National Dwelling Cost Study

Prepared for the National Housing Supply Council

May 2011

urbis

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Malcolm Aikman
Associate Director	Deanne Frankel
Senior Consultant	Sam Wood
Job Code	SSP02511
Report Number	V2

URBIS
Australia Asia Middle East
urbis.com.au

TABLE OF CONTENTS

Executive Summary

INTRODUCTION AND STUDY PURPOSE

The Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) commissioned the inaugural National Dwelling Costs Study in December 2009 for delivery in early 2010 (herein referred to as the 2010 study). This work provided input into the housing supply monitoring role of the National Housing Supply Council.

The Australian Government is committed to monitoring the issue of dwelling costs as they affect housing affordability and has commissioned an update (herein referred to as the 2011 study) of the inaugural 2010 study. As a result of reorganisation of Australian Government portfolios following the federal election in 2010, the secretariat function supporting the work of the National Housing Supply Council has become part of the Department of Sustainability, Environment, Water, Population, and Communities (the Department) which becomes the commissioning department for this study update. Through this study the Department is seeking to identify policies and programs that can reduce dwelling costs and improve housing affordability across Australia.

This report focuses on collating the individual costs involved in delivering greenfield and infill housing product with the view to identifying the factors influencing rising dwelling prices. From this the study is able to provide policy recommendations on how the Australian Government can more effectively address the widespread decline in housing affordability for Australian residents.

APPROACH

The 2011 National Dwelling Costs Study is a direct update of the 2010 study. The 2010 study presented data on dwelling costs for 2009, while the 2011 report presents data for 2010. This study methodology required the segmentation of dwelling development costs into relevant categories that can be compared across locations and over time. This assessment allows comparison to the previous years study and other similar studies.

The key components of this approach are:

- It comprises Australia's five largest cities – Sydney, Melbourne, Brisbane, Perth, Adelaide
- It includes two forms of residential development in each city – greenfield detached house; infill apartment
- Cost components are consistent across locations so that cost differences between cities can be identified and understood
- It is structured so that it is capable of being updated every one to two years

It should be noted that this approach is a static approach that only allows for limited cost changes during the development timeframe. As property development is a time based activity that involves costs changing over time, typical feasibility analyses allow for cost escalation. While some allowance for this has been incorporated into the results of this study other components of escalation have not, most notably sale prices in comparison to construction costs. Both of these factors are estimated in today's terms thus excluding future sale price escalation during the development process. While this tends to underestimate development profit this approach does provide the most appropriate estimates of all other components of costs. This is consistent with the 2010 study approach.

From the 2010 study and work undertaken by Urbis since then, there are some minor modifications to the previous approach that enhance the output of the updated study. Improvements to the 2010 approach include the use of Estate Master software to better automate the dwelling cost template. This provides a consistent spreadsheet platform across all dwelling types and locations and is designed to accommodate different tax rates for each State.

Through the use of Estate Master there has been improved accuracy in calculating interest. Through enabling payback periods to be calculated monthly the methodology has effectively reduced the amount of interest payable, more closely reflecting what happens in practice.

A further improvement is the inclusion of developer input to the underlying land cost and sale price of dwellings. This has been used as a check against publicly sourced information and provides the benefit of aligning specific land costs with dwelling types and locations.

A key component of this assessment is the construction cost component. To optimise accuracy and consistency across the five cities Quantity Surveyors Rider Levett Bucknall has been commissioned for this component of the study.

Caution should be exercised in drawing conclusions from comparisons between the 2009 and 2010 data for some components of dwelling costs data owing to the changes in methodology. The cost component categories affected by the changes in methodology are interest costs and professional fees.

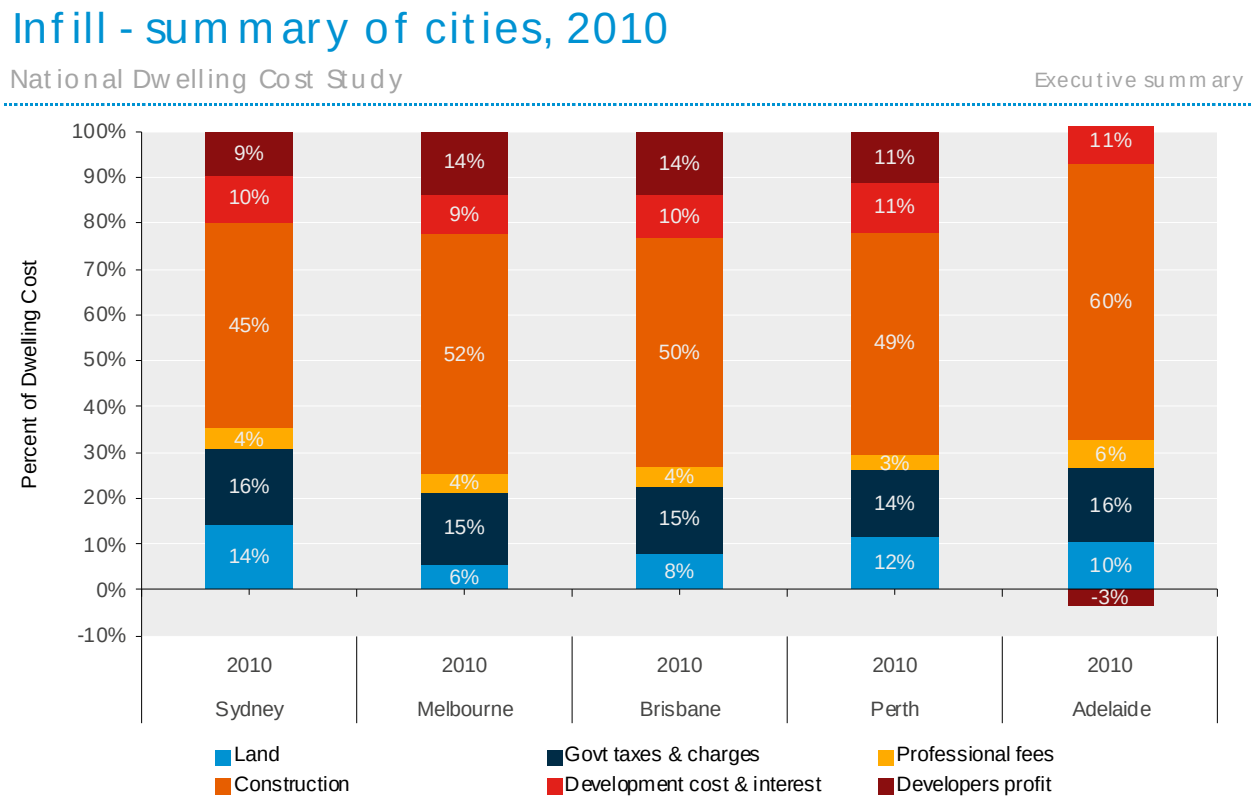
RESULTS AND ANALYSIS

The analysis of infill and greenfield development has enabled a comparison of cost components between the five subject cities. The results of the analysis are summarised as follows.

Infill Dwelling Costs

The commercial viability of infill dwelling development has improved across Sydney, Brisbane and Perth. In the Melbourne market the viability of infill development declined marginally but is still performing relatively well. Adelaide saw a further decline in the viability of medium and high rise infill dwelling development.

Melbourne continues to be the best performing infill dwelling market in Australia both in terms of volume and profitability. This performance is underpinned by low land costs and competitive government taxes and charges, principally low infrastructure charges for this type of development. This is being offset by rising construction costs and sale prices which are starting to squeeze profit margins. It will be interesting to see if Melbourne can retain the market balance it has been able to achieve between supply, demand, and costing over the coming 12 months.



Source : Urbis

Sydney, Brisbane and Perth achieved a notable increase in the costings of their infill dwelling products. In Sydney this has been driven by an increase in sale price and a stable construction cost. Perth has benefited from the same situation though it has also benefited from a reduction in construction costs. Brisbane has benefited from an increase in sale prices and a reduction in land prices. This reflects the potential oversupply of sites (land price) and supply constraints from the detached housing market (benefiting price).

Construction remains the largest cost component of infill dwellings (45%-60%) and a key area to focus reform to improve housing affordability. While most of the other factors appear to respond to market pressures or move with sale price movements, construction costs appear to be less influenced by dwelling market changes. Indirectly though the reduction in dwelling construction levels has placed price pressure on construction inputs including materials, labour costs and sub-contractor rates. This has been more noticeable in Brisbane and Perth where construction costs have declined at relatively low rates of 3%. Construction costs for medium and high rise infill dwellings are in the order of 50% higher than for greenfield dwellings that are of a larger size (2 bed vs 3 bed). This is a barrier to the provision of affordable inner city dwellings. There are a number of factors that lead to greater construction costs for infill dwellings over greenfield dwellings. These include higher environmental and safety requirements; additional components such as lifts, sprinklers, basements, and fire stairs; and additional labour costs associated with unionisation.

The next most significant component is government taxes and charges (14-16%). GST, stamp duty and infrastructure charges are the principal components here. Little progress appears to have been achieved in this regard across most jurisdictions in regard to addressing the big issues of tax reform. GST and stamp duty remain a double cost blow to new dwellings in an industry which has affordability issues.

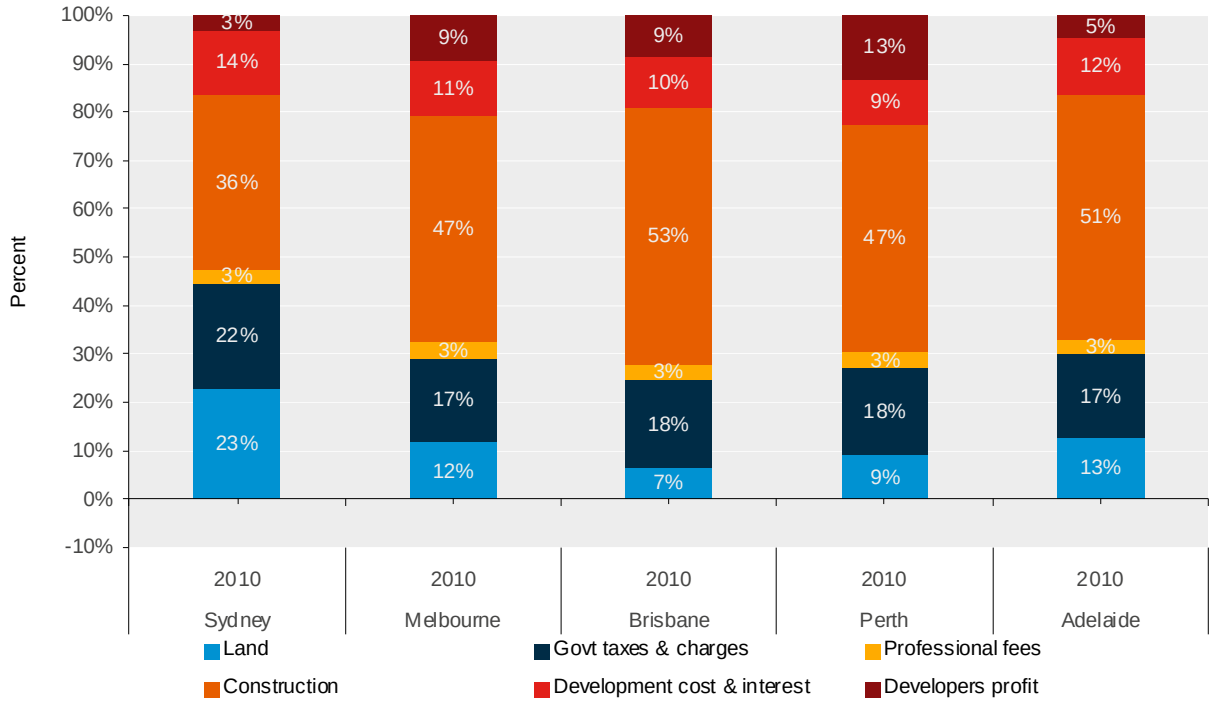
Price pressure on land appears to have reduced somewhat with Brisbane experiencing a fall and most of the other cities remaining relatively stable. Perth is the exception here and this may be the result of a shortage of appropriate sites and the improving market.

Across most markets, infill dwellings (medium to high density) have an average of 10% to 30% higher costs to purchasers than greenfield dwellings. Under current development conditions this is unlikely to change in the near future. While this situation continues this form of dwelling will provide a limited solution to improve housing affordability.

Greenfield Dwelling Costs

Greenfield dwelling markets across the five major cities have varied over 2010. Sydney has experienced a decline as the market has responded to price point pressures. Costs have not fallen in line with prices and subsequently profit margins have fallen. Land costs have come back in line with dwelling prices. Overall affordability in this market has improved but will not be sustainable unless other costs fall in line with prices.

Greenfield - summary of cities, 2010



Source : Urbis

The Melbourne greenfield market has remained relatively strong over the year showing an increase in pricing and associated increases in costs. Developer margins have been squeezed slightly as costs have risen more than prices and this may reflect a downturn in the market going forward. Melbourne's affordability advantage through its depth of product priced under $450,000 allows it to maintain high levels of greenfield dwelling development.

The Brisbane greenfield dwelling market has responded to consumer price pressures and reduced greenfield dwelling prices and costs. This has been principally achieved through lower land costs, stable construction costs, and the reduced costs associated with lower sale prices including GST and stamp duty.

The greenfield dwelling market in Perth has turned around in 2010 with increased sale prices, reduced land costs, and reduced construction costs. This has led to a recovery in profit to credible levels and strong dwelling development activity at long term averages.

Construction costs represent the largest component of total costs to purchasers (36% to 53%) though at levels lower than for infill dwellings. Most markets have experienced rises with Perth the only market reflecting less competitive conditions with a $24,000 fall.

Government taxes and charges remain a significant component (17% to 22%) of greenfield dwelling costs through major contributions from GST, stamp duty, and infrastructure charges in Sydney and Brisbane. As is the case with infill dwellings there remains pressure for reform in these areas.

POLICY RESPONSES

The findings from the 2011 National Dwelling Cost Study of greenfield and infill dwellings across Australia's five major cities along with insights from the previous study, highlight four areas of focus for policy responses to improve housing affordability across Australia:

Construction Costs – These remain the single largest component of both infill and greenfield dwelling costs and subsequently reductions in this component can have significant benefits for improved affordability. This year's study has shown that the construction sector can respond to changes in market demand and supply situations. The Queensland Government has attempted to address this issue through their Building Revival Forum. This forum had a strong focus on demand however policy responses were also identified with relation to costs.

An independent study into the value chain of both infill and greenfield dwelling construction would provide an opportunity to breakdown the elements of this cost component (as this study has done) which would shed light on what the major cost factors in construction are and whether measures can be taken to reduce these costs.

A further initiative to address this cost component is through alternative dwelling materials and construction techniques. Pilot testing of fast track dwelling development for both forms of dwellings in this study have been occurring in different parts of Australia over the past few years. Government incentives could be provided for the mass production of these forms of innovative, more affordable dwellings.

Tax Reform – The Australian Government presented the findings of the Henry Tax Review in 2010. To date the follow up to this review has been limited. New dwelling taxation reform addressing GST and stamp duty may improve housing affordability. Consideration needs to be given to how to restructure these components to improve this situation. We are conscious that as Australia emerges from the global financial crisis in a tight fiscal environment, policies to reduce taxation are unlikely to be appealing.

Initiatives to address increasing infrastructure charges are in the process of being introduced into Queensland following the recommendations from the State Government's Infrastructure Charges Task Force. There is debate over the affordability of the recommended charges however they have provided short term certainty for the development industry. Queensland now appears to be ahead of the other states in this regard however this has not been a significant issue in Western Australia or South Australia. It is emerging as an issue in Victoria with respect to areas newly included in the urban growth boundary (Growth areas infrastructure charges). These are likely to be comparable to Brisbane rates in the near future for the higher rated areas.

Sydney is moving back into a high infrastructure charges regime after a couple of years of respite. This is a symptom of a government with significant debt and limited revenue. Unfortunately this is likely to constrain greenfield development going forward. Sydney needs to find a better solution to this approach as it has been down this path before with substantial negative impacts for the development and housing industry.

Land supply – Land supply is an area where State Governments have taken the most action. In Queensland four major greenfield development areas have been placed under the planning control of the Urban Land Development Authority for fast tracking of development. Sydney's northern and southern growth corridors are beginning to gain momentum though pricing is still an issue. Perth has placed greater emphasis on understanding its land supply allowing it to focus policy in the right areas. Reductions and the slowing in growth in land values appear to reflect the impact that these policies and initiatives are having. There are lessons to be learned across the different states in terms of policies and initiatives that have improved land supply. Specifically these include:

- Accurate monitoring of land supply – Victoria (Urban Development Program)
- Single government approval authority for planning – Queensland (ULDA)
- Clear planning guidelines – Western Australia (greater code assessment)

Product innovations – It is clear that the best performing dwelling market has been Melbourne and a key reason for this has been its ability to provide high quantities of dwellings that meet the affordability requirements of its markets. An important driver of this has been the reduction in lot sizes. This has led to lower prices and higher dwelling yields which benefit both pricing and developer margins. In the future this may also be associated with reductions in dwelling sizes which will provide further costs savings thereby improving housing affordability. This is a key learning for all other markets especially where minimum lot sizes prevent the delivery of lots less than 600m^2 or more commonly less than 400m^2. Government guidelines can assist with this however it is important that the government is not too prescriptive in relation to this as the market needs flexibility to meet market requirements and work with development constraints.

A small section of the construction industry is responding to high construction costs through concepts such as modular housing. We recommend greater government incentives including tax dispensation for these types of products.

1 Introduction

The Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) commissioned the inaugural National Dwelling Costs Study in December 2009 for delivery in early 2010 (herein referred to as the 2010 study). This work provided input into the housing supply monitoring role of the National Housing Supply Council.

The Australian Government is committed to monitoring the issue of dwelling costs as they affect housing affordability and has commissioned an update (herein referred to as the 2011 study) of the inaugural 2010 study. As a result of reorganisation of Australian Government portfolios following the federal election in 2010, the secretariat function supporting the work of the National Housing Supply Council has become part of the Department of Sustainability, Environment, Water, Population, and Communities (the Department) which becomes the commissioning department for this study update. Through this study the Department is seeking to identify policies and programs that can reduce dwelling costs and improve housing affordability across Australia.

This study, the 2011 study, has refined the previous methodology to enhance the comparability of results across locations. Importantly it collates costing information on greenfield and infill dwelling developments across five capital cities (Sydney, Brisbane, Melbourne, Adelaide and Perth) to gain insights into what factors are impacting rising dwelling prices. From this the study is able to provide policy recommendations on how the Australian Government can more effectively address the widespread decline in housing affordability for Australian residents.

1.1 BACKGROUND

This study has a key focus on identifying initiatives to improve housing affordability. The 2010 study noted how housing affordability had emerged as a key issue in the early 2000s and had worsened as the decade progressed. Government policy responses to this situation are yet to achieve noticeable impacts on this problem.

During 2010 Australia's housing affordability situation has worsened as indicated by a number of publicly advertised housing affordability measures. The Real Estate Institute of Australia (REIA), through its Deposit Power Housing Affordability Report, indicated that 2010 saw the largest annual decrease in housing affordability over the past decade noting that the proportion of income required to meet home loan repayments had increased from 29.0% to 34.8% over the year. At the end of 2010 the Housing Industry Association – Commonwealth Bank housing affordability index was 10% lower (reflecting declining affordability) than at the end of 2009 (Housing Industry Association, 2011). In addition, a survey of 976 home buyer candidates by Loan Market indicated that 65% of respondents rated housing affordability as the main market issue facing first home buyers (Loanmarket.com.au).

The worsening state of housing affordability in Australia over 2010 has been driven by rises in interest rates and increases in housing prices in a number of Australia's major cities. During 2010 the Reserve Bank raised interest rates four times – March, April, May, and November. Increased interest payments for those with variable mortgage rates has reduced their disposable income and subsequently the affordability of home ownership for them.

An analysis of Australia's housing market for the 2010 year by RP Data indicates that Sydney, Melbourne and Adelaide experienced real increases in median house prices while house prices in Brisbane and Perth actually declined. Sydney houses ($605,000) remained the most expensive although Melbourne houses ($557,750) are closing the gap.

Capital growth - houses

Year on year capital growth to December 2010 — Table 1.1

	Sydney	Melbourne	Brisbane	Adelaide	Perth
Year on year (%)	6.4%	8.5%	-1.1%	3.9%	-1.5%
Median price[1] ($)	$605,000	$557,750	$459,000	$405,000	$487,000

1. Median price is based on settled sales over quarter
Source : RPData-Rismark hedonic Home Value index - 31.01.11; Urbis

Though experiencing a decline in median prices, Perth houses remained the third most expensive of the major cities, comfortably ahead of Brisbane ($459,000), and Adelaide ($405,000).

The median house price data while providing an overall picture for each city does not necessarily have a direct relationship with situations in particular sub markets of interest to this study, such as the greenfield dwelling market. An analysis of the volume of houses available for sale broadly in the greenfield areas of the five cities indicates varying depths of the affordable dwelling markets in these cities.

Detached housing market by price point

Capital city outer suburban areas — TABLE 1.2

	House price		
City	**<$450,000**	**<$400,000**	**<$350,000**
Sydney	40%	31%	19%
Melbourne	61%	48%	28%
Brisbane (SEQ)	47%	36%	23%
Perth	40%	30%	17%
Adelaide	68%	57%	42%

Source : www.domain.com.au; Urbis

The above table records advertised prices for detached dwellings (houses) in outer and fringe suburbs of Australia's five major cities as recorded by a major real estate web site. The table highlights the high proportion of houses that Adelaide (68%) and Melbourne (61%) have in the affordable price range of less than $450,000. Generally a lower proportion of houses in the more affordable price range is indicative of a higher median house price and vice versa. That is, Sydney has the highest median house price. Sydney (40%) and Perth (40%) have the lowest proportion of dwellings under $450,000 . Brisbane (South East Queensland) has a moderately lower median house price than Perth and a moderately higher share of dwellings (47%) under $450,000. Adelaide (68%) has the lowest median house price and the highest proportion of dwellings below $450,000.

The major exception to this position is the Melbourne market. Melbourne has a high median house price ($557,750) but a large proportion (61%) of its outer and fringe housing market priced under $450,000. Analysis undertaken for the Queensland Building Revival Forum in April this year (Lend Lease, April 2011, Building Revival Forum Presentation) indicates that a key reason for this is the move by the Melbourne market to smaller lot sizes. While this trend has been occurring across Australia as a measure to improve housing affordability, the move has been greater in Melbourne than in other locations. Data collated by Lend Lease indicates that in the Melbourne greenfield market 46% of housing lots are 450m^2 or less while in south east Queensland only 25% of lots are in this size range.

This is an important finding which is not directly identified in this study as it focuses on the cost component of comparable sized dwellings.

1.2 STUDY PURPOSE

This study updates the 2010 National Dwelling Cost Study undertaken for the Australian Government. Dwelling cost, as a major component of dwelling price, is a key to understanding housing affordability. To better understand the drivers of housing costs and thereby inform the most appropriate policy responses the Department has commissioned this independent assessment of residential dwelling costs across Australia's major cities. Through an analysis of cost components of new dwelling development, the Department is seeking to identify policy initiatives and programs that can reduce dwelling costs across the country.

The study is intended to investigate housing affordability nationally and subsequently has reviewed housing costs in Australia's five major cities – Sydney, Melbourne, Brisbane, Perth, and Adelaide. The inclusion of regional locations is under consideration as part of a future extension to this study.

The study is conscious of potential differences in dwelling costs for different types of dwellings. Due to this it has examined dwelling costs for detached dwellings (greenfield) and medium rise apartments (infill).

1.3 REPORT OUTLINE

The structure of this report includes an introduction to the study, an outline of the methodology, the results and analysis, and conclusions:

Section One: Introduction –	Introduction, background, study purpose, report outline, report limitations
Section Two: Methodology –	Study methodology, key assumptions
Section Three: Results and Analysis	Infill dwelling costs, greenfield dwelling costs, infill vs greenfield, review of findings from previous study
Section Four: Conclusion	Infill dwelling costs summary, greenfield dwelling costs summary, summary of results, focus for policy responses.

1.4 REPORT LIMITATIONS

This report has been prepared for the Australian Government Department of Sustainability, Environment, Water, Population, and Communities (the Department) and is not suitable for use other than by the party to whom it is addressed. It represents for the Department the various estimates of Urbis Pty Ltd and its subcontractors but no assurance is given by Urbis Pty Ltd that the estimates will be achieved.

This report contains a number of opinions and assumptions however, Urbis Pty Ltd will not accept liability or responsibility to any third party relying on information provided in this report.

2 Study Methodology

The 2011 National Dwelling Costs Study is a direct update of the 2010 study. The 2011 study methodology required the segmentation of dwelling development costs into relevant categories that can be compared across locations and over time. This assessment allows comparison to the previous years study and other similar studies.

The key components of this approach are:

- It comprises Australia's five largest cities – Sydney, Melbourne, Brisbane, Perth, Adelaide
- It includes two forms of residential development in each city – greenfield detached house; infill apartment
- Cost components are consistent across locations so that cost differences between cities can be identified and understood
- It is structured so that it is capable of being updated every one to two years

From the previous 2010 study and work undertaken by Urbis since then, there are some minor modifications to the previous approach that enhance the output of the updated study. Improvements to the 2010 approach include the use of Estate Master software to better automate the dwelling cost template. This provides a consistent spreadsheet platform across all dwelling types and locations and is designed to accommodate different tax rates for each State.

A further improvement is the inclusion of developer input to the underlying land cost and sale price of dwellings. This has been used as a check against publicly sourced information and provides the benefit of aligning specific land costs with dwelling types and locations.

A key component of this assessment is the construction cost component. To optimise accuracy and consistency across the five cities Quantity Surveyors Rider Levett Bucknall has been commissioned for this component of the study.

The specific steps comprising the methodology for this study update are outlined below.

Step 1 Confirmation of Criteria

The criteria used in this study to provide both comparisons across locations and ongoing replication included the following for greenfield and infill sites:

Criteria	Greenfield specification	Infill specification
Site Location	Comparable outer city suburbs	Comparable inner city locations
Land Zoning/Status	Urban development zoning but not currently subdivided or serviced	Urban development zoning
Development size	Approximately 100 lot development – could be first stage of much larger development	30-70 apartments, in block of 5-9 storeys
Lot size	Average lots 400-500 m^2	0.5-1 hectares
Dwelling type	3 bedroom, one storey house	2 bedroom, single level apartment
Proximity to	Approximately within 10km of major retail,	Within 2-3km of main street and/or major

Criteria	Greenfield specification	Infill specification
Services	health (hospital), education (secondary) or planned services. Within 5km of primary education	supermarket (Coles/Woolworths)
Public Transport Access	Within 5-10km of rail station or major bus station. Within 1km of bus route or future bus route	Within 1km of major public transport – rail station, bus stop/station
Land Preparation	▪ Assume relatively flat ▪ Minimal vegetation clearing ▪ No major civil infrastructure works required off site to support development	▪ Assume relatively flat ▪ Minimal demolition ▪ No major civil infrastructure works required off site to support development
Quality of finishes	Medium quality finishes (not top of range or bottom)	Medium quality finishes (not top of range or bottom)

Step 2 Cost Compilation

The core cost components and the approaches for compiling these costs are:

- Land – Review of development feasibility assessments for the appropriate dwelling type in the relevant location. This has been compared to publicly sourced land sale information from RP Data, Victorian Valuer General's Department, and other land sales databases.
- Development timing – This is based on research and experience from our town planning division across the relevant geographies. This has relevance in terms of development holding costs and consultant's fees.
- Council rates and fees – Council based costs incurred during the development of each type of dwelling. Sourced from Council web sites and other published Council documentation.
- Taxes – Drawn from government published rates for stamp duty, land tax, and GST.
- Professional fees – These have been provided by our sub consultants, Rider Levitt Bucknall and are based on relevant project examples.
- Infrastructure charges – These are based on a range of sources including Local Government Association information, council information, and information from the Urbis Town Planning division. These reflect charges incurred during 2010 (and do not reflect changes to infrastructure charging regimes that have been implemented in 2011).
- Land preparation costs and dwelling construction costs – This has been provided by Rider Levett Bucknall through its national office network and databases. This is based on identical dwelling developments across the study locations (taking into account appropriate geographic and climatic differences).
- Development costs – These are a compilation of development management, marketing, and selling costs and any other development costs not included in the above categories. These are based primarily on industry benchmarks (typically these are percentages of overall costs and estimates of development management salaries) which have been verified through discussions with developers.
- Sale prices – These have been drawn from national RP Data information, Victorian Valuer Generals data, and other dwelling sale data sources for dwelling sale prices over the relevant period and for the study locations and dwelling typologies. This assessment has also reviewed developer feasibility assessments to cross check publicly sourced information.

- Development Profit – This is calculated as a result of the compilation of the above costs subtracted from the identified dwelling sale price.

Step 3 Results Compilation and Analysis

From the above cost analysis, cost tables were compiled for each of two dwelling types for each of the 5 study locations. Effectively this generates 5 greenfield tables and 5 infill tables across the study locations for comparison. This information has then been analysed to ascertain changes in dwelling cost components over the past year, the significance of each component, and compare cost components across geographies and dwelling types. Detailed data tables for infill, greenfield and construction and professional costs appear in appendices A, B and C respectively.

Step 4 Conclusions and Recommendations

The final stage of the study draws together the key findings and insights of the study and from this identifies recommendations and policy responses aimed at improving housing affordability across Australia.

2.1 KEY ASSUMPTIONS

The key assumptions for each cost component are outlined in the following tables for greenfield and infill dwellings.

Table 1 – Greenfield dwelling cost assumptions

Cost component	Key assumptions
Land	▪ Based on the average price of urban development land in each city location over the period Jan 2008 to Jan 2011 combined with advice received from developers
Stamp duty	▪ Stamp duty assumes there are no concessions available to the developer
Local council fees	▪ Based on candidate location local government charges
Professional fees	▪ Provided by Rider Levett Bucknall and is based on relevant project examples
Infrastructure charges	▪ Based on state and local government identified charges appropriate for each location
Land preparation	▪ Based on minimal constraints to development
Council rates/water	▪ Rates are calculated on the parent site throughout the development period. Assumes no water usage, however charges are applied for connection.
Land tax	▪ Calculated on an 80% market value to estimate unimproved capital value
Development timing	▪ Assumes no undue time delay caused by developer in seeking planning approvals, land preparation or dwelling construction
Dwelling construction costs	▪ While costs were based on effectively identical dwellings across states, it was considered appropriate to account for factors relating to climatic, geographic, and regulatory differences across the study locations

Development costs	▪ Marketing costs have increased in areas to account for in depth marketing strategies ▪ Sales costs are calculated at 3% of sales value. This is consistent with market rates. ▪ Development management fees typically represent 1.0% of project costs
Interest	▪ Assumed developer provides 40% equity on the purchase of land (consistent with market rate) ▪ Interest on land (remaining 60%) and purchase costs is calculated on 9.5% p.a. for the whole of the development period ▪ Interest for the remaining costs is calculated on a draw down facility at 9.5% p.a.
Sale price	▪ Reflective of recent sales of new 3 bedroom, 2 bathroom detached houses on 400m^2 to 500m^2 lots in relevant area
GST liability	▪ Calculated as 10% of end sale price
Development profit	▪ Based on difference between sale price and total development costs

Table 2 – Infill dwelling cost assumptions

Cost component	Key assumptions
Land	▪ Based on average price of urban development land in each city location over the period Jan 2008 to Jan 2011
Stamp duty	▪ Stamp duty assumes there are no concessions available to the developer
Local council fees	▪ Based on candidate location local government charges
Professional fees	▪ Provided by Rider Levett Bucknall and is based on relevant project examples
Infrastructure charges	▪ Based on state and local government identified charges appropriate for each location
Land preparation	▪ Based on minimal constraints to development
Council rates/water	▪ Rates are calculated on the parent site throughout the development period. Assumes no water usage, however charges are applied for connection
Land tax	▪ Calculated on 80% of market value to estimate unimproved capital value
Development timing	▪ Assumes no undue time delay caused by developer in seeking planning approvals, land preparation or dwelling construction
Dwelling construction costs	▪ While costs were based on effectively identical dwellings across states, it was considered appropriate to account for factors relating to climatic,

Cost component	Key assumptions
	geographic, and regulatory differences across the study locations
Development costs	▪ Marketing costs have increased in areas to account for in depth marketing strategies ▪ Sales costs are calculated at 3% of sales value. This is consistent with market rates. ▪ Development management fees typically represent 1.0% of project costs
Interest	▪ Assumed developer provides 40% equity on the purchase of land (consistent with market rate) ▪ Interest on land (remaining 60%) and purchase costs is calculated on 9.5% p.a. for the whole of the development period ▪ Interest for the remaining costs is calculated on a draw down facility at 9.5% p.a.
Sale price	▪ Reflective of recent sales of new 2 bedroom, 2 bathroom apartments in the relevant area
GST liability	▪ Calculated as a 10% of end sale price
Development profit	▪ Based on difference between sale price and total development costs

3 Results and Analysis

This second edition of the National Dwelling Cost Study for the Australian Government examined the costs for new dwelling development of both infill and greenfield dwellings in Australia's five major cities. The results of this assessment are presented in separate infill and greenfield sections with the emphasis on comparing cost similarities and differences between cities and changes over the past year. To focus the analysis of the results of this dwelling cost study the individual cost components for infill and greenfield dwelling developments have been compiled into six main categories as shown below.

TABLE 3 – Dwelling cost categories

Major category	Component costs	Cost to developer	Cost to purchaser
Land	▪ Land acquisition	✓	✓
Government taxes and charges	▪ Stamp duty on land	✓	✓
	▪ Stamp duty on dwelling sale	✗	✓
	▪ Local council fees	✓	✓
	▪ Infrastructure charges	✓	✓
	▪ Council rates/water	✓	✓
	▪ Land tax	✓	✓
	▪ GST liability	✗	✓
Professional fees	▪ Professional fees during development	✓	✓
	▪ Professional fees on sale	✗	✓
Construction	▪ Land preparation	✓	✓
	▪ Dwelling construction costs	✓	✓
Development costs and interest	▪ Development management	✓	✓
	▪ Marketing	✓	✓
	▪ Due diligence / legal fees	✓	✓
	▪ Sale costs	✓	✓
	▪ Interest on land and purchase costs	✓	✓
	▪ Interest on construction	✓	✓
	▪ Finance charges	✓	✓
Development profit	▪ Developer profit	✗	✓

This study examines the entire dwelling costs for a dwelling purchaser including post sale costs - stamp duty, transfer fees, and professional transaction fees. These components are generally not included when compiling housing affordability measures, however they are genuine costs of purchasing dwellings and need to be considered in a study that aims to assess housing affordability including all costs of dwelling development and purchase.

3.1 INFILL DWELLING COSTS

In 2010 sale prices for infill dwellings were higher for all cities than in 2009. Sales prices in Sydney, Brisbane and Perth experienced the highest increases (13-14%) while price increases in Melbourne and Adelaide were more modest (4-5%). The total costs to the purchaser have seen comparable increases to sales prices.

When these price rises are placed in the context of new dwelling approvals for other dwellings (apartments, semi-detached, townhouses, cabins, and other dwellings) the Sydney and Brisbane markets appear to be on the upward part of the cycle seeing both strong increases in dwelling approvals and price increases. Perth also appears to be in the early stages of the upward cycle with price growth leading a moderate increase in new other dwelling approvals.

New dwelling approvals - attached/other

National Dwelling Cost Study — Table 3.1

	Statistical divisions (SD)				
	Sydney	**Melbourne**	**Brisbane**	**Perth**	**Adelaide**
2000-01	11,524	8,955	4,013	2,161	994
2001-02	18,037	10,489	4,911	2,189	1,363
2002-03	19,034	12,840	5,839	2,667	1,777
2003-04	17,507	9,733	6,571	2,867	2,062
2004-05	11,506	7,858	6,090	3,448	1,877
2005-06	10,116	6,000	5,347	3,037	2,511
2006-07	10,381	7,581	4,933	3,920	1,570
2007-08	11,195	9,785	5,656	4,480	2,158
2008-09	7,526	10,036	4,014	2,745	2,224
2009-10	11,139	15,246	6,399	3,093	2,172
5 year average	10,071	9,730	5,270	3,455	2,127
10 year average	12,797	9,852	5,377	3,061	1,871

Source : ABS Building Approval Data ; Urbis

The Melbourne market appears to be turning with the potential for an oversupply through strong growth in new other dwellings leading to a slowing in price growth. Adelaide could be on the way down with a drop in new other dwelling approvals and low price growth.

Infill housing comparison

Summary table

Table 3.2

Cost component	Sydney				Melbourne				Brisbane			
	2009		2010		2009		2010		2009		2010	
	$	%	$	%	$	%	$	%	$	%	$	%
Cost to developer	$532,000		$541,000		$462,000		$490,000		$515,000		$475,000	
Sale price	$531,000		$600,000		$550,000		$572,000		$490,000		$552,000	
Total cost to purchaser	$552,137	100%	$624,702	100%	$577,846	100%	$603,845	100%	$499,809	100%	$565,580	100%
Land	$85,000	15.4%	$90,000	14.4%	$32,000	5.5%	$35,000	5.8%	$72,000	14.4%	$45,000	8.0%
Govt taxes & charges	$91,000	16.5%	$102,000	16.3%	$83,000	14.4%	$93,000	15.4%	$85,000	17.0%	$83,000	14.7%
Professional fees	$24,000	4.3%	$27,000	4.3%	$17,000	2.9%	$26,000	4.3%	$16,000	3.2%	$24,000	4.2%
Construction	$282,137	51.1%	$282,702	45.3%	$301,846	52.2%	$313,845	52.0%	$290,809	58.2%	$282,580	50.0%
Development cost & interest	$71,000	12.9%	$64,000	10.2%	$56,000	9.7%	$54,000	8.9%	$61,000	12.2%	$54,000	9.5%
Developers profit	-$1,000	-0.2%	$59,000	9.4%	$88,000	15.2%	$82,000	13.6%	-$25,000	-5.0%	$77,000	13.6%

Cost component	Perth				Adelaide			
	2009		2010		2009		2010	
	$	%	$	%	$	%	$	%
Cost to developer	$500,000		$517,000		$446,000		$476,000	
Sale price	$513,000		$585,000		$440,000		$460,000	
Total cost to purchaser	$533,073	100%	$608,935	100%	$461,561	100%	$484,452	100%
Land	$60,000	11.3%	$71,000	11.7%	$48,000	10.4%	$50,000	10.3%
Govt taxes & charges	$76,000	14.3%	$87,000	14.3%	$71,000	15.4%	$78,000	16.1%
Professional fees	$17,000	3.2%	$21,000	3.4%	$7,000	1.5%	$31,000	6.4%
Construction	$307,073	57.6%	$296,935	48.8%	$290,561	63.0%	$290,452	60.0%
Development cost & interest	$60,000	11.3%	$65,000	10.7%	$51,000	11.0%	$51,000	10.5%
Developers profit	$13,000	2.4%	$68,000	11.2%	-$6,000	-1.3%	-$16,000	-3.3%

1. 2009 Inputs are based on the 2009 Final Report National Dwelling Cost Study January 2010

2. Total cost to purchaser includes stamp duty, a transfer fee and legal costs

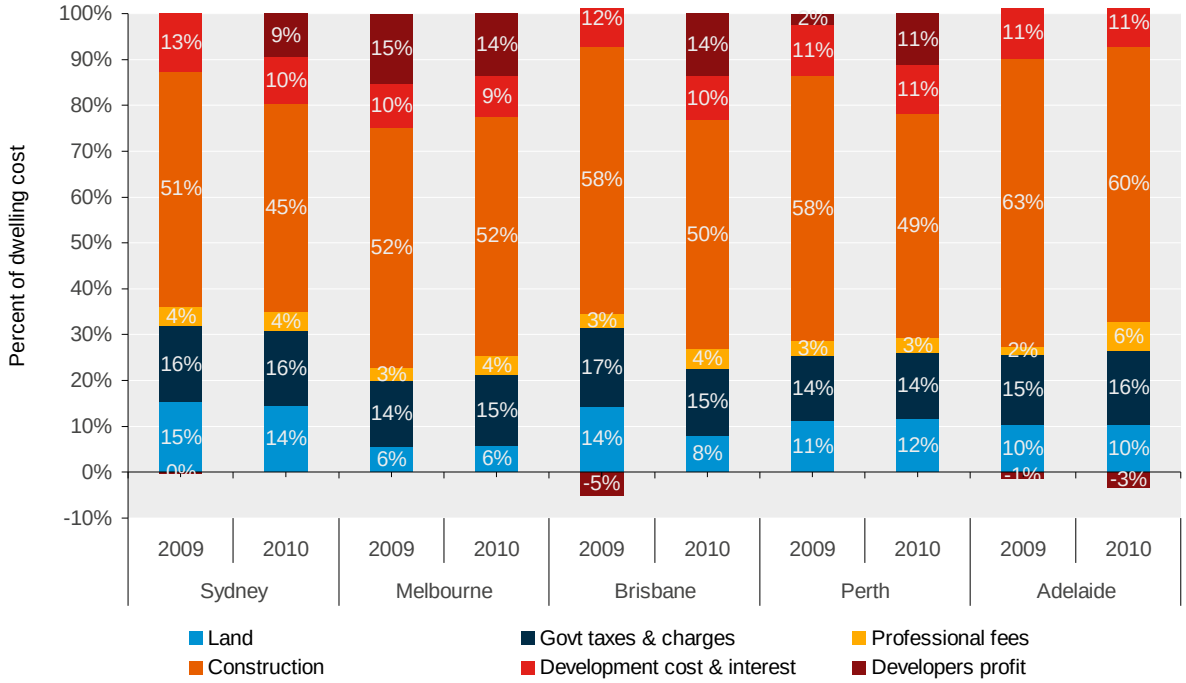
2. Initial developer profit figures are based on Estate Master

Source : Urbis ; Rider Levett Bucknall 2010

The relative proportion of the various dwelling cost components have not changed in 2010, with construction costs (45-60%) remaining the largest dwelling cost component, followed by government taxes and charges (14-16%), land (6-14%), and development costs and interest (9-11%). Development profit increased in 2010, with most cities achieving profit for infill developments of, on average, around 9-14% of total costs to the purchaser. The exception to this is Adelaide (-3%) where the infill development market for mid rise apartments remains commercially challenging.

Infill - summary of cities, 2009 & 2010

National Dwelling Cost Study — Chart 3.1



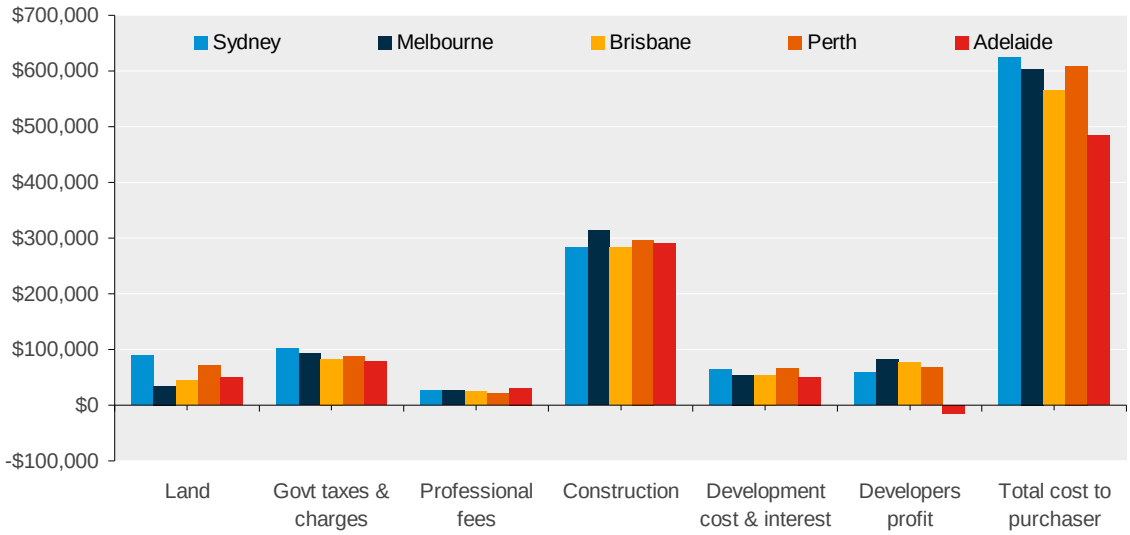
Source : Urbis

Sydney ($624,000) remains the highest cost city for infill dwelling development followed by Perth ($609,000), Melbourne ($604,000), Brisbane ($565,000), and Adelaide ($484,000).

Infill - summary by city, 2009 & 2010

National Dwelling Cost Study

Chart 3.2



Source : Urbis ; Rider levett Bucknell, 2011

3.1.1 Land

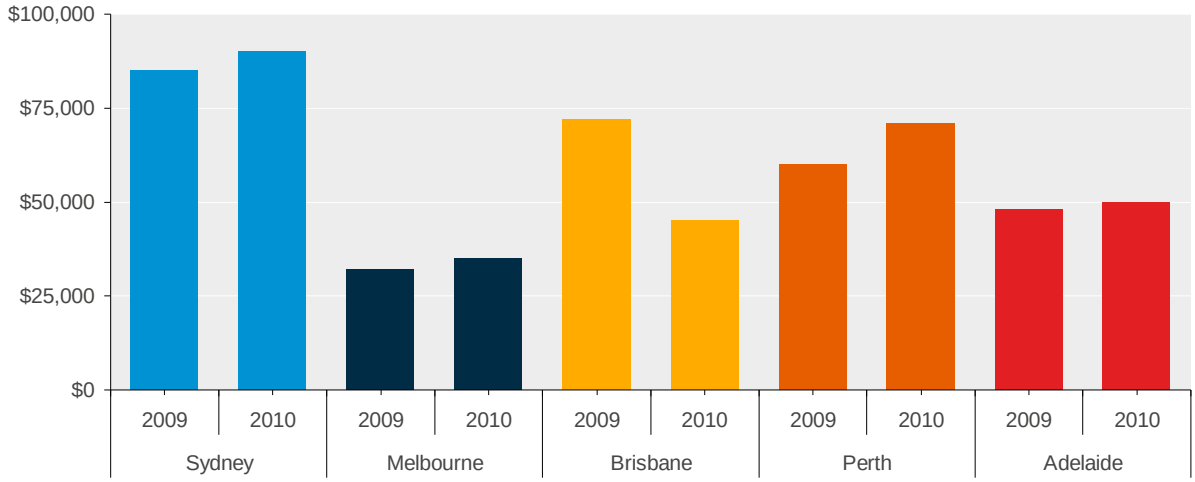
In 2010 the land cost component of infill dwelling development remained at a similar proportion of overall cost to that in 2009 for all cities with the exception of Brisbane. Brisbane has experienced a notable decrease in the land cost component of new infill dwellings, declining from around $72,000 to $45,000 (14% to 8% of the total cost to the purchaser). This reflects the difficult market conditions being experienced in the Brisbane residential market and Queensland economy in general. The decline in raw land cost is a function of meeting the relatively low demand and transactions that have occurred over the last 12 months which is reflective of a quieter market. According to the April 2011 Comsec Economic report, Queensland is currently experiencing the slowest economic growth and highest unemployment rate of any state or territory in Australia. In terms of these economic indicators NSW is faring only marginally better than Queensland.

In 2010 the land cost component for infill dwellings in Melbourne remained at the lowest proportion of total cost to purchaser (6%) of Australia's largest five cities. Land cost accounted for a larger proportion of overall cost in Sydney (14% down from 15% the previous year), Perth (12% up from 11%), and Adelaide (remaining at 10%).

Sydney also has the highest cost for land in infill dwelling development at $90,000 compared to Melbourne's low of $35,000. Brisbane ($45,000) and Adelaide ($50,000) are also at the lower end, while Perth ($71,000) is closer to Sydney's high.

Infill - land cost, 2009 & 2010

National Dwelling Cost Study — Chart 3.3



Source : Urbis ; Rider Ievett Bucknell, 2011

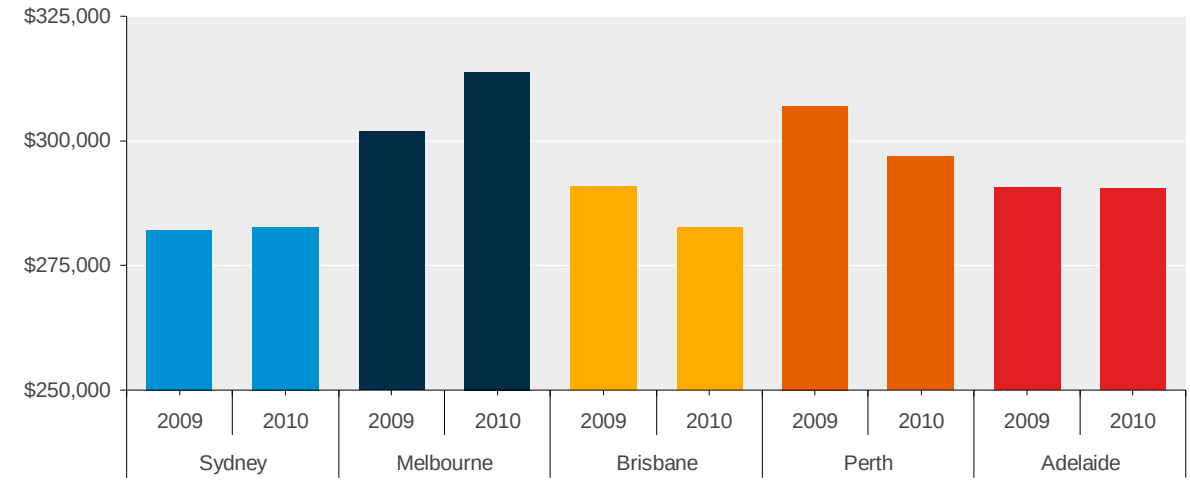
3.1.2 Construction

In 2010, movements in construction costs for infill dwellings across the five cities varied with Sydney and Adelaide recording virtually no increase; Brisbane and Perth recording declines; and Melbourne recording an increase. In most instances construction costs have decreased as a proportion of overall costs to the purchaser with the exception of Melbourne where they remained steady at 52%. Construction costs still represent the largest component of overall costs by a considerable margin. The proportion of total costs attributable to construction varies across cities from 45% in Sydney, 49% in Perth, 50% in Brisbane, and a high of 60% in Adelaide.

Melbourne has replaced Perth as the most expensive city in which to build infill dwellings at $314,000 for a two bedroom unit in a medium to high storey development. Perth follows at $297,000, with Adelaide at $290,000. Brisbane ($283,000) and Sydney ($283,000) are the least expensive of the five cities in which to build infill dwellings.

Infill - construction costs, 2009 & 2010

National Dwelling Cost Study — Chart 3.4



Source : Urbis ; Rider Ievett Bucknell, 2011

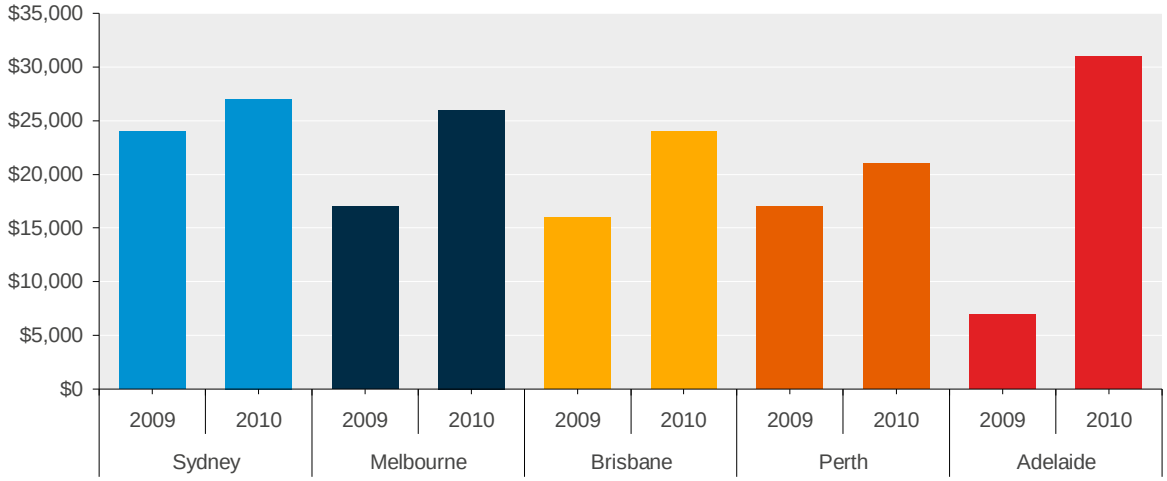
3.1.3 Professional Fees

Professional fees include consultant fees outside of construction costs such as architects, traffic engineers, and post sale legal fees. In 2010 professional fees increased across all cities but remained relatively steady as a proportion of total cost to purchaser (3-4%). The exception to this has been Adelaide where professional fees rose from $7,000 in 2009 to $31,000 in 2010. This was also reflected in an increase from 2% in 2009 to 6% in 2010 of total costs to the purchaser.

Infill - professional fees, 2009 & 2010

National Dwelling Cost Study

Chart 3.5



Source : Urbis ; Rider levett Bucknell, 2011

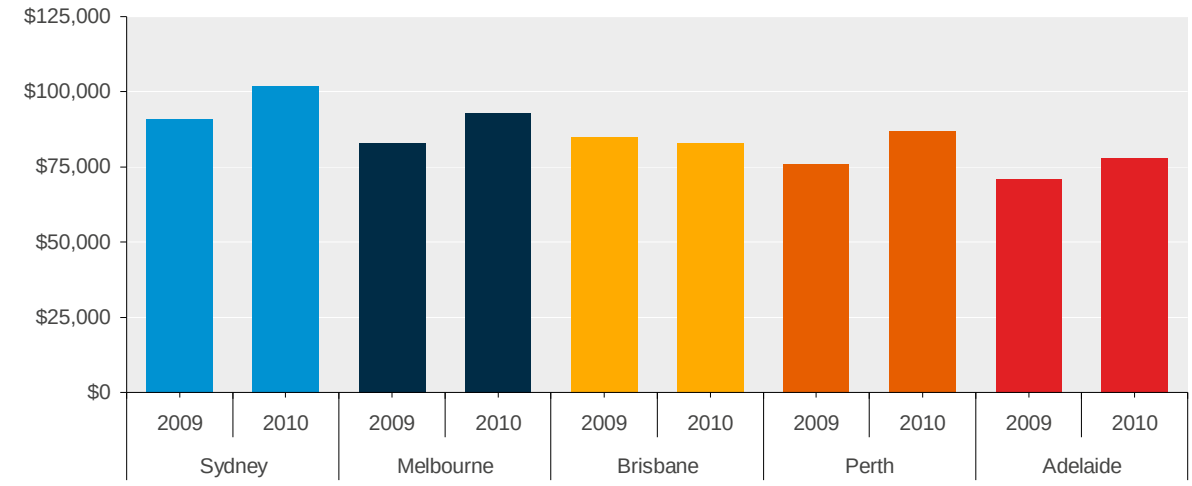
The increase in professional fees, particularly in Adelaide, reflects a refinement to the methodology used for this report. The approach used in this study has drawn on the experience of Rider Levett Bucknall and reflects a more consistent approach in the determination of professional fees across the five cities. The previous study had estimated this component from a number of sources and in the case of Adelaide had not comprehensively captured these costs in this category.

3.1.4 Government Taxes and Charges

In 2010 government taxes and charges have increased for all cities with the exception of Brisbane. On the surface this would indicate that there have been few changes in policy and legislation with respect to infill dwelling development costs across Australia's more populous states, with the exception of Queensland. This is reflected in the relatively unchanged proportion of total costs to purchasers for which government taxes and charges account for infill dwellings (14-16%). Most cities registered either a rise or fall of one percentage point in the proportion that government taxes and charges represent of total costs to purchaser. Brisbane has seen a slightly greater change with a decline from 17% or $86,000 in 2009 to 15% or $83,000 of total purchaser costs in 2010. All other cities recorded increases of $6,000-$11,000. In 2010, Sydney continued to have the highest government costs at $102,000 followed by Melbourne ($93,000), Perth ($87,000), Brisbane, with Adelaide ($78,000) the lowest.

Infill - govt taxes and charges, 2009 & 2010

National Dwelling Cost Study — Chart 3.6



Source : Urbis ; Rider levett Bucknell, 2011

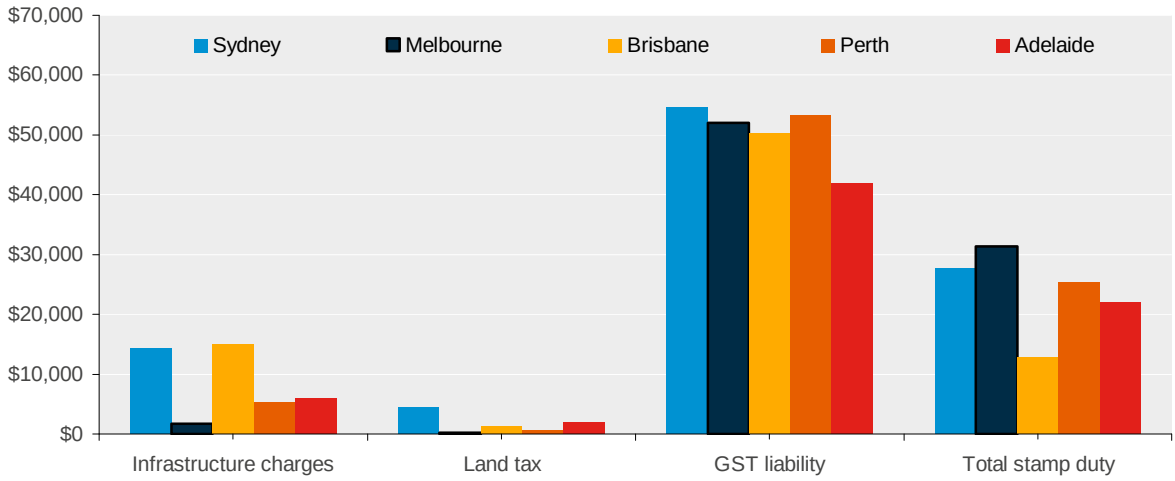
Government taxes and charges incorporate a range of government costs, however GST liability is the largest item. This remains an issue for the development and construction industry as it is not a cost born by existing dwellings. Effectively then a new $500,000 dwelling incurs a $50,000 impost (approximately) compared to an established dwelling of comparable standard.

.

Infill - govt taxes and charges break down, 2010

National Dwelling Cost Study

Chart 3.7



1. Total stamp duty includes stamp duty payable to developer (on land) and purchaser
Source : Urbis ; Rider levett Bucknell, 2011

Stamp duty is the second most significant government cost and Brisbane infill dwellings have a significant advantage over their counterparts in the other major cities in this regard. This is very similar to the picture in the 2009 results and reflects Queensland's favourable stamp duty treatment of lower priced and mid priced dwellings. We noted last year that there are two components of stamp duty that the state governments reap, being on the sale of the underlying land and again on sale of the completed property. The combination of GST and stamp duty for new dwellings remains a significant tax burden for dwellings that flows directly through to the end purchaser.

Much emphasis is given to infrastructure charges in relation to dwelling development. The above chart highlights the comparably high costs that NSW and Queensland pay for infrastructure. However, infrastructure costs represent between 2% to 3% of total costs to purchaser for infill dwellings in these cities. Notably Queensland costs reflect the highest share of overall costs. Recent government initiatives in Queensland have aimed to provide greater certainty and consistency for infrastructure charges (Infrastructure Charges Taskforce, 2011) though industry feedback indicates these charges are at the high end of the affordable range.

Land tax is a relatively insignificant component of government costs however it adds to the overall tax burden on dwellings more so in NSW than the other states.

3.1.5 Development Costs and Interest

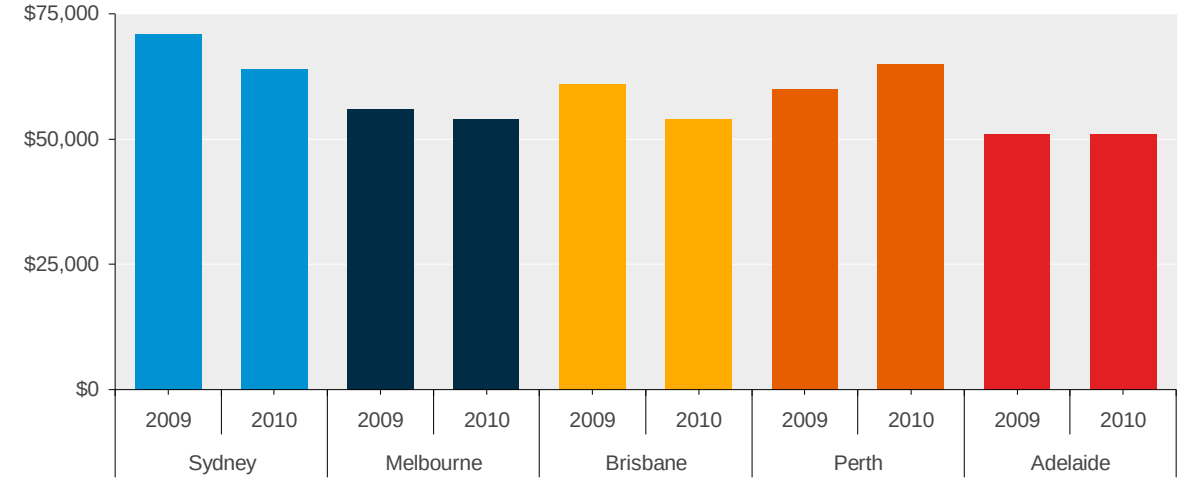
Development costs, including interest have declined or remained steady across all major cities in 2010 with the exception of Perth. Development and interest costs in Perth rose from $60,000 to $65,000 to equal Sydney ($65,000) as the city with the highest development costs.

The decline in development and interest costs is a reflection of a change in methodology adopted in the compilation of 2010 data presented in this report. Through the use of Estate Master there has been improved accuracy in calculating interest. Through enabling payback periods to be calculated monthly the methodology has effectively reduced the amount of interest payable, more closely reflecting what happens in practice.

This has a particular effect on infill development due to the lumpy nature of development where construction funding is required up front as opposed to the on going need for construction funding when developing detached housing. This results in lumpier interest payments for infill development. However, when payback periods can be split into monthly repayments, a significant interest saving is incurred.

Infill - development cost and interest, 2009 & 2010

National Dwelling Cost Study — Chart 3.8



Source : Urbis ; Rider Ievett Bucknell, 2011

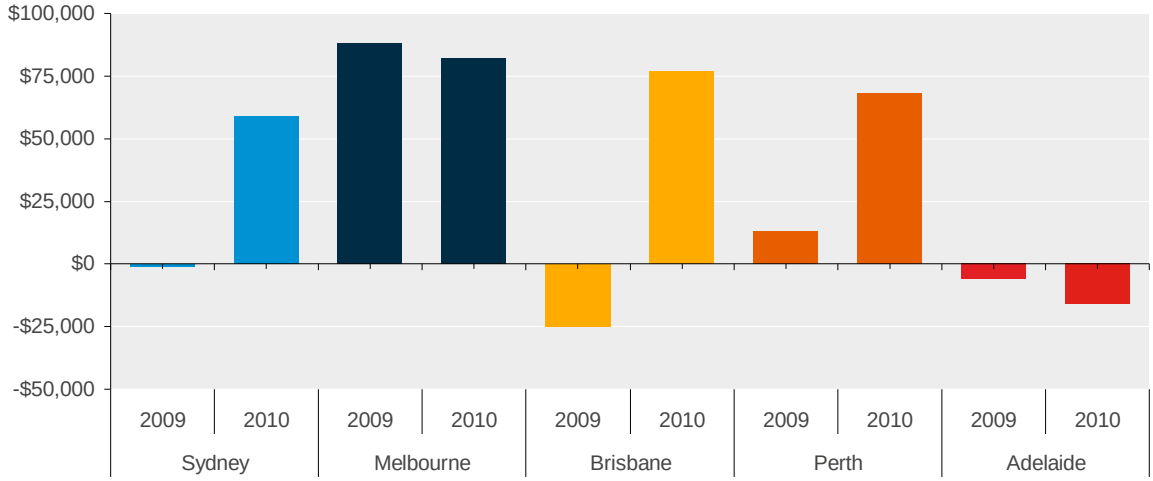
3.1.6 *Development Profit*

Development profit is calculated as the difference between the cost to the developer and the dwelling sale price. Where markets are not performing well developer profit is expected to be low. As this study uses average costs of dwelling components and generally does not take into allowance timing differences between construction costs and sale costs it is possible to generate a loss. This generally would not happen in actuality as a developer would not proceed if there was a likelihood of incurring a loss.

Developer profit increased in 2010 for Sydney, Brisbane, and Perth. This reflects a turnaround from a loss or minimal profit in 2009 to a profit of between 9-14% of total costs to the purchaser. This is likely to be a reflection of these markets being on the upward part of the infill dwelling cycle with sales price increases exceeding or in line with the growth of volume of dwelling production. While developer profit for infill dwelling development in Melbourne has declined from 15% to 14% of overall cost to purchaser, this level of profit still falls within an acceptable range for the developer, be it at the low end. This is consistent with a falling market indicating that the Melbourne infill market could be in the early stages of a downturn. Infill dwelling development in Adelaide remains problematic with developer profit falling further into negative territory at -3%. This indicates the Adelaide infill dwelling market is in decline but also that it has a cost imbalance compared to market prices.

Infill - developer profit, 2009 & 2010

National Dwelling Cost Study — Chart 3.9



Source : Urbis ; Rider levett Bucknell, 2011

3.2 GREENFIELD DWELLING COSTS

The disparity between greenfield dwelling costs across Australia's five major cities continued in 2010 although there was a change in the relative price differences between cities. This was due to a nominal fall in greenfield dwelling prices in Sydney (from $600,000 in 2009 to $570,000 in 2010) and Brisbane ($400,000 to $376,000) and moderate rises in Perth ($370,000 to $402,000) and Adelaide ($395,000 to $415,000). Greenfield dwelling prices in Melbourne experienced the greatest increase ($400,000 to $450,000) which is a reflection of the stronger greenfield dwelling market in this city compared with other major Australian cities.

It is important to note that this study does not necessarily assess the average growth in dwelling costs across capital cities over time. Rather it is a relative comparison of dwelling costs across Australia's five major cities where average costs and prices for a relatively comparable dwelling in each city have been used. We noted in the background to this report how the Melbourne greenfield market provides a greater depth of affordable greenfield housing. This has been achieved through a number of mechanisms, an important factor being the reduction in average lot sizes. This has been more prevalent in the Melbourne market than other capital city markets. The impact for this study is that when comparing houses on comparable sized blocks (400-500m^2) Melbourne's affordability advantage is less apparent.

Greenfield housing comparison

Summary table

Table 3.3

Cost Component	Sydney				Melbourne				Brisbane			
	2009		2010		2009		2010		2009		2010	
	$	%	$	%	$	%	$	%	$	%	$	%
Cost to developer	$535,000		$552,000		$356,000		$406,000		$362,000		$342,000	
Sale price	$600,000		$570,000		$400,000		$450,000		$400,000		$376,000	
Total cost to purchaser	$626,146	100%	$595,024	100%	$418,911	100%	$472,430	100%	$407,588	100%	$382,789	100%
Land	$152,000	24.3%	$135,000	22.7%	$50,000	11.9%	$55,000	11.6%	$54,000	13.2%	$25,000	6.5%
Govt taxes & charges	$130,000	20.8%	$131,000	22.0%	$71,000	16.9%	$82,000	17.4%	$76,000	18.6%	$69,000	18.0%
Professional fees	$10,000	1.6%	$16,000	2.7%	$2,000	0.5%	$16,000	3.4%	$3,000	0.7%	$13,000	3.4%
Construction	$211,146	33.7%	$214,024	36.0%	$212,911	50.8%	$221,430	46.9%	$201,588	49.5%	$201,789	52.7%
Development cost & interest	$58,000	9.3%	$81,000	13.6%	$39,000	9.3%	$54,000	11.4%	$35,000	8.6%	$40,000	10.4%
Developers profit	$65,000	10.4%	$18,000	3.0%	$44,000	10.5%	$44,000	9.3%	$38,000	9.3%	$34,000	8.9%

Cost Component	Perth				Adelaide			
	2009		2010		2009		2010	
	$	%	$	%	$	%	$	%
Cost to developer	$371,000		$347,000		$355,000		$394,000	
Sale price	$370,000		$402,000		$395,000		$415,000	
Total cost to purchaser	$384,204	100%	$416,831	100%	$415,289	100%	$436,436	100%
Land	$52,000	13.5%	$38,000	9.1%	$50,000	12.0%	$55,000	12.6%
Govt taxes & charges	$70,000	18.2%	$75,000	18.0%	$66,000	15.9%	$76,000	17.4%
Professional fees	$9,000	2.3%	$14,000	3.4%	$4,000	1.0%	$13,000	3.0%
Construction	$219,204	57.1%	$195,831	47.0%	$217,289	52.3%	$220,436	50.5%
Development cost & interest	$35,000	9.1%	$39,000	9.4%	$38,000	9.2%	$51,000	11.7%
Developers profit	-$1,000	-0.3%	$55,000	13.2%	$40,000	9.6%	$21,000	4.8%

1. 2009 Inputs are based on the 2009 Final Report National Dwelling Cost Study January 2010

2. Total cost to purchaser includes stamp duty, a transfer fee and legal costs

2. Initial developer profit figures are based on Estate Master

Source : Urbis ; Rider Levett Bucknall 2010

When examining new dwelling approvals for houses across the five major cities over the past year recoveries appear to have continued in the first part of 2010 before a slowing or decline in all markets. New dwelling approvals in Sydney remained steady and well above the five year average for the city. Approvals in Melbourne remained strong, although approvals weakened somewhat in the second half of 2010, but remained well above the five and ten year averages. Approvals in Brisbane weakened notably in the second half of the year and remained significantly below the five and ten year averages. Approvals in Perth declined in the second half of the year though remained in line with the five year average and above the ten year average. In Adelaide, approvals remained steady over the second part of the year and remained above the five and ten year averages.

New dwelling approvals - houses

National Dwelling Cost Study — Table 3.4

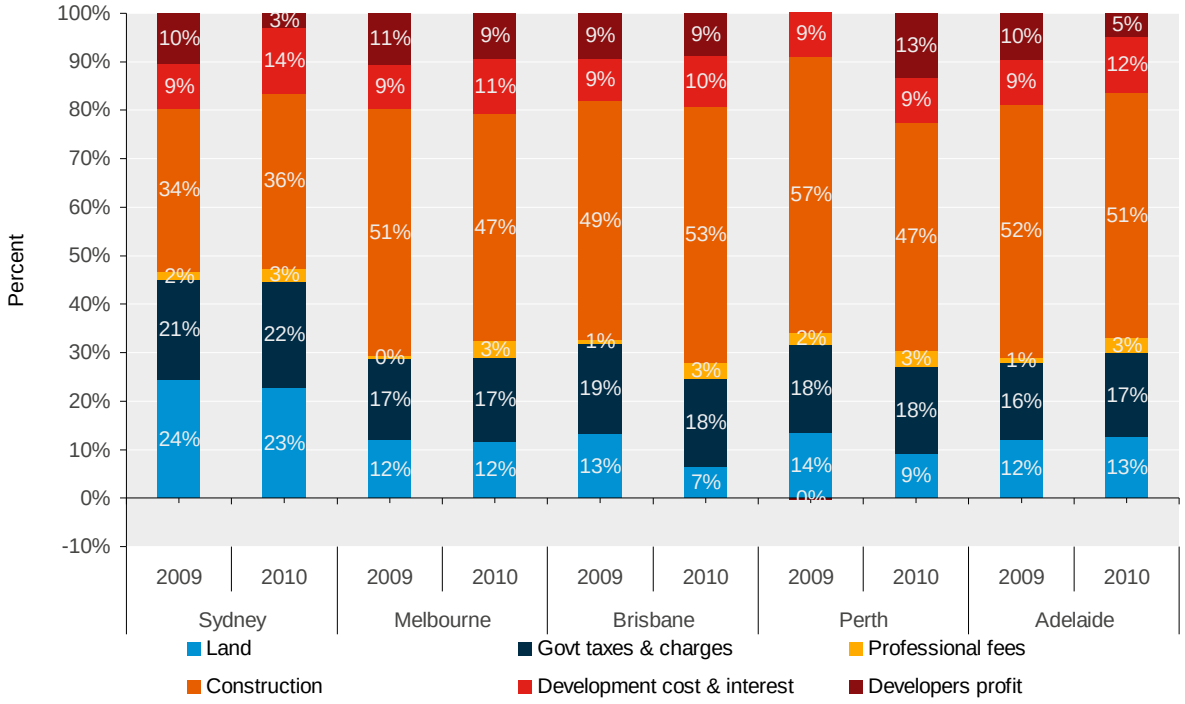
	Statistical Divisions (SD)				
	Sydney	**Melbourne**	**Brisbane**	**Perth**	**Adelaide**
2000-01	9,835	17,492	7,847	8,734	3,838
2001-02	13,268	25,658	12,245	12,759	5,848
2002-03	10,799	22,657	13,064	13,295	5,538
2003-04	9,509	22,698	12,966	14,123	5,859
2004-05	7,284	20,351	9,816	13,589	5,196
2005-06	6,563	18,742	9,918	15,392	4,982
2006-07	6,460	19,169	10,775	13,462	5,526
2007-08	6,686	22,124	11,935	11,742	6,673
2008-09	6,038	21,441	8,401	11,114	5,850
2009-10	8,104	26,080	9,107	14,178	6,565
Calendar year 2010	8,020	25,644	8,453	13,025	6,350
5 year average	6,770	21,511	10,027	13,178	5,919
10 year average	8,455	21,641	10,607	12,839	5,588

In 2010, many of the components contributing to greenfield dwelling costs across the five cities have changed little as a proportion of total cost to purchasers. Exceptions to this include the developer's profit for Sydney, Perth, and Adelaide; construction costs for Perth; and land costs for Brisbane and Perth which all increased substantially. These are discussed in detail in the analysis for each cost component later in this section of the report.

Greenfield - summary of cities, 2009 & 2010

National Dwelling Cost Study

Chart 3.10



Source : Urbis

Although having experienced a decline over 2010, Sydney continued to have the highest costs to purchasers for greenfield dwellings ($595,000). This is owing to relatively high land costs, government taxes and charges, and development costs. Sydney is comparable to the other cities in regards to construction costs. Melbourne has the second highest total costs to purchasers ($472,000) owing to relatively higher construction costs, and development costs. Development profit in Melbourne is still relatively high as a result of the historically strong demand for greenfield dwellings and widespread affordability of this dwelling offer.

Adelaide has the third highest total costs to purchasers for greenfield dwellings (for the study areas), marginally lower than Melbourne. Adelaide has comparably high construction costs (second highest across the five cities), land costs, and development costs. This has put downward pressure on the development profit generating unsustainable levels of return of less than 5% for developers.

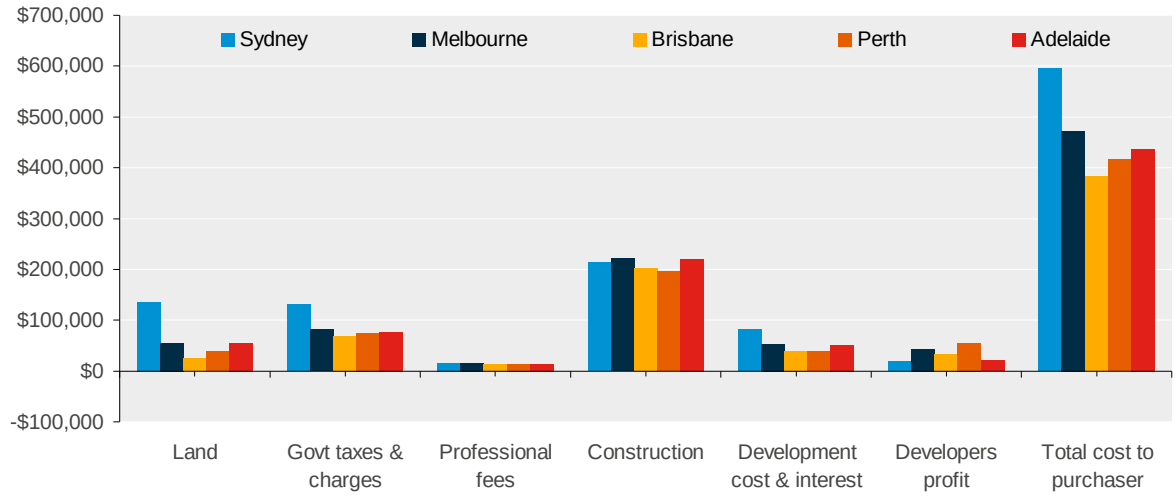
Perth has marginally lower total costs than Adelaide but has advantages in lower land costs, construction costs, and development costs. These factors have generated a stronger development profit (13%) for greenfield dwellings in Perth.

Brisbane has seen a notable change in greenfield dwelling development costs including a significant fall in the land cost component and a reduction in government taxes and charges principally as a result in the lower sale price. The cost reductions have balanced the fall in sale price leaving the developers profit stable at 9% of total cost to purchaser.

Greenfield - summary by city, 2009 & 2010

National Dwelling Cost Study

Chart 3.11



Source : Urbis ; Rider levett Bucknell, 2011

3.2.1 Land

The land cost component of greenfield dwelling costs has not seen strong upward movement for most cities in 2010. Land costs declined in Sydney (from $152,000 in 2009 to $135,000 in 2010), Brisbane ($54,000 to $25,000), and Perth ($52,000 to $38,000). This is owing to weaknesses in these greenfield markets as sale volumes fall and developers have cut prices to stimulate demand. This response has also seen average block sizes decline as a response to increased demand for affordable dwellings.

The rise in the land cost component in Melbourne ($50,000 to $55,000) and Adelaide ($50,000 to $55,000) reflects the relative strength in these dwelling markets especially in the first half of 2010. This is also reflected in the strong increase in new dwelling approvals for houses in these cities.

Greenfield - land cost, 2009 & 2010

National Dwelling Cost Study — Chart 3.12

Source : Urbis ; Rider levett Bucknell, 2011

3.2.2 Construction

In 2010, for greenfield dwellings construction costs remain the largest component of total costs to purchasers though, as was the case in 2009, these are generally at lower proportions than for infill dwellings. House construction costs have increased as a proportion of total cost to purchaser in Brisbane and Sydney as overall costs have declined. However, in absolute terms construction costs for greenfield dwellings in Brisbane have remained stable at $202,000. Construction costs have also remained relatively stable in Adelaide (from $217,000 in 2009 to $220,00 in 2010), and Sydney ($211,000 to $214,000). Melbourne has become the most expensive city to build greenfield dwellings in (from $213,000 in 2009 to $221,000 in 2010) just ahead of Adelaide, while Perth ($219,000 to $196,000) has gone from the most expensive to the least expensive city for greenfield dwelling construction.

With respect to these movements in construction costs, Rider Levett Bucknall has provided the following insights. Tendered construction prices are very closely related to work volumes. Up until 2008 the level of work exceeded the capacity of the industry and so prices received at tender were very high. However, since 2008 the volume of work has declined substantially so that currently the construction industry capacity is well in excess of the available work. This results in very competitive tender prices due to the following factors:

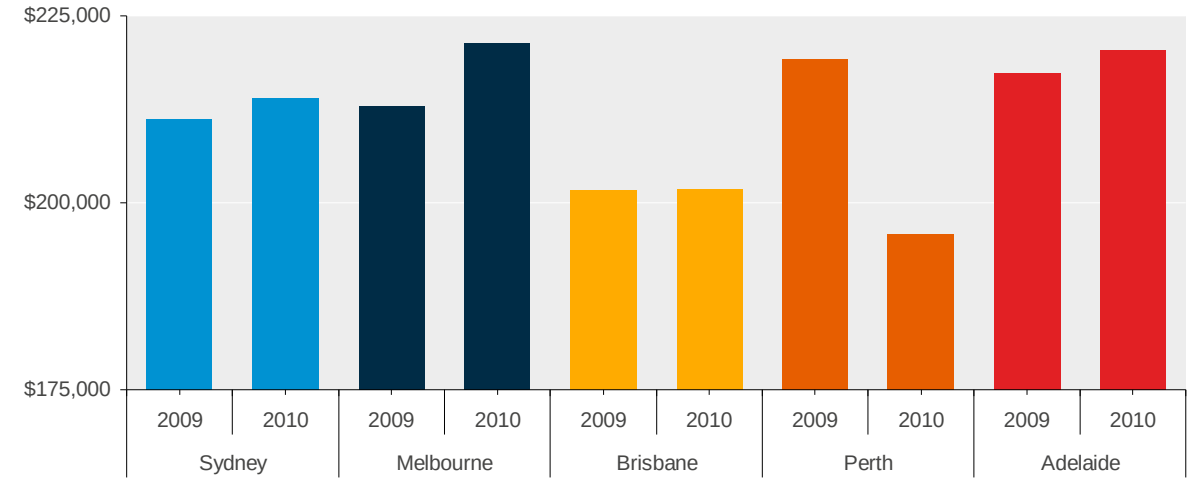
- Suppliers offer substantial discounts on materials
- Subcontractors cut margins to the minimum to secure work for their personnel
- Main contractors cut margins to secure work

As a result there has been a 15% reduction in tendered prices from a high in September 2008 to the end of 2009 with relatively flat prices from then on. This has impacted each of the five major cities differently with construction cost increasing in the markets with greater demand and declining or remaining steady in weaker markets. The significant decline in Perth reflects a broader freeing of labour supply across the Perth market.

Tendered rates are expected to increase again from mid this year at an annual rate of 4%.

Greenfield - construction costs, 2009 & 2010

National Dwelling Cost Study — Chart 3.13



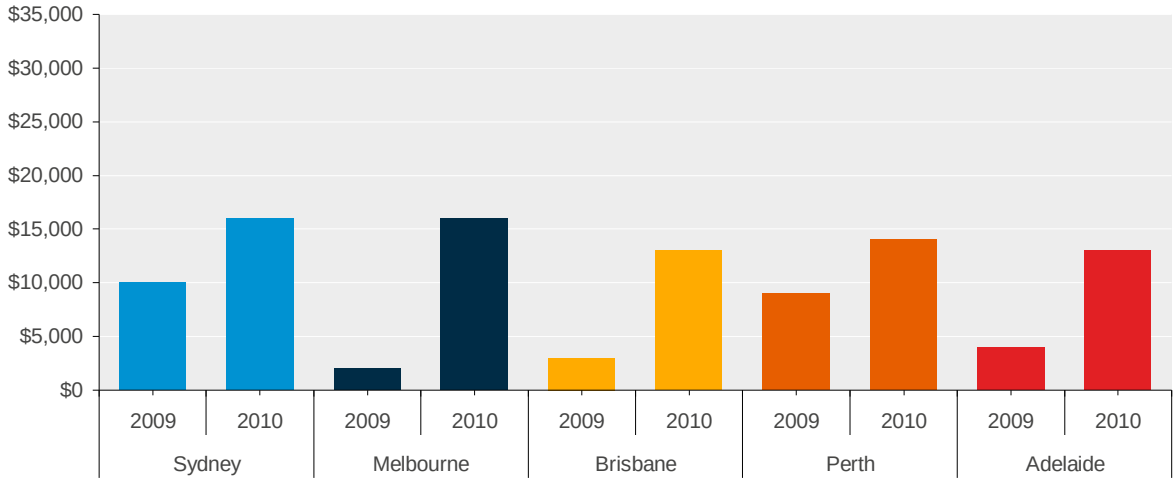
Source : Urbis ; Rider levett Bucknell, 2011

3.2.3 *Professional Fees*

Professional fees represent a relative minor component of total cost to purchaser. In 2010, the proportion of total cost attributable to professional fees was relatively consistent across the five cities (3%). The dollar value of professional fees increased across all cities, however this was principally due to a change in methodology in the compilation of the 2010 data. In 2009 some geographic variations relating to the development of greenfield land were included. Assumptions on land constraints and resulting professional input (e.g. hydrology, acoustics, traffic) varied across some locations. In 2010, these assumptions have been standardised across the locations and now better reflect averages incurred by the developer.

Greenfield - professional fees, 2009 & 2010

National Dwelling Cost Study — Chart 3.14



Source : Urbis ; Rider levett Bucknell, 2011

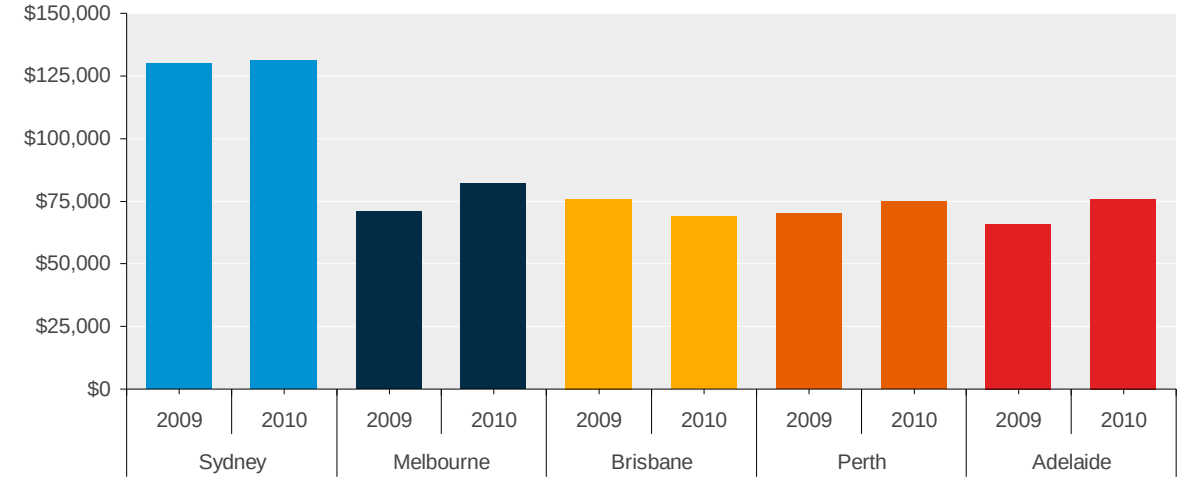
3.2.4 Government Taxes and Charges

In 2010, government taxes and charges have increased moderately across Melbourne, Perth, and Adelaide, generally in line with overall dwelling price movements. This would be expected as the major government components (GST, and stamp duty) relate principally to the sale price. In the cities which have experienced declines in greenfield dwelling prices government taxes and charges have remained stable (Sydney) or fallen (Brisbane).

Greenfield - govt taxes & charges, 2009 & 2010

National Dwelling Cost Study

Chart 3.15



Source : Urbis ; Rider levett Bucknell, 2011

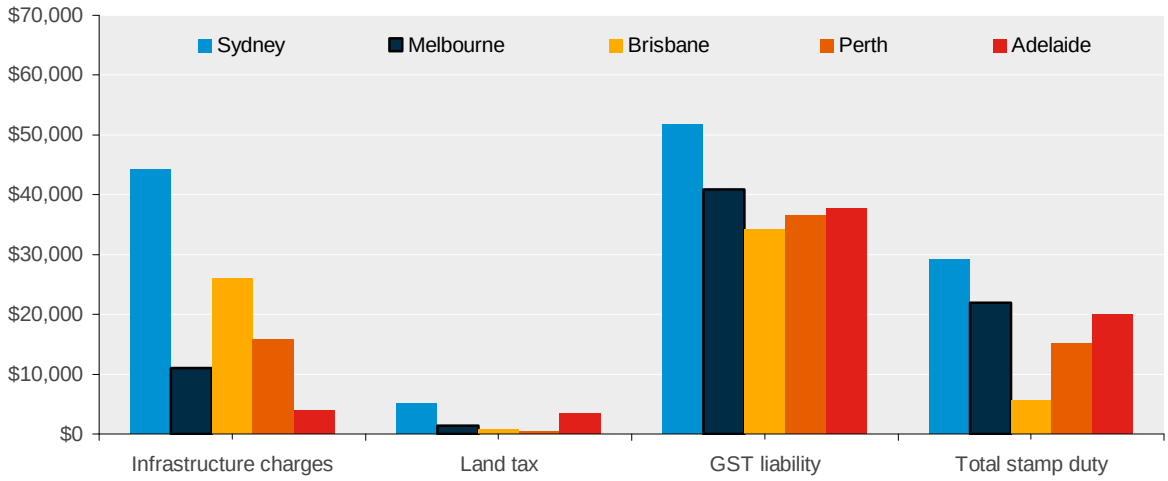
An examination of the sub components of government taxes and charges provides insight into these movements. The decline in government taxes and charges for greenfield dwellings in Brisbane in 2010 is principally due to the lower levels of stamp duty resulting from the Queensland Government's concessions in stamp duty to assist low income home buyers. Owing to this Queensland has increased its advantage in stamp duty costs for greenfield dwellings (generally entry level housing) over the other states. This is not as visible for the development industry as the majority of this cost is incurred after the sale, and is unlikely to be part of the comparison that interstate buyers make when considering relocating from another state. For Brisbane Greenfield dwellings, the GST liability has also declined with the decline in the dwelling price, while infrastructure charges have remained steady at around $27,000.

In 2010, government taxes and charges in Sydney remained at around the same level as in 2009, although they rose as a proportion of total cost to purchaser from 21% to 22%. In Sydney, declines in GST and stamp duty due to lower sale prices have been offset by an increase in infrastructure charges. This is mostly due to the inclusion of a $15,000 state infrastructure charge on top of the average $30,000 local government charges.

Greenfield - govt taxes & charges categorised, 2010

National Dwelling Cost Study

Chart 3.16



1. Total stamp duty includes stamp duty payable to developer (on land) and purchaser
Source : Urbis ; Rider levett Bucknell, 2011

3.2.5 Development Costs and Interest

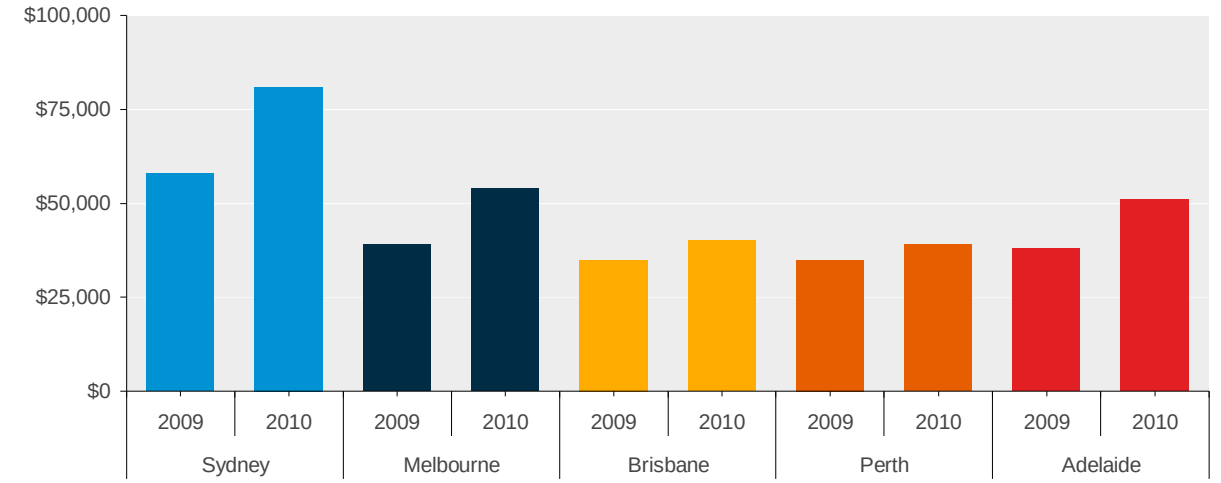
In 2010, development costs and interest rose notably in Sydney (from $58,000 in 2009 to $81,000 in 2010), Melbourne (from $39,000 to $54,000), and Adelaide ($38,000 to $51,000). This reflected rises in interest rates, marketing costs and increased levels of required due diligence on site acquisitions following the global financial crisis.

With the reserve bank lifting interest rates by 100 basis points over the 2010 calendar year, developers incurred increases in borrowing costs, most notably interest payable.

With many housing markets finding it difficult to gather momentum, marketing campaigns and selling strategies (including targeting investor groups) have meant developers have been required to spend more on marketing in order to maintain cash flows.

Greenfield - development cost & interest, 2009 & 2010

National Dwelling Cost Study — Chart 3.17



Source : Urbis ; Rider levett Bucknell, 2011

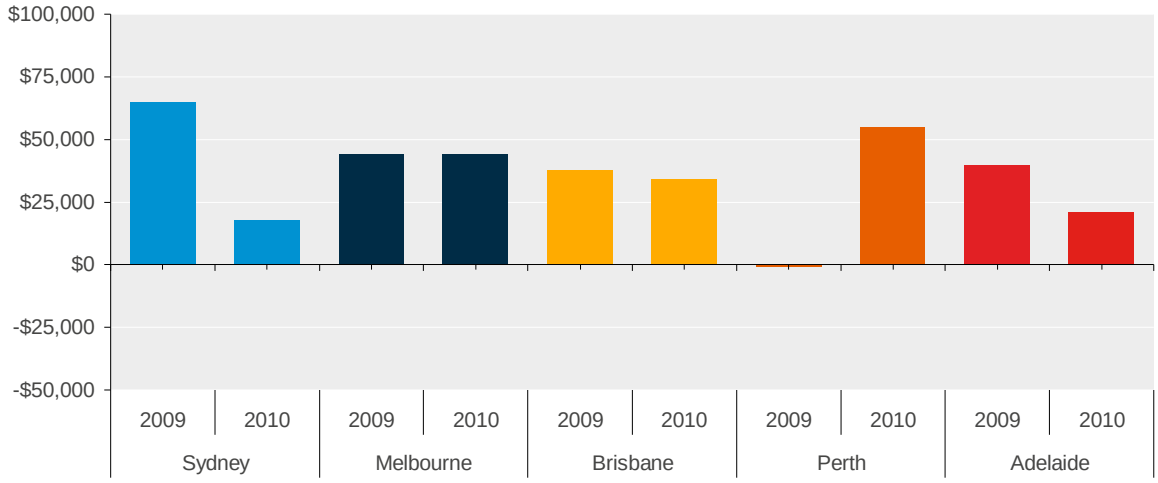
As a result of these factors there was an increase in the proportion of total cost to purchaser attributable to development costs and interest from 9% in 2009 to 10-14% in 2010 across nearly all cities. Development costs in Brisbane experienced similar proportional increase from 9% to 10%. However, the overall cost figure in Brisbane remained relatively steady indicating the decline in total costs is the cause for the proportional increase of this component. Perth is the only location where despite a modest increase in this component, development costs and interest continue to account for 9% of total costs to purchasers.

3.2.6 Development Profit

In 2010, there was a tightening in the profit levels in the greenfield dwelling development market in nearly all cities. The exception was Perth where developers profit rose to a creditable 13% of total costs to purchasers. This was due to a solid rise in greenfield dwelling prices and notable falls in land costs, and construction costs. While the market in Melbourne remained relatively strong, costs increased faster than sale prices in 2010. This resulted in development profit remaining steady at $44,000, but a decline from 11% to 9% of total costs to purchasers.

Greenfield - developer profit, 2009 & 2010

National Dwelling Cost Study — Chart 3.18



Source : Urbis ; Rider levett Bucknell, 2011

Brisbane's greenfield dwelling market was difficult in 2010. New dwelling approval rates for detached dwellings rose in the early part of the year but then fell in the second half as the housing recovery stalled. Current new dwelling approval levels are still well below the five and ten year averages for new detached dwellings in Brisbane. This was reflected in substantial reductions in dwelling prices in greenfield areas in 2010. Developers responded to this through reductions in lot sizes. In comparison to Melbourne though it would appear that there needs to be a greater spread of this across the Brisbane greenfield market. As a result developer profit in Brisbane declined from $38,000 to $34,000 per house.

Sydney like Brisbane has experienced a difficult greenfield dwelling market during 2010. While prices have come down along with declines in land, and government taxes and charges, these have been offset with increases in professional fees, construction costs, and developer costs and interest. This has resulted in a reduction in developers profit from $65,000 (10% of total costs to purchasers) to $18,000 (3% of total costs to purchasers).

The Adelaide market appears to have turned during 2010 with costs increasing at a higher rate than dwelling sale prices. Notable increases in land, government taxes and charges, professional fees, and development costs and interest have resulted in a decrease in developer profit from 10% to 5% of total costs to purchasers.

3.3 INFILL VS GREENFIELD

A comparison of infill and greenfield dwelling costs in 2009 was presented in the previous National Dwelling Costs Study report to ascertain the price and cost competitiveness between the two types of dwelling products across different locations at this time. The objective was to gain insight into how this may assist in improving housing affordability. In this analysis, greenfield dwellings in 2010 in all major cities had cost advantages over infill dwellings, however the scale of the advantage varied substantially across the cities.

The difference between the total costs to purchasers for greenfield and infill dwellings is greatest in Brisbane (32%) due to the decline in greenfield dwelling prices and associated cost cutting. Land is also much cheaper for greenfield dwellings than for infill dwellings. This is not the case in most of the other cities including Sydney and Melbourne where land is around twice as expensive for greenfield dwellings compared to infill dwellings. Professional fees are substantially cheaper for greenfield dwellings due to the less complex nature of these types of dwellings including limited architectural costs, and generally cheaper costs for traffic consultants, noise, and other specialists.

Sydney (5%) and Adelaide (10%) have minimal variations between infill and greenfield dwelling costs. This appears to reflect different situations. Sydney's established infill dwelling market provides proximity advantages over its greenfield market and a genuine alternative housing option. Adelaide's situation appears to be more of a cost constrained infill market that can't achieve the price points it needs to be profitable.

Melbourne (22%) and Perth (32%) have relatively strong infill markets and this is reflected in the higher prices and costs of their medium and high rise infill product compared to their greenfield products.

Greenfield vs infill development

National Dwelling Cost Study

Table 3.5

Cost component	Sydney		Melbourne		Brisbane		Perth		Adelaide	
	$	%	$	%	$	%	$	%	$	%
Land - greenfield	$135,000	-50%	$55,000	-57%	$25,000	44%	$38,000	46%	$55,000	-10%
Land - infill	$90,000		$35,000		$45,000		$71,000		$50,000	
Govt taxes & charges - greenfield	$131,000	-28%	$82,000	12%	$82,000	1%	$75,000	14%	$76,000	3%
Govt taxes & charges - infill	$102,000		$93,000		$83,000		$87,000		$78,000	
Professional fees - greenfield	$16,000	41%	$16,000	38%	$13,000	46%	$14,000	33%	$13,000	58%
Professional fees - infill	$27,000		$26,000		$24,000		$21,000		$31,000	
Construction - greenfield	$214,024	24%	$221,430	29%	$201,789	29%	$195,831	34%	$220,436	24%
Construction - infill	$282,702		$313,845		$282,580		$296,935		$290,452	
Development cost & interest - greenfield	$81,000	-27%	$54,000	0%	$40,000	26%	$39,000	40%	$51,000	0%
Development cost & interest - infill	$64,000		$54,000		$54,000		$65,000		$51,000	
Developers profit - greenfield	$18,000	69%	$44,000	46%	$34,000	56%	$55,000	19%	$21,000	231%
Developers profit - infill	$59,000		$82,000		$77,000		$68,000		-$16,000	
Total cost to purchaser - greenfield	$595,024	5%	$472,430	22%	$382,789	32%	$416,831	32%	$436,436	10%
Total cost to purchaser - infill	$624,702		$603,845		$565,580		$608,935		$484,452	

**Excludes Negative Developer Profit*

Source : Urbis ; Rider Levett Bucknall 2010

There are also notable differences between infill and greenfield dwelling for the individual cost components.

In 2010, government taxes and charges were lower for greenfield dwellings than infill dwellings in Melbourne (12% lower) and Perth (14% lower) but more expensive in Sydney (28%), whereas they were comparable in Brisbane and Adelaide. In Melbourne and Perth this is due to lower infrastructure charges being applied to infill dwellings than greenfield dwellings. This results in a lower differential between greenfield and infill dwellings for government taxes and charges. Brisbane is also influenced by higher infrastructure charges for greenfield dwellings than for infill dwellings which results in little difference between government taxes and charges for Brisbane greenfield and infill dwellings.

In Adelaide, the limited differential between infill and greenfield dwelling costs for government taxes and charges (2%) is principally due to higher land tax costs for greenfield dwellings. This is a result of higher land costs for greenfield dwellings over infill dwellings.

Sydney is the only city where government taxes and charges are more expensive for greenfield dwellings than infill dwellings. This is a result of higher infrastructure charges for greenfield dwellings and higher stamp duty due to the higher land cost of the greenfield dwellings over the infill dwellings.

In 2010 it was considerably cheaper to construct greenfield dwellings than infill dwellings across all the major cities. It was around 24% to 34% cheaper to construction a three bedroom, single storey detached greenfield house compared to a two bedroom, unit in a multi-storey (5 levels or greater) infill development. The higher construction cost for infill development is due to increased costs in safety, union requirements, basement car parking, lifts, excavation, and foundations.

In 2010 it was broadly more profitable to undertake infill dwelling development than greenfield dwelling development. In Australia's three largest cities developer profit for infill development has yielded higher returns than that for greenfield development – Sydney (9.4% of total cost to purchaser compared to 3.0%), Melbourne (14% compared to 9%), and Brisbane (14% compared to 9%). In Sydney and Melbourne higher developer profit for infill has been a result of the lower land costs for infill dwellings compared to greenfield. A reduction in developer profit for Greenfield dwellings in Sydney can be attributed to the higher government taxes and charges, and developer costs and interest for greenfield dwellings. While in Brisbane, lower dwelling sale prices for greenfield dwellings compared to infill dwellings has generated a lower developer profit for greenfield.

Perth and Adelaide have seen relatively better developer profit results for greenfield dwellings compared to infill dwellings. For Perth this has been driven by reductions in costs for greenfield dwellings for land, and construction (greater than the reduction for infill dwelling construction costs). Adelaide has seen a reduction in developer profit in gross terms for both infill and greenfield dwelling development as costs have risen faster than dwelling sale prices. However, greenfield dwellings have moved from a position of comparably strong performance to modest performance while infill dwellings have moved from a position of poor performance to an even poorer position.

3.4 REVIEW OF FINDINGS FROM PREVIOUS STUDY

It has been a year since the previous National Dwelling Cost study and as we bring together the analysis for this years study it is worth recalling the findings from the 2009 study.

3.4.1 Infill Dwelling Costs

The key findings from the 2009 National Dwelling Cost Study in relation to infill dwellings were:

- Construction costs are the most significant component of infill dwelling costs, accounting for in excess of 50% of the total cost. This component has experienced substantial cost increases in recent years as a result of high demand for labour and materials and increasing regulation for sustainability and safety.
- Government taxes and charges also represent a significant proportion of the total cost of infill dwellings. Substantial savings could be achieved through the elimination of the GST on new housing, reduction or elimination of stamp duty, and reductions in infrastructure charges in Sydney and Brisbane.
- Improvements to improve infill dwelling costs were identified in increasing the supply of sites through streamlined planning legislation for this form of development; and reducing the development timeframe.

3.4.2 Greenfield Dwelling Cost Summary

Key findings for greenfield dwelling costs from the 2009 study were:

- Sydney dwellings are much more costly than those of the other four cities, some $200,000 higher. This is principally due to the much higher land costs (three times higher) and the associated government taxes and charges costs (including higher infrastructure charges).
- As was the case with infill dwellings, construction costs are the most significant individual cost category (34% to 52%), though proportionally less significant than for infill dwellings. Land (10% to 24%) and government taxes and charges (13% to 21%) are more significant than for infill dwellings.
- Examination of dwelling price data and new dwelling approval (NDA) data indicates that dwelling supply issues are placing upward pressure on prices in Sydney and Brisbane while stronger markets in Melbourne and Adelaide have performed better in providing the necessary supply to the market.
- Government taxes and charges, specifically the GST, stamp duty, and infrastructure charges are areas for reform that can significantly improve housing affordability

3.4.3 Infill vs Greenfield and Change over Time

- A key finding of this study is the significantly higher cost of infill dwellings over greenfield dwellings (13% to 39% with the exception of Sydney where greenfield costs are higher). This is principally a result of higher construction costs for infill dwellings (medium rise two bedroom apartments) and longer development timeframes. Given the strategic planning push towards greater infill development across all major Australian cities, this represents a fundamental inconsistency that must be addressed as part of any strategic housing affordability response.

3.4.4 The Focus for Policy Responses

There were four areas for the focus of future policy responses:

Construction Costs – While these have been impacted by high demand for resources and labour they have also been significantly impacted by increased government regulation in relation to environmental requirements (sustainability), and safety. Little work has been done in regard to this and a recommendation is made to undertake a detailed study into how dwelling construction costs can be reduced while limiting any reductions in desired environmental and safety outcomes.

Tax Reform – The Australian Government's Henry Tax Review represents the most detailed and widespread review of Australia's tax system in many years. Consideration needs to be given to incorporating the elimination of either the GST liability or stamp duty on new dwellings. Infrastructure charges are increasingly becoming a driver of worsening housing affordability. While the user pays approach underpinning this is designed to cover costs of necessary infrastructure this has not assisted the housing affordability position in these jurisdictions. A national review of infrastructure charging approaches is required with a policy response that reduces the impact that these costs are having on housing affordability.

Land Supply – Land supply is an important driver of end housing prices and subsequently housing affordability. The locations that have their residential land supply markets in relative equilibrium (Melbourne and Adelaide) appear to have the best balance between affordability, commerciality, and dwelling supply. Markets with constrained supply such as Sydney have a significant imbalance between affordability and long term supply. This is the responsibility of State and Local Governments, however a number of jurisdictions have been failing in this area for sometime. This is not as easy as just rezoning more land for residential development as this process is excessive in a number of jurisdictions making the end land supply unaffordable for the target markets. In addition, such land requires significant infrastructure of which a number of jurisdictions are unable to currently fund. Australian Government intervention appears warranted in these areas in the form of accelerated planning and approval processes and infrastructure funding.

Development Timeframes – Related to land supply is the issue of excessive development timeframes. Time is money in the residential development process and the ability to reduce development timeframes, principally planning approval timeframes can positively impact housing affordability. Increasing development timeframes are a result of increasing government regulation and pressure for resources, both labour and capital (including infrastructure). It is difficult to see how development approval timeframes can be accelerated without compromising recent regulatory goals, specifically in relation to environmental sustainability objectives. There are, however, likely to be opportunities to accelerate developments that voluntarily meet affordability and environmental sustainability objectives. Incentives, in the form of accelerated approval processes, where developments demonstrate the ability to achieve desired outcomes in these areas should be implemented across all jurisdictions.

4 Conclusion

This update of the 2009 National Dwelling Cost Study across Australia's five major cities provides an opportunity to review progress in relation to dwelling costs and identify areas for further focus or prioritised action. A summary of the key findings for infill and greenfield dwelling costs is presented below as a basis for policy recommendations that follow to identify initiatives to address housing affordability.

4.1 INFILL DWELLING COST SUMMARY

Infill dwelling development improved across most of the five major city markets with the exception of Adelaide which saw a further decline in the viability of medium and high rise infill dwelling development. The Melbourne market declined marginally but is still performing relatively well.

Melbourne continues to be the best performing infill dwelling market in Australia both in terms of volume and profitability. This performance is underpinned by low land costs and competitive government taxes and charges, principally low infrastructure charges for this type of development. This is being offset by rising construction costs and sale prices which are starting to squeeze profit margins. It will be interesting to see if Melbourne can retain the market balance it has been able to achieve between supply, demand, and costing over the coming 12 months.

Sydney, Brisbane and Perth achieved notable turnarounds in the costings of their infill dwelling products. In Sydney this has been driven by an increase in sale price and a stable construction cost. Perth has benefited from the same situation though it has also benefited from a reduction in construction costs. Brisbane has benefited from an increase in sale prices and a reduction in land prices. This reflects the potential oversupply of sites (land price) and supply constraints from the detached housing market (benefiting price).

Construction remains the largest cost component of infill dwellings (45%-60%) and a key area to focus reform to improve housing affordability. While most of the other factors appear to respond to market pressures or move with sale price movements, construction costs appear to be less influenced by market changes. While construction costs in Brisbane and Perth declined these were at low rates (3%). Construction costs for medium and high rise infill dwellings are in the order of 50% higher than for greenfield dwellings that are of a larger size. This is a barrier to the provision of affordable inner city dwellings. There are a number of factors that lead to greater construction costs for infill dwellings over greenfield dwellings. These include higher environmental and safety requirements; additional components such as lifts, sprinklers, basements, and fire stairs; and additional labour costs associated with unionisation.

The next most significant component is government taxes and charges (14-16%). As highlighted previously, GST, stamp duty and infrastructure charges are the principal components here. Little progress appears to have been achieved across most jurisdictions in regard to addressing the big issues of tax reform. GST and stamp duty remain a double cost blow to new dwellings in an industry which has affordability issues.

Price pressure on land appears to have reduced somewhat with Brisbane experiencing a fall and most of the other cities remaining relatively stable. Perth is the exception here and this may be the result of a shortage of appropriate sites and the improving market.

4.2 GREENFIELD DWELLING COST SUMMARY

Greenfield dwelling markets across the five major cities have varied over 2010. Sydney has experienced a decline as the market has responded to price point pressures. Costs have not fallen in line with prices and subsequently profit margins have fallen. Land costs have come back in line with dwelling prices. Overall affordability in this market has improved but will not be sustainable unless other costs fall in line with prices.

The Melbourne greenfield market has remained relatively strong over the year showing an increase in pricing and associated increases in costs. Developer margins have been squeezed slightly as costs have risen more than prices and this may reflect a downturn in the market going forward. We noted Melbourne's affordability advantage through its depth of product priced under $450,000 which allows it to maintain high levels of greenfield dwelling development.

The Brisbane greenfield dwelling market has responded to consumer price pressures and reduced greenfield dwelling prices and costs. This has been principally achieved through lower land costs, stable construction costs, and the reduced costs associated with lower sale prices including GST and stamp duty.

The greenfield dwelling market in Perth has turned around in 2010 with increased sale prices, reduced land costs, and reduced construction costs. This has led to a recovery in profit to credible levels and strong dwelling development activity at long term averages.

Construction costs represent the largest component of total costs to purchasers (36% to 53%) though at levels lower than for infill dwellings. Most markets have experienced rises with Perth the only market reflecting less competitive conditions with a $24,000 fall.

Government taxes and charges remain a significant component (17% to 22%) of greenfield dwelling costs through major contributions from GST, stamp duty, and infrastructure charges in Sydney and Brisbane. As is the case with infill dwellings their remains pressure for reform in these areas.

4.3 THE FOCUS FOR POLICY RESPONSES

The findings from this update of the National Dwelling Cost Study of greenfield and infill dwellings across Australia's five major cities, along with insights from the previous study, highlight four areas of focus for policy responses to improve housing affordability across Australia:

Construction Costs – These remain the single largest component of both infill and greenfield dwelling costs and subsequently reductions in this component can have significant benefits for improved affordability. This year's study has shown that the construction sector can respond to changes in market demand and supply situations. The Queensland Government has attempted to address this issue through their Building Revival Forum. This forum had a strong focus on demand however policy responses were also identified with relation to costs.

An independent study into the value chain of both infill and greenfield dwelling construction would provide an opportunity to breakdown the elements of this cost component (as this study has done) which would shed light on what the major cost factors in construction are and whether measures can be taken to reduce these costs.

A further initiative to address this cost component is through alternative dwelling materials and construction techniques. Pilot testing of fast track dwelling development for both forms of dwellings in this study have been occurring in different parts of Australia over the past few years. Government incentives could be provided for the mass production of these forms of innovative, more affordable dwellings.

Tax Reform – The Australian Government presented the findings of the Henry Tax Review in 2010. To date the follow up to this review has been limited. New dwelling taxation reform addressing GST and stamp duty may improve housing affordability. Consideration needs to be given to how to restructure these components to improve this situation. We are conscious that as Australia emerges from the global financial crisis in a tight fiscal environment, policies to reduce taxation are unlikely to be appealing.

Initiatives to address increasing infrastructure charges are in the process of being introduced into Queensland following the recommendations from the State Government's Infrastructure Charges Task Force. There is debate over the affordability of the recommended charges however they have provided

short term certainty for the development industry. Queensland now appears to be ahead of the other states in this regard however this has not been a significant issue in Western Australia or South Australia. It is emerging as an issue in Victoria with respect to areas newly included in the Urban Growth Boundary (Growth Areas Infrastructure Charges). These are likely to be comparable to Brisbane rates in the near future for the higher rated areas.

Sydney is moving back into a high infrastructure charges regime after a couple of years of respite. This is a symptom of a government with significant debt and limited revenue. Unfortunately this is likely to constrain greenfield development going forward. Sydney needs to find a better solution to this approach as it has been down this path before with substantial negative impacts for the development and housing industry.

Land Supply – Land supply is an area where State Governments have taken the most action. In Queensland four major greenfield development areas have been placed under the planning control of the Urban Land Development Authority for fast tracking of development. Sydney's northern and southern growth corridors are beginning to gain momentum though pricing is still an issue. Perth has placed greater emphasis on understanding its land supply allowing it to focus policy in the right areas. Reductions and the slowing in growth in land values appears to reflect the impact that these policies and initiatives are having. There are lessons to be learned across the different states in terms of policies and initiatives that have improved land supply. Specifically these include:

- Accurate monitoring of land supply – Victoria (Urban Development Program)
- Single government approval authority for planning – Queensland (ULDA)
- Clear planning guidelines – Western Australia (greater code assessment)

Product Innovations – It is clear that the best performing dwelling market has been Melbourne and a key reason for this has been its ability to provide high quantities of dwellings that meet the affordability requirements of its markets. An important driver of this has been the reduction in lot sizes. This has led to lower prices and higher dwelling yields which benefit both pricing and developer margins. Going forward this may also be associated with reductions in dwelling sizes which will provide further costs savings thereby improving housing affordability. This is a key learning for all other markets especially where minimum lot sizes prevent the delivery of lots less than 600m^2 or more commonly less than 400m^2. Government guidelines can assist with this however it is important that the Government is not too prescriptive in relation to this as the market needs flexibility to meet market requirements and work with development constraints.

A small section of the construction industry is responding to high construction costs through concepts such as modular housing. We recommend greater government incentives including tax dispensation for these types of products.

Appendix A Estate Master Output for Infill Developments

National Housing Supply Council - Residential Dwelling Costs, Infill - Sydney

State	**NSW**
Region	**Mascot**
Development Type	**Infill**
Number of Dwellings	**50**

Revenue

Total Sales Revenue	**$30,000,000**	**$600,000**
Less Selling Costs	**$785,000**	**$15,700**
Legal Fees	$92,500	$1,850
Marketing Fees	$92,500	$1,850
Sales Comission	$600,000	$12,000
Net Sale Proceeds	**$29,215,000**	**$584,300**
Total Revenue (before GST paid)	$29,215,000	$584,300
Less GST Paid	$2,727,273	$54,545
Total Revenue (after GST paid)	**$26,487,727**	**$529,755**

Costs

Land Purchase Costs	**$4,950,000**	**$99,000**
Land Purchase	$4,500,000	$90,000
GST on Land Purchase	$450,000	$9,000
Land Transaction Costs	**$307,240**	**$6,145**
Stamp Duty	$257,740	$5,155
Due Diligence and Legals	$45,000	$900
GST on Due Diligence and Legals	$4,500	$90
Construction	**$15,548,610**	**$310,972**
Construction Costs	$14,135,100	$282,702
GST on Subdivision Construction Costs	$1,413,510	$28,270
Professional Fees	**$1,717,326**	**$34,347**
Professional Fee	$1,263,700	$25,274
GST on Professional Fee	$126,370	$2,527
Development Manager	$327,256	$6,545
Statutory Fees	**$721,938**	**$14,439**
Council Application	$7,938	$159
Infrastructure Charges	$714,000	$14,280
Land Holding Costs	**$242,063**	**$4,841**
Land Tax	$221,634	$4,433
Council Rates	$20,429	$409
Finance Charges	**$25,596**	**$512**
Loan 1 Application Fee	$14,850	$297
Loan 2 Application Fee	$10,746	$215
Interest Expense	**$2,041,898**	**$40,838**
Interest on Loan 1	$734,494	$14,690
Interest on Loan 2	$1,307,404	$26,148
Total Costs (before GST reclaimed)	**$25,554,671**	**$511,093**
Less GST Reclaimed	$1,994,380	$39,888
Total Costs (after GST reclaimed)	**$23,560,291**	**$471,206**
Net Development Profit	**$2,927,436**	**$58,549**

Total Cost to End User		
Dwelling Purchase Price	$	$600,000
Stamp Duty	$	$22,490
Transfer Fee	$	$398
Professional & Other	$	$1,500
TOTAL COSTS	***$***	***$624,388***

National Housing Supply Council - Residential Dwelling Costs, Infill - Melbourne

State	**VIC**
Region	**Brunswick**
Development Type	**Infill**
Number of Dwellings	**50**

Revenue

Total Sales Revenue	**$28,600,000**	**$572,000**
Less Selling Costs	**$1,144,000**	**$22,880**
Legal Fees	$286,000	$5,720
Marketing Fees	$286,000	$5,720
Sales Comission	$572,000	$11,440
Net Sale Proceeds	**$27,456,000**	**$549,120**
Total Revenue (before GST paid)	$27,456,000	$549,120
Less GST Paid	$2,600,000	$52,000
Total Revenue (after GST paid)	**$24,856,000**	**$497,120**

Costs

Land Purchase Costs	**$1,925,000**	**$38,500**
Land Purchase	$1,750,000	$35,000
GST on Land Purchase	$175,000	$3,500
Land Transaction Costs	**$110,688**	**$2,214**
Stamp Duty	$96,250	$1,925
Due Diligence and Legals	$13,125	$263
GST on Due Diligence and Legals	$1,313	$26
Construction	**$17,261,475**	**$345,230**
Construction Costs	$15,692,250	$313,845
GST on Subdivision Construction Costs	$1,569,225	$31,385
Professional Fees	**$1,720,186**	**$34,404**
Professional Fee	$1,247,900	$24,958
GST on Professional Fee	$124,790	$2,496
Development Manager	$347,496	$6,950
Statutory Fees	**$122,305**	**$2,446**
Council Application	$8,064	$161
Infrastructure Charges	$87,500	$1,750
Council BA Fees	$6,655	$133
State Government Fees	$20,086	$402
Land Holding Costs	**$312,350**	**$6,247**
Land Tax	$12,350	$247
Council Rates	$281,250	$5,625
Water and Sewerage	$18,750	$375
Finance Charges	**$10,286**	**$206**
Loan 1 Application Fee	$578	$12
Loan 2 Application Fee	$9,708	$194
Interest Expense	**$1,161,177**	**$23,224**
Interest on Loan 1	$228,565	$4,571
Interest on Loan 2	$932,612	$18,652
Total Costs (before GST reclaimed)	**$22,623,467**	**$452,469**
Less GST Reclaimed	$1,870,328	$37,407
Total Costs (after GST reclaimed)	**$20,753,139**	**$415,063**
Net Development Profit	**$4,102,861**	**$82,057**

Total Cost to End User		
Dwelling Purchase Price	$	$572,000
Stamp Duty	$	$29,390
Transfer Fee	$	$1,352
Professional & Other	$	$1,500
TOTAL COSTS	***$***	***$604,242***

National Housing Supply Council - Residential Dwelling Costs, Infill - Brisbane

State	**QLD**
Region	**Indooroopilly**
Development Type	**Infill**
Number of Dwellings	**50**

Revenue		
Total Sales Revenue	**$27,600,000**	**$552,000**
Less Selling Costs	**$828,000**	**$16,560**
Legal Fees	$138,000	$2,760
Marketing Fees	$138,000	$2,760
Sales Comission	$552,000	$11,040
Net Sale Proceeds	**$26,772,000**	**$535,440**
Total Revenue (before GST paid)	$26,772,000	$535,440
Less GST Paid	$2,509,091	$50,182
Total Revenue (after GST paid)	**$24,262,909**	**$485,258**
Costs		
Land Purchase Costs	**$2,455,695**	**$49,114**
Land Purchase	$2,232,450	$44,649
GST on Land Purchase	$223,245	$4,465
Land Transaction Costs	**$121,296**	**$2,426**
Stamp Duty	$102,879	$2,058
Due Diligence and Legals	$16,743	$335
GST on Due Diligence and Legals	$1,674	$33
Construction	**$15,541,900**	**$310,838**
Construction Costs	$14,129,000	$282,580
GST on Subdivision Construction Costs	$1,412,900	$28,258
Professional Fees	**$1,420,561**	**$28,411**
Professional Fee	$1,122,800	$22,456
GST on Professional Fee	$112,280	$2,246
Development Manager	$185,481	$3,710
Statutory Fees	**$781,732**	**$15,635**
Council Application	$16,540	$331
Infrastructure Charges	$747,300	$14,946
Operational Works Approval Fee	$4,312	$86
Complianeand Inspection Fee	$10,200	$204
State Government DERM Title Registration Fee	$3,095	$62
Community managemnet Endorsement Fee	$285	$6
Land Holding Costs	**$162,540**	**$3,251**
Land Tax	$64,953	$1,299.06
Council Rates	$24,579	$491.58
Water and Sewerage	$73,008	$1,460.16
Finance Charges	**$9,690**	**$194**
Loan 1 Application Fee	$737	$15
Loan 2 Application Fee	$8,953	$179
Interest Expense	**$1,684,855**	**$33,697**
Interest on Loan 1	$385,140	$7,703
Interest on Loan 2	$1,299,715	$25,994
Total Costs (before GST reclaimed)	**$22,178,269**	**$443,565**
Less GST Reclaimed	$1,750,099	$35,002
Total Costs (after GST reclaimed)	**$20,428,170**	**$408,563**
Net Development Profit	**$3,834,739**	**$76,695**

Total Cost to End User		
Dwelling Purchase Price	$	$552,000
Stamp Duty	$	$10,690
Transfer Fee	$	$1,154
Professional & Other	$	$1,500
TOTAL COSTS	***$***	***$565,344***

National Housing Supply Council - Residential Dwelling Costs, Infill - Perth

State	**WA**
Region	**East Perth**
Development Type	**Infill**
Number of Dwellings	**50**

Revenue

Total Sales Revenue		**$29,250,000**	**$585,000**
Less Selling Costs		**$1,170,000**	**$23,400**
Legal Fees		$146,250	$2,925
Marketing Fees		$146,250	$2,925
Sales Comission		$877,500	$17,550
Net Sale Proceeds		**$28,080,000**	**$561,600**
Total Revenue (before GST paid)		$28,080,000	$561,600
Less GST Paid		$2,659,091	$53,182
Total Revenue (after GST paid)		**$25,420,909**	**$508,418**

Costs

Land Purchase Costs		**$3,877,940**	**$77,559**
Land Purchase		$3,525,400	$70,508
GST on Land Purchase		$352,540	$7,051
Land Transaction Costs		**$204,558**	**$4,091**
Stamp Duty		$175,473	$3,509
Due Diligence and Legals		$26,441	$529
GST on Due Diligence and Legals		$2,644	$53
Construction		**$16,331,425**	**$326,629**
Construction Costs		$14,846,750	$296,935
GST on Subdivision Construction Costs		$1,484,675	$29,694
Professional Fees		**$1,254,321**	**$25,086**
Professional Fee		$958,950	$19,179
GST on Professional Fee		$95,895	$1,918
Development Manager		$199,476	$3,990
Statutory Fees		**$346,597**	**$6,932**
Council Application		$31,350	$627
Building License		$51,964	$1,039
Strata Title Applciation		$3,283	$66
Water and Headworks		$260,000	$5,200
Land Holding Costs		**$67,993**	**$1,360**
Land Tax		$27,676	$553.52
Council Rates		$23,833	$476.66
Water and Sewerage		$7,452	$149
MRIT		$9,032	$181
Finance Charges		**$10,163**	**$203**
Loan 1 Application Fee		$1,163	$23
Loan 2 Application Fee		$9,000	$180
Interest Expense		**$1,863,689**	**$37,274**
Interest on Loan 1		$397,661	$7,953
Interest on Loan 2		$1,466,028	$29,321
Total Costs (before GST reclaimed)		**$23,956,686**	**$479,134**
Less GST Reclaimed		$1,935,754	$38,715
Total Costs (after GST reclaimed)		**$22,020,932**	**$440,419**
Net Development Profit		**$3,399,977**	**$68,000**

Total Cost to End User		
Dwelling Purchase Price	$	$585,000
Stamp Duty	$	$21,803
Transfer Fee	$	$245
Professional & Other	$	$1,500
TOTAL COSTS	***$***	***$608,548***

National Housing Supply Council - Residential Dwelling Costs, Infill - Adelaide

State	**VIC**
Region	**Hindmarsh**
Development Type	**Infill**
Number of Dwellings	**50**

Revenue

Total Sales Revenue	**$23,000,000**	**$460,000**
Less Selling Costs	**$920,000**	**$18,400**
Legal Fees	$230,000	$4,600
Marketing Fees	$230,000	$4,600
Sales Comission	$460,000	$9,200
Net Sale Proceeds	**$22,080,000**	**$441,600**
Total Revenue (before GST paid)	$22,080,000	$441,600
Less GST Paid	$2,090,909	$41,818
Total Revenue (after GST paid)	**$19,989,091**	**$399,782**

Costs

Land Purchase Costs	**$2,750,000**	**$55,000**
Land Purchase	$2,500,000	$50,000
GST on Land Purchase	$250,000	$5,000
Land Transaction Costs	**$151,955**	**$3,039**
Stamp Duty	$131,330	$2,627
Due Diligence and Legals	$18,750	$375
GST on Due Diligence and Legals	$1,875	$38
Construction	**$15,974,860**	**$319,497**
Construction Costs	$14,522,600	$290,452
GST on Subdivision Construction Costs	$1,452,260	$29,045
Professional Fees	**$1,927,806**	**$38,556**
Professional Fee	$1,452,250	$29,045
GST on Professional Fee	$145,225	$2,905
Development Manager	$330,331	$6,607
Statutory Fees	**$330,874**	**$6,617**
Council Application	$18,264	$365
Infrastructure Charges	$300,000	$6,000
Council BA Fees	$12,610	$252
Land Holding Costs	**$210,825**	**$4,217**
Land Tax	$94,350	$1,887
Council Rates	$103,125	$2,063
Water and Sewerage	$13,350	$267
Finance Charges	**$10,047**	**$201**
Loan 1 Application Fee	$825	$17
Loan 2 Application Fee	$9,222	$184
Interest Expense	**$1,270,082**	**$25,402**
Interest on Loan 1	$328,266	$6,565
Interest on Loan 2	$941,816	$18,836
Total Costs (before GST reclaimed)	**$22,626,449**	**$452,529**
Less GST Reclaimed	$1,849,360	$36,987
Total Costs (after GST reclaimed)	**$20,777,089**	**$415,542**
Net Development Profit	**-$787,998**	**-$15,760**

Total Cost to End User		
Dwelling Purchase Price	$	$460,000
Stamp Duty	$	$19,330
Transfer Fee	$	$2,963
Professional & Other	$	$1,500
TOTAL COSTS	***$***	***$483,793***

Appendix B Estate Master Output for Greenfield Developments

National Housing Supply Council - Residential Dwelling Costs, Greenfield - Sydney

State	NSW
Region	Kellyville
Development Type	Greenfield
Number of Dwellings	100

Revenue

Total Sales Revenue	**$57,000,000**	**$570,000**
Less Selling Costs	**$3,015,000**	**$30,150**
Legal Fees	$165,000	$1,650
Marketing Fees	$1,140,000	$11,400
Sales Comission	$1,710,000	$17,100
Net Sale Proceeds	**$53,985,000**	**$539,850**
Total Revenue (before GST paid)	$53,985,000	$539,850
Less GST Paid	$5,181,818	$51,818
Total Revenue (after GST paid)	**$48,803,182**	**$488,032**

Costs

Land Purchase Costs	**$14,850,000**	**$148,500**
Land Purchase	$13,500,000	$135,000
GST on Land Purchase	$1,350,000	$13,500
Land Transaction Costs	**$876,490**	**$8,765**
Stamp Duty	$802,240	$8,022
Due Diligence and Legals	$67,500	$675
GST on Due Diligence and Legals	$6,750	$68
Construction	**$23,542,640**	**$235,426**
Subdivision Construction Costs	$4,274,800	$42,748
GST on Subdivision Construction Costs	$427,480	$4,275
House Construction Costs	$17,127,600	$171,276
GST on House Construction Costs	$1,712,760	$17,128
Professional Fees	**$1,989,624**	**$19,896**
Subdivision Fee	$277,900	$2,779
GST on Subdivision Fee	$27,790	$278
Professional Fee	$1,027,700	$10,277
GST on Professional Fee	$102,770	$1,028
Development Manager	$553,464	$5,535
Statutory Fees	**$4,421,150**	**$44,212**
Council BA Fee	$5,450	$55
Infrastructure Charges	$1,415,700	$14,157
S94 Contributions	$3,000,000	$30,000
Land Holding Costs	**$544,054**	**$5,441**
Land Tax	$505,554	$5,056
Council Rates	$38,500	$385
Finance Charges	**$65,848**	**$658**
Loan 1 Application Fee	$44,550	$446
Loan 2 Application Fee	$21,298	$213
Interest Expense	**$4,365,041**	**$43,650**
Interest on Loan 1	$2,201,327	$22,013
Interest on Loan 2	$2,163,714	$21,637
Total Costs (before GST reclaimed)	**$50,654,847**	**$506,548**
Less GST Reclaimed	$3,627,550	$36,276
Total Costs (after GST reclaimed)	**$47,027,297**	**$470,273**
Net Development Profit	**$1,775,885**	**$17,759**

Total Cost to End User		
Dwelling Purchase Price	$	$570,000
Stamp Duty	$	$21,140
Transfer Fee	$	$338
Professional & Other	$	$3,000
TOTAL COSTS	***$***	***$594,478***

National Housing Supply Council - Residential Dwelling Costs, Greenfield - Melbourne

State	VIC
Region	Wollert
Development Type	Greenfield
Number of Dwellings	100

Revenue

Total Sales Revenue	**$45,000,000**	**$450,000**
Less Selling Costs	**$2,250,000**	**$22,500**
Legal Fees	$450,000	$4,500
Marketing Fees	$450,000	$4,500
Sales Comission	$1,350,000	$13,500
Net Sale Proceeds	**$42,750,000**	**$427,500**
Total Revenue (before GST paid)	$42,750,000	$427,500
Less GST Paid	$4,090,909	$40,909
Total Revenue (after GST paid)	**$38,659,091**	**$386,591**

Costs

Land Purchase Costs	**$6,050,000**	**$60,500**
Land Purchase	$5,500,000	$55,000
GST on Land Purchase	$550,000	$5,500
Land Transaction Costs	**$332,750**	**$3,328**
Stamp Duty	$302,500	$3,025
Due Diligence and Legals	$27,500	$275
GST on Due Diligence and Legals	$2,750	$28
Construction	**$24,357,300**	**$243,573**
Subdivision Construction Costs	$4,565,700	$45,657
GST on Subdivision Construction Costs	$456,570	$4,566
House Construction Costs	$17,577,300	$175,773
GST on House Construction Costs	$1,757,730	$17,577
Professional Fees	**$2,119,761**	**$21,198**
Subdivision Fee	$410,900	$4,109
GST on Subdivision Fee	$41,090	$411
Professional Fee	$1,054,600	$10,546
GST on Professional Fee	$105,460	$1,055
Development Manager	$507,711	$5,077
Statutory Fees	**$1,168,362**	**$11,684**
Council Application	$8,064	$81
Council BA Fee	$31,955	$320
Infrastructure Charges	$1,100,000	$11,000
State Government Fee	$28,343	$283
Land Holding Costs	**$608,688**	**$6,087**
Land Tax	$141,188	$1,412
Council Rates	$403,750	$4,038
Water and Sewerage	$63,750	$638
Finance Charges	**$17,677**	**$177**
Loan 1 Application Fee	$1,815	$18
Loan 2 Application Fee	$15,862	$159
Interest Expense	**$2,559,689**	**$25,597**
Interest on Loan 1	$869,903	$8,699
Interest on Loan 2	$1,689,786	$16,898
Total Costs (before GST reclaimed)	**$37,214,227**	**$372,142**
Less GST Reclaimed	$2,913,600	$29,136
Total Costs (after GST reclaimed)	**$34,300,627**	**$343,006**
Net Development Profit	**$4,358,464**	**$43,585**

Total Cost to End User		
Dwelling Purchase Price	$	$450,000
Stamp Duty	$	$18,970
Transfer Fee	$	$1,229
Professional & Other	$	$1,500
TOTAL COSTS	***$***	***$471,699***

National Housing Supply Council - Residential Dwelling Costs, Greenfield - Brisbane

State	QLD
Region	Redbank Plains/Springfield
Development Type	Greenfield
Number of Dwellings	100

Revenue

Total Sales Revenue	**$37,600,000**	**$376,000**
Less Selling Costs	**$1,504,000**	**$15,040**
Legal Fees	$188,000	$1,880
Marketing Fees	$188,000	$1,880
Sales Comission	$1,128,000	$11,280
Net Sale Proceeds	**$36,096,000**	**$360,960**
Total Revenue (before GST paid)	$36,096,000	$360,960
Less GST Paid	$3,418,182	$34,182
Total Revenue (after GST paid)	**$32,677,818**	**$326,778**

Costs

Land Purchase Costs	**$2,750,000**	**$27,500**
Land Purchase	$2,500,000	$25,000
GST on Land Purchase	$250,000	$2,500
Land Transaction Costs	**$130,675**	**$1,307**
Stamp Duty	$116,925	$1,169
Due Diligence and Legals	$12,500	$125
GST on Due Diligence and Legals	$1,250	$13
Construction	**$22,196,790**	**$221,968**
Subdivision Construction Costs	$4,127,500	$41,275
GST on Subdivision Construction Costs	$412,750	$4,128
House Construction Costs	$16,051,400	$160,514
GST on House Construction Costs	$1,605,140	$16,051
Professional Fees	**$1,559,350**	**$15,594**
Subdivision Fee	$371,400	$3,714
GST on Subdivision Fee	$37,140	$371
Professional Fee	$802,600	$8,026
GST on Professional Fee	$80,260	$803
Development Manager	$267,950	$2,680
Statutory Fees	**$2,696,966**	**$26,970**
Council Application	$54,000	$540
Infrastructure Charges	$2,598,500	$25,985
Operational Works Approval Fee	$7,150	$72
Council Plan Endorsement Fee	$29,500	$295
State Government DERM Title Registration Fee	$7,816	$78
Land Holding Costs	**$115,713**	**$1,157**
Land Tax	$73,750	$738
Council Rates	$41,274	$413
Water and Sewerage	$689	$7
Finance Charges	**$14,356**	**$144**
Loan 1 Application Fee	$825	$8
Loan 2 Application Fee	$13,531	$135
Interest Expense	**$2,163,231**	**$21,632**
Interest on Loan 1	$407,676	$4,077
Interest on Loan 2	$1,755,555	$17,556
Total Costs (before GST reclaimed)	**$31,627,081**	**$316,271**
Less GST Reclaimed	$2,386,540	$23,865
Total Costs (after GST reclaimed)	**$29,240,541**	**$292,405**
Net Development Profit	**$3,437,277**	**$34,373**

Total Cost to End User		
Dwelling Purchase Price	$	$376,000
Stamp Duty	$	$4,410
Transfer Fee	$	$668
Professional & Other	$	$1,500
TOTAL COSTS	***$***	***$382,578***

National Housing Supply Council - Residential Dwelling Costs, Greenfield - Perth

State	WA
Region	Wellard
Development Type	Greenfield
Number of Dwellings	100

Revenue

Total Sales Revenue	**$40,233,300**	**$402,333**
Less Selling Costs	**$1,609,333**	**$16,093**
Legal Fees	$201,167	$2,012
Marketing Fees	$201,167	$2,012
Sales Comission	$1,206,999	$12,070
Net Sale Proceeds	**$38,623,967**	**$386,240**
Total Revenue (before GST paid)	$38,623,967	$386,240
Less GST Paid	$3,657,573	$36,576
Total Revenue (after GST paid)	**$34,966,394**	**$349,664**

Costs

Land Purchase Costs	**$4,222,301**	**$42,223**
Land Purchase	$3,838,455	$38,385
GST on Land Purchase	$383,846	$3,838
Land Transaction Costs	**$210,788**	**$2,108**
Stamp Duty	$191,595	$1,916
Due Diligence and Legals	$17,448	$174
GST on Due Diligence and Legals	$1,745	$17
Construction	**$21,541,400**	**$215,414**
Subdivision Construction Costs	$3,818,727	$38,187
GST on Subdivision Construction Costs	$381,873	$3,819
House Construction Costs	$15,764,364	$157,644
GST on House Construction Costs	$1,576,436	$15,764
Professional Fees	**$1,690,582**	**$16,906**
Subdivision Fee	$343,727	$3,437
GST on Subdivision Fee	$34,373	$344
Professional Fee	$945,818	$9,458
GST on Professional Fee	$94,582	$946
Development Manager	$272,082	$2,721
Statutory Fees	**$2,210,310**	**$22,103**
Building License	$75,395	$754
Council Application	$31,350	$314
Subdivsion Fees	$3,565	$36
Infrastructure Charges	$1,580,000	$15,800
Water and Sewerage Headworks	$520,000	$5,200
Land Holding Costs	**$77,779**	**$778**
Land Tax	$41,280	$413
Metropolitan Regional Improvement Tax	$8,618	$86
Council Rates	$21,205	$212
Water and Sewerage	$6,676	$67
Finance Charges	**$15,007**	**$150**
Loan 1 Application Fee	$1,267	$13
Loan 2 Application Fee	$13,740	$137
Interest Expense	**$1,980,820**	**$19,808**
Interest on Loan 1	$456,467	$4,565
Interest on Loan 2	$1,524,353	$15,244
Total Costs (before GST reclaimed)	**$31,948,986**	**$319,490**
Less GST Reclaimed	$2,472,854	$24,729
Total Costs (after GST reclaimed)	**$29,476,132**	**$294,761**
Net Development Profit	**$5,490,262**	**$54,903**

Total Cost to End User		
Dwelling Purchase Price	$	$402,333
Stamp Duty	$	$13,129
Transfer Fee	$	$225
Professional & Other	$	$1,500
TOTAL COSTS	***$***	***$417,187***

National Housing Supply Council - Residential Dwelling Costs, Greenfield - Adelaide

State	SA
Region	Salisbury
Development Type	Greenfield
Number of Dwellings	100

Revenue

Total Sales Revenue	**$41,500,000**	**$415,000**
Less Selling Costs	**$2,075,000**	**$20,750**
Legal Fees	$415,000	$4,150
Marketing Fees	$415,000	$4,150
Sales Comission	$1,245,000	$12,450
Net Sale Proceeds	**$39,425,000**	**$394,250**
Total Revenue (before GST paid)	$39,425,000	$394,250
Less GST Paid	$3,772,727	$37,727
Total Revenue (after GST paid)	**$35,652,273**	**$356,523**

Costs

Land Purchase Costs	**$6,050,000**	**$60,500**
Land Purchase	$5,500,000	$55,000
GST on Land Purchase	$550,000	$5,500
Land Transaction Costs	**$326,580**	**$3,266**
Stamp Duty	$296,330	$2,963
Due Diligence and Legals	$27,500	$275
GST on Due Diligence and Legals	$2,750	$28
Construction	**$24,247,960**	**$242,480**
Subdivision Construction Costs	$4,324,900	$43,249
GST on Subdivision Construction Costs	$432,490	$4,325
House Construction Costs	$17,718,700	$177,187
GST on House Construction Costs	$1,771,870	$17,719
Professional Fees	**$1,754,576**	**$17,546**
Subdivision Fee	$259,500	$2,595
GST on Subdivision Fee	$25,950	$260
Professional Fee	$886,000	$8,860
GST on Professional Fee	$88,600	$886
Development Manager	$494,526	$4,945
Statutory Fees	**$489,276**	**$4,893**
Council Application	$27,666	$277
Council BA Fee	$61,610	$616
Infrastructure Charges	$400,000	$4,000
Land Holding Costs	**$1,047,903**	**$10,479**
Land Tax	$339,938	$3,399
Council Rates	$403,750	$4,038
Water and Sewerage	$304,215	$3,042
Finance Charges	**$17,337**	**$173**
Loan 1 Application Fee	$1,815	$18
Loan 2 Application Fee	$15,522	$155
Interest Expense	**$2,530,656**	**$25,307**
Interest on Loan 1	$883,180	$8,832
Interest on Loan 2	$1,647,476	$16,475
Total Costs (before GST reclaimed)	**$36,464,288**	**$364,643**
Less GST Reclaimed	$2,871,660	$28,717
Total Costs (after GST reclaimed)	**$33,592,628**	**$335,926**
Net Development Profit	**$2,059,645**	**$20,596**

Total Cost to End User		
Dwelling Purchase Price	$	$415,000
Stamp Duty	$	$17,080
Transfer Fee	$	$2,662
Professional & Other	$	$1,500
TOTAL COSTS	***$***	***$436,242***

Appendix C Construction and Professional Costs

Rider Levett Bucknall - construction & professional fees

National Dwelling Cost Study

		Sydney $	Melbourne $	Brisbane $	Perth $	Adelaide $
Subdivision						
Construction Cost	Per Lot	$41,275	$42,748	$45,657	$43,249	$42,006
Professional Fee	Per Lot	$3,714	$2,779	$4,109	$2,595	$3,781
Total	Per Lot	$44,989	$45,527	$49,766	$45,844	$45,787
Standard Single Level 3 Bed House (162 sq.m)						
Construction Cost	Per House	$160,514	$171,276	$175,773	$177,187	$173,408
Professional Fee	Per House	$8,026	$10,277	$10,546	$8,860	$10,404
Total	Per House	$168,540	$181,553	$186,319	$186,047	$183,812
Infill Unit Development - 2 bed unit (99 sq.m)						
Construction Cost	Per Unit	$282,580	$282,702	$313,845	$290,452	$296,935
Professional Fee	Per Unit	$22,456	$25,274	$24,958	$29,045	$19,179
Total	Per Unit	$305,036	$307,976	$338,803	$319,497	$316,114

Source : Rider Levett Bucknall 2010

Appendix D References

Australian Government, National Housing Supply Council, 2008, *State of Supply Report*

Australian Government, Productivity Commission, 2004, *First Home Ownership Productivity Commission Inquiry Report*

Australian Housing and Urban Research Institute 2008, *Planning, government charges and the costs of land and housing*, Sydney, AHURI

Australian Housing and Urban Research Institute, 2009, *Counting the costs; planning requirements, infrastructure contributions and residential development in Australia,* Sydney, AHURI

Comsec, State of the States, April 2011

Queensland Government, Infrastructure Charges Taskforce Final Report-Recommended reform of local government development infrastructure charging arrangements, March 2011

RP Data – Rismark Hedonic Home Value Index, January 2011

The Housing Industry Association – Commonwealth Bank Housing Affordability Index, 2011

The Real Estate Institute of Australia (REIA), Deposit Power Housing Affordability Report, 2011

The Residential Development Council, 2006, *Residential Development Cost Benchmarking Study*

Sydney
Level 21, 321 Kent Street
Sydney, NSW 2000
t +02 8233 9900
f +02 8233 9966

Brisbane
Level 12, 120 Edward Street
Brisbane, QLD 4000
t +07 3007 3800
f +07 3007 3811

Melbourne
Level 12, 120 Collins Street
Melbourne, VIC 3000
t +03 8663 4888
f +03 8663 4999

Perth
Level 1, 55 St Georges Terrace
Perth, WA 6000
t +08 9346 0500
f +08 9321 7790

Australia • Asia • Middle East
w urbis.com.au **e** info@urbis.com.au