013(Q4)**

Sub-regional housing market area *Perth planning region*	Median household gross annual income *by sub-region, 2013 $s*		Median sales price of multi-residential unit *by sub-region, 2013 $s*		Median price-to-income ratio *by sub-region*	
Sub-region	median income	rank	median sales price	rank	ratio	rank
Fremantle	78,000	19	540,000	3	6.9	1
South Perth/Victoria Park	87,100	11	532,000	5	6.1	2
Stirling East	66,800	25	395,000	11	5.9	3
Canning	74,400	20	436,000	8	5.9	4
Belmont	71,200	23	403,250	10	5.7	5
Stirling West	94,600	6	535,000	4	5.7	6
Melville	91,900	7	500,000	6	5.4	7
Perth City	101,500	2	550,000	2	5.4	8
Bassendean/Bayswater	72,000	22	367,000	16	5.1	9
Western Suburbs	111,500	1	565,000	1	5.1	10
Vincent/Stirling SE	96,600	5	485,000	7	5.0	11
Kalamunda	84,500	13	421,000	9	5.0	12
Wanneroo North West	83,400	14	387,500	14	4.6	13
Swan	79,000	17	352,000	18	4.5	14
Gosnells	79,300	15	345,000	19	4.4	15
Rockingham	78,900	18	340,000	20	4.3	16
Wanneroo North East	91,900	8	386,000	15	4.2	17
Cockburn	85,700	12	359,000	17	4.2	18
Armadale	73,000	21	296,000	22	4.1	19
Wanneroo South	79,200	16	320,000	21	4.0	20
Joondalup South	98,400	4	390,000	13	4.0	21
Joondalup North	101,000	3	394,000	12	3.9	22
Kwinana	68,300	24	195,000	23	2.9	23
Mundaring (a)	91,000	9	-	-	-	-
Serpentine-Jarrahdale (a)	90,200	10	-	-	-	-
Perth Planning Region	83,000		448,000		5.4	
Mandurah/Murray	44,600	13	332,500	5	7.5	1
Busselton Urban Area	55,300	9	340,000	4	6.1	2
Geraldton/Greenough	52,200	11	294,000	7	5.6	3
Bunbury Greater	64,400	6	318,000	6	4.9	4
Albany Urban Area	51,200	12	240,000	10	4.7	5
Broome Urban Area	83,500	4	390,000	3	4.7	6
Esperance Urban Area	63,100	7	284,000	8	4.5	7
Balance of Regional WA	68,500	5	283,000	9	4.1	8
Port Hedland	149,500	2	607,500	1	4.1	9
Karratha Urban Area	156,500	1	495,000	2	3.2	10
Kalgoorlie/Boulder	109,200	3	220,000	11	2.0	11
Carnarvon Urban Area (a)	53,800	10	-	-	-	-
Northam (a)	57,200	8	-	-	-	-
Regional WA	68,600		315,750		4.6	

Note: Housing sales prices are 2013(Q4) median prices for all types of multi-residential units for each REIWA regional sub-market.
Income is median household gross annual income by regional sub-market, imputed from Census 2011 and uprated to 2013 $s.
(a) No/insufficient data on housing transactions.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

These ratios reveal some interesting insights. When it comes to the purchase of a median priced house, Western Suburbs is least affordable to households with a median level of income. However, if a household were to insist in living in this prestigious part of Perth, and is willing to consider a unit instead of a house, then Western Suburbs becomes much more attainable (price-income ratio of 5.1, 10th highest). The contrast is even more stark for lower income households. Western Suburbs, predictably, is the least affordable sub-market in the lower house price/lower income range. However, for a lower income household, the Western Suburbs is the second most affordable sub-market for purchasing units (price-income ratio 6.6, 22nd highest) though in absolute terms the magnitude of the ratio (6.6) remains high.

Part of the reason for this is that the Western Suburbs comprises a fairly diverse set of suburbs, where there are a number of older flats that are unflattering by modern standards, many of them nestled within tree-lined streets with million dollar homes. A closer inspection of the transactions data shows that the lower quartile price of units in Wembley at the end of 2013 was only $268,125, and $303,750 in Mosman Park.

When it comes to the unit sale in WA's regional centres the price-income ratios should be interpreted with some caution since many are derived from relatively few transactions over a single quarter. Having said that, we can be quite confident in saying that Mandurah/Murray is the least affordable urban centre, as it had 62 units changing hands in the fourth quarter of 2013. This is true for both the median and lower quartile price/income levels.

Table 15 **Lower quartile price-income ratios for multi-residential units: by WA sub-region, 2013(Q4)**

Sub-regional housing market area *Perth planning region*	LQ household gross annual income *by sub-region, 2013 $s*		LQ sales price of multi-residential unit *by sub-region, 2013 $s*		LQ price-to-income ratio *by sub-region*		
Sub-region	LQ h/h income	rank	LQ sales price	rank	ratio	LQ rank	med rank
Fremantle	33,400	25	400,000	5	12.0	1	1
Canning	37,600	20	395,000	6	10.5	2	4
Melville	43,300	14	443,000	2	10.2	3	7
Stirling East	34,400	23	347,000	12	10.1	4	3
Stirling West	44,200	11	438,500	3	9.9	5	6
Belmont	33,600	24	316,625	18	9.4	6	5
South Perth/Victoria Park	43,700	12	410,000	4	9.4	7	2
Perth City	53,700	2	470,000	1	8.8	8	8
Vincent/Stirling SE	44,900	8	385,000	7	8.6	9	11
Bassendean/Bayswater	20,800	22	307,000	19	8.3	10	9
Kalamunda	44,300	10	364,000	10	8.2	11	12
Wanneroo North West	44,900	9	358,000	11	8.0	12	13
Gosnells	42,900	16	335,000	14	7.8	13	15
Swan	42,600	17	320,000	16	7.5	14	14
Cockburn	43,100	15	318,750	17	7.4	15	18
Wanneroo North East	50,500	4	371,500	8	7.3	16	17
Rockingham	39,200	18	272,000	21	6.9	17	16
Armadale	39,100	19	271,250	22	6.9	18	19
Wanneroo South	43,300	13	300,000	20	6.9	19	20
Joondalup North	54,200	1	365,625	9	6.7	20	22
Joondalup South	50,500	5	339,500	13	6.7	21	21
Western Suburbs	50,600	3	335,000	14	6.6	22	10
Kwinana	37,200	21	182,500	23	4.9	23	23
Serpentine-Jarrahdale (a)	48,400	6	-	-	-	-	-
Mundaring (a)	46,800	7	-	-	-	-	-
Perth Planning Regions	42,300		355,000		8.4		
Mandurah/Murray	23,900	13	248,500	7	10.4	1	1
Geraldton/Greenough	26,500	12	253,750	6	9.6	2	3
Busselton Urban Area	30,600	9	283,500	4	9.3	3	2
Bunbury Greater	32,200	7	272,000	5	8.4	4	4
Albany Urban Area	27,400	11	209,000	10	7.6	5	5
Broome Urban Area	45,300	4	332,500	3	7.3	6	6
Esperance Urban Area	32,600	6	237,500	8	7.3	7	7
Balance of Regional WA	35,100	5	210,000	9	6.0	8	8
Port Hedland	86,700	2	515,000	1	5.9	9	9
Karratha Urban Area	107,400	1	438,750	2	4.1	10	10
Kalgoorlie/Boulder	60,900	3	187,500	11	3.1	11	11
Carnarvon Urban Area (a)	31,400	8	-	-	-	-	-
Northam (a)	30,200	10	-	-	-	-	-
Regional WA	34,700		238,750		6.9		

Note: Sales price is the 2013(Q4) lower quartile (P25) price for all types of multi-residential units for each REIWA sub-regional housing market area.
Income is lower quartile (P25) total household annual gross income by sub-regional market, imputed from Census 2011 and uprated to 2013 $s.
(a) No/insufficient data on housing transactions.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

Affordable rentals – a social issue in WA

The rental market is (or should be) an important complement to the purchased house sector, meeting a range of demands either for those seeking short-term or transitional accommodation, as an alternative longer-term accommodation option to suit lifestyle choices, or as a rational insurance against adverse financial conditions or business cycle movements. For many new entrants to the workforce in WA, whether leaving home or migrating to the state from the rest of Australia or overseas, the rental sector is their first entry point to the housing market. The relative fluidity of the rental housing sector can 'fill the space' created by the frictions and stickiness of the market for purchased housing. Rental properties should also act to 'clear the housing market', providing secure and affordable supply to that segment of the population where home ownership is as yet out of reach.

Acknowledging that home ownership may not be possible or even desirable by certain population groups, we augment the price-to-income ratio by substituting sale price with rental price to construct 'rent-to-income' ratios for the same sub-markets and regional centres covered in the analysis of the established housing sector. This gives a sense of the comparative ability of West Australian households (especially those on low or moderate incomes) to rent rather than buy a house or multi-residential unit.

Established house rental

The rental market for houses is just as active as the sales sector in Western Australia. Over the course of the fourth quarter of 2013 there were 7,737 house rental transactions according to data from the Real Estate Institute of Western Australia. Over the same period, 7,345 houses were sold. The sub-market of Rockingham had the most number of house rentals with 773.

To examine the affordability of rental accommodation in WA, and especially the spatial variation in rental costs, we calculate rent-to-income ratios for each of the twenty-five sub-markets in the Perth planning region and twelve WA regional urban centres. Ratios are calculated using combinations of median and lower quartile weekly rents divided by the median and lower quartile weekly household incomes (the latter derived from the 2011 ABS Census of Population and Housing).

Table 16 shows the rent-to-income ratios for median rental properties across Perth and regional WA for the fourth quarter of 2013, compared to median household incomes indexed to the same period. Our results indicate a positive correlation between house sale and rental prices as expected, with Western Suburbs and Fremantle among the most expensive rental sub-markets, as they are for those seeking to buy. These two markets also rank as the two least affordable in terms of rental-income ratios.

Table 16 **Median rent-income ratios for established houses: by WA housing sub-region, 2013(Q4)**

Sub-regional housing market area *Perth planning region*	Median household gross weekly income *by sub-region, 2013 $s*		Median rental price of established house *by sub-region, 2013 $s*		Median rent-to-income ratio *by sub-region*	
Sub-region	Median income	rank	Median rental	rank	ratio	rank
Fremantle	1,500	19	580	5	0.39	1
Western Suburbs	2,144	1	798	1	0.37	2
Stirling East	1,284	25	450	18	0.35	3
Stirling West	1,818	6	620	2	0.34	4
Belmont	1,369	23	463	13	0.34	5
Bassendean/Bayswater	1,385	22	458	17	0.33	6
Vincent/Stirling SE	1,858	5	600	3	0.32	7
Canning	1,430	20	460	14	0.32	8
Melville	1,767	7	550	6	0.31	9
Perth City	1,952	2	600	3	0.31	10
Kwinana	1,314	24	400	24	0.30	11
Wanneroo South	1,523	16	460	14	0.30	12
South Perth/Victoria Park	1,674	11	500	8	0.30	13
Cockburn	1,649	12	485	11	0.29	14
Swan	1,520	17	440	20	0.29	15
Gosnells	1,525	15	440	20	0.29	16
Kalamunda	1,625	13	460	14	0.28	17
Mundaring	1,751	9	495	10	0.28	18
Armadale	1,403	21	390	25	0.28	19
Rockingham	1,518	18	420	23	0.28	20
Joondalup South	1,892	4	520	7	0.27	21
Wanneroo North West	1,603	14	430	22	0.27	22
Wanneroo North East	1,767	8	470	12	0.27	23
Serpentine-Jarrahdale	1,735	10	450	18	0.26	24
Joondalup North	1,942	3	500	8	0.26	25
Perth Planning Region	**1,596**		**470**		**0.29**	
Port Hedland	2,875	2	1,600	1	0.56	1
Mandurah/Murray	858	13	380	6	0.44	2
Broome Urban Area	1,605	4	710	3	0.44	3
Geraldton/Greenough	1,004	11	380	6	0.38	4
Busselton Urban Area	1,064	9	393	5	0.37	5
Karratha Urban Area	3,010	1	1,100	2	0.37	6
Albany Urban Area	985	12	320	11	0.32	7
Northam	1,100	8	355	10	0.32	8
Bunbury Greater	1,238	6	370	9	0.30	9
Balance of Regional WA	1,317	5	375	8	0.28	10
Esperance Urban Area	1,214	7	305	12	0.25	11
Kalgoorlie/Boulder	2,100	3	400	4	0.19	12
Carnarvon Urban Area (a)	1,034	10	-	-	-	-
Regional WA	**1,319**		**400**		**0.30**	

Note: Rental value is the 2013(Q4) median rent for all types of established housing for each REIWA sub-regional housing market area.
Income is median total household annual gross income by sub-region, imputed from Census 2011 and uprated to 2013 $s.
(a) No/insufficient data on housing transactions.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

Table 17 Lower quartile rent-income ratios for established houses: by WA housing sub-region, 2013(Q4)

Sub-regional housing market area *Perth planning region*	LQ household gross weekly income *by sub-region, 2013 $s*		LQ rental price of established house *by sub-region, 2013 $s*		LQ rent-to-income ratio *by sub-region*		
Sub-region	LQ h/h income	rank	LQ rental	rank	ratio	LQ rank	med rank
Fremantle	643	25	480	4	0.75	1	1
Belmont	647	24	400	18	0.62	2	5
Western Suburbs	973	3	600	1	0.62	3	2
Stirling East	661	23	400	18	0.61	4	3
Bassendean/Bayswater	710	22	415	15	0.58	5	6
Vincent/Stirling SE	864	8	500	3	0.58	6	7
Stirling West	850	11	480	4	0.56	7	4
Melville	832	14	470	6	0.56	8	9
Canning	723	20	406	17	0.56	9	8
Cockburn	828	15	440	8	0.53	10	14
Perth City	1,032	2	530	2	0.51	11	10
South Perth/Victoria Park	841	12	430	11	0.51	12	13
Rockingham	753	18	375	23	0.50	13	20
Kalamunda	851	10	421	12	0.49	14	17
Wanneroo South	832	13	409	16	0.49	15	12
Swan	820	17	400	18	0.49	16	15
Kwinana	716	21	343	25	0.48	17	11
Mundaring	900	7	420	13	0.47	18	18
Gosnells	824	16	384	22	0.47	19	16
Armadale	752	19	350	24	0.47	20	19
Joondalup South	971	5	450	7	0.46	21	21
Wanneroo North West	864	9	400	18	0.46	22	22
Serpentine-Jarrahdale	931	6	420	13	0.45	23	24
Wanneroo North East	972	4	434	10	0.45	24	23
Joondalup North	1,042	1	440	8	0.42	25	25
Perth Planning Regions	**813**		**410**		**0.50**		
Broome Urban Area	872	4	650	3	0.75	1	3
Mandurah/Murray	459	13	340	4	0.74	2	2
Port Hedland	1,666	2	1,100	1	0.66	3	1
Geraldton/Greenough	510	12	320	8	0.63	4	4
Busselton Urban Area	588	9	340	4	0.58	5	5
Northam	581	10	320	8	0.55	6	8
Albany Urban Area	526	11	285	10	0.54	7	7
Bunbury Greater	620	7	330	7	0.53	8	9
Karratha Urban Area	2,066	1	900	2	0.44	9	6
Balance of Regional WA	675	5	280	11	0.41	10	10
Esperance Urban Area	628	6	260	12	0.41	11	11
Kalgoorlie/Boulder	1,172	3	335	6	0.29	12	12
Carnarvon Urban Area (a)	604	8	-	-	-	-	-
Regional WA	**668**		**330**		**0.49**		

Note: Rental value is the 2013(Q4) lower quartile rent for all types of established housing for each REIWA sub-regional housing market area. Income is lower quartile household income by sub-region, imputed from Census 2011 and uprated to 2013 $s.
(a) No/insufficient data on housing transactions.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

The northern suburbs of Joondalup North and Wanneroo and the south east region of Serpentine-Jarrahdale are the most affordable when it comes to the rental of established houses. This is true for both median and low income demographics.

When it comes to regional WA, Mandurah/Murray is again among the least affordable, this time along with Port Hedland and the Broome Urban Area. Kalgoorlie/Boulder is the most affordable regional centre for house rentals at the median and lower quartile levels.

Multi-residential unit rental

By far the most active market for renting units is Perth City, with 1,171 transactions over the fourth quarter of 2013. This is not surprising given that a high stock of units is located in residential areas around Perth CBD.

The sub-market of Stirling East (encompassing suburbs like Balcatta, Osborne Park and Tuart Hill) is revealed as the least affordable to median households in the area seeking to rent units at the median price level. This is primarily because households living in the Stirling East sub-market have lower incomes relative to surrounding areas, without local rental prices adjusting fully to match. Belmont and Fremantle rank as the second and third most unaffordable sub-regions when it comes to unit rental at the median.

Perhaps surprisingly, units in the Western Suburbs are among the most affordable in Perth. Comparing Table 16 and Table 18, it can be observed that this area is the second least affordable place to rent a median priced house, but in contrast, is among the most affordable places to rent a unit at the median priced level. The conclusion does not change when it comes to lower quartile price/income. The Western Suburbs is unique in that it comprises suburbs that are either adjacent to the Indian Ocean (City Beach, Cottesloe, Floreat and Swanbourne), or next to the Swan River (Crawley, Dalkeith, Mosman Park and Peppermint Grove). Their proximity away from the city centre and the limited number of newer style units are contributing factors for the median and lower quartile unit rental prices being in the middle of the pack.

When it comes to regional WA, Mandurah/Murray is again the least affordable area to rent a unit, while Esperance is the most affordable at the median level and Karratha is the most affordable at the lower quartile level.

Table 18 **Median rent-income ratios for multi-residential units: by WA housing sub-region, 2013(Q4)**

Sub-regional housing market area *Perth planning region*	Median household gross weekly income *by sub-region, 2013 $s*		Median rental price of multi-residential unit *by sub-region, 2013 $s*		Median rent-to-income ratio *by sub-region*	
Sub-region	Median income	rank	Median rental	rank	ratio	rank
Stirling East	1,284	25	410	15	0.32	1
Belmont	1,369	23	420	13	0.31	2
Fremantle	1,500	19	460	4	0.31	3
Perth City	1,952	2	590	1	0.30	4
Canning	1,430	20	430	9	0.30	5
Wanneroo South	1,523	16	430	9	0.28	6
Bassendean/Bayswater	1,385	22	390	18	0.28	7
Stirling West	1,818	6	495	3	0.27	8
Cockburn	1,649	12	440	7	0.27	9
Joondalup South	1,892	4	500	2	0.26	10
Armadale	1,403	21	370	21	0.26	11
Swan	1,520	17	400	17	0.26	12
Wanneroo North East	1,767	8	460	4	0.26	13
South Perth/Victoria Park	1,674	11	430	9	0.26	14
Kalamunda	1,625	13	405	16	0.25	15
Gosnells	1,525	15	380	20	0.25	16
Melville	1,767	7	438	8	0.25	17
Vincent/Stirling SE	1,858	5	450	6	0.24	18
Wanneroo North West	1,603	14	385	19	0.24	19
Rockingham	1,518	18	350	22	0.23	20
Joondalup North	1,942	3	420	13	0.22	21
Kwinana	1,314	24	280	23	0.21	22
Western Suburbs	2,144	1	425	12	0.20	23
Mundaring (a)	1,751	9	-	-	-	-
Serpentine-Jarrahdale (a)	1,735	10	-	-	-	-
Perth Planning Region	1,596		450		0.28	
Balance of Regional WA	1,317	5	545	3	0.41	1
Mandurah/Murray	858	13	350	6	0.41	2
Busselton Urban Area	1,064	9	358	5	0.34	3
Port Hedland	2,875	2	900	1	0.31	4
Broome Urban Area	1,605	4	495	4	0.31	5
Bunbury Greater	1,238	6	350	6	0.28	6
Albany Urban Area	985	12	260	9	0.26	7
Geraldton/Greenough	1,004	11	245	10	0.24	8
Northam	1,100	8	240	11	0.22	9
Karratha Urban Area	3,010	1	650	2	0.22	10
Kalgoorlie/Boulder	2,100	3	350	6	0.17	11
Esperance Urban Area	1,214	7	200	12	0.16	12
Carnarvon Urban Area (a)	1,034	10	-	-	-	-
Regional WA	1,319		370		0.28	

Note: Rental value is the 2013(Q4) median rent for all types of multi-residential units for each REIWA sub-regional housing market area.
Income is median total household annual gross income by sub-region, imputed from Census 2011 and uprated to 2013 $s.
(a) No/insufficient data on housing transactions.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

Table 19 **Lower quartile rent-income ratios for multi-residential units: by WA housing sub-region, 2013(Q4)**

Sub-regional housing *Perth planning region*	LQ household gross weekly income *by sub-region, 2013 $s*		LQ rental price of multi-residential unit *by sub-region, 2013 $s*		LQ rent-to-income ratio *by sub-region*		
Sub-region	LQ h/h income	rank	LQ rental	rank	ratio	LQ rank	med rank
Fremantle	643	25	375	8	0.58	1	3
Stirling East	661	23	370	11	0.56	2	1
Belmont	647	24	360	15	0.56	3	2
Canning	723	20	380	7	0.53	4	5
Cockburn	828	15	400	5	0.48	5	9
Stirling West	850	11	410	4	0.48	6	8
Bassendean/Bayswater	710	22	333	21	0.47	7	7
Melville	832	14	390	6	0.47	8	17
Perth City	1,032	2	480	1	0.47	9	4
Armadale	752	19	340	20	0.45	10	11
Joondalup South	971	5	435	2	0.45	11	10
Wanneroo North East	972	4	430	3	0.44	12	13
Swan	820	17	361	14	0.44	13	12
South Perth/Victoria Park	841	12	366	13	0.44	14	14
Kalamunda	851	10	370	11	0.43	15	15
Vincent/Stirling SE	864	8	375	8	0.43	16	18
Gosnells	824	16	350	16	0.42	17	16
Wanneroo South	832	13	350	16	0.42	18	6
Wanneroo North West	864	9	350	16	0.41	19	19
Rockingham	753	18	300	22	0.40	20	20
Kwinana	716	21	270	23	0.38	21	22
Western Suburbs	973	3	350	16	0.36	22	23
Joondalup North	1,042	1	371	10	0.36	23	21
Mundaring (a)	900	7	-	-	-	-	-
Serpentine-Jarrahdale (a)	931	6	-	-	-	-	-
Perth Planning Regions	813		370		0.46		
Mandurah/Murray	459	13	300	6	0.65	1	2
Busselton Urban Area	588	9	315	5	0.54	2	3
Bunbury Greater	620	7	300	6	0.48	3	6
Port Hedland	1,666	2	800	1	0.48	4	4
Balance of Regional WA	675	5	293	8	0.43	5	1
Geraldton/Greenough	510	12	220	10	0.43	6	8
Northam	581	10	230	9	0.40	7	9
Broome Urban Area	872	4	343	3	0.39	8	5
Albany Urban Area	526	11	204	11	0.39	9	7
Esperance Urban Area	628	6	180	12	0.29	10	12
Kalgoorlie/Boulder	1,172	3	320	4	0.27	11	11
Karratha Urban Area	2,066	1	550	2	0.27	12	10
Carnarvon Urban Area	604	8	-	-	0.00	-	-
Regional WA	668		300		0.45		

Note: Rental value is the 2013(Q4) lower quartile rent for all types of multi-residential units for each REIWA sub-regional housing market area.
Income is lower quartile total household annual gross income by sub-region, imputed from Census 2011 and uprated to 2013 $s.
(a) No/insufficient data on housing transactions.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

As is the case with home purchasing we witness a clear asymmetry when it comes to the distinction between median income and low income households with respect to their ability to rent.

Across the board, whether looking at house or multi-residential unit rental, the rental-income ratios are up to 73 percent higher for the lower quartile than for the median. We can illustrate this by focusing on two sub-markets at different ends of the spectrum. First, in the house rental market, the rental-income ratio for Fremantle is 0.39 at the median rental/income level (Table 17). At the lower quartile rental/income level this almost doubles to 0.75. The rental-income ratio for a house in Kwinana is 0.30 at the median rental/income level. However, for lower quartile rental/income the ratio rises to 0.48.

We can tell a similar story for the multi-residential unit rental market (Table 19). The rental-income ratio for a unit in Fremantle at the median rental/income level is 0.31. At the lower quartile rental/income level this almost doubles to 0.58. In Joondalup North, the median rental-income ratio for a unit is 0.22. However, for lower quartile rental/income, the ratio increases to 0.36.

These observations are significant as they suggest that the market is not serving renters with different income circumstances in a symmetric manner. Contrary to social policy intent, low income earners suffer disproportionately when compared to median income earners. The relative magnitudes of the rental-income ratios reveal that the market clearing role that rental properties are intended to play is failing in WA, forcing low income earners to either locate to less amenable areas further from central Perth, or commit a higher proportion of their weekly income to housing.

Location,

location,

location...

Location, location, location...

For all but the wealthiest of WA households, some suburbs in Perth remain practically unattainable in cost terms. We may aspire to locate to a comfortable property on the river, yet within easy travelling distance to the city centre. However, for the majority of households, such options are simply out of reach.

For this section of the report, we provide a more detailed spatial picture of the capacity for WA households to buy and rent in different locations in Perth. What level of household income would be required to comfortably afford properties in different suburbs? And how much of their income would WA households be required to commit to buy or rent properties in different localities in metropolitan Perth?

The section ends with some examples of the capacity for key workers in essential occupations (for example, in health, education and the police service) to locate to different suburbs of Perth.

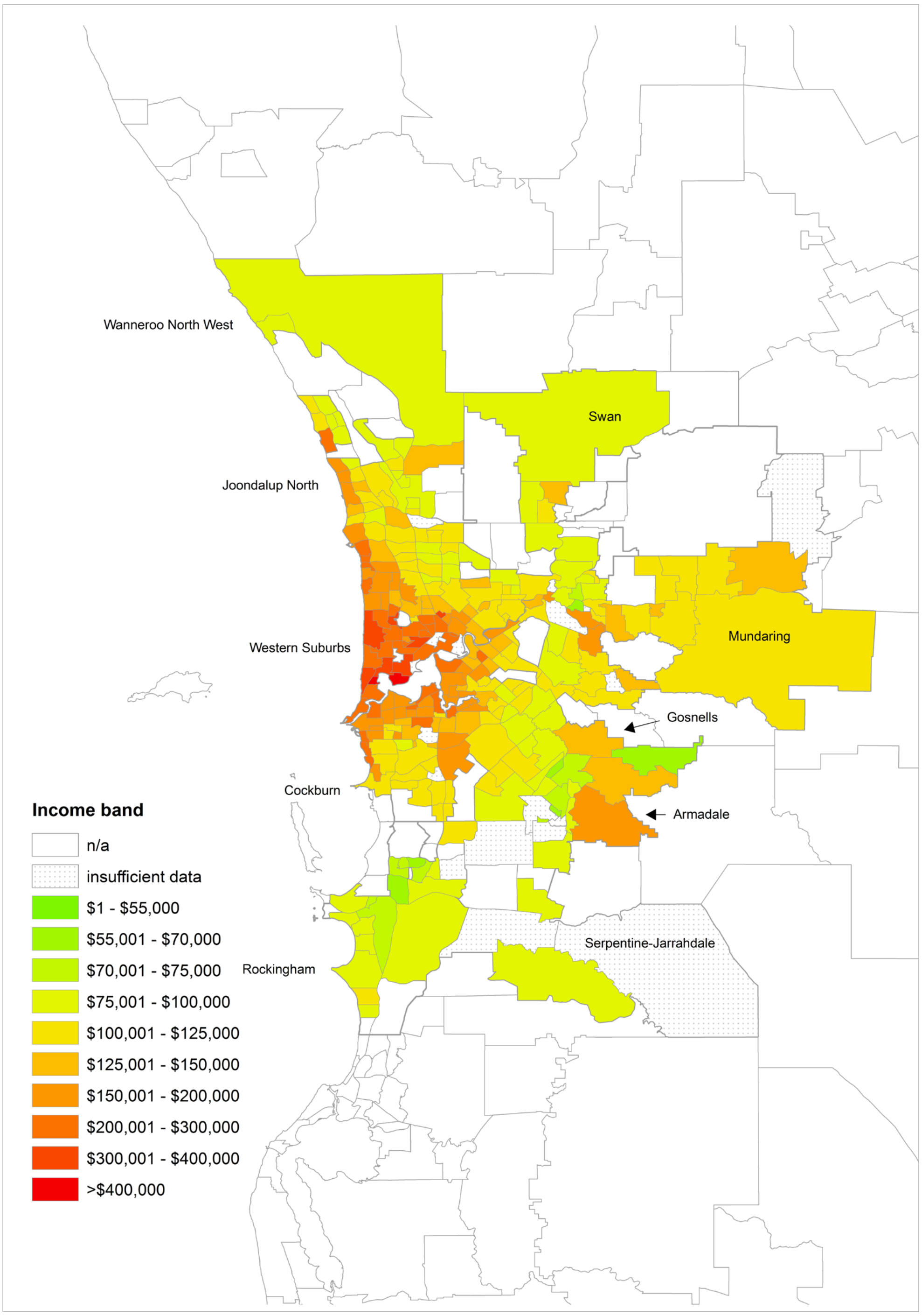
Capacity to buy – a spatial picture

We begin with the capacity to service annual repayments under typical mortgage arrangements for West Australians who are able to commit 30 per cent of their income to housing. We ask the question: What income would a household need to be earning to be able to afford a 3 bedroom house priced at the median level in locations across the Perth metropolitan area? We are able to create this picture (Figure 10) using REIWA transactions data for the December quarter 2013 period. The lightest shades of green and yellow typically appear in the fringe of the metropolitan area. Not surprisingly, suburbs along the river and adjacent to the northern beaches are darkest in shade, indicating that households would need to be in a high income band to have the capacity to buy in those areas.

Upon closer inspection we would be misled to think that 'inner city living', broadly defined, is unaffordable whilst localities beyond 30 kilometres of the city are affordable. Mirrabooka, Thornlie , Kenwick, Ballajura and High Wycombe are all examples of suburbs within a 20 kilometre radius of the city centre for which a household with an annual income short of $100,000 a year can potentially attain. By contrast, selected properties in outer suburbs like Roleystone and Guildford can require annual incomes over $125,000 a year to afford. This of course is predicated on distance alone. Factoring in transportation network and travel times, amenities, and age/quality of the property can make the difference between attainable and desirable.

Figure 10 serves to highlight that the Perth housing market is not dissimilar to others around Australia, or elsewhere for that matter, in that suburbs closer to desirable localities such as the CBD and the coast require much higher capacities to pay. However, it can also highlight that there are pockets of affordable localities scattered across the metropolitan area.

Figure 10 Gross household income to afford median house: by Perth metropolitan suburb, 2013 prices



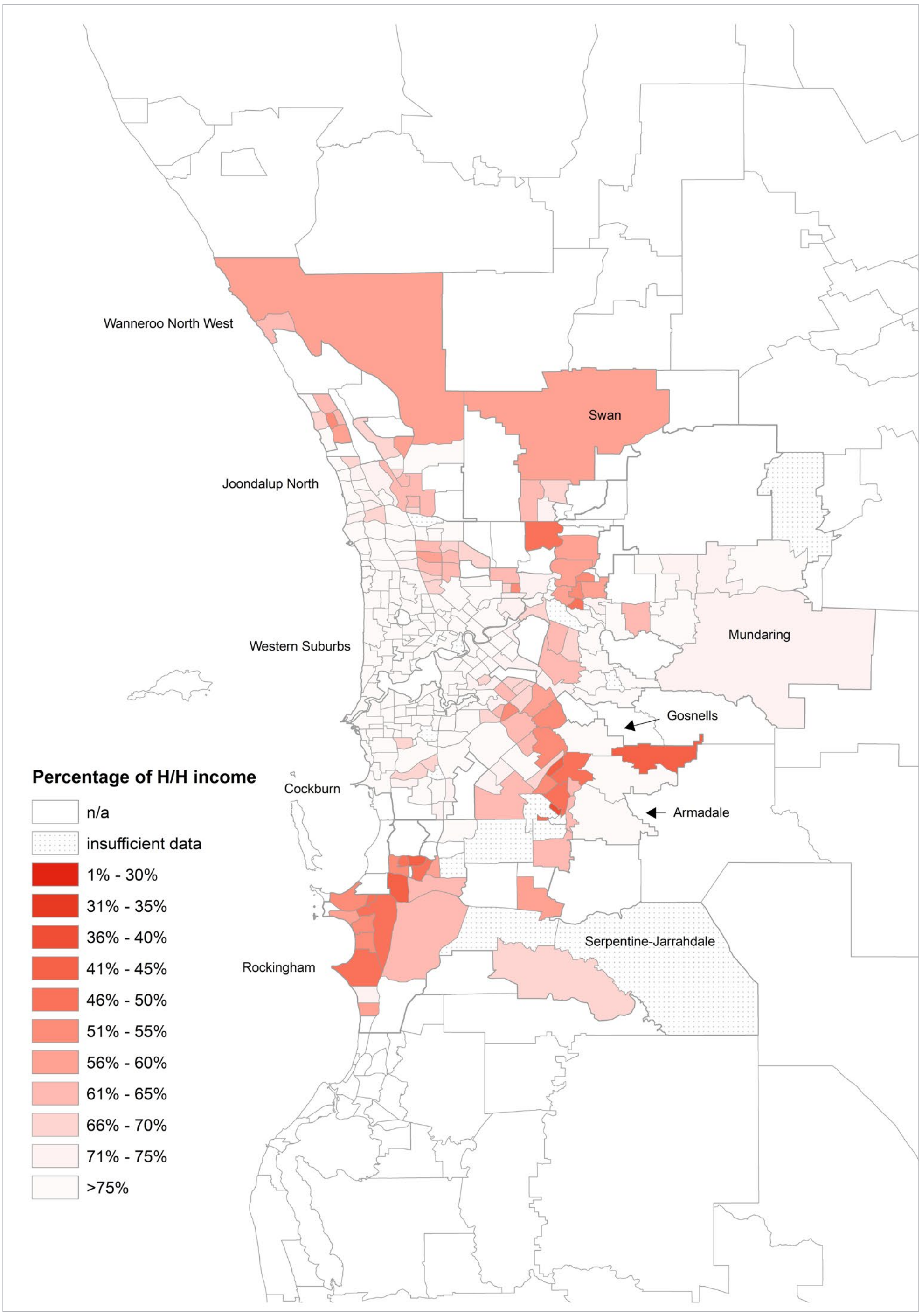
Note: Affordability is based on the income required to service a standard mortgage to purchase the median house in each sub-region, committing 30 per cent of income to cover repayments, using standard assumptions regarding deposit, interest rate and mortgage term.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

To allow us to analyse affordability with respect to income at a more localised level, Figures 11 and 12 look at the capacity to buy for two segments of the population. The first (Figure 11) focusses on the capacity for low income earners (lower quartile level of household income) to purchase a three bedroom house at the lower quartile price point, i.e. the potentially affordable sort of home a family aspires to own at this point in their lives with their present income situation. The map is differentiated according to the percentage of income required to service annual repayments, again under typical mortgage arrangements. The darker the shade on the map, the lower the percentages of income required to afford the target property.

Figure 11 highlights the restricted choice of affordable housing in metropolitan Perth, with no houses at the lower quartile price within scope for a low income earner seeking to commit up to 30 per cent of their salary to service a mortgage. In fact, the lowest commitment of income required to service a mortgage for a lower quartile three bedroom house is 35 per cent, in this case for the suburb of Brookdale in the Armadale sub-market. This is followed by the suburbs of Leda, Orelia and Camillo, which all approach a 45 per cent commitment. Lighter shades of red - indicating progressively higher percentages of income – fill much of the map, with many localities unattainable for a reasonable commitment of income.

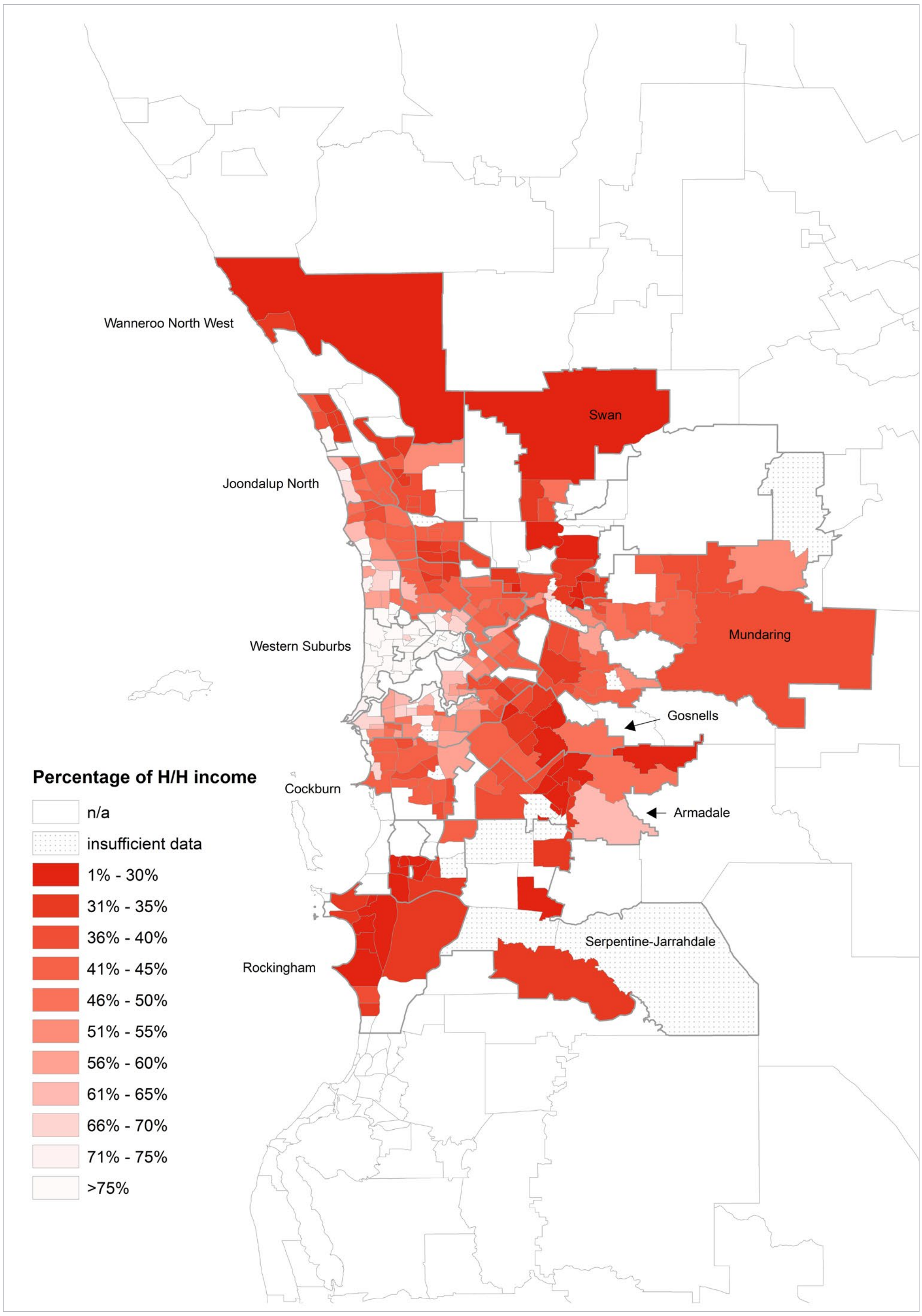
The second segment (Figure 12) is the household with a median level of income targeting to own the same 3 bedroom house at the median price point. The contrast between this and the low income earners is startling. Apart from the inner city and properties along the sunset coast, many more localities are affordable at lower percentages of income.

Figure 11 Capacity to pay for lower quartile house by LQ income households: by WA suburb



Note: Prices are for 2013(Q4). Capacity to pay is calculated as the proportion of lower quartile income in each sub-region required to service a standard mortgage to buy the lower quartile house in that sub-region, using standard assumptions regarding deposit, interest rate and term.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

Figure 12 Capacity to pay for median house by median income households: by WA suburb



Note: Prices are for 2013(Q4). Capacity to pay is calculated as the proportion of median income in each sub-region required to service a standard mortgage to buy the median house in the same area using standard assumptions regarding deposit, interest rate and term.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Census 2011 and REIWA (2013).

Access to affordable rentals – spatial trade-offs for key workers

We examine the notion of affordability for key public sector workers borrowing from the Bankwest Key Worker Housing Affordability Report. Using salary scales from state government departments and REIWA December quarter 2013 house price and rental data, we are able to identify sub-regional housing markets that are affordable to these key workers in the Perth metropolitan region.

As shown in Table 20, an individual on the adult award wage of $33,600 a year cannot afford to rent a 1 bedroom unit in the lower quartile in any of the Perth metropolitan sub-regional housing markets. By contrast, a Police Officer with three years of experience earning $69,300 a year is able to afford to rent a 2 bedroom unit in eight of the sub-regional housing markets. Earning around $99,200 annually, a Senior Teacher seeking to rent a 3 bedroom house at the upper quartile price could afford to live in almost 70 per cent of the metropolitan sub-regional housing markets with only Perth City, Vincent/Stirling SE and the Western Suburbs being unaffordable. An AP1 Ambulance Officer earning $89,000 a year seeking to rent a 1–2 bedroom house at the median price has a number of affordable metropolitan sub-regional housing markets from which to choose. While there may be affordable housing markets available for these key workers seeking diverse housing options in the metropolitan region, it is the geographic positioning of these affordable locations that is interesting. For all key workers, the southern sub-regional housing markets are affordable for the given rental scenarios, while housing markets on the eastern fringe of the city are affordable to some. As key workers are employed throughout the metropolitan region, it reasons that many individuals will be forced to make spatial trade-offs to access housing which matches their individual needs.

In a more specific example, consider a mid-level (1.6) registered nurse earning $71,049 a year who is willing to commit 30 per cent of her gross weekly income on rental. If she works at Sir Charles Gairdner Hospital our calculations show that she would only be able to rent a two bedroom unit priced at the lower quartile range in several suburbs in that vicinity, being the Western Suburbs. If she needs to provide housing for her family in addition to herself she would not be able to afford to rent a larger 3 bedroom house at the median price range. Using 30 per cent of her salary for annual repayments of a 25 year mortgage at 5.5% interest, there is nothing available in terms of established houses in that area for her to purchase. She does, however, have the capacity to purchase a multi-residential unit at selected suburbs in the vicinity.

If she were to transfer to Osborne Park Hospital, she would be able to rent a 3 bedroom house at the median price range at selected suburbs in the Stirling East area. At the new location, several more lower quartile priced units are available for her to purchase. Buying a house near her new workplace remains beyond her reach unless she is willing to forgo other expenses and increase the amount committed to repayments to 40 per cent of her salary.

Table 20 Affordable rental sub-regions for key workers in Western Australia

Key worker at selected experience level	Gross annual income	Target rental property
Adult award wage holder	$33,600	1 bedroom unit, Lower quartile price
Police officer, 3rd year of service	$69,300	2 bedroom unit, Median price
Registered nurse/midwife, Level 1.6	$71,000	1–2 bedroom house, Lower quartile price
Firefighter, 1st class	$77,800	3 bedroom unit, Median price
Ambulance officer, St John Ambulance Paramedic - AP1	$89,000	1–2 bedroom house, Median price
Teacher, Senior	$99,200	3 bedroom house, Upper quartile price

Note: Based on rental transactions in the Perth Planning Region for the fourth quarter 2013 period. Volumes less than 3 transactions are not used. Assume 30 per cent of weekly income is the maximum available for rental commitment.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from REIWA (2013).

Sub-markets where suburbs are affordable	Sub-markets where suburbs are partially/selectively afforable	Sub-markets where suburbs are unaffordable
None	None	Bassendean/Bayswater, Belmont, Canning, Fremantle, Melville, Perth City, South Perth/Victoria Park, Stirling East, Stirling West, Vincent/Stirling SE, Western Suburbs, Joondalup North, Wanneroo North West, Swan, Gosnells, Cockburn, Rockingham
Bassendean/Bayswater, Canning, Stirling East, Kalamunda, Armadale, Gosnells, Kwinana, Rockingham,	Belmont, Fremantle, Melville, South Perth/Victoria Park, Stirling West, Vincent/Stirling SE, Western Suburbs, Swan, Cockburn	Perth City, Joondalup North, Wanneroo North West
Bassendean/Bayswater, Belmont, Canning, South Perth/Victoria Park, Stirling East, Stirling West, Joondalup South, Mundaring, Swan, Armadale, Gosnells, Kwinana, Rockingham	Fremantle, Melville, Vincent/Stirling SE, Western Suburbs, Joondalup North, Wanneroo North West, Cockburn	Perth City
Wanneroo North West, Kalamunda, Swan, Armadale, Gosnells, Rockingham	Bassendean/Bayswater, Belmont, Canning, Melville, Stirling East, Joondalup North, Joondalup South, Wanneroo North East, Wanneroo South, Cockburn	Fremantle, Perth City, South Perth/Victoria Park, Stirling West, Vincent/Stirling SE, Western Suburbs
Bassendean/Bayswater, Belmont, Canning, Melville, South Perth/Victoria Park, Stirling East, Stirling West, Vincent/Stirling SE, Joondalup North, Joondalup South, Wanneroo North West, Mundaring, Swan, Armadale, Gosnells, Cockburn, Kwinana, Rockingham	Fremantle, Western Suburbs	Perth City
Bassendean/Bayswater, Belmont, Canning, Stirling East, Joondalup North, Joondalup South, Wanneroo North East, Wanneroo North West, Wanneroo South, Kalamunda, Mundaring, Swan, Armadale, Gosnells, Serpentine-Jarrahdale, Cockburn, Kwinana, Rockingham	Fremantle, Melville, South Perth/Victoria Park, Stirling West	Perth City, Vincent/Stirling SE, Western Suburbs

Housing

affordability: the social dimension

Housing affordability: the social dimension

This *Focus on Western Australia* report has emphasised how individual circumstances have a major bearing on access to affordable housing in the state. It is critical that we deepen our understanding of the impact that high housing costs have on day-to-day life, and the trade-offs and compromises that families choose to, or have to, make in their housing decisions.

For this reason, the Bankwest Curtin Economics Centre conducted a unique survey in collaboration with the Department of Property Studies at Curtin Business School. The survey was designed specifically to broaden our understanding of the wider effects of high housing costs and to learn from the personal housing stories of families living in Western Australia.

The Bankwest Curtin Economics Centre Housing Affordability Survey

The Bankwest Curtin Economics Centre Housing Affordability Survey was conducted in November 2013 and builds on earlier work conducted as part of the *Housing We'd Choose* report published by the WA Department of Planning and Department of Housing. The survey was administered on-line and was open to anyone living in the state. It was promoted through advertisements, in online newspapers, on property listings websites, through social media and via distribution through the mailing lists of the Department of Housing and Nicheliving. Shelter WA and Western Australian Council of Social Services (WACOSS) also advertised the survey on their websites. 1,458 individuals responded to the survey before the closing date, providing data on their experiences of housing affordability and the impact of housing related costs on expenditure. This section describes the results of the survey.

The age profile of the respondents was in general younger than that of Western Australia as a whole, which is not surprising for a survey focused on housing affordability (Table 21). Responses are concentrated within the 25–44 age categories; the age ranges where households traditionally make key housing decisions, perhaps forming for the first time or making a dwelling purchase. The purpose of the survey was to examine individual households' experiences of housing affordability rather than to make general statements about the population. Therefore the survey does not need to deliver a representative sample.

Table 21 Housing affordability survey: age profile of respondents

Age category	Survey	Western Australia
18–24	9%	13%
25–34	33%	21%
35–44	24%	19%
45–54	17%	17%
55–64	10%	14%
65+	7%	16%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

96 per cent of respondents lived in the Greater Perth area even though the survey was promoted throughout the State. Unfortunately this limits geographical analysis to Greater Perth because there are too few responses from other regions to draw meaningful conclusions. The survey adopts the same geographical classification as the *Housing We'd Choose* study based around planning regions in order to group respondents spatially and these regions are shown in Table 22 and Figure 13.

Figure 13 Survey regional classifications: Perth Planning Region

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Table 22 Housing affordability survey: respondents by region

Region	Survey
North West	10%
Coastal	6%
River/Coastal Central	5%
Inner Central	27%
Outer Central	25%
North East	7%
South East	9%
South West	8%
Peel	4%
Rest of WA	4%
Total	100%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Respondents are grouped in the inner and outer central regions of Perth reflecting the younger demographic in these areas and generally the distribution of residents. Table 23 reports the household composition of respondents. As expected for a survey of this nature, the number of retired respondents is low but is still sufficient for some interesting analysis. The two crucial groups often ignored in housing affordability research are those individuals living with parents or renting as part of a group household. These individuals are discussed in detail later in this section.

Table 23 Housing affordability survey: household composition

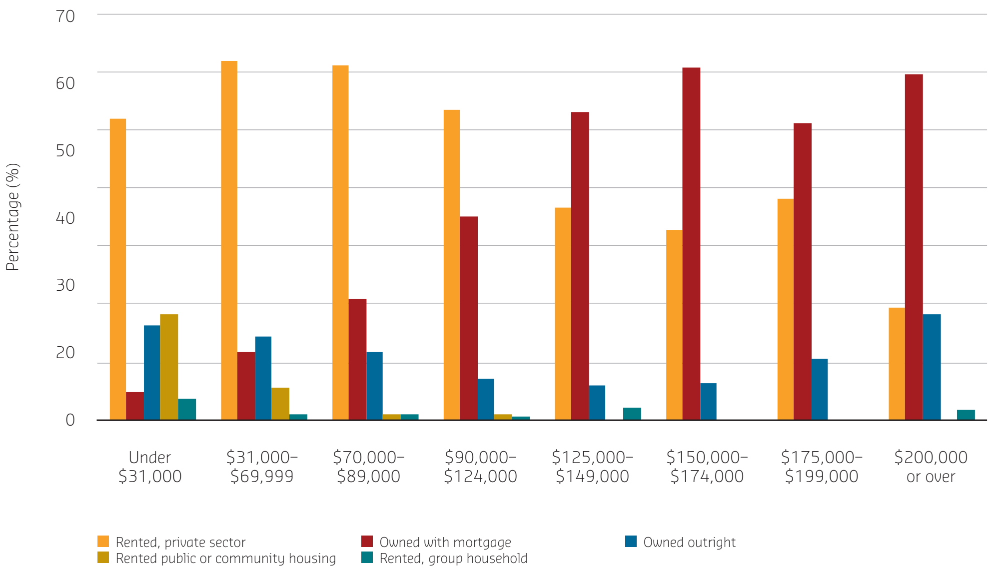
Household composition	Survey
Couple, No Children	19%
Couple with Children	27%
Single Person Household	13%
Single Person with Children	12%
Retired	5%
Multigenerational household	3%
Other (Living with parents, group households, other)	20%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Consistent with previous housing surveys recently conducted in WA, households in the private rental sector are over-represented. This is primarily because, as discussed later, the impact of housing affordability is felt most strongly in this sector. 72 per cent of single person households with children reported living in the private rental sector while 40 per cent of couples (with and without children) own with a mortgage. 62 per cent of retired households are outright owners, 18 per cent rent in the private sector and 12 per cent own with a mortgage. This gives rise to a significant, and rapidly growing, issue of what would traditionally be retired households still needing to work to secure an income necessary to pay rental costs or a mortgage. If a household is forced to retire but has insufficient income to pay for housing costs then such a household faces an uncertain housing future. The traditional retirement model assumes minimal housing costs in retirement but this is less and less likely as debt burdens rise and those on low incomes face the prospect of being locked out of the owner occupier sector for their whole housing careers.

Figure 14 presents housing tenure by household income. A very clear pattern emerges with the private rental sector dominating housing tenure in the low to moderate income groups with ownership most prevalent when incomes rise above $125,000. Housing owned outright is highest in the lowest income group, which includes many retired households and, unsurprisingly, the highest income group.

Figure 14 Household income by housing tenure



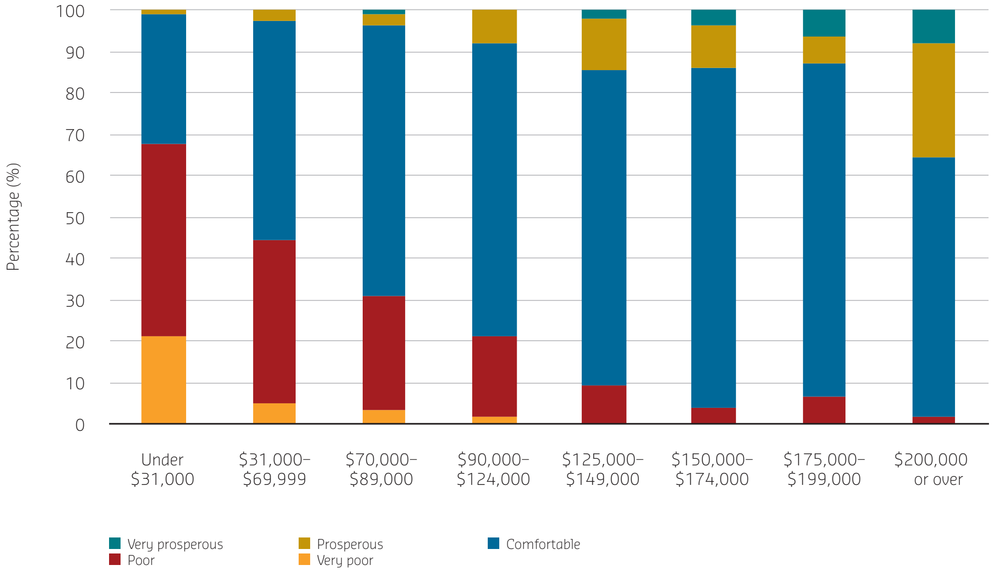
Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Painting a picture of housing affordability

The survey asked a number of direct questions about housing affordability. Respondents were asked to rate their financial situation and report, on a scale of 1 to 10, how affordable they felt their housing was to them. Although self-assessed measures of wealth and finances have their problems, for example many individuals are reluctant to report being more than comfortable on such a scale, such reporting is effective in identifying those households that perceive their financial situation as difficult.

Figure 15 shows how responses are dominated by households stating they are comfortable but at the margins, 68 per cent of those in the lowest income band report being poor or very poor while 31 per cent of those in what would traditionally be considered the moderate income band of $70,000–$89,999 reported being poor or very poor. When mapped against housing tenure (Table 24), it becomes clear that those respondents in the public and community housing sectors and also within the private rental sector are the most likely to consider themselves poor or very poor while 88 per cent of households owning with a mortgage consider themselves financially comfortable or better. This suggests a very strong correlation between home ownership and perceptions of financial wellbeing within the survey group. When asked whether housing costs had a major impact on their household's financial situation, 90 per cent of those in the private rental sector agreed compared to 75 per cent of those owning with a mortgage. 9 per cent of those owning outright considered themselves poor or worse.

Figure 15 Self-assessed financial situation: by household income



Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

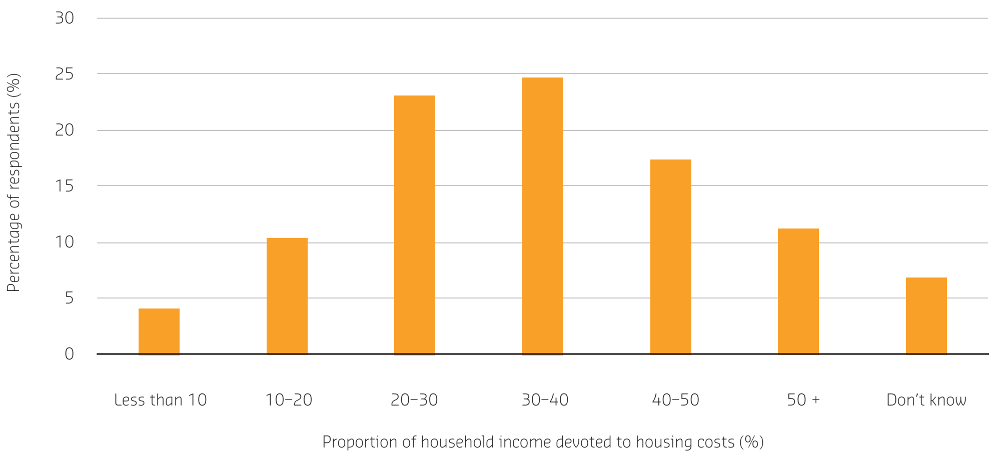
Table 24 Self-assessed financial situation by housing tenure

Financial situation	Rented from public or community housing provider	Rented in the private sector	Owned with a mortgage	Owned outright
Very Prosperous	0%	1%	3%	1%
Prosperous	0%	3%	13%	14%
Comfortable	37%	55%	72%	76%
Poor	53%	36%	11%	8%
Very poor	9%	6%	1%	1%
Total	100%	100%	100%	100%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

The survey asked respondents to estimate the proportion of their gross income spent on mortgage or rental costs and the results are shown in Figure 16. Around a quarter of the respondents report that 30–40 per cent of their gross income is used to service their housing costs, e.g. between $460 and $615 per week for an individual with a $80,000 annual income. Table 25 sets out the housing cost burden against self-assessed financial circumstances and Table 26 by income. The analysis shows the relationship between housing costs and financial circumstances is more complex than the housing stress rule suggests, with many paying less than 30 per cent poor or very poor and a considerable proportion paying above 30 per cent comfortable or better.

Figure 16 **Self-assessed housing cost burdens**



Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

‘Rachel’s’ story

Single parent in rented housing

I am a 40 year old single mother with 4 children aged 16, 14, 12 and 7. I separated from my husband seven years ago. I work part time and receive family tax benefit and Commonwealth Rent Assistance, but next year when the youngest child turns 8. The payments will change and will be more than $100 less per fortnight. I will need to make up for this shortfall by increasing my hours by 7–8 hours a week – but I’m worried that my employer may not be able to offer me more hours and not sure what will happen then as it will be hard to survive with less income.

My housing story

Immediately after I separated from my husband, the children and I stayed with my parents but they soon moved into a small unit and we were forced to find rental accommodation. The first time around it was very hard because most landlords don’t seem to want a single parent with 4 children as tenants, and there is a lot of competition over available properties. I viewed about 40 properties and applied for 20 before eventually being offered one. Since being in the private rental market, my children and I have been forced to move three times because owners have wanted to sell or move into the properties. Now I feel that it is better to rent through the same agency as it’s easier to get offered a new property when the agency know you and your history as a good tenant. I even took the last property without seeing it because I needed a place and had only limited time to find a new one. I stay ahead of my rental payments and never fall behind, because if you have four children and you fall behind you will never be able to catch up again. But rent keeps going up and in the past 3 years in the current property it has increased from $300 pw to $430 pw. I just find it difficult to cope with the rent increases and I can’t understand how such high increases can be justified.

I have been in the current property for 3 years, but it’s stressful because you never know when you’re going to have to move again. I am trying to provide my children with some security and stability by keeping them in the same schools since the separation and to do this I have to drive them a long way every day during term time. I am on the Homeswest waiting list but have been told it’s likely to be at least 5 years before I will receive an offer of a four bedroom home.

Housing affordability

I have looked into the Department of Housing Shared Ownership scheme and I could get a slightly smaller but otherwise comparable property in the same area with mortgage payments of $290 pw. This would not only be cheaper but also would make more sense and I would much prefer this opportunity over renting from Homeswest. However, when I approached them I was told that as a single parent of four children my income is too low to apply. I find this ironic as they consider my income to be high enough to pay the $430pw in rent! I wish there were more options available for single parent families who are in stable employment with low incomes who have good records of paying rent. It would make a lot more sense to pay $290 pw for a home to purchase than $430 a week in rent.

Almost 50 per cent of households paying between 40 and 50 per cent regard themselves as poor. When broken down by income it is clear that those paying the highest burdens are those in the lowest income groups that can least afford such a level of expenditure. Moderate income groups are commonly paying above 30 per cent in housing costs.

Table 25 **Housing cost burdens and self-assessed financial situation**

Housing Costs/ Financial Circumstances	Very Prosperous	Prosperous	Comfortable	Poor	Very Poor
Less than 10%	3%	15%	73%	8%	3%
10–20%	3%	12%	70%	14%	2%
20–30%	3%	10%	71%	15%	0%
30–40%	1%	4%	67%	26%	2%
40–50%	0%	2%	49%	45%	3%
50% +	0%	1%	28%	53%	19%
Don't know	0%	3%	62%	26%	9%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Table 26 **Housing cost burdens by income group**

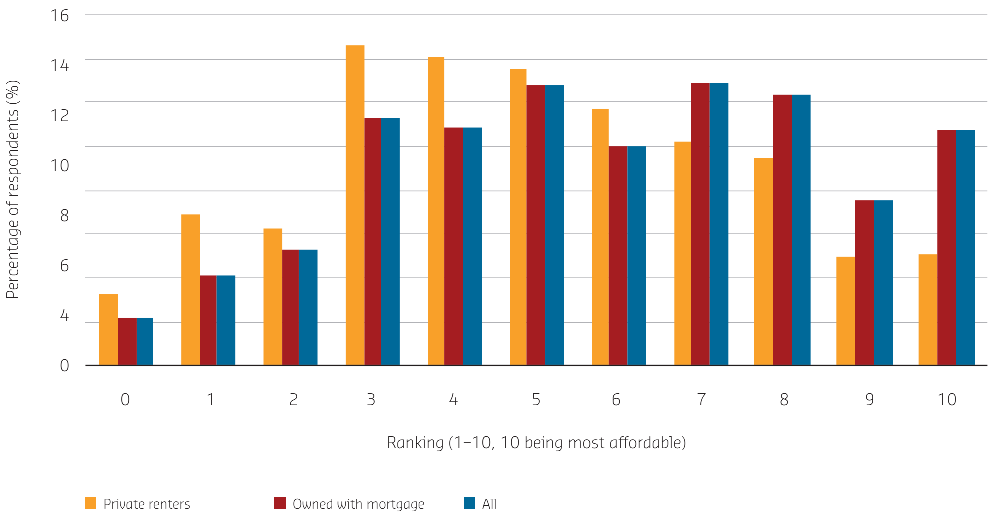
Cost burden	Under $31,000	$31k– $69,999	$70k– $89,999	$90k– $124,999	$125k– $149,999	$150k– $174,999	$175k– $199,999	$200k or over
Less than 10%	8%	3%	1%	5%	1%	7%	5%	11%
10–20%	8%	5%	8%	13%	14%	11%	29%	18%
20–30%	9%	15%	26%	28%	37%	31%	29%	34%
30–40%	10%	30%	31%	30%	21%	29%	17%	9%
40–50%	14%	24%	17%	12%	20%	15%	10%	13%
50% +	38%	14%	12%	7%	3%	1%	5%	7%
Don't know	13%	8%	4%	5%	3%	6%	5%	8%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

58 per cent of private renters stated they are paying more than 30 per cent of their income in housing costs with the equivalent figure for owner purchasers being 53 per cent.

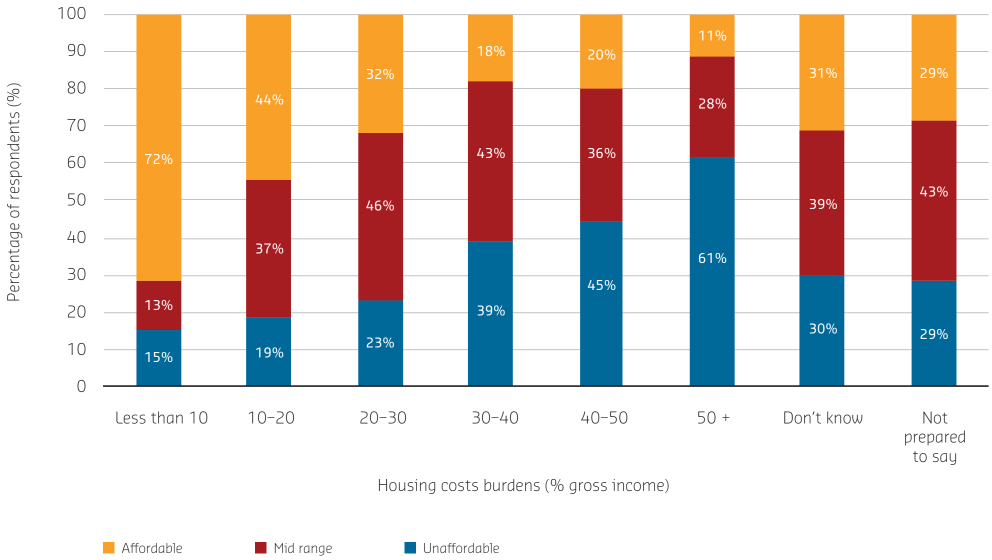
Respondents were asked to rate, on a scale of 1 to 10, how affordable they considered their housing (Figure 17). A ranking of 1–4 is defined as unaffordable, 5–7 mid-range, with 8 and above being regarded as affordable. It is clear from the figure that those in the private rental sector were the most likely to rate their housing as unaffordable. Figure 18 links the rankings of affordability with housing cost burdens. Generally once housing costs rose above 30 per cent there was a sharp increase in the proportion of respondents claiming their housing was unaffordable.

Figure 17 Household perceptions of housing affordability: by tenure



Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Figure 18 Housing cost burdens and affordability perceptions



Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Only in the highest income group ($200,000 and over) did over half of respondents rank their housing as affordable (Table 27). In contrast, 42 per cent of those earning under $31,000 regarded their housing as unaffordable. Even in the moderate income categories, more respondents ranked their housing unaffordable than affordable. Examining affordability rankings by household composition determined multi-generational households with the highest proportion of unaffordable housing, 43 per cent, followed by single person households, both with and without children at 38 and 37 per cent respectively. The multi-generational households are interesting with perhaps the size of dwelling required to accommodate extended families causing affordability problems.

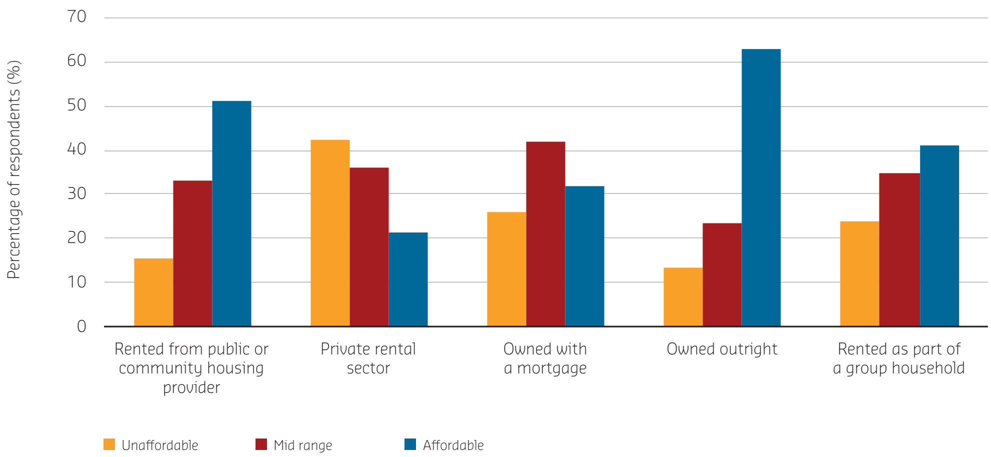
"As a single mother studying full time, housing affordability is my largest cause of stress and the highest cost of living expense that I have."

Table 27 Housing affordability perceptions by income group

Respondent income group	Unaffordable	Mid-range	Affordable
Under $31,000	42%	26%	32%
$31,000–$69,999	34%	36%	30%
$70,000–$89,999	37%	37%	26%
$90,000–$124,999	33%	41%	26%
$125,000–$149,999	29%	37%	34%
$150,000 –$174,999	26%	45%	29%
$175,000–$199,999	23%	44%	33%
$200,000 or over	14%	33%	53%
Not prepared to say	34%	32%	34%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Figure 19 Housing affordability perceptions by tenure



Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

"I am just able to afford the housing costs I currently have, however if it was to increase by approximately 10% or more, I would need to make significant changes to be able to afford my rental property."

Respondents were asked what impact a significant increase in direct housing costs would have on affordability (Figure 20). The results are worrying because almost 50 per cent of households declared such a rise would have a major impact on affordability (a rank of 8 or above). Those most likely to experience a major impact were the 50 per cent already struggling to meet their housing costs on a regular basis and the 40 per cent already regarding their current housing as unaffordable. There were no spatial patterns evident but a household characterised by a single person with children were most in danger from such a cost increase.

Figure 20 **Impact on affordability of a significant increase in housing costs**

Note: xxxx
Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

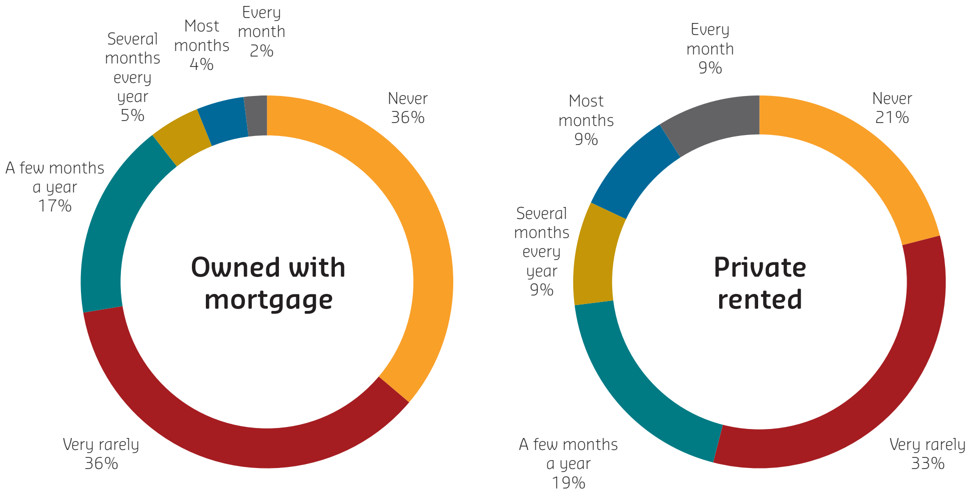
A related question was put to those owning with a mortgage asking what impact a 3 percentage point rise in interest rates would have on their ability to service their mortgage. 48 per cent responded with no impact while 44 per cent said it would have a major impact. 65 per cent of those in the $70,000–$89,999 category stated that such a rise would have a major impact on their household.

Private renters were much more likely to have difficulty in meeting housing costs than households in other tenures (Figure 21) however the situation could change with a rise in interest rates as highlighted above. Almost half of all private renters and 66 per cent of those in the lowest income band had difficulty meeting their housing costs at least a few months a year. This figure fell to 49 per cent in the $31,000 -$69,999 income band. 53 per cent of multi-generational households struggled to meet costs over the same period with the figure almost 50 per cent for a single person with children household.

Housing choice

The choice of a dwelling has a number of implications for housing costs, not only direct costs of rent or a mortgage but also running costs associated with the dwelling (utility bills etc.), commuting and travel costs associated with the location and maintenance costs for those purchasing. While dwelling choice may minimise direct costs, in some cases the related costs may outweigh any potential savings on rent or the mortgage. This section examines housing choice; in particular what drives choice and the trade-offs households make when selecting a house or unit.

Figure 21 **Difficulty meeting housing costs: frequency, by tenure**



Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

The survey asked respondents to rank the most important factors in their choice of dwelling. Table 28 describes the relative ranking, where a figure of 0.5, for example, means the factor is considered half as important as a factor with a score of 1. Affordability was the most important decision making factor followed very closely by location. The characteristics of the neighbourhood and size of house were also considered important. These findings are consistent with the *Housing We'd Choose* study.

Table 28 Decision-making factors in housing choice

Most important factors in dwelling choice	Relative Ranking
Affordability	1.00
Location (e.g. easy access to work, family, friends etc)	0.95
Neighbourhood characteristics	0.88
Size (number of bedrooms etc)	0.80
Specific features (such as a garage, garden or energy efficiency)	0.69
It was the best option available at short notice	0.63
Space (large rural lot for example)	0.58
Other	0.13

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Given the importance of location in the decision making process, respondents were asked whether they were forced to make any trade-offs in the location selected. More than half of all respondents stated they were able to access their first choice location when choosing their dwelling. 72 per cent of retired households were able to access their first choice location, probably a reflection of how long they have been there and relative accessibility when they made that choice. 60 per cent of multi-generational households were forced outside their first choice location with the remaining household groups hovering around the 50 per cent mark. Those households currently living the in the North West Coastal, Inner Central, North East and river/coastal areas were the most likely to have secured their first choice location compared with less than half of those in the other areas. Those in the private rental sector were less likely to secure their first choice than owner purchasers. Those who were not able to secure a dwelling in their first choice location were asked how far they had to move away (Table 29). 46 per cent moved within 5–10 km of their first choice location but 37 per cent were forced to move more than 10 km away.

Table 29 Location choices of those unable to locate to preferred location

Distance of alternative location	Percentage
Bought/rented very close to my preferred location	18%
5–10 km from preferred location	46%
10–20 km from preferred location	24%
More than 20 km from preferred location	13%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

When asked to identify why a household moved more than 10 km away from the first choice location, 44 per cent explained the location they chose was the best they could afford with 20 per cent stating it was the only way they could secure the house type/size they wanted. Those living further than 10 km from their first choice location were more likely to be currently located in the outer regions (over 50 per cent of respondents) with those less than 10 km away located in the more central areas (Table 30).

Table 30 **Current location of households living outside their first choice location**

Region	Bought/rented very close to my preferred location	5–10 km	10–20 km	More than 20 km
North West	12%	39%	34%	15%
Coastal	29%	29%	36%	7%
River/Coastal Central	27%	59%	9%	5%
Inner Central	22%	56%	18%	3%
Outer Central	16%	59%	16%	9%
North East	21%	26%	32%	21%
South East	16%	28%	40%	16%
South West	7%	31%	36%	27%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

For those households that were able to select their first choice location, 34 per cent stated they had to compromise on the neighbourhood in order to live there while 21 per cent suggested they had to compromise on other expenditure to access that location. 26 per cent had to compromise on the dwelling itself.

Neighbourhood quality is one aspect of housing affordability regularly ignored. Some households are forced to compromise on neighbourhood quality in order to secure a dwelling with manageable direct housing costs. Respondents were asked about their neighbourhood quality and to select all the neighbourhood characteristics that applied to them. The responses do not suggest households are particularly happy with their neighbourhoods with Table 31 showing how less than half of respondents were positive about public transport, open space, safety and security.

'Norma and John's' story

Couple, owns house outright

I am an owner-occupier who owns their home outright. We have one full time income coming into the household. We have two children (27 and 29) who have now moved out.

My housing story

After we got married we moved to a suburb close to the city. In the 1980s we started providing accommodation for young people in difficult situations. We have a spare room in the house where young people sometimes come to stay via an organisation that helps them through challenging situations. This doesn't boost our income, rather we are happy to offer secure, good quality and affordable accommodation to young people who may otherwise struggle to find anything in a place that has good public transportation links. We charge below market rate only to cover our own expenses. We also have a granny flat at the back and we are thinking about perhaps later renting it out. I'm not sure if I would be happy to have a total stranger living there, although it might be suitable for someone who wants to have a more independent life rather than live with a family.

Housing affordability

I think that a lot more householders in large houses in the inner urban areas could let vacant rooms out after their children have left home. This could be mutually beneficial providing accommodation for young people such as students or people traveling around Australia and, as the owners get older, the tenants might help them with jobs around the house. There could be different arrangements, but that would ease the pressure to tear down nice houses in nice neighbourhoods and rebuild at higher density. This could also help to ease the accommodation problem for others, such as families who need their own places. Perth should avoid destroying what little bit of quirk we have in favour of the neat and tidy… we need more trees and land where water can soak into the ground. I find it sad that young people who want houses, rather than small apartments, are pushed to the urban fringes. I wish that planning policy would encourage more open space and mixed communities, in terms of both income and age.

Table 31 Respondents' ratings of neighbourhood quality factors

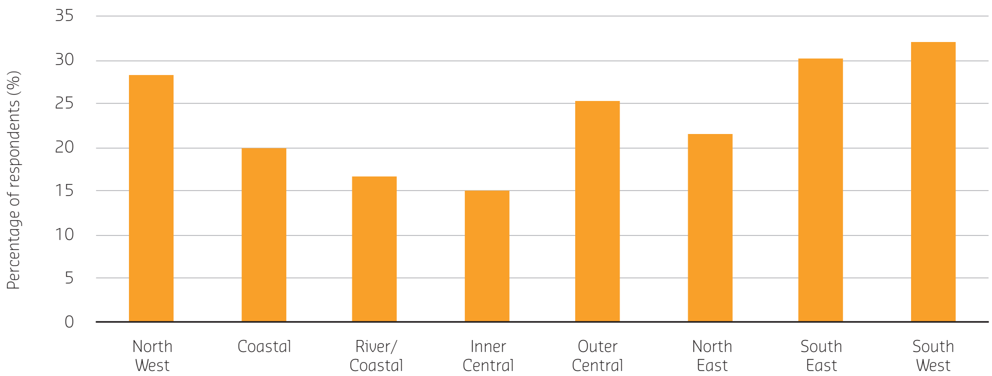
Neighbourhood quality factors	Percentage
It provides all the amenities and services I need	57%
I feel safe and secure	43%
There is sufficient open space	42%
It has adequate public transport links	43%
It allows me to be close to family and friends	34%
It was the best I could afford	37%
It is convenient for work	35%
It was not my first choice but I am happy here	21%
It is affordable here and allows me to spend all I need on other things	19%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

"I find it sad that young people who want houses, rather than small apartments, are pushed to the urban fringes."

The choice of location has implications for commuting costs. Respondents were asked how much they spent on commuting costs and whether such costs forced them to compromise on other expenditure. 27 per cent of respondents spent more than $100 per week on commuting costs with 23 per cent stating such costs forced them to compromise on other expenditure. Those households where commuting costs were having an impact were most likely to live in the outer metropolitan regions with 32 per cent of respondents living in the South West forced to compromise on other expenditure with the equivalent figure being 30 per cent for the South East and 28 per cent for the North West (Figure 22). Those living in inner areas were least likely to report that commuting costs were biting.

Figure 22 Do commuting costs force you to compromise on other expenditure?

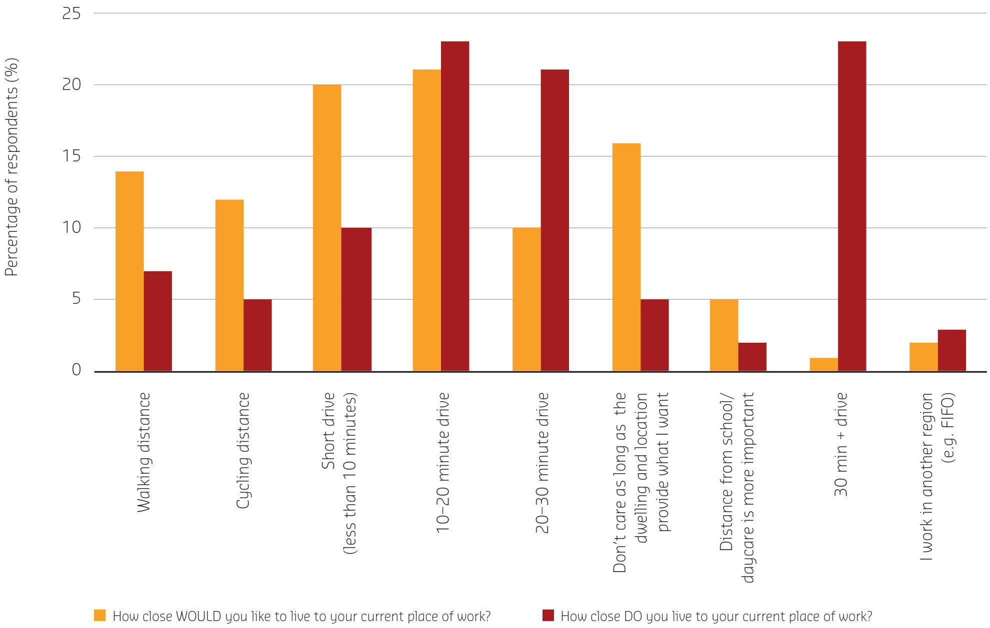


Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

> "In order to purchase my own home I had to buy in the outer suburbs. I am very happy I did though because I pay less for my mortgage than I did in rent (when I lived in Fremantle). I feel better knowing my hard earned cash is going into my own investment."

Commuting patterns and costs affect the day to day lives of many households so the survey asked how close to work households would like to live and compared the responses with how close they said they would actually like to live. Figure 23 shows the results. Most respondents would like to live closer to work than they actually do, but not too close. The most popular option was a drive of up to 20 minutes favoured by 41 per cent. Currently 33 per cent of respondents undertake this commuting pattern. More than twice as many people would like to walk or cycle to work. Currently 23 per cent of respondents live more than a 30 minute drive from work – a commuting pattern favoured by only 1 per cent of respondents. Of those 212 respondents undertaking that commuting pattern, 23 per cent, the largest proportion, actually lived in outer central areas of the metro region but were still forced to drive for 30 minutes or more. They were also more likely to be in the low to moderate income categories and more likely to rate their housing unaffordable than affordable.

Figure 23 **Commuting patterns and preferences**



Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Housing expenditure

Respondents were asked whether they ever needed to prioritise their expenditure and 44 per cent stated they did, frequently (Table 32). Such households were more likely to be in the lower income groups and within the private rental sector. 43 per cent rated their housing as unaffordable and just 19 per cent affordable, demonstrating the impact housing costs have on the need to prioritise expenditure. Table 33 reinforces the importance of housing costs showing it is easily the most important item of expenditure, twice as important as bills and food. Direct housing costs were the item of expenditure for which households were the least willing to compromise due to the implications of missing a mortgage or rental payment.

Table 32 Do you ever need to prioritise your expenditure to meet housing costs?

Respondent views on prioritisation of expenditure	Percentage
Yes, frequently	44%
Yes, occasionally	24%
Only when I am faced with unexpected large expenditure	19%
Hardly ever	10%
Never	4%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Table 33 Most important items of household expenditure

Item of expenditure	Relative Ranking
Mortgage/rent payments	1.00
Bills (Water, electricity, gas, rates)	0.49
Food and drink	0.47
A car (for reasons other than commuting)	0.11
Health insurance premiums	0.11
School/child care fees and other expenses	0.08
Home insurance (building and contents)	0.07
Holidays	0.04
Commuting costs	0.04
Personal phone	0.04
Car insurance	0.04
Social activities	0.03
Computing, Internet and TV	0.03
Home maintenance	0.03
Public transport	0.01
Health and beauty products	0.01
Non-essential spending on children (e.g. clothes, toys etc)	0.01

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Table 34 highlights the expenditure households were willing to sacrifice in order to meet housing costs. Given 68 per cent of households in the survey regularly prioritise expenditure it is certain that the items towards the top of the list in table 16 are being sacrificed on a regular basis by many households in order to meet housing costs. Clearly sacrificing such expenditure on a regular basis has implications, not only for household wellbeing but also for economic and social participation.

"It takes me 1 ¼ hours to get to work and can take up to 2 hours to get home. I've had to give up some of my business clients because I couldn't access them in a timely fashion. These sacrifices to my earning potential are a direct consequence of the limitations of my housing."

'Christine and Tom's' story

Couple with children in mortgaged housing

I am married with two school-aged children. I work full time and my wife looks after the children. We own a house 60 km north of Perth city.

My housing story

We lived in private rental for two and a half years, 5 years after arriving here from NZ. During this time the rent went up from $380 to $440 per week, so we figured that owning and paying off mortgage would be a more cost efficient option. Also the longer-term outcomes of owning make more sense as house prices are likely to continue increasing and rents will only keep going up. We thoroughly researched our options and took advantage of the First Home Owner's Grant and stamp duty exemptions. To save up the $15,000 deposit we compromised and sacrificed a lot. We hardly ever went out, maybe movies twice a year, I stopped drinking and we cut off all luxuries. We did a very detailed budget and counted every penny, we sold our new car and economised weekly shopping to include only essentials and bought the cheapest option. Altogether we saved a deposit of $40,000 and spent about $400,000 on our new home. We bought the land and the house separately and chased good deals on most things including energy efficiency features so our house is nearly carbon neutral to minimise long-term running costs. We wanted a product that would be easy to sell if we needed or wanted to. We put a lot of thought into the area. We wanted a separate house and a larger block for the children, so made the decision to move further out. We tried to pick an area that has development potential.

Housing affordability

We kept up the tight budgeting after moving in, so we are ahead in mortgage payments and plan to pay off the house in 10 years. We describe ourselves as poor because we still need to sacrifice so much to be able to own what we want to own. I have to get up very early to get to work on public transport as a result of living so far out because we can't afford to run two cars. We have sacrificed a lot but it was our choice because we felt that it's better to own our home rather than rent as the rents are constantly going up. We are now happy because we are home owners.

Table 34 Proportion of households willing to sacrifice specified expenditure to meet housing costs

Item of expenditure	Percentage
New clothes	80%
Holidays	72%
Social activities	71%
Health and Beauty products	66%
Basic home help e.g. a cleaner	64%
Non-essential spending on children (e.g. toys, swimming lessons etc)	51%
Home maintenance	30%
A car (for reasons other than commuting)	25%
Computing, Internet and TV	25%
Health insurance premiums	23%
Public transport	21%
School/child care fees and other expenses	20%
Personal phone	20%
Food and drink	18%
Home insurance (building and contents)	17%
Commuting costs	16%
Car insurance	14%
Bills (Water, electricity, gas, rates)	3%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

"My husband and I often go without things such as new clothes, nice things and social outings so we can pay for our bills and mortgage."

Living with parents and group households

The analysis now turns to household classification starting with two groups that are often ignored in housing affordability debates: individuals living with parents and people sharing in a group household. Table 35 describes the low incomes of those individuals in such housing circumstances with 78 per cent earning below $70,000. Around 30 per cent of the 100 respondents living with parents were full time students (although the vast majority also worked) while 18 per cent of the 150 respondents in group households were students. Although the number of respondents is relatively low, it is sufficient to make some interesting observations.

Table 35 Gross income for individuals living with parents or in a group household

Gross income	Living with parents	Group Household
Under $31,000	23%	12%
$31,000–$69,999	55%	50%
$70,000–$89,999	13%	27%
$90,000–$124,999	5%	7%
$125,000 +	4%	4%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

> "With rent costs it would be impossible to save for a house and I feel renting would be a waste of money if I can happily live with my parents."

Both groups were asked to describe their current housing situation. 13 per cent of the living with parents group and 14 per cent of those in a group household stated they were happy with their current situation. 32 per cent and 27 per cent respectively replied that they were currently happy but wanted to move in the near future while 56 per cent and 59 per cent would like to form their own household immediately but could not afford to do so. Clearly affordability is a major barrier to household formation for such groups.

When asked for more detail of why they lived in their current dwelling, 44 per cent of those in a group household responded that it was the only option they could afford while 29 per cent said it allowed them to live in a better area. The same proportion noted that they were currently saving to buy their own place. Responses for those living with parents were more diverse with 20 per cent saving to buy a place, 18 per cent citing the option as the only one they could afford and 15 per cent stating they didn't want to rent but can't afford to buy. Table 36 shows that individuals will largely remain in their current household status until they can afford to buy something appropriate. For both groups this could be a number of years given the deposit gap identified in Table 37.

The average gap between the deposit currently available to an individual living with parents and the amount they would expect to have to raise to purchase a dwelling was calculated to be $29,000. The equivalent figure for individuals in a group household was $26,300. Clearly these are significant gaps and would require an individual on a gross income of $70,000 saving 10 per cent of their net income per annum for around 5 years to accumulate such a deposit.

‘Samantha’s’ story

Young professional in shared rental accommodation

I am 36 year old woman in a group household. I work full time and earn around $80,000 pa. I have been living in a shared house for the past 15 years and consider this a more sensible way to live as it reduces the cost of not just rent but also other expenses, such as utilities, phone, internet. I could afford to live alone, but would have to compromise on saving and quality of housing.

My housing story

At the moment I live in a separate house in Mount Lawley with two housemates and I pay $175 pw in rent. I want to live within a 30 min cycle ride from the CBD or a train station that I feel is safe such as Subiaco, Fremantle or Claremont. The landlord has decided to sell the property so we have to move out. I am moving into a two-bedroom shared house which will cost $217 pw, which is a bit high so it will probably be a temporary arrangement. If I had to live alone I would probably be renting an inner city apartment because I’d want to live somewhere quite central, but it would still be a lot more expensive and I wouldn’t be able to afford nice quality.

I prefer shared housing to living alone for safety reasons, the sense of community and the reduced cost, which makes it possible for me to live in a better location. The downside of shared housing is that while you may be able to select your housemates you can’t select their partners and sometimes there are unexpected negatives caused by partners. Also sometimes it can be uncomfortable if things go sour and you can’t move out as quickly as you would like. Overall, it’s not very stable and things are changing frequently. Everybody also has a different idea of what’s ‘normal’ in terms of household matters and that can cause friction.

Housing affordability

Low rent makes it possible for me to save without tight budgeting and at the moment I have about $40,000 saved up for a deposit. I don’t want to be in a shared house forever because I think it’s important to own your own home before reaching old age. My current saving capacity may go down in the short-to-medium term because I will be paying more rent in the new place, and I also plan to make a career change that will temporarily reduce income to around $60,000 pa. I’m planning to move over east and buy there in a housing cooperative or something and should be able to buy in around 10 years, but will not settle for a property that doesn’t meet my requirements.

"I prefer shared housing to living alone for safety reasons, the sense of community and the reduced cost, which makes it possible for me to live in a better location".

Table 36 How long do you plan to stay within your current accommodation?

Respondent preference on intended duration	Living with parents	Group Household
I don't know	13%	31%
Until I can afford to rent something appropriate for my needs	10%	15%
Until I can afford to buy something appropriate for my needs	76%	54%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Given the difficulties for those on low income generating a sufficient deposit to purchase, as well as sustaining mortgage payments, it is commonly assumed that many younger people will rely on help from their parents to access the housing market. However, less than one in five respondents currently living with parents expected to receive such help with a further 16 per cent unsure whether such help would be forthcoming. Of those who did expect help, the form of this help would most likely be a cash gift/loan to help with the deposit (57 per cent) or through a mortgage guarantee (21 per cent).

Table 37 Current and expected deposits

Deposit you could raise today	Living with parents	Group Household
$0	8%	14%
$1–9,999	47%	41%
$10,000–19,999	15%	14%
$20,000 +	30%	31%
How much do you think you will need to save for a deposit to buy the type of dwelling you want?	**Living with parents**	**Group Household**
$0	0%	1%
$1–9,999	10%	13%
$10,000–19,999	11%	9%
$20,000–49,999	32%	42%
$50,000 +	48%	35%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Respondents in the two groups were also asked about the importance of first home buyer incentives. Table 38 describes the results clearly showing how important the First Home Owners Grant (FHOG) and stamp duty relief are to the prospects of entering the home ownership market, particularly for those in group households that have perhaps looked into purchasing options more than those living with parents. There seems less awareness of the First Home Saver Account (FHSA) incentive even though such a scheme could potentially deliver a significant boost to a first home buyer.

Table 38 **Importance of first home buyer incentives**

	FHSA		FHOG		Stamp Duty Relief	
Indication of importance	Living with parents	Group Household	Living with parents	Group Household	Living with parents	Group Household
Not Important	21	20	14	6	5	3
Quite Important	18	14	23	18	18	5
Very Important	30	40	58	73	66	79
Don't Know	31	26	4	4	10	14

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

The *Housing We'd Choose* study showed how potential purchasers were prepared to accept a range of different dwellings if it allowed them to access a preferred location. First home buyers and young people are often labelled as having unrealistic expectations surrounding the purchase of their first home demanding a four bedroom house rather than something perhaps more modest and affordable. Figure 24 challenges that assumption. The survey asked respondents to think about the type of dwelling they would be prepared to purchase and select favoured options from a list. The most popular options were the non-traditional forms of housing such as the 3 bed semi-detached, 3 bed townhouse, 2 bed apartment, 2 bed townhouse and 2 bed semi-detached. The four-by two was still popular but lagged behind the 2 and 3 bed options.

‘Lisa’s’ story

FIFO worker – first home buyer

I am a 31 year old female FIFO employee and a first home buyer.

My housing story

I used to rent in the private sector but I hated the inspections and the inconvenience of constantly moving. I was forced to move six or seven times in seven years mostly because the landlord wanted to sell or do something else with the place. While renting privately, I managed to save a deposit of $120,000 and purchased this house on a single income in June 2010. It took approximately 3 years but I didn’t feel I had to sacrifice as I was on an income of around $130,000 – but I didn’t go on holidays or live an expensive life so could save more in a shorter time.

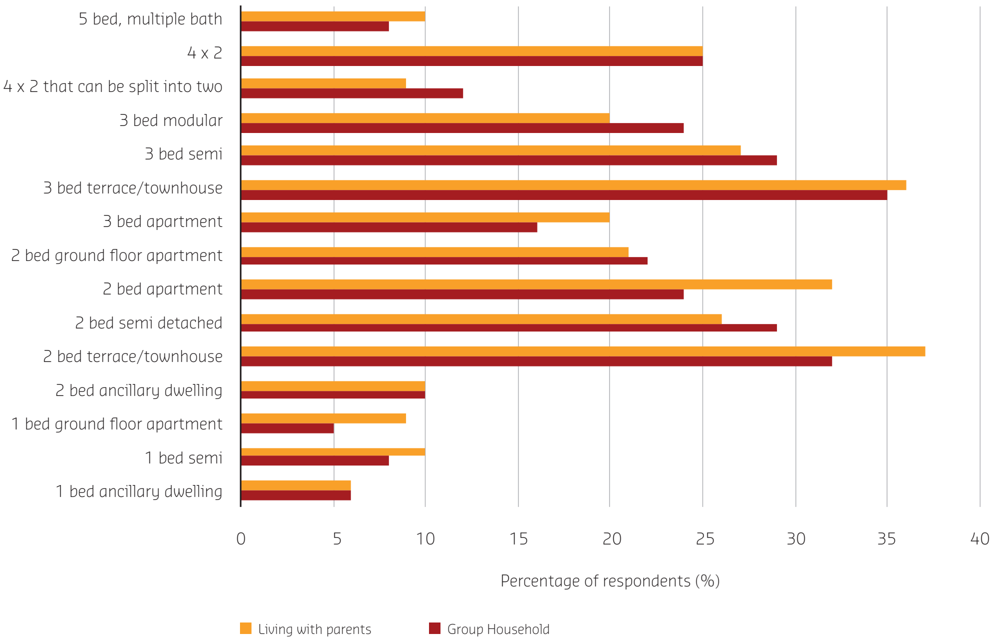
I bought my house with the help of First Home Owner’s Grant, but wasn’t really prepared for all the additional costs such as stamp duty, which were ‘a kick in the gut’ after saving up the deposit. I was able to buy in my preferred area where my extended family lives. I think I compromised on the size of the house a bit, but mainly because I was fed up with renting and wanted to buy quickly and get out.

My brother moved in with me when his contract ended and he couldn’t afford to live anywhere. At first this arrangement was out of necessity for my brother, however, it’s actually worked out pretty well for both of us. He doesn’t pay proper rent but at the moment I don’t need it and he helps in other ways.

Housing affordability

I’m worried about my job security because I’m on a contract which expires in 15 months and it might be hard to find work at the same income level. So, I’m currently paying more on my mortgage than I need to because I think I will struggle if my income drops below $100,000.

Figure 24 **Preferred housing options: respondents' preferences**



Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

"You can never get into a home without the First Home Buyer's Grant, rent just keeps increasing so you never get a chance to get close to a deposit".

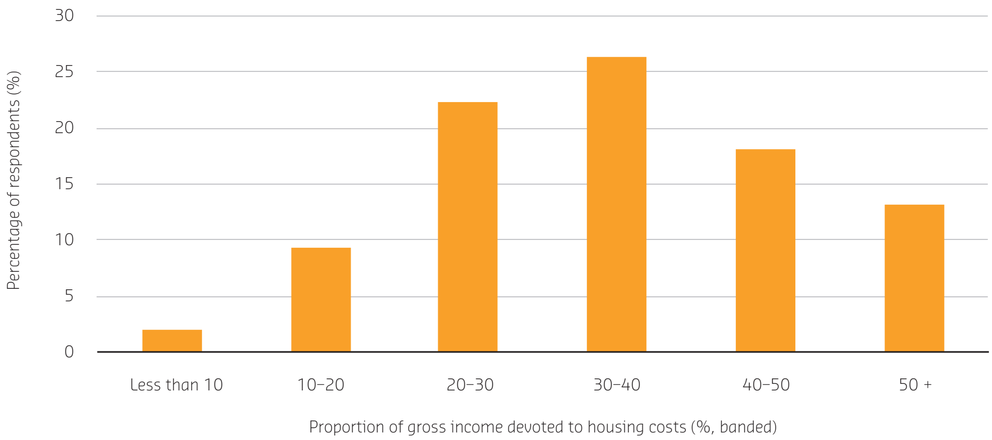
Group households were asked questions about the affordability of direct housing costs. 43 per cent were paying a weekly rent of up to $199 with the remainder paying $200 or above. Less than 7 per cent were in receipt of Commonwealth rent assistance. 33 per cent regarded their housing as unaffordable and 32 per cent affordable with 77 per cent stating that they either never or very rarely had difficulty meeting their housing costs. Almost 70 per cent were satisfied with their dwelling with around half being able to access their preferred location. Although a high proportion stated they did not have difficulty meeting their housing costs, 67 per cent answered that they occasionally or frequently had to prioritise their expenditure.

Private renters

68 per cent of the 548 private renters responding to the survey earned less than $70,000 while over half paid more than $400 per week in rent. Unsurprisingly, as a result 40 per cent considered themselves financially poor or very poor. 45 per cent regarded their housing as unaffordable and only 20 per cent affordable. 60 per cent of respondents stated that a significant increase in rents would have a major impact on the affordability of their current dwelling.

Figure 25 shows the proportion of gross income spent on rent by those respondents living in the private rental sector. Almost two thirds spent 30 per cent or more of their gross income on their housing costs. With the vast majority of respondents in the bottom 40 per cent of the income distribution, the level of housing stress within the survey population is extreme. 80 per cent of those in the $31,000–$69,999 income category were spending 30 per cent or more of their income in rent.

Figure 25 Housing cost burdens in the private rental sector



Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Despite the high proportion of income spent on rent 53 per cent of respondents stated they either never or very rarely had difficulty in meeting their housing costs, with 26 per cent having problems at least several months per year. This is perhaps because 74 per cent prioritise their expenditure on at least an occasional basis with rent being by far the most important item of expenditure.

The *Housing We'd Choose* study reported that 98 per cent of respondents had a preference for owner occupation but it didn't explore the reasons why renting was so unpopular. This survey asked respondents to select the main disadvantage of renting. 60 per cent stated that paying rent was a 'waste of money' and paying off a mortgage would be a preferable way to spend rent. 16 per cent were concerned about the uncertainty of tenure with 12 per cent claiming renting was too expensive. When asked why they rent, 42 per cent said they wanted to own but did not have enough for a deposit with 40 percent stating they couldn't afford to buy anything appropriate. Only 14 per cent stated they could live in a better area if renting. 11 per cent cited a bad credit history as a barrier, regardless of income. Affordability is therefore the main barrier preventing a transition from the private rental market into owner occupation.

'Lilian and Eddie's' story

Older couple in rented housing

My husband and I are 60 and 55 years old. We sold our home and moved from Queensland to WA a few years ago after my husband's work dried up. We were left with $150,000 after paying off our mortgage and used this to move and then live on when we arrived in WA. After a while, my husband found employment.

My housing story

Since moving to WA, we have had to rent privately because we didn't have enough savings to purchase a property and my husband is too old to qualify for a mortgage. We have lived in three different rental properties because they were of such poor quality. We are now renting a three bedroom, one bathroom home – I like it but would prefer two bathrooms. I am not used to renting and I'm finding it mentally hard to cope with. I really dislike the home inspections and the fact that our rental payments are just making someone else rich. But I also don't like the fact that you can't make the place your own and do up the garden. I think we will really be in trouble if we are not able to buy our own property soon and I don't want to think what might happen, if that's the case.

Housing affordability

At the moment we are paying $450 a week in rent, which we can manage on my husband's income although we do have to budget a little bit, for example we don't eat out as often as we otherwise would. I do find that rent and the general cost of living in WA are very high. I am worried about being able to meet rental payments after my husband retires. We have looked at supported accommodation options but they all seem to be 1 bedroom and not allow pets, which we would not like one bit. We have also investigated Department of Housing homeownership options. I could get a loan (although not a huge one) but we would need to put $20,000 deposit together. At the moment it is not possible to save from my husband's wages so I have been looking for a job for the last 4–5 months but haven't had any success. I think that if I can get a job it would take about 4–5 months to save the $20,000 then we could look at buying a property, which would be lovely!

We are looking at a price range of $350–400,000 and would prefer to stay close to where we are renting now. We want somewhere that isn't too far out in order to have the option of using public transport. We would not want to move too far up north because then the cost of commuting will be too high, or south to Armadale because it has such a high crime rate. Ideally we would like a 3 bedroom 2 bathroom house with an alfresco area, a study and enough room for our pets. We often think about buying a run-down property and fixing it up as both have experience of that kind of thing.

"Since moving to WA, we have had to rent privately because we didn't have enough savings to purchase a property and my husband is too old to qualify for a mortgage."

Respondents were also asked about all the barriers preventing them from owning their own home. Table 39 sets out the results. Again it is affordability that dominates with almost half of private renters stating the lack of a deposit is the primary barrier to ownership, compared to a quarter that cited mortgage payments as a problem. Expectations were an issue for some with 27 per cent not being able to afford to buy in a preferred location and 16 per cent unable to access their preferred house type.

Table 39 Perceived barriers to home ownership

Barrier	Percentage
I can't afford the deposit	49%
I can't afford to live in my preferred location	27%
I can't afford the mortgage payments	24%
I can't afford to live in the type of house I want	16%
I want to build a new house but cannot afford it	13%
I'm not in stable employment	12%
I can't get a mortgage due to a bad credit history	11%
I am looking but haven't found anything suitable yet	8%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

Private renters regarded location as the most important factor in dwelling choice (35 per cent) followed by affordability. However, almost a quarter stated their current dwelling was the best they could get at short notice. Just under 40 per cent of private renters were unsatisfied with their dwelling citing expense as the main source of dissatisfaction followed by its size, or lack thereof, and its condition. Those dissatisfied with their dwelling were asked about the main reasons preventing a move to a different property: 33 per cent stated there was just nothing affordable and 21 per cent that they couldn't move to their preferred location. Renters were more likely to be satisfied with local amenities in the neighbourhood.

37 per cent of renters were forced to move more than 10 km, and 10 per cent more than 20 km, from their preferred location and cited their subsequent choice of location as the best they could afford. 23 per cent or renters lived at least a 30 minute drive from work with a quarter a 20–30 minute drive away. Affordability compromises are clearly being made.

Owner occupiers

The survey suggests that few owner occupiers have affordability concerns today but this may change if interest rates rise back to historic norms over the next couple of years. 61 per cent of those with a mortgage stated they were ahead on their mortgage payments while around a quarter of respondents ratied their housing as unaffordable. However, there are households in this group that have affordability concerns with 37 per cent frequently prioritising expenditure and 27 per cent having difficulty meeting their housing costs at least a few months a year. Table 40 shows how 30 per cent of survey households could afford only up to $2,000 in maintenance costs should expenditure arise tomorrow. This suggests a limited capacity to absorb increased mortgage costs.

"Buying a house for young couple these days is nearly impossible in Perth. Rents going up really doesn't help with saving money towards a house."

Table 40 **How much maintenance expenditure could you afford tomorrow?**

Affordable amounts for maintenance expenditure	Percentage
I could not afford any maintenance	12%
Up to $2,000	20%
$2,000–$5,000	23%
$5,000–$10,000	17%
$10,000 +	28%

Source: BANKWEST CURTIN ECONOMICS CENTRE | BCEC Housing Affordability Survey (2014).

51 per cent of owner purchasers are paying more than 30 per cent of their gross income in housing costs. Of that group 19 per cent regard their housing as affordable and 40 per cent unaffordable. Although households are taking on high housing cost burdens to access owner occupation 40 per cent regard their housing as unaffordable even in today's low interest rate environment.

When purchasing their house 26 per cent of households secured a loan-to-value ratio of 26 per cent with 36 per cent a loan-to-value ratio above 80 per cent. Only 14 per cent were below 60 per cent. A quarter of purchasers received help from their parents or grandparents when purchasing with 77 per cent of help in the form of a cash loan or deposit to help with the deposit. First home buyer incentives were important, but below the levels of importance expressed by households seeking to break into the owner purchaser market; individuals living with parents and in a group household. Table 23 sets out the results.

Further observations

Comments within the survey and from 20 follow up telephone interviews with groups underrepresented in the survey raised a number of important issues. First, divorcees or other individuals not eligible for first home buyer incentives were struggling to get back into home ownership. First home buyer incentives can plug a significant gap in a deposit requirement but individuals not eligible and renting in the private sector are struggling to save that deposit. Household break-up was considered a critical issue forcing individuals into unaffordable housing or to take up options they would otherwise have not considered.

> *"Some of us divorcees are not classified as first home buyers but are having to start again from scratch and when you have children to look after it is hard to get a deposit together yet maintaining a mortgage is not a problem."*

> *"When you divorce, first time buyers grant should reset, for both parties, as I see this is the biggest barrier to get back in the market."*

The deposit gap was raised by many as the main barrier to owner occupation. Households could afford to maintain mortgage payments, which are often lower than private sector rents, but could not secure a mortgage in the first place.

Retiree households needing to maintain an income to pay rental or mortgage costs was an issue raised on a number of occasions. Unless a retiree has minimal housing costs it is difficult to see a situation where they can afford housing costs without eating into any savings they may have or being forced to rely on state subsidised housing.

> *"My wife and I are both in our 70s. We are forced to work part-time to supplement our age pension because of commercial renting rates. We have looked into government affordable housing but they tell us we are not earning enough to qualify. State housing won't register us because we are currently earning too much. We are in a "catch 22" situation in that we won't be able to keep working for much longer (I'm nearly 76 and my wife is 72 next birthday). There don't seem to be any options for us. What should we do?"*

Many young people were very negative about their prospects for home ownership and were being forced to make compromises which they considered unacceptable such as moving to the urban periphery or into areas they considered unsafe. Affordability, or lack of, creates uncertainty in the housing market making it difficult for households to make long term decisions.

Comments were made about how current housing circumstances were a result of simply having no other choices. 16 per cent of respondents selected their current dwelling because it was the best available at short notice. Such decision making is particularly prevalent in the private rental market, especially in periods of high demand. Households are forced to take whatever housing option they can get with landlords being able to pick and choose their tenants. A shortage of supply reduces dwelling choice forcing households to make tradeoffs they would not otherwise have made given a choice. Such tradeoffs include taking on high housing cost burdens which push households into an unsustainable financial position.

> *"I am in an age bracket and situation where I can see myself only renting until I die. In Perth, the high cost of renting is forcing me to rent in places where I feel less safe. Landlords want higher prices and people like me can't afford them. I am vulnerable to being evicted when a landlord wants the house for family or to sell, which is how I became homeless last time."*

Affordable

housing policies and strategies

Affordable housing policies and strategies

Given the impact housing affordability is having on existing households while at the same time being the major barrier preventing household formation, what can policy makers do to improve housing affordability? The only sustainable, long term solution is for incomes to align with house prices and rents, and to do so across the income and housing cost distribution. Certain economic conditions can produce an environment where house prices either fall or are stagnant but often such periods are characterised by growing unemployment and a lack of consumer confidence. Interest rates are then used to stimulate the economy and, as we are seeing in the current market, have a significant impact on house price growth. In this final section, we review policies that currently affect housing demand and supply in WA and rehearse issues in relation to the delivery of affordable housing to West Australian households.

Rental markets

Rents and prices tend to move counter cyclically and recent patterns of price and rental growth in Western Australia have illustrated this perfectly. With sustained growth in rents, households have made the decision, helped by a low interest rate environment, to exit the rental market and move into the ownership market because they believe it is financially advantageous to make such a switch. This increases the availability of rental stock and therefore eases the pressure on rents but demand for ownership increases, shifting the pressure to prices instead.

The first requirement is for a private rental market that is considered a viable, sustainable, long term housing option. This would have a number of positive impacts on affordability and on those groups reliant on the tenure. Long term leases offer certainty to the tenant and also the ability to make a “home” within a rental property. Making the rental sector more desirable would then take some of the demand from the ownership market reducing the pressure on prices, particularly at the bottom end of the market. Tax breaks for landlords that offer long term tenancies to those on low to moderate incomes would benefit both investors and tenants. Additionally, incentives for landlords to deliver new housing stock rather than purchasing existing dwellings would increase the supply of rental property while maintaining supply in the existing housing market.

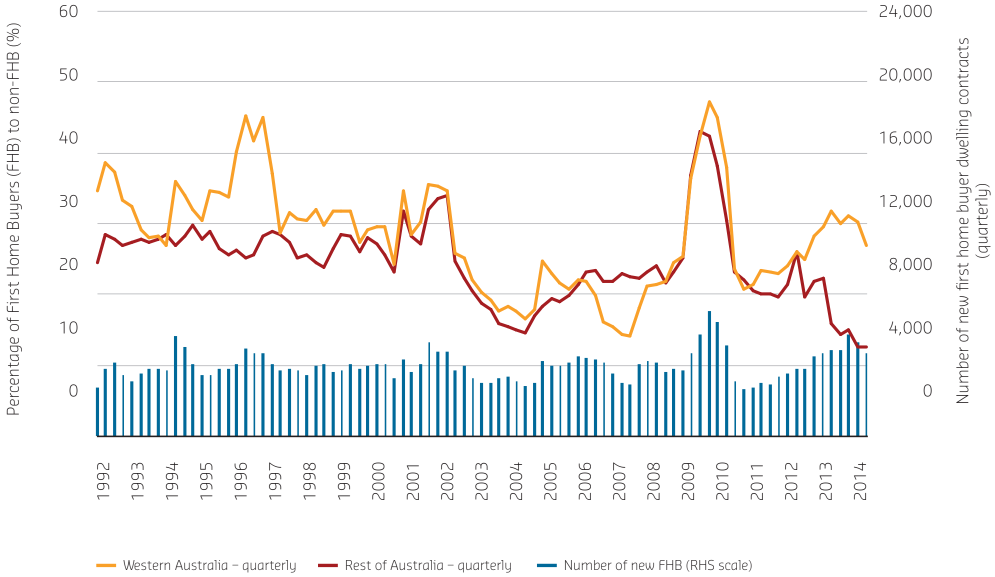
The affordable end of the private rental market is in greatest need of attention. The limited supply of quality rental accommodation affordable to those ineligible for social housing or available to those looking to transition from the tenure is a major barrier. Increasing the supply of housing delivered by the community housing sector would help ease the pressure on the cheapest end of the rental market. This would necessitate an increase in direct funding of the sector or the transfer of public housing assets which would then allow the community housing sector to leverage on these assets and develop new stock.

The National Rental affordability Scheme (NRAS) has come in for criticism from some quarters in recent times but is the only supply side policy incentivising the direct provision of an affordable product in the rental market. Although the structure of the policy restricts the potential of the scheme to deliver housing in those areas most in need of affordable housing, it has still delivered affordable options for thousands of tenants. NRAS is very important to provide a supply of affordable rental accommodation and should be reviewed, revised and extended to continue to deliver a supply of affordable housing.

Support for housing market entrants

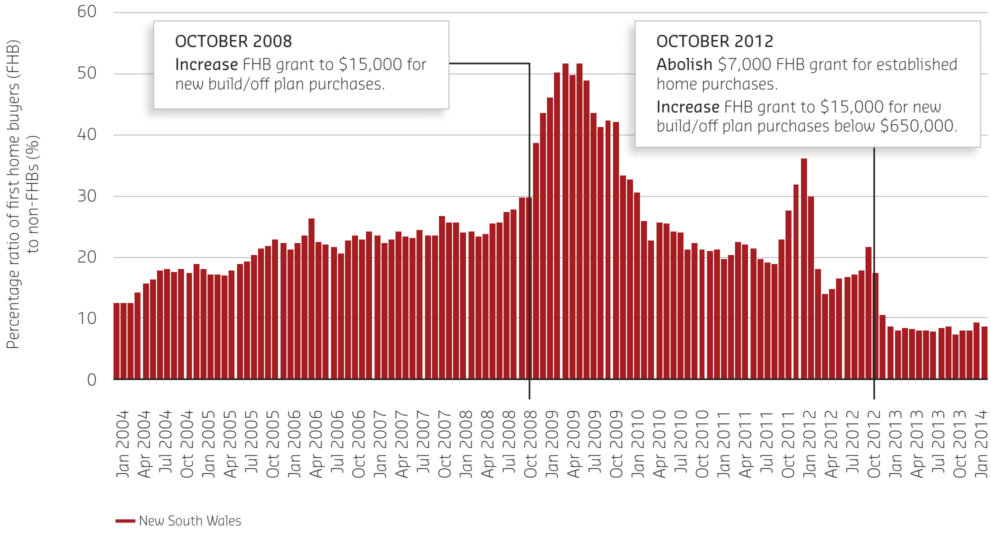
The survey identified the importance of first home buyer incentives. Such activity remains strong in WA, particularly when considering the comparable rates of first home buyers in other States. If policy makers are to use demand side incentives then they must also deliver supply side outcomes. Restricting the first home owners grant to new dwellings is sensible but grants cannot be set at levels that have an inflationary impact on prices which was clearly evident in the boost period during the GFC. With a major barrier to ownership being the deposit, initiatives to aid savings such as the First Home Savings Account are sensible. However, demand side incentives distort the market bringing forward decisions to purchase, causing major demand spikes but also falls when incentives are reduced or removed. Creating this uncertainty and volatility is not helpful and instead a range of affordable dwelling options that do not require grants or subsidies would deliver an element of stability to the market.

Figure 26 **Number and ratio of first home buyers to non-first home buyers: WA and Australia, 1992–2014**



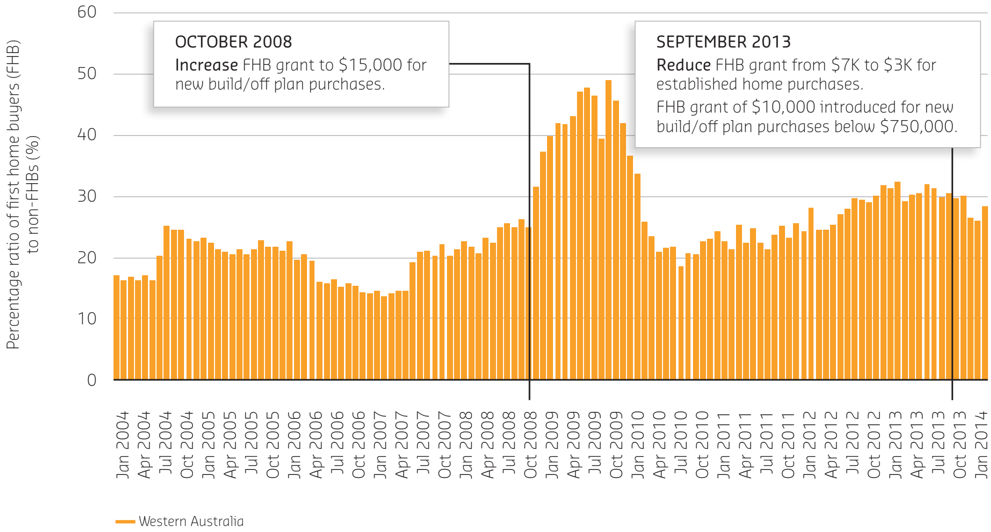
Note: Housing costs comprise: rents, new dwelling purchases, maintenance and utilities.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 5609.0

Figure 27 Ratio of first home buyers (FHBs) to non-FHBs: New South Wales, 2004–2014



Note: Housing costs comprise: rents, new dwelling purchases, maintenance and utilities.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS CAT NO. XXXX

Figure 28 Ratio of first home buyers (FHBs) to non-FHBs: Western Australia, 2004-2014



Note: Housing costs comprise: rents, new dwelling purchases, maintenance and utilities.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS CAT NO. XXXX

The Government of Western Australia's Keystart program has been highly effective in providing households with housing options previously unavailable to them, allowing transition out of the rental market and into affordable ownership. Expanding the program would improve the housing options available to many more households. There is potential to grow shared ownership in WA by involving the private and not for profit sector, provided schemes were structured correctly. Capturing rent on the portion of the house owned by the government or not for profit organisation, for example, would provide an income stream; a model applied in the UK. This would still deliver an affordable option but also provide some reward for the partner organisation that otherwise has equity tied up in the asset.

Housing supply and planning

The planning system, or more correctly the development approval process, is often cited as a major contributor to declining affordability with delays, taxes, developer contributions and infrastructure charges adding to the costs of development. These costs are being passed on to the consumer as they cannot be absorbed by the developer and are not being borne by landowners. A system of capturing value uplift resulting from development approvals, ideally at the re-zoning stage, could help reduce the burden on developers and the end consumer. Such policies are long term in nature and need to be embedded in policy now in order to have an impact many years in the future. Value uplift capture is problematic where land has already been purchased for the purpose of development but the implementation of policy to raw land has more chance of delivering effective outcomes.

The provision of affordable housing through the planning system has been an effective affordable housing delivery mechanism in other countries and the Department of Planning recently consulted on a range of options for future policy in Western Australia. It is essential to use such policy to maximise the affordable housing options from new supply. Maximising such contributions on Government land is a start but the scale of the affordability problem requires contributions from the private sector. To keep affordable housing affordable in the long term, the provision of dwellings should involve the community housing sector, either through asset transfer or for long term management. This would not only keep housing affordable but help grow the community housing sector.

Western Australia is currently in a period of strong housing supply as evidenced by dwelling commencements but new housing is adding only around 2 to 3 per cent per annum to the existing housing stock. New supply therefore can have only a limited impact on the affordability of existing housing because it is simply not delivered on a sufficient scale. The delivery of affordable housing is reliant on new housing supply therefore it is essential that new supply delivers housing accessible to those in need wherever possible, be it for key workers, those on low incomes, those who want to remain within the community in which they grew up or those seeking employment opportunities.

Social responsibility

Key players in the development industry have spoken of a ''social responsibility'' in relation to the provision of affordable housing, that is, a duty to provide affordable housing to groups such as key workers. If this leads to a greater diversity of housing and a wider range of price point options this can only be positive. Policy makers should explore how they can work closely with the private sector to maximise affordable housing opportunities in partnership with the private sector and the Department of Housing has already demonstrated how successful such a policy can prove. Those developers who do look to provide voluntary affordable housing contributions, (although what constitutes such housing would need to be carefully defined) should be rewarded through a fast tracked planning process, for example.

As highlighted in this report, it will become increasingly common for retired households to sustain an income in order to pay for their housing costs, either rent or mortgage. The burden on the state and community housing sector to accommodate low/no income retirees who are no longer commonly outright owners will increase rapidly over time. For those who do own their house there needs to be an incentive to downsize and release equity and there needs to be an affordable range of options available to age specific households. The removal of stamp duty for downsizing would be one step but there needs to be product available to retirees which is significantly cheaper to allow the release of capital but also permit the households to remain within their existing area.

Development issues

Private sector development is perhaps the major barrier to the delivery of more affordable housing options. In order to make a profit there needs to be a positive balance between revenues and costs that leaves sufficient room to deliver the required developer's profit. The problem faced by the development industry is the physical cost of development. Anecdotal evidence from the industry highlights the additional cost of developing in the west when compared to the east; some put it as high as 40 per cent for a multi residential development. High costs require high revenues in order for a development to be financially feasible, preventing low cost housing options in a wider range of housing markets. Multi-residential options are not feasible in lower value areas because the revenues that can be generated are just not sufficient to outweigh costs. If developers cannot bring a product onto the market that will support a dwelling price of well under $400 thousand (and not just one bedroom options) then it is always going to be difficult to provide a significant supply of diverse affordable housing.

In order to deliver affordability, the cost issues need to be addressed including taxes and developer contributions to infrastructure. Physical costs can be reduced by the use of alternative construction technologies but also cutting the length of the development period. Once such technologies are proven to cut costs and potentially deliver a more affordable product then their take up may prove widespread. Such new technologies can also address the issue of affordable living, reducing maintenance and running costs, thereby contributing to more affordable and sustainable practices. Environmentally efficient features can save running costs over time but the industry needs to do a better job demonstrating these cost savings to owners and investors. Adaptable living designs can also help those households that want to remain in place but need to adapt their home to their specific lifestyle needs over time.

Travel costs will become an increasing burden on household finances, which means an efficient and affordable transport system is essential. Employment opportunities located throughout the metropolitan area would enable residents to live close to work and reduce costs. Government can help by decentralising key services, shifting employment hubs outside of central areas.

Conclusion

and Discussion

Conclusion and Discussion

This second *Focus on Western Australia* report by the Bankwest Curtin Economics Centre examines one of the most important economic and social issues faced by Western Australians – that of housing affordability.

Despite an abundance of published indicators of housing affordability, most measures are broad or aggregate in nature and fail to capture the wide variations in housing costs in metropolitan Perth and regional WA. Neither do existing measures provide sufficient insight into which WA households are under genuine financial pressure from high housing costs.

This report takes a far more detailed and disaggregated look at the housing costs burdens faced by WA households. In addition to incorporating traditional measures of affordability, such as median mortgage and rental payments as a share of household income, the report uses microeconomic measures to focus on housing stress for different groups in the WA population – including lower income earners, lone parent families, and older renters.

Research findings from the Bankwest Curtin Economics Centre Housing Affordability Survey have added significantly to our understanding of the housing circumstances and personal housing stories of WA households, and the degree to which household are being forced to prioritise their household expenditures to meet high housing costs.

Around a third of those households responding to the survey rated their current housing as unaffordable. The situation is worse for households in the private rental market with well over half of those surveyed for this report paying more than 40 per cent of their gross income in rents with 45 per cent viewing rating their existing housing unaffordable. Owner purchasers viewed their financial and housing position more favourably, but it is worth noting the risks to affordability should interest rates rise from the historically low levels currently experienced.

One of the most striking findings to emerge from this *Focus on Western Australia* report is the extent to which those on low to moderate incomes are able to purchase only in a small proportion of suburbs in metropolitan Perth. This provides strong evidence that the housing market in WA is failing to clear for all sections of the state's population.

It is therefore essential that new housing supply is able to deliver affordable housing options to WA households. The existing housing market offers limited diversity in terms of product and price to those most in need. If such a supply is not forthcoming it is difficult to see how housing affordability is going to improve significantly in the state without a sustained and significant change in the balance between household incomes and housing price/rent growth.

Glossary

Glossary

Disposable income

Total income, monetary and in-kind, less income tax, the Medicare levy and the Medicare levy surcharge.

Equivalised household Income

Equivalising income is a method of standardising household income to take account of household size and compositional differences.

First Home Owner Grant

The First Home Owner Grant is a national scheme funded by state and territories introduced to offset the effect of the GST on home ownership. In Western Australia, from September 2013, the grant provides first home buyers signing a contract to build or purchase a new home and owner builders that commence laying foundations for the construction of a new home an amount of $10,000, and first home buyers signing a contract to purchase an established home an amount of $3,000.

Housing cost burden

Housing cost burden is an indicator that shows an aggregate measure of housing costs as a fraction of household income.

Household Reference Person

The reference person for each household is chosen by applying, to all household members aged 15 years and over, the selection criteria below, in the order listed, until a single appropriate reference person is identified: (1) the person with the highest tenure when ranked as follows: owner without a mortgage, owner with a mortgage, renter, other tenure; (2) one of the partners in a registered or de facto marriage, with dependent children; (3) one of the partners in a registered or de facto marriage, without dependent children; (4) a lone parent with dependent children; (5) the person with the highest income; (6) the eldest person.

Housing stress

A term used when discussing housing affordability. It refers to the financial impact of high housing costs relative to an individual or household's income.

Percentile

Percentiles divide a set of numbers in a category that has been ranked from smallest to largest into 100 equal groups. Commonly, only specific percentiles are used as summary measures of a category to complement other descriptive measures such as the Mean, Median or Mode. For example, the 50th percentile is equivalent to the median, or midpoint. Hence, the median house price in a particular category is the midpoint of the sale prices in that category. Other commonly used percentiles are the 25th percentile (also known as the first or lower quartile) and the 75th percentile (also known as the third or upper quartile).

Price-to-income ratio

A commonly used measure of housing affordability that measures the sale price of a property divided by a measure of household income. A specific price-to-income ratio that uses the median measure of price with median household income is also known as the Median Multiple.

National Rent Affordability Scheme

Overseen by the Department of Social Services, the National Rent Affordability Scheme is a joint initiative between the Commonwealth, State and Territories which aims to address the shortage of affordable rental housing by offering financial incentives for investors to build and rent dwellings to low and moderate income individuals and households.

Rental-income ratio

An analogous measure to the price-to-income ratio of housing affordability that measures the rental price of a property as a fraction of household income.

References

BIS Shrapnel 2013. Australian housing outlook 2013–2016. Sydney: BIS Shrapnel for QBELMI.

Coredata Consulting 2013. Bankwest First Time Buyer Deposit Report 2013. Sydney: Bankwest.

Costello, G., Fraser, P. and MacDonald, G. (2013), 'The Impact of Monetary Policy on Australian Capital City Housing Prices: The Case of Australia'. Paper presented to the 26th Australasian Finance and Banking Conference, Sydney, December 2013.

Crawford, T. 2011. 3rd Key Worker Housing Affordability Report. Bankwest Financial Indicator Series. Sydney: Bankwest.

Demographia 2014. 10th Annual Demographia International Housing Affordability Survey: 2013. Demographia

Haylen, A. 2014. House prices, ownership and affordability: Trends in New South Wales. Briefing Paper No. 1/2014. Sydney: NSW Parliamentary Research Service.

HIA Economics Group 2013. HIA-Commonwealth Bank Affordability Report: September 2013 Quarter. Sydney: HIA Economics Group.

Real Estate Institute of Australia and Adelaide Bank 2013. Adelaide Bank/REIA Housing Affordability Report. Canberra: Real Estate Institute of Australia and Adelaide Bank.

Real Estate Institute of Western Australia. 2013. Perth rental and vacancy rate [Online]. Perth: Real Estate Institute of Western Australia. Available: http://reiwa.com.au/Research/Pages/Perth-Listings-And-Rental-Trends.aspx.

Disclaimer

While every effort has been made to ensure the accuracy of this document, the uncertain nature of economic data, forecasting and analysis means that the centre, Curtin University and/or Bankwest are unable to make any warranties in relation to the information contained herein. Any person who relies on the information contained in this document does so at their own risk. The centre, Curtin University, Bankwest, and/or their employees and agents disclaim liability for any loss or damage, which may arise as a consequence of any person relying on the information contained in this document. Except where liability under any statute cannot be excluded, the centre, Curtin University, Bankwest and/or their advisors, employees and officers do not accept any liability (whether under contract, tort or otherwise) for any resulting loss or damage suffered by the reader or by any other person.

The views in this publication are those of the authors and do not represent the views of Curtin University and/or Bankwest or any of their affiliates. This publication is provided as general information only and does not consider anyone's specific objectives, situation or needs. Neither the authors nor the centre accept any duty of care or liability to anyone regarding this publication or any loss suffered in connection with the use of this publication or any of its content.

Authorised Use

© Bankwest Curtin Economics Centre, April 2014

Bankwest Curtin Economics Centre *Focus on Western Australia* Report Series

ISBN: 978-1-925083-11-8

This report was written by: Rebecca Cassells, Alan Duncan, Grace Gao and Kenneth Leong from the Bankwest Curtin Economics Centre, and Amity James, Sanna Markkanen and Steven Rowley from the Department of Property Studies at Curtin Business School.

This report may be cited as: Cassells, R., Duncan, A., Gao, G., James, A., Leong, K., Markkanen, S. and Rowley, S. (2014) Housing Affordability: The real costs of housing in WA, Bankwest Curtin Economics Centre, *Focus on Western Australia Series*, Issue 14/2, April 2014.

The authors would like to thank staff within the Centre and researchers within the Curtin Business School for comments on earlier versions, as well as Stewart Darby, Executive Manager Research & Policy of REIWA, for insightful discussions and for supplying the latest 2013Q4 suburban-level price and rent data.

This publication contains confidential and proprietary information of the Bankwest Curtin Economics Centre. All of the material in this publication is for your exclusive use and may not be otherwise used or modified for, or by, any other person or sold to or otherwise provided in whole or in part to any other person or entity without the prior written consent of the Bankwest Curtin Economics Centre.

For subscribers' use only. NOT TO BE PHOTOCOPIED.

A standard hard copy of, or electronic subscription to, this publication entitles employees of the same organisation and same physical location as the subscriber to the use of its contents for internal reporting purposes only. Multiple user licenses are available for organisations with more than one location.

Contact

Bankwest Curtin Economics Centre
Tel: +61 8 9266 2873
Email: bcec@curtin.edu.au

business.curtin.edu.au/bcec

© Curtin University of Technology 2014
Curtin University is a trademark of Curtin University of Technology
CRICOS Provider Code 00301J (WA), 02637B (NSW)