



Urban Development Institute
of Australia (Victoria)

Residential Development Index

September 2021 Update



UDIA RDA Research Sponsors







Table of Contents

EXECUTIVE SUMMARY	5
UDIA Residential Development Index	6
Overview of Market Trends	7
Snapshot of Building Approvals for Dwellings by Region	12
UDIA RESIDENTIAL DEVELOPMENT INDEX	14
About the UDIA Residential Development Index	15
Current UDIA Residential Development Index	16
Other Residential Market Indicators	20
RESIDENTIAL DEVELOPMENT TRENDS BY REGION	22
Trends in Victoria and Melbourne	23
Inner Ring of Melbourne	25
Middle Ring of Melbourne	27
Outer Ring of Melbourne	29
Melbourne's Growth Areas	30
Regional Areas	32
ECONOMIC IMPACT OF THE RESIDENTIAL DEVELOPMENT SECTOR	35
Contribution to the Victorian Economy	36
Contribution to Employment	37
Spotlight: COVID Recovery Drivers	38
METHOD AND DATA SOURCES	42
Method of Calculating Economic Impacts	43
Data Sources and Glossary	44
Geographical Study Areas	46

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These sources are believed to be reliable. The information obtained from such sources, however, has not independently verified and was relied upon in performing the analysis. Accordingly, no representation or warranty is provided regarding the accuracy or completeness of the information contained in this report.

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EXECUTIVE SUMMARY

In this section

UDIA Residential Development Index	6
Overview of Market Trends	7
Snapshot of Building Approvals for Dwellings by Region	12



UDIA Residential Development Index

The Urban Development Institute of Australia, Victoria (UDIA Victoria) uses a unique model to assess the health of Victoria's residential development industry and measure its activity on an ongoing basis. The research examines the dynamics impacting the industry, including economic conditions, population growth, development activity, building approvals, regulatory changes and policy implications. These industry activity fundamentals inform the Residential Development Index (RDI), which determines whether the industry is operating in a strong, moderate or weak market, relative to recent and long history.

This report provides the annual update of the UDIA Victoria RDI and associated market indicators as at September 2021, and a forecast for the UDIA RDI for June 2022. Additionally, this research report includes:

- ◆ a review and update of activity in individual sub-markets including inner, middle and outer ring, and growth areas of Melbourne;
- ◆ market commentary and assessment of key drivers and health of the overall market;
- ◆ an economic impact assessment of the Victorian residential development sector, including multiplier impacts on the economy and employment;
- ◆ consideration of how a drop-off residential construction could impact the Victorian economy; and
- ◆ a review of the impacts of the covid-19 pandemic on the latest population growth estimates.

Overview of Market Trends

As Australia transitions into a post-covid world, trends are emerging which have fundamentally altered the Victorian residential market and will ultimately change the way the market grows for decades to come. In our 2021 assessment of the Victorian residential market, the following key structural trends have been identified as emerging in the market:

- ◆ The shift in activity from Melbourne's established areas to growth areas;
- ◆ The escalation of land prices in the Melbourne suburbs;
- ◆ The emergence of the Institutional Build to Rent sector;
- ◆ The decline in project feasibility;
- ◆ The improving strength of regional areas in Victoria; and
- ◆ The strength of the construction industry.

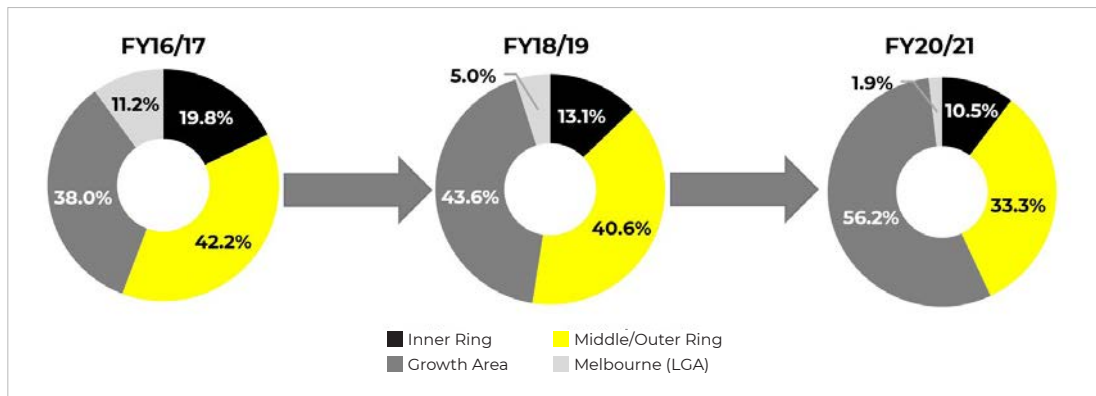
As Melbourne exits the longest Covid-19 pandemic-related lockdown in the world, these property market trends are driving the changing identity of the Victorian residential property market and its position in the wider Victorian economy in the coming years.

The decline of the CBD and Inner Ring

Since 2015, there has been a broader trend of population migration out of the central business district (CBD) and Inner Ring areas of Melbourne towards the Middle Ring, Outer Ring and the Growth Areas. This trend has accelerated significantly since 2016, and further accelerated through the Covid-19 pandemic. Four years ago, the City of Melbourne LGA was responsible for 11 per cent of all new residential stock which came on the market within Victoria, with that share declining year on year to 2 per cent in 2021.

Moreover, following this trend, Councils within the Inner Ring have seen a halving of contribution of new stock, now comprising less than one in ten dwellings. This can be attributed to the decline in project feasibility in the apartment market, as well as shifting buyer preferences and the strength of supply currently seen in Melbourne's Growth Areas. What is currently happening could be described as a 'donut movement', in which the population of the inner city and inner suburbs make their way to middle and outer suburban areas which are close enough to take advantage of the amenity that the city offers. As a result, there is a strengthening of demand in the Middle and Outer Rings and Growth Areas and a softening in demand in the Inner Ring.

Interestingly, this seems to be a trend that for the most part is unique to Melbourne, with Sydney and Brisbane not experiencing the same trajectory. The graph below describes the proportion of dwelling approvals and the shift over time away from the Inner Ring and CBD to the middle and outer ring of Melbourne and the Growth Areas.

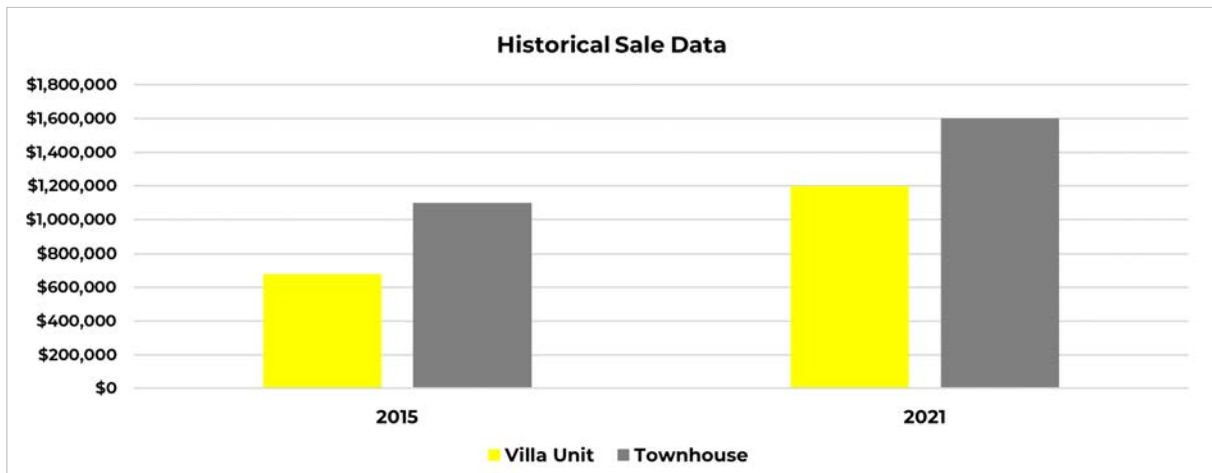


Source: ABS, 2021

Escalation of land prices in the Inner and Middle Ring

In 2015, the majority of first and second home buyers could afford to buy a villa unit or townhouse in the Inner and Middle Rings. These types of properties have become increasingly out of reach, pushing buyers into the outer suburbs and growth areas. This is unsurprising, given that the price of a typical unrenovated villa in the bayside suburbs of Bentleigh, Cheltenham or Mentone has increased from \$700,000 to over \$1,000,000 within the last five years.

This trend is a real concern for essential workers seeking affordable housing within reasonable proximity to their places of work. The inability of the essential workers to adequately locate themselves within reasonable transit to their places of employment has real and measurable economic penalties.



Source: REIV, 2021

Ongoing decline in project feasibility

There is a clear trend of declining project feasibility in established areas in recent years. This is driven primarily by inflationary pressure in construction materials which have increased by 30 to 40 per cent over the last two years and has been compounded by large government infrastructure projects placing pressure on available materials and labour. A secondary driver is the increasing range of government taxes and charges that are applied to development in established areas.

These pressures have led to higher dwelling prices within the CBD and Inner Ring in particular, and has contributed to a reduction in supply of projects in the CBD and Inner Ring.

This trend of higher construction costs can be attributed to the following three main drivers:

- ◆ The 'crowding out' of the labour and material markets from large government funded infrastructure projects;
- ◆ An increasing draw on the materials market from a growing industrial sector; and
- ◆ An increase in demand for detached housing drawing further resources.

The estimate for the current price of construction in the Inner Ring is circa \$4,200 per square metre to \$4,500 per square metre. This feasibility decline is only expected to improve once dwelling prices increase by at least 30 per cent in real terms, which is likely to be driven by increasing levels of immigration into Victoria.

Improving strength of Victoria's regions

In recent years regional areas of Victoria have experienced significant population growth, which is demonstrated by residential rental vacancy rates as low as 0.5 per cent in some markets. In 2015, the price gap between key regional areas and Melbourne's growth areas was around 50 per cent to 80 per cent per square metre for residential lots. As of June 2021, the pricing gap between the regional areas and Melbourne's growth areas has narrowed significantly to be closer to 15 to 30 per cent across most LGA's. This is primarily driven by the increasing cost of land in outer Melbourne and the new freedoms of working remotely which has enabled workers to live further away from existing employment hubs within the CBD and Inner Ring of Melbourne.

Research by the Productivity Commission suggests that the shift to remote and part-time remote working will be permanent for many parts of the labour force. Workers will begin to seek jobs which better suit their preference, and will preference employment offers which allow for flexible work options, as long as this doesn't result in a reduction in their salary.

As working from home embeds itself as a feasible option for many workers, it is inevitable that there will be weakening activity in Melbourne's CBD which may spill over into the broader metropolitan area as some opt for a completely different lifestyle. This will be driven by the same workers who are fuelling the growth of residential activity in regional areas.

If these trends continue, migration away from the Melbourne core is expected to increase, putting pressure on the limited supply in regional centres of Geelong, Bendigo and Ballarat and driving up prices. Those seeking more affordable housing, such as new migrants that previously opted for Melbourne's growth areas, will be driven even further outward. Despite the aspirational target outlined in Plan Melbourne to deliver 70 per cent of new housing in established areas, the increasing cost of new dwellings in established areas, growth areas and regional centres is creating a relentless force to move outwards.

Given these trends, the regional centres that are within a two-hour commute from Melbourne will appeal to some buyers with Melbourne-based employment. These centres are shown on the map below, and include Shepparton in the Goulburn Valley and Traralgon in Gippsland.



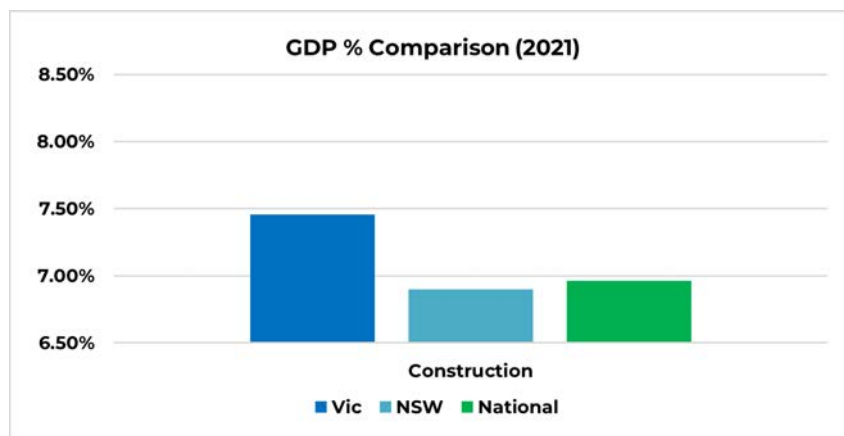
Source: EY, 2021

Strength of the construction industry

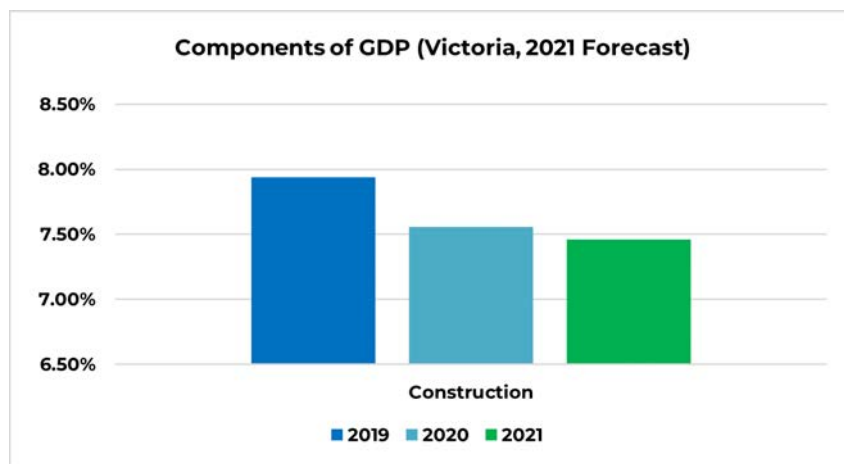
Overall, the construction industry has seen fewer pandemic-related impacts than expected. The strength of the construction industry is primarily driven through a strong industrial land sector (with yields in the industrial market decreasing significantly of late), as well as through large, government-funded civil works programs including transport projects and a substantial mix of social housing infrastructure, hospitals and schools. While the construction industry's contribution to the Victorian economy as a percentage of GDP has marginally declined year-on-year between 2019 and 2021, the sector has remained strong and is still a significant GDP contributor.

This represents a doubled-edged sword for the Victorian residential market. Given that the State relies quite heavily on the construction sector, it is critical that the industry has been able to remain strong amid the global pandemic. This strength translates into sustained work for Victorians who will continue to have the capacity to support demand in the wider Victorian economy. Conversely, such construction activity has significantly driven up the cost of materials, especially in the sense that government investment has 'crowded out' the private sector. The continuation of large public infrastructure projects will translate into supply constraints in the private sector, and importantly residential development.

We foresee this being a significant issue for the residential market, especially if the trend continues into 2022, which will catalyse even greater levels of population movement into the regions as previously highlighted.



Source: EY, 2021



Source: EY, 2021

Snapshot of Building Approvals for Dwellings by Region

Victoria and Melbourne					
Victoria – All Regions	FY16/17	FY17/18	FY18/19	FY19/20	FY20/21
Flats units or apartments - In a four or more storey block	15,821	20,631	11,087	12,442	7,958
Flats units or apartments - Total	17,828	22,204	12,061	13,451	9,012
Houses	35,867	39,568	36,747	36,166	47,751
Semi-detached, row or terrace houses, townhouses - Total	11,393	13,841	10,916	10,445	10,917
Total Residential	65,088	75,613	59,724	60,062	67,680

Victoria and Melbourne					
Inner Ring – Total Dwelling Approvals	FY16/17	FY17/18	FY18/19	FY19/20	FY20/21
Flats units or apartments - In a four or more storey block	9,183	11,855	4,895	8,286	3,887
Flats units or apartments - Total	9,556	12,074	5,078	8,464	3,991
Houses	474	493	313	383	351
Semi-detached, row or terrace houses, townhouses - Total	526	900	524	652	658
Total Residential	10,556	13,467	5,915	9,499	5,000

Middle Ring Melbourne					
Middle Ring – Total Dwelling Approvals	FY16/17	FY17/18	FY18/19	FY19/20	FY20/21
Flats units or apartments - In a four or more storey block	5,555	7,020	4,732	3,607	3,600
Flats units or apartments - Total	6,727	8,062	5,286	4,155	4,367
Houses	4,581	4,053	3,454	2,847	3,126
Semi-detached, row or terrace houses, townhouses - Total	5,734	6,591	4,863	5,198	5,578
Total Residential	17,042	18,706	13,603	12,200	13,071

Outer Ring Melbourne

Outer Ring – Total Dwelling Approvals	FY16/17	FY17/18	FY18/19	FY19/20	FY20/21
Flats units or apartments – In a four or more storey block	-	-	1,091	543	275
Flats units or apartments - Total	1,575	1,211	1,183	657	293
Houses	2,130	2,038	1,693	1,255	1,107
Semi-detached, row or terrace houses, townhouses - Total	1,819	1,971	1,846	1,552	1,347
Total Residential	4,866	5,220	4,722	3,464	2,747

Melbourne Growth Area LGA's

Melbourne Growth Areas – Total Dwelling Approvals	FY16/17	FY17/18	FY18/19	FY19/20	FY20/21
Flats units or apartments – In a four or more storey block	-	-	189	-	145
Flats units or apartments - Total	-	-	238	79	164
Houses	17,005	19,585	17,297	18,695	24,811
Semi-detached, row or terrace houses, townhouses - Total	2,190	2,511	2,140	1,610	1,688
Total Residential	19,612	22,345	19,675	20,384	26,663

Regional Areas

Regional Areas – Total Dwelling Approvals	FY16/17	FY17/18	FY18/19	FY19/20	FY20/21
Flats units or apartments – In a four or more storey block	-	-	180	6	51
Flats units or apartments - Total	-	-	276	96	197
Houses	11,677	13,399	13,988	12,984	18,354
Semi-detached, row or terrace houses, townhouses - Total	1,124	1,868	1,540	1,433	1,646
Total Residential	13,012	15,875	15,804	14,513	20,197

Source: ABS, 2021

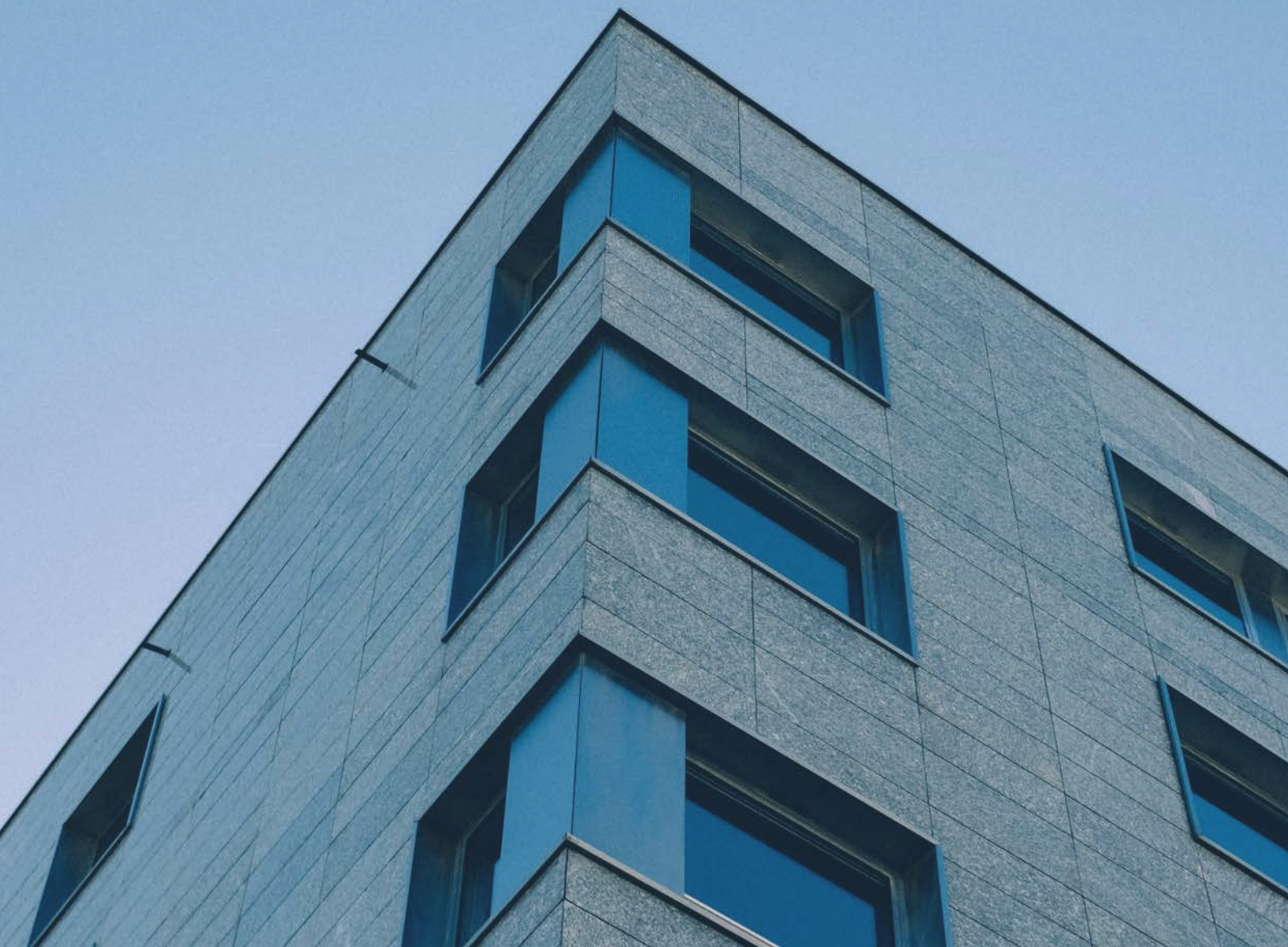
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Source: ABS, 2021

UDIA RESIDENTIAL DEVELOPMENT INDEX

In this section

About the UDIA Residential Development Index	15
Current UDIA Residential Development Index	16
Other Residential Market Indicators	20



About the UDIA Residential Development Index

The UDIA Residential Development Index (UDIA RDI) considers demand for residential development, purchasing power, and the overall cost of finance.

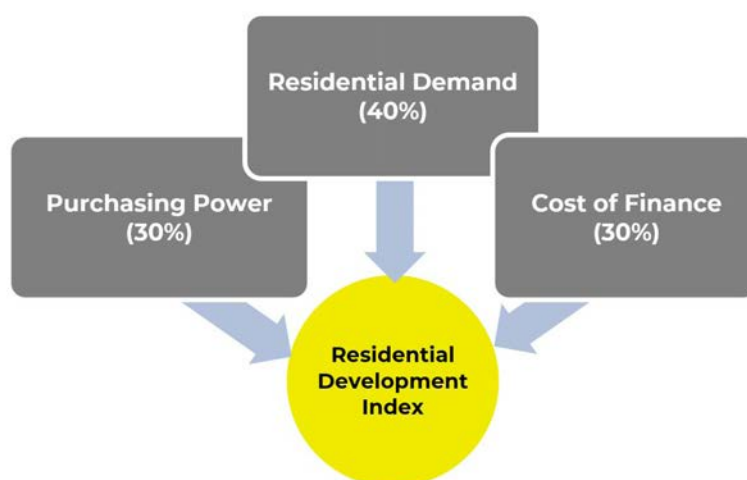
This review has been undertaken considering emerging mega trends including dramatic changes in population growth, relative housing supply, and significant grants from the state and commonwealth government which influence market activity. In light of this the, inputs of the UDIA RDI have been updated to reflect these current market drivers.

In considering these factors, the UDIA RDI acts as an interface between top-down demand driven by demographic factors together with market affordability to consider the overall health of the industry, relative to historical trends.

The index has been revised to include the following components:

- 1. Residential Demand:** This component considers population growth in Victoria. Calculated as annual per centage growth over 12 months to March 2021 which is then indexed. Index = $[\text{annual per centage change} + 1] \times 100$. The index is weighted at 40 per cent.
- 2. Purchasing Power:** This component considers employment growth in Victoria. Calculated as annual per centage growth to June 2021 which is then indexed. Index = $[\text{annual per centage change} + 1] \times 100$. This is weighted at 30 per cent.
- 3. Cost of Finance:** This component considers the average 3Y fixed rate and discounted variable rate for residential home loans. This is then adjusted for inflation using Australian CPI with the difference indexed. Index = $[\text{annual per centage difference} + 1] \times 100$. This is weighted at 30 per cent.

It is acknowledged that other factors influence the operation of the residential construction sector, including sales volumes, vacancy rates and other economic drivers. These factors are assumed to directly and indirectly influence the three key drivers that act as inputs to the UDIA RDI. The UDIA RDI (including its weightings) will be updated over time as drivers of the market are continually assessed and re-calibrated.



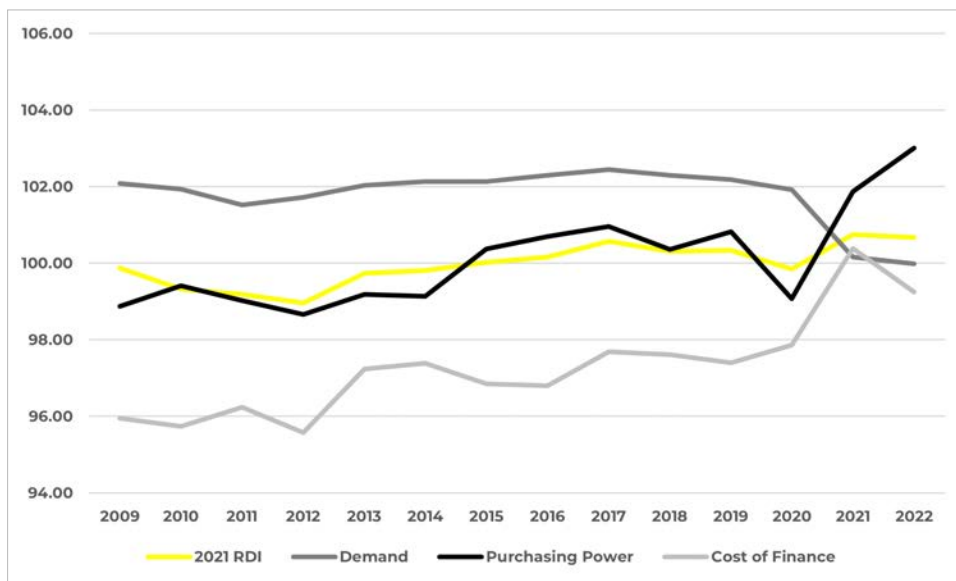
Current UDIA RDI Rating: 100.7

The results for the UDIA RDI and its components are depicted in the below figure.

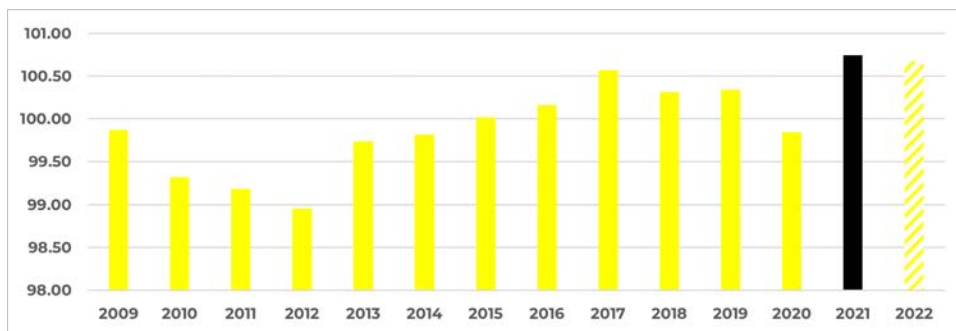
Based on the twelve years of analysis between June 2009 and June 2021:

1. The index has experienced a marginal increase in June 2021 to 100.7 up from 99.9 in June 2020, which puts it above the 10-year average of 99.9, and at the highest level based on the new measure and methodology that now considers the cost of finance and its impact.
2. While the updated UDIA RDI is much less volatile than the previous measure, values above 100 are considered to be an indication of strong residential market and any value below 99 to be indicative of particularly harsh conditions.
3. The index was at its lowest point in June 2012 (98.9) when the cost of finance was significantly higher than it is now at 4.75 per cent.
4. While there was a significant decline in the 2020 UDIA RDI due to a massive decline in activity, there has been a reversal of the previous year, primarily driven by a massive reduction in the cost of finance as well as a strong labour market.

Current UDIA RDI and 2022 forecast



Source: EY, 2021



Source: EY, 2021

UDIA RDI and its components

The UDIA RDI uses purchasing power, residential demand, and the cost of finance as the inputs to drive the index year to year. These have been chosen as they are intended to encapsulate broader sub factors across the Victorian economy without requiring data points for each individual variable.

Purchasing Power

The level of employment within Victoria is a key driver for purchasing power. Employment is contingent on wider economic conditions and is directly affected by the level of investment within the economy. The indirect factors of employment comprise gross state product (GSP), wage growth and consumer and business confidence.

In the post covid era, there has been an expansionary trend in such factors. GSP, wages and confidence levels have been rising steadily over the last few months. This is being driven through the renewed optimism which has come with the easing of lockdowns in Sydney and Melbourne. This trend is expected to continue into the new year, especially considering the large amount of consumer spending activity expected over the Christmas period.

Residential Demand

On a state-wide basis, demand is primarily driven by the growth of population. While the natural birth rate is a steady, reliable source of population growth, migration levels have a significantly greater impact, especially within Victoria. The attractiveness of a city or state for migrants is driven by both factors of employment, as discussed, and through a range of non-economic factors. These non-economic factors can include the quality of education and lifestyle which are becoming increasingly important in the post covid era as workers have more choice of location with the advent of remote working. In the case of Victoria, a large percentage of population growth has come from interstate and international migration.

The opening of international and interstate borders in the coming months is expected to create an influx of residents into Victoria which will continue to increase the level of residential demand. Given this, it is important to highlight however that the forecast migration provided within the Victorian State Budget is well below the long-term average, resulting in a weaker overall demand input within the UDIA RDI forecast for FY22.

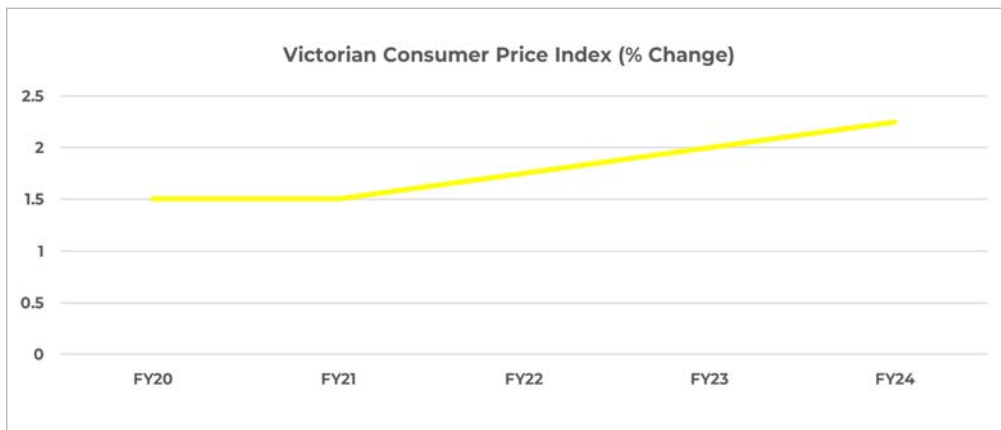
Cost of Finance

The cost of finance is directly driven by the cash rate set within the current economic environment. Given monetary policy is used with consideration of inflation, employment and consumer and business confidence, these sub-factors are considered to drive this input. In the coming months there will be large debate around the level of inflation developed economies are experiencing. Official guidance from the RBA states that the cash rate will be put on hold until 2024, however increasingly equity markets have started to price in an interest rate hike before then.

For our 2022 forecast of the UDIA RDI it is assumed that there will be no change to the RBA cash rate. However, if CPI figures over the coming months follow a similar upward trend to that in other countries, it would not be out of the question to see a rate hike much sooner than 2024.

It is widely considered that a rise in the cash rates will have significant flow-through effect on house prices, with CommBank predicting a 10 per cent decline in house prices as a result of a rate hike. This will cause further significant declines in residential development feasibility and would potentially push a future UDIA RDI below the value of 100 once again. The forecast for the FY22 UDIA RDI has maintained the current cash rate, albeit the net cost of financing as an input to the UDIA RDI may have a lower influence than this year as it takes into consideration higher levels of forecast inflation and the lack of monetary action to combat this.

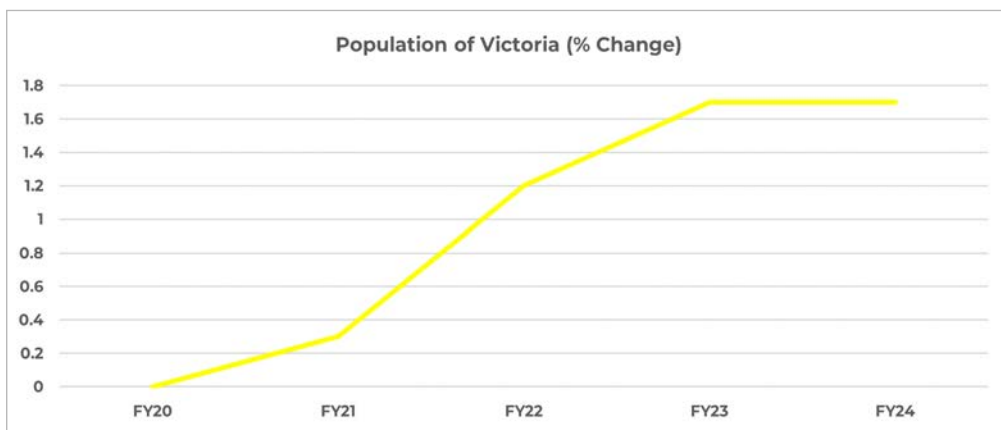
Five year forecast of key variables



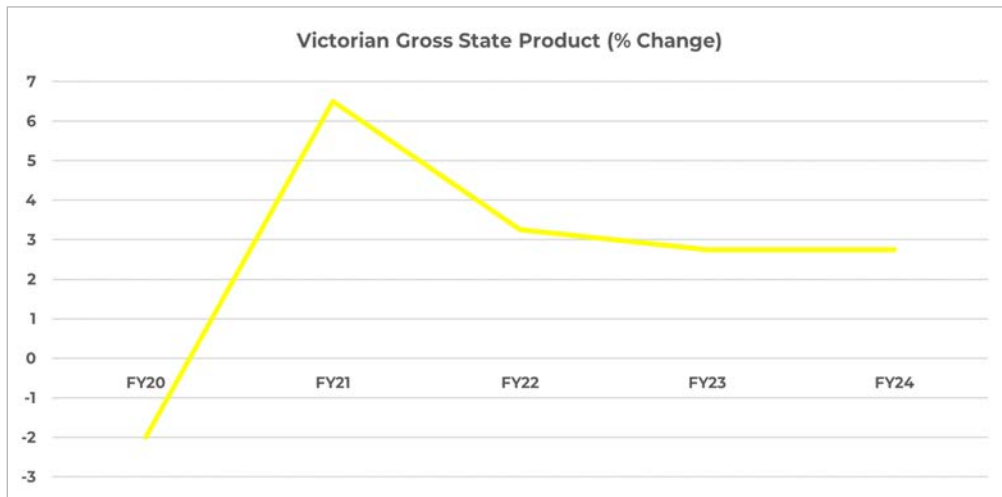
Source: Victorian State Budget, 2021



Source: Victorian State Budget, 2021



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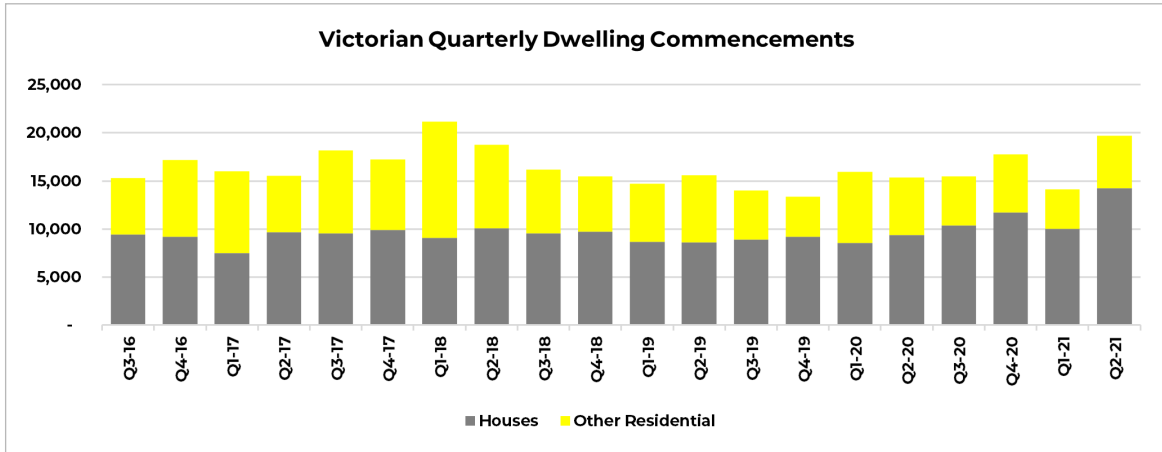


Source: Victorian State Budget, 2021

Other Residential Market Indicators

Dwelling commencements

Since 2010, dwelling commencements have stayed relatively steady, hovering around an annual average of 15,000. The June quarter however has shown a sharp increase in the level of activity jumping from approximately 14,000, to almost 20,000, the sharpest increase in 10 years.

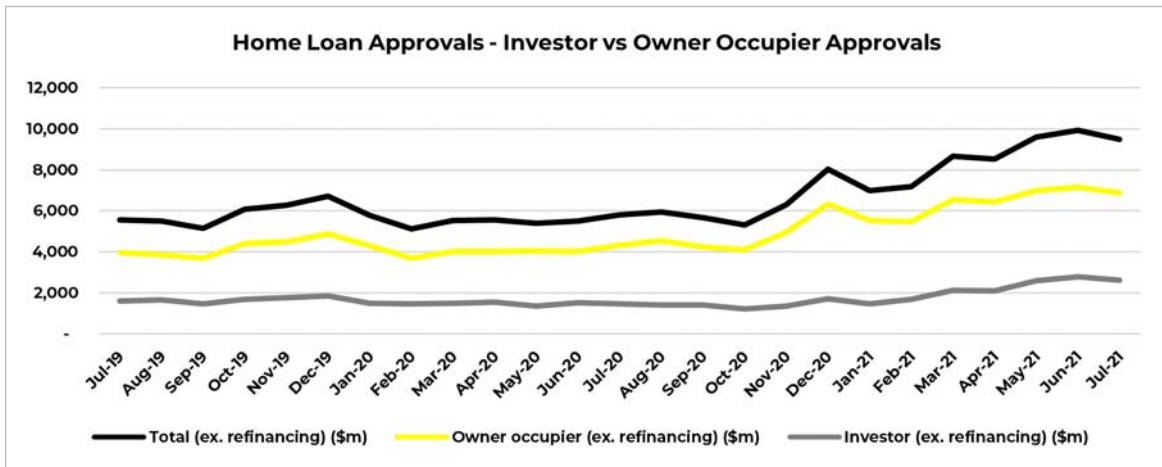


Source: ABS, 2021

Home loan approvals

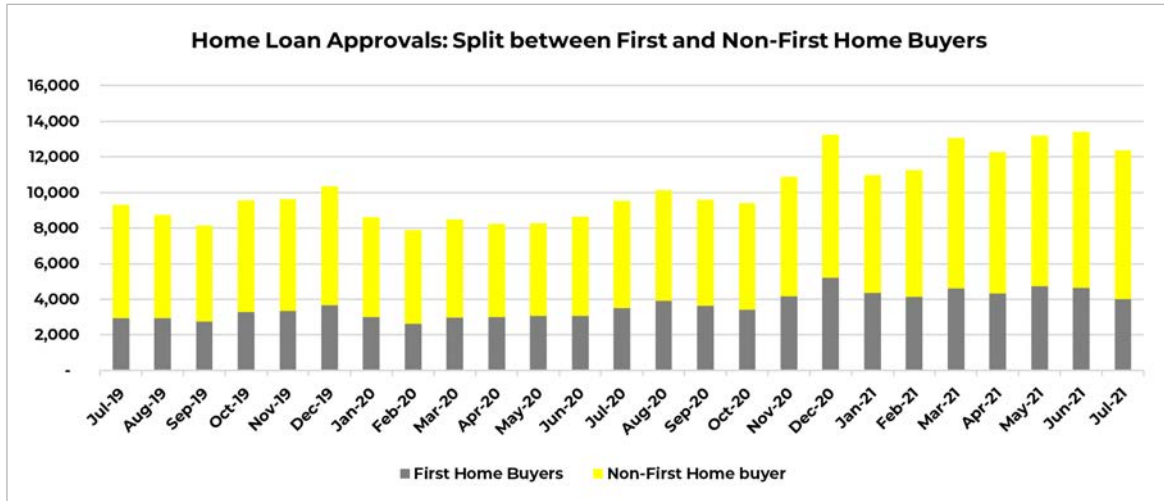
Since 2019, there has been a noticeable trend upward in regards to new home commitments, however it is evident that the recent APRA restriction of lending criteria has had an effect on the market. The previous two months have seen reductions in the number of loans signed, signalling a decline from the recent peak of 13,406 in June.

The majority of new home loans comprise owner-occupiers at 69%, with first home-owners comprising 20 per cent. Investors comprised 31 per cent of all new loans, with investors who are also first home-owners making up 2 per cent.



Source: ABS, 2021

Further to this, the proportion of new home loan approvals between first home buyers and non-first home buyers has been shifting over the past two years. Historically, first home buyers have represented in the range of 30 to 35 per cent of the total new home loan approvals but this trended upward over 2020 and early 2021 to be closer to 40 per cent month-on-month, with the volume of new home loan approvals increasing for both buyer pools by approximately 20 per cent between July 2019 and July 2021. This trend has been supported by a large range of factors including access to finance, low bank interest rates, and increased savings generally as a result of a reduced ability to travel domestically and internationally.

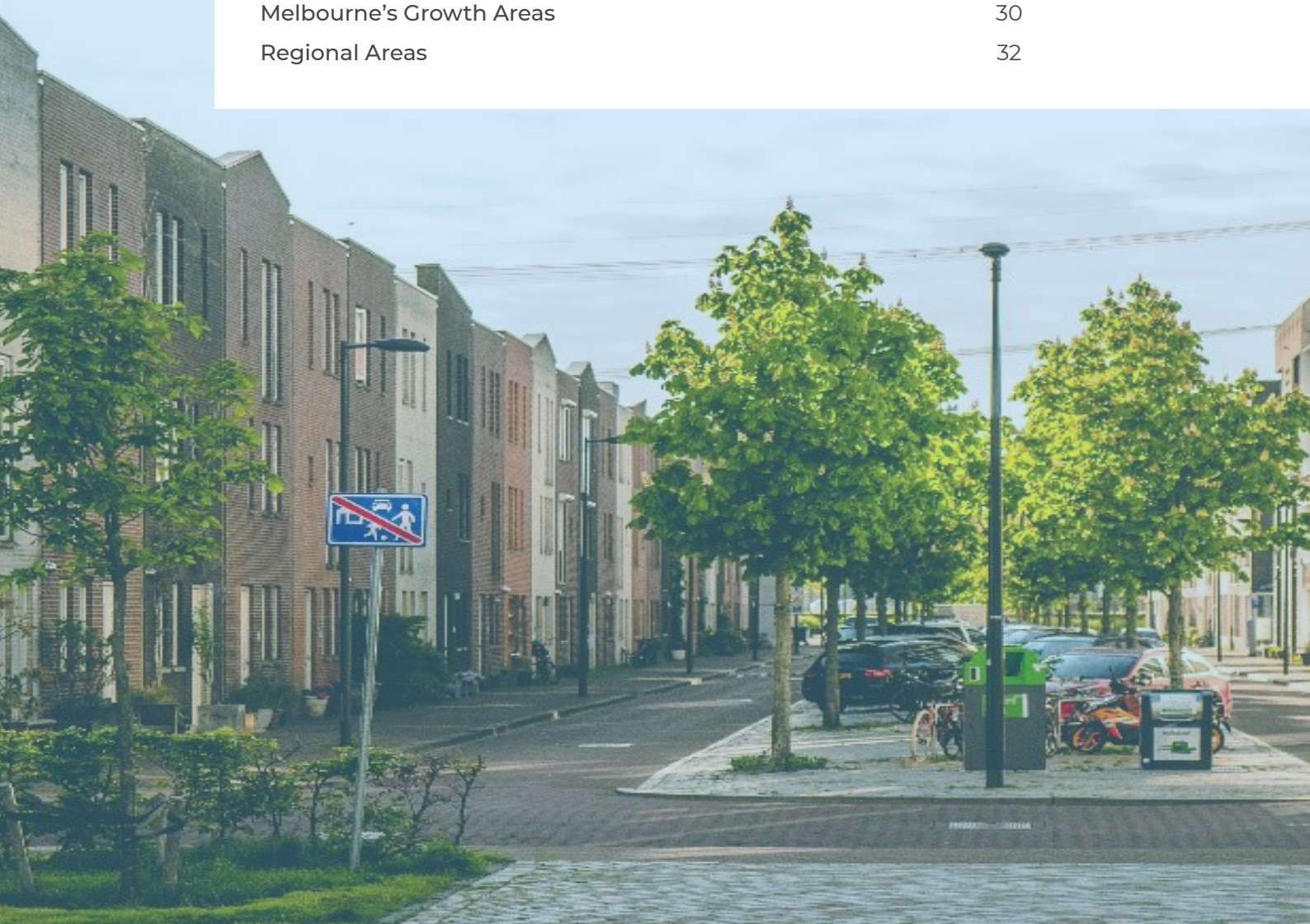


Source: ABS, 2021

RESIDENTIAL DEVELOPMENT TRENDS BY REGION

In this section

Trends in Victoria and Melbourne	23
Inner Ring of Melbourne	25
Middle Ring of Melbourne	27
Outer Ring of Melbourne	29
Melbourne's Growth Areas	30
Regional Areas	32



Trends in Victoria and Melbourne

- ◆ Overall building approvals for dwellings have returned to the longer term average of close to 70,000 per annum due to the increased activity in Growth Areas and interest in detached housing growing more broadly across Melbourne and Victoria.
- ◆ Construction of detached houses is strong the Growth Areas, established areas of Melbourne, and the regions. Overall, detached housing supply remains relatively strong particularly in growth and regional areas, leading dwelling approvals over apartments and townhouses in the Melbourne Statistical Division (SD).
- ◆ Overall, the apartment market has declined from having a market share of around 20 per cent down to around 14 per cent, with townhouse development holding up and remaining a stable source of demand. Across the Melbourne SD, between FY19/20 and FY20/21 apartment approvals declined significantly by 34 per cent, houses grew by 27 per cent and townhouse approvals were stable.
- ◆ ABS building approvals for dwellings show that total dwelling approvals in the Melbourne SD increased by 4 per cent in FY20/21 from FY19/20 to 47,483.
- ◆ The proportion of building approvals for dwellings in regional areas compared with approvals overall in Victoria has grown from circa 25 per cent in FY18/19 and FY19/20 to 30 per cent in FY20/21, with this trend expected to continue.
- ◆ So far, overall building permit activity remains relatively stable in FY20/21 and in the September quarter of 2021. Overall activity however remains well below longer term averages and has not been heavily impacted by COVID-19 and the State economy at this stage, with FY21/22 and beyond heavily dependent on immigration.
- ◆ The prospect of avoiding major impacts from a pandemic-induced recession in the residential sector has largely been avoided as a result of the State and Federal Government economic stimulus measures, including the Homebuilder scheme.

Recent market profile for September quarter 2021

Victoria and Melbourne				
Victoria – All Regions	Q3 2020	Q2 2021	Q3 2021	Q3 Y-o-Y % Change
Flats units or apartments - In a four or more storey block	3,216	1,828	2,870	-10.76%
Flats units or apartments - Total	3,056	2,090	2,661	-12.93%
Houses	10,898	13,743	12,184	11.80%
Semi-detached, row or terrace houses, town-houses - Total	2,715	3,075	3,435	26.52%
Total Residential	16,829	18,908	18,489	9.86%

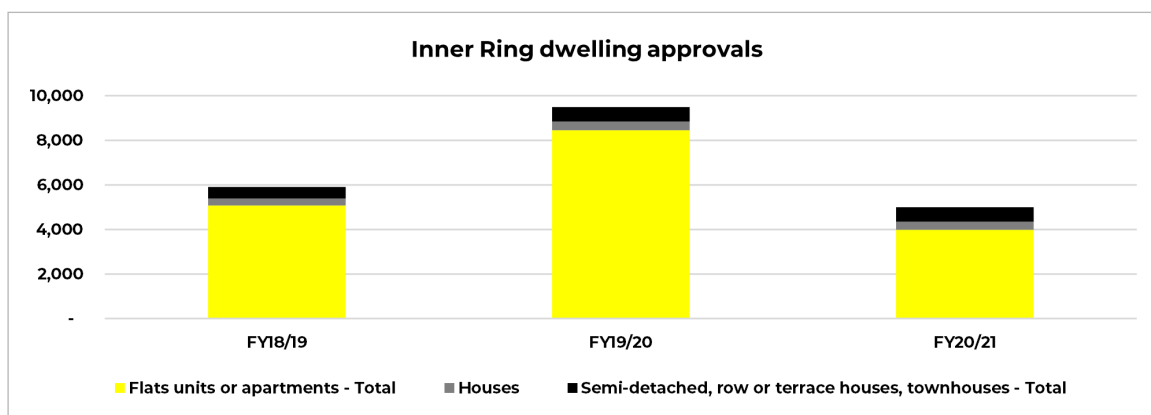
Source: ABS, 2021

The latest release of monthly building approval data indicates the following:

- ◆ When considering the number of building approvals within the September quarter of 2021 against September quarter 2020, approvals for apartments decreased within Victoria. Despite this year-on-year decrease, the overall number of building approvals for apartments increased from 3,918 within June quarter of 2021 to 5,531 within the September quarter, reflecting a significant return to 2020 levels.
- ◆ Demand for houses was strong over year-on-year to September Quarter 2021, attributable to increased grants and Government support through the pandemic. Overall, between June quarter of 2021 to the September quarter, there was a marginal decrease in building approvals for houses.
- ◆ Building approvals for semi-detached dwellings saw an increase year-on-year to September Quarter 2021 as well as a marginal increase between the June and September quarters of 2021.

Inner Ring of Melbourne

Trends across the Inner Ring of Melbourne



Source: ABS, 2021

- ◆ ABS building approvals for dwellings shows that total dwelling approvals in inner Melbourne for FY20/21 have decreased significantly to 5,000, down from 9,499 in FY19/20, representing an annual decline of 47 per cent. The past three years are well below the 13,467 dwelling approvals in FY17/18.
- ◆ The majority of building approvals for dwellings in the Inner Ring comprise four storey plus projects, which declined from 8,286 in FY19/20 to 3,887 in FY20/21. This number of approvals is consistent with FY18/19 but is well below longer term averages.
- ◆ Growth for houses and townhouses has remained stable between FY18/19 and FY19/20.
- ◆ Over FY20/21, the City of Port Phillip was the strongest LGA in the Inner Ring for apartment approvals, overshadowing the City of Melbourne for the first time in a number of years. Overall, the City of Port Phillip had a share of 27 per cent of all apartment approvals for FY20/21.
- ◆ Approvals in the City of Melbourne LGA for high density projects continue to be weak. In the September quarter of 2020 there were a total of 207 apartments approved high density projects. The total supply of apartments is just over 1,000, which is an historically low figure.
- ◆ Outside the Melbourne LGA, apartment approvals remain stable with significant increases in Port Phillip, particularly within Fishermans Bend, as well as within Maribyrnong.

Market drivers in the Inner Ring

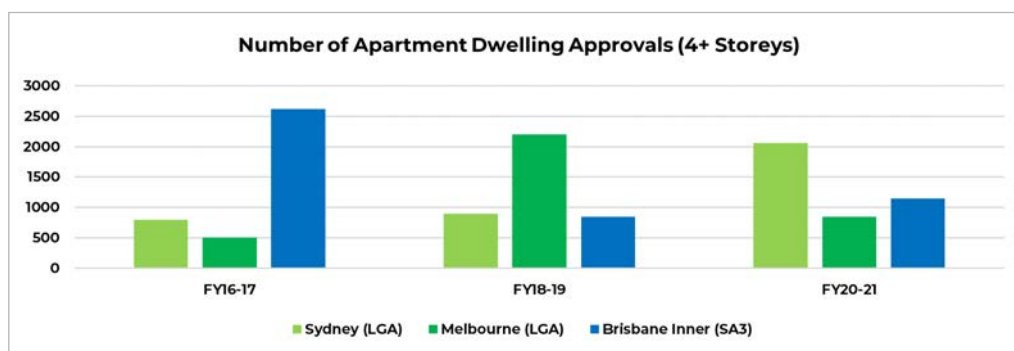
There are a number of issues influencing demand in the the inner ring of Melbourne. The inner ring of Melbourne has experienced the most noticeable impacts in population movements resulting from COVID-19 restrictions. This has been led by significant declines in the number of international students as well as the shift to more people working from home if they can. These impacts are characterised by the following:

- ◆ The loss of international students combined with a reduced need to live near work has dramatically reduced demand.

- ◆ There has been a shift within the rental market from inner city suburbs including within the City of Melbourne to Melbourne's growth areas and other regions of Victoria. Vacancy rates in the Inner Ring and surrounds have jumped from around 2 per cent to 9 per cent, but appear to have stabilised. Not all of these vacancies represent growth area or region buyers - some vacancies are departing international students - however the comparison with growth area and regional markets is stark where vacancy rates are as low as 0.5 per cent. This, in turn, drives up rents and investor activity.
- ◆ Data available from the Real Estate Institute of Victoria shows median rent for units did not grow over 2020 and 2021 and are still comparable to 2019 rental levels.
- ◆ The reduced need to live near the city combined with lower housing costs in Melbourne's growth areas and regions will continue to impact demand in the short to medium term.

High density housing in the Melbourne LGA

- ◆ The Melbourne LGA completely overshadowed other capitals in the period between 2014 and 2018 with 6,000 to 8,000 units commencing per annum. There has been a recent increase in activity in the Sydney LGA in FY21 with around 2,000 units commencing, while Melbourne's central city apartment market has collapsed to historically low levels.
- ◆ Similar trends in apartment approvals have been seen in Brisbane and Sydney due to a shift away from demand for apartments, with Melbourne's central city apartment market now similar to Sydney and Brisbane. The below graph compares the number of dwelling approvals in Sydney, Melbourne and Brisbane's inner LGA's:



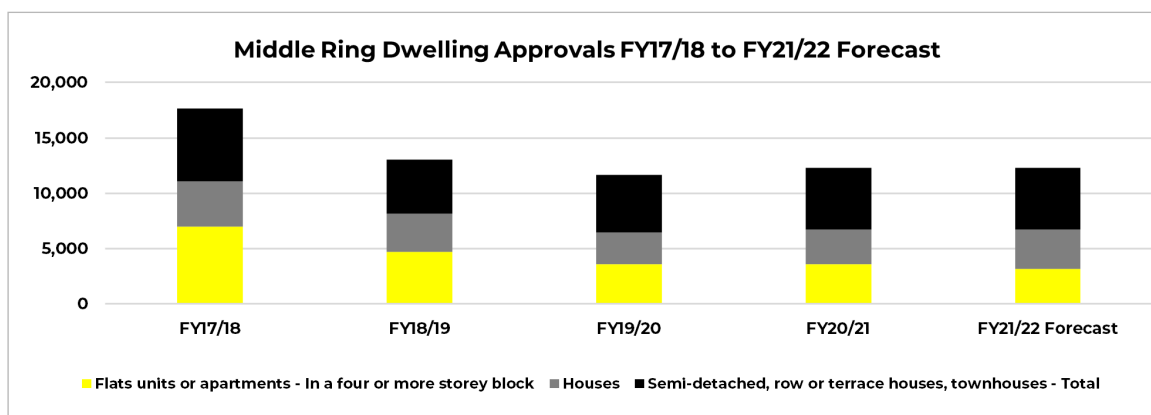
Source: ABS, 2021

Will the market conditions persist?

- ◆ Current Supply - a large volume of stock has reached completion in FY19/20 which has coalesced with declining demand. These volumes reduced significantly over FY20/21.
- ◆ Demand Factors – low bank interest rates and a desire for renters to purchase has led to a large increase in first home buyers that formed a portion of the renters within the Inner Ring. These renters are generally choosing to purchase outside the Inner Ring as affordability issues persist.
- ◆ International Students – high vacancy rates should decline by FY21/22 if international students return and offices reach 70 per cent capacity.
- ◆ Investors - buyers will accept limited capital gains on apartments in the first five years if rental yields are strong, however if yields collapse the investor market will vanish completely.

Middle Ring of Melbourne

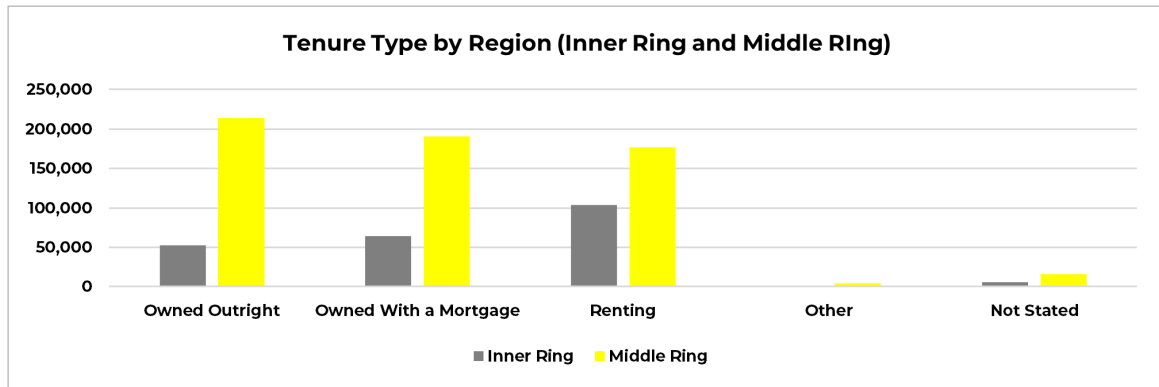
Trends across the Middle Ring of Melbourne



Source: ABS, 2021

- ◆ ABS building approvals for dwellings shows that total dwelling approvals in middle Melbourne for FY20/21 grew by 7 per cent, with all building types experiencing modest or stable growth in approvals compared to the previous financial year.
- ◆ Dwelling approvals grew by 10 per cent in FY20/21, whilst townhouse grew by 7 per cent and apartments showed no growth.
- ◆ Approvals for apartments in FY20/21 were stable compared to FY19/20 with circa 3,600 approvals for each year, below the 4,732 approvals in FY18/19. Overall, the past three years is significantly below the overall 17,020 total residential approvals in FY17/18.
- ◆ Bayside, Brimbank and Banyule LGAs have consistently low levels of approvals over FY19/20 and FY20/21, which is representative of mature middle ring suburbs with low land supply.
- ◆ The LGAs of Whitehorse, Moonee Valley and Hobsons Bay experienced moderately strong growth over FY20/21 which was boosted by approvals for large apartment and townhouse projects.
- ◆ The most consistently high approvals were within Glen Eira and Moreland. These were led predominantly by a modest increase in townhouse and apartment dwelling approvals.
- ◆ Historically activity remains low compared to FY16/17 and FY17/18. This may indicate a decline in available sites in some key activity centres.

Market drivers in the Middle Ring

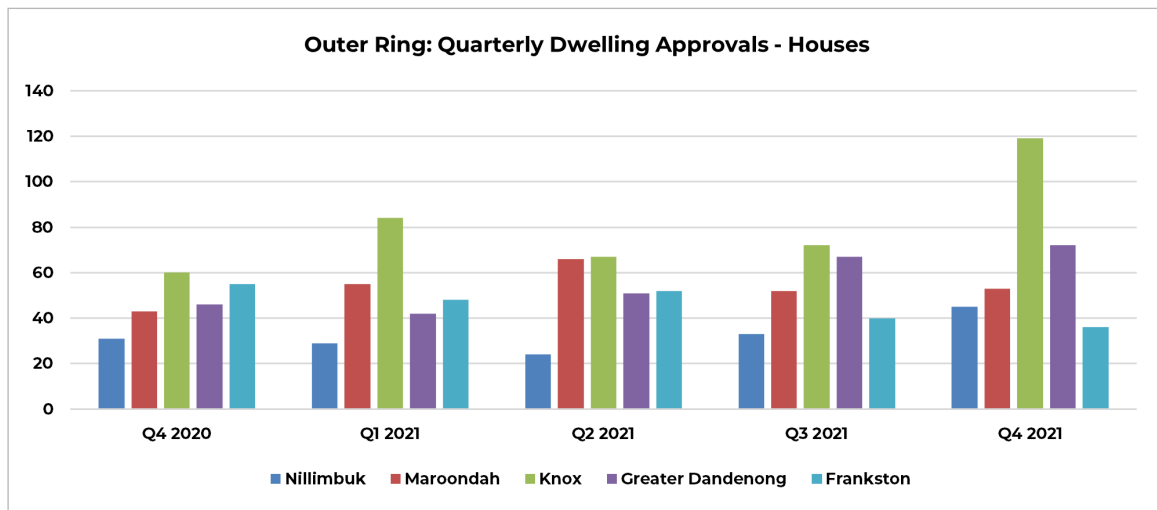


Source: ABS, 2021

- ◆ There is a significant disparity in tenure type between the Inner Ring and Middle Ring of Melbourne, with high levels of home ownership in the Middle Ring compared with high levels of renters in the Inner Ring.
- ◆ The Homebuilder economic stimulus scheme and changing working and living trends stemming from the pandemic is having less of an effect within the Middle Ring.
- ◆ Renters in Melbourne's Inner and Middle Ring will continue to act as a buyer source, and the ownership cohort with and without a mortgage will also act as cash-out buyers.
- ◆ The market depth for home ownership is now concentrated in 30 to 45 year old renters and young families.

Outer Ring of Melbourne

Trends across the Outer Ring of Melbourne

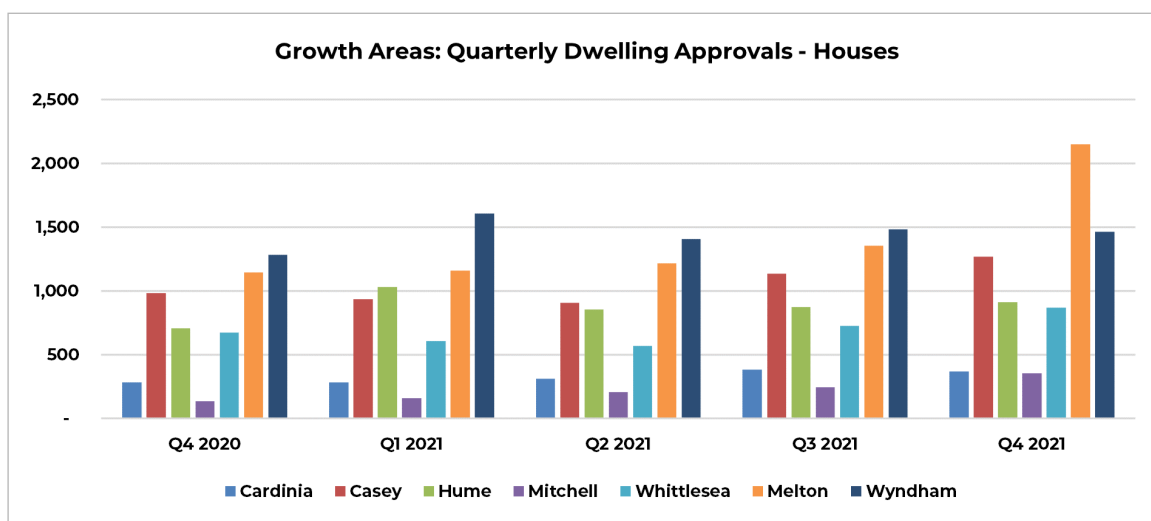


Source: ABS, 2021

- ◆ ABS building approvals for dwellings shows that total dwelling approvals in middle Melbourne for FY20/21 grew by 7 per cent, with all building types experiencing modest or stable growth in approvals compared to the previous financial year.
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- ◆ Historically activity remains low compared to FY16/17 and FY17/18. This may indicate a decline in available sites in some key activity centres.

Melbourne's Growth Areas

Trends across the Growth Areas of Melbourne



Source: ABS, 2021

- ◆ Total building approvals for dwellings in the Growth Areas of Melbourne are 26,663 for FY20/21 which represents a 31 per cent increase from 20,348 in FY19/20. This was a further increase from 19,675 dwelling approvals in FY18/19.
- ◆ Houses account for 93 per cent of all Growth Area dwelling approvals in FY20/21. This is an increase of 1 per cent over the prior year and up from FY16/17 and FY 17/18 levels where houses were approximately 87 per cent of total dwelling approvals with the balance taken up by townhouses.
- ◆ Apartment and townhouse approvals have been relatively low in volume and stable in growth over the past three financial years, with a fall recorded of five per cent growth in townhouse approvals between FY19/20 and FY20/21 to 1,688 dwellings, down from historical levels of around 2,100 townhouse approvals annually.
- ◆ Over the last year Growth and Regional Areas have delivered circa 43,000 new houses. Of this, approximately 18,000 of these were in Regional Areas and 25,000 were in the Growth Areas.
- ◆ Although small, declines in dwelling approvals were most significant in Cardinia and Hume LGAs with all other LGAs being generally stable over FY19/20. Currently lot sales are outpacing dwelling approvals.
- ◆ More recent activity is also strong reflecting the strong lot sales over the last 12 to 18 months.

Market drivers in Growth Areas

There are a number of issues influencing demand in the growth areas of Melbourne. These include:

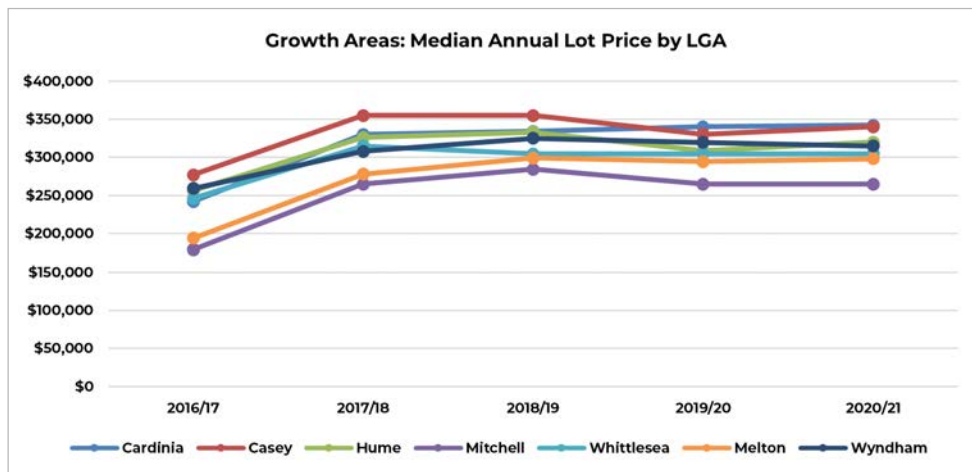
- ◆ A significant pool of pre COVID-19 migrants who will be shifting from renters to buyers.

- ◆ Other longer-term renters deciding it's a good time to buy.
- ◆ Melbourne residents cashing out, downsizing, losing work and taking early retirement.

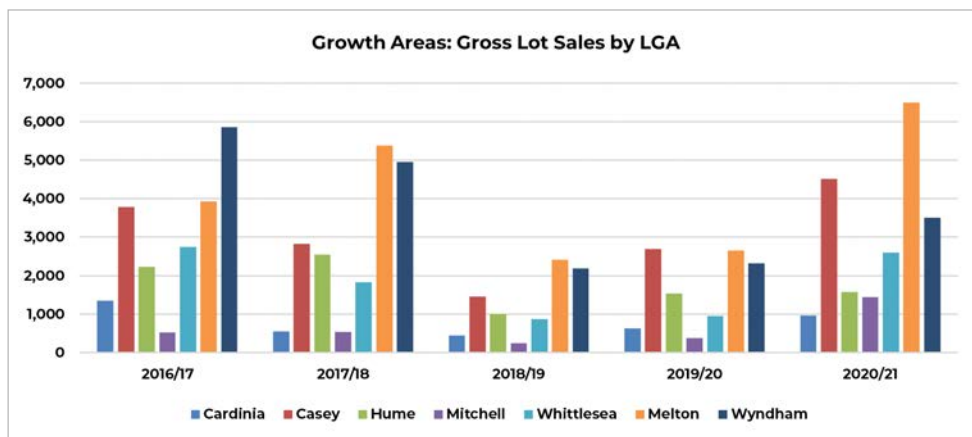
Market trends in Growth Areas

RPM, a UDIA Member, has provided updated details of lot sales in the growth areas of Melbourne, which has been compared with dwelling approvals data from the ABS.

- ◆ Growth Areas now account for 56 per cent of all building approvals for dwellings in Melbourne, up from 45 per cent in FY19/20, and significantly higher than historical levels of 37 per cent seen in FY16/17. This could increase further over the next one to two years, along with regional areas.
- ◆ Market price data for sales of new lots in the Growth Areas of Melbourne show a flattening in pricing when comparing FY20/21 to FY19/20 and FY18/19.
- ◆ Lot sizes and lot pricing stabilized over FY20/21, FY19/20 and FY18/19, despite consistent growth between FY14/15 to FY18/19. This is likely due to competition from products in regional Victoria and this trend expected to continue.
- ◆ In FY18/19 median lot prices were 43 per cent higher in Growth Areas of Melbourne relative to Regional Areas of Victoria. In FY19/20 this price premium reduced to 38 per cent and has further reduced in FY20/21 to 32 per cent. This is largely driven by price growth in Regional Areas, with lot pricing being fairly stable in the Growth Areas over the past three years.



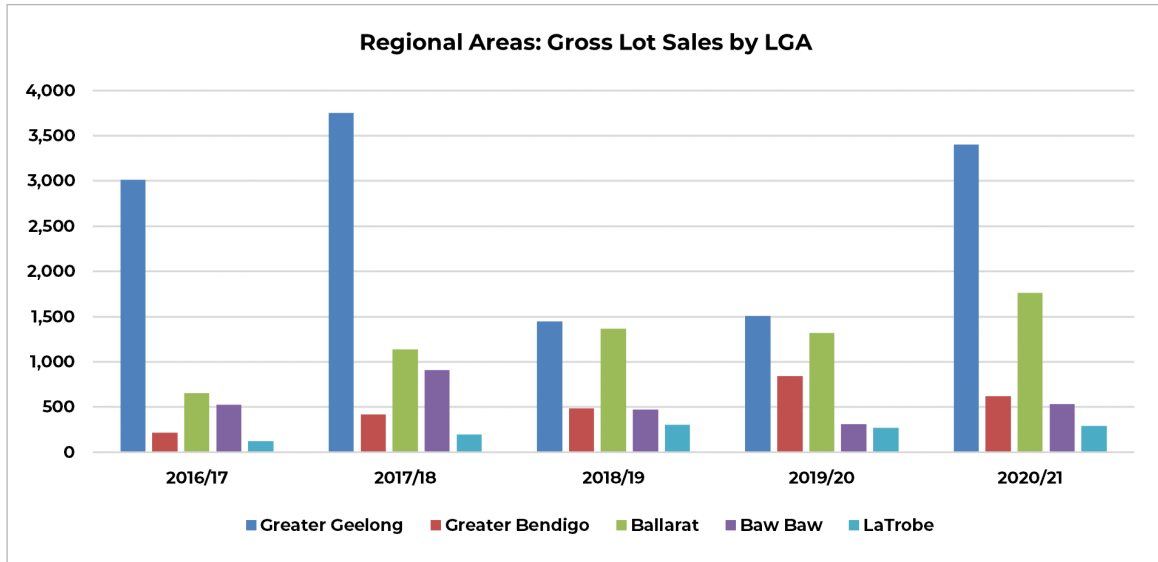
Source: RPM, 2021



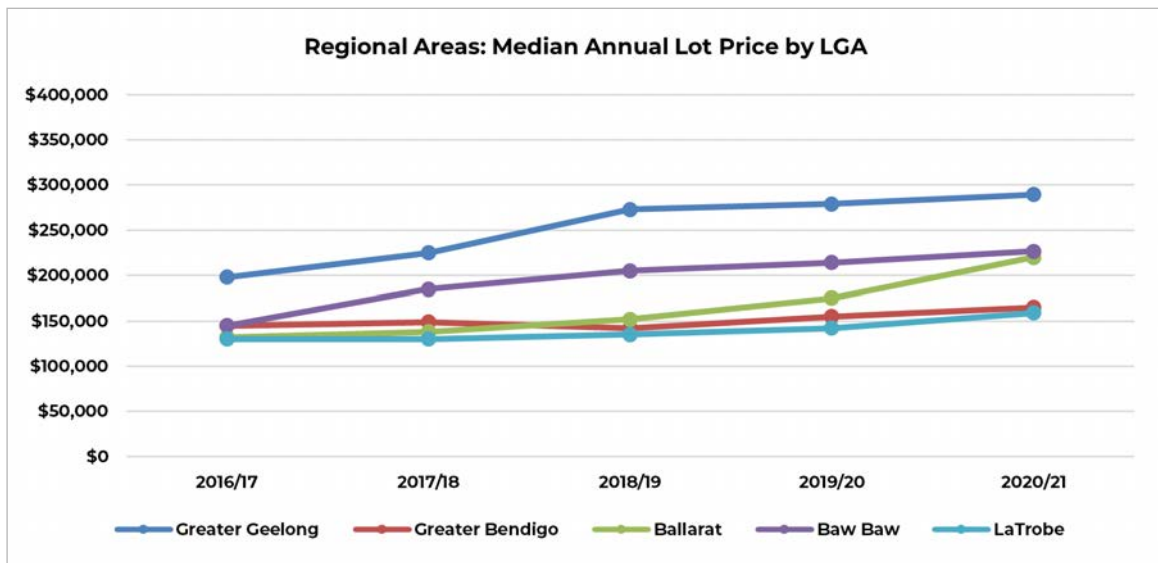
Source: RPM, 2021

Regional Areas

Trends across the Regional Areas of Victoria



Source: RPM, 2021



Source: RPM, 2021

- ◆ Total building approvals for dwellings in regional Victoria for FY19/20 have increased significantly to 20,197, up from 14,513 in FY18/19 representing annual growth of 39 per cent.
- ◆ Houses account for 91 per cent of all regional dwelling approvals in FY19/20, a marginal proportional increase of 1 per cent over the prior year. In terms of the number of housing approvals, there has been a recorded increase of 41 per cent over the past year to 18,354, with approvals well above historical levels of 11,677 in FY16/17 and 13,399 in FY17/18.

- ◆ Approvals for townhouses increased by a modest 15 per cent over FY20/21 to 1,646 approvals, with levels of approvals generally stable around 1,400 annually over the past five years.
- ◆ While there was a decline for apartment and townhouse approvals between FY18/19 and FY19/20 with a fall recorded of 65 per cent and 25 per cent respectively, this trend has now reversed in FY20/21. Overall, townhouse and apartment activity approvals comprise a small part of the residential market in regional Victoria.
- ◆ Dwelling approvals for FY20/21 followed strong lot sales in FY18/19 and FY19/20, particularly in Greater Geelong and increasingly in Ballarat.
- ◆ The growth in regional areas is outpacing the growth in Melbourne's Growth Areas, with 33 per cent growth in dwelling approvals year on year between FY19/20 and FY20/21 for regional areas compared with 31 per cent in Melbourne's Growth Areas.
- ◆ Regional areas have for the first time supported more than 20,000 total dwelling approvals for new houses, with regional areas trending to comprise 70 to 80 per cent of the size of the total new housing market, led by major regional centres including Bendigo, Ballarat and Geelong. Increasingly, major regional centres within a two hour commuting distance to Melbourne are experiencing an uplift in lot sales and residential development activity.

Where are the buyers coming from?

There are a number of factors influencing demand in regional Victoria. These include:

- ◆ Growth Area buyers wanting larger lots or being outpriced within the Growth Areas.
- ◆ Professional services workers commuting to CBD one or two days per week wanting to establish themselves in regional locations.
- ◆ Services and facilities including healthcare and education being more established in some regional centres relative to the Growth Areas.

Research by the Productivity Commission supports these observations, noting that it will be difficult for employers to pressure staff to return to working full time on-site in an office environment, and that the shift to the regions will be a permanent feature for parts of the labour force.

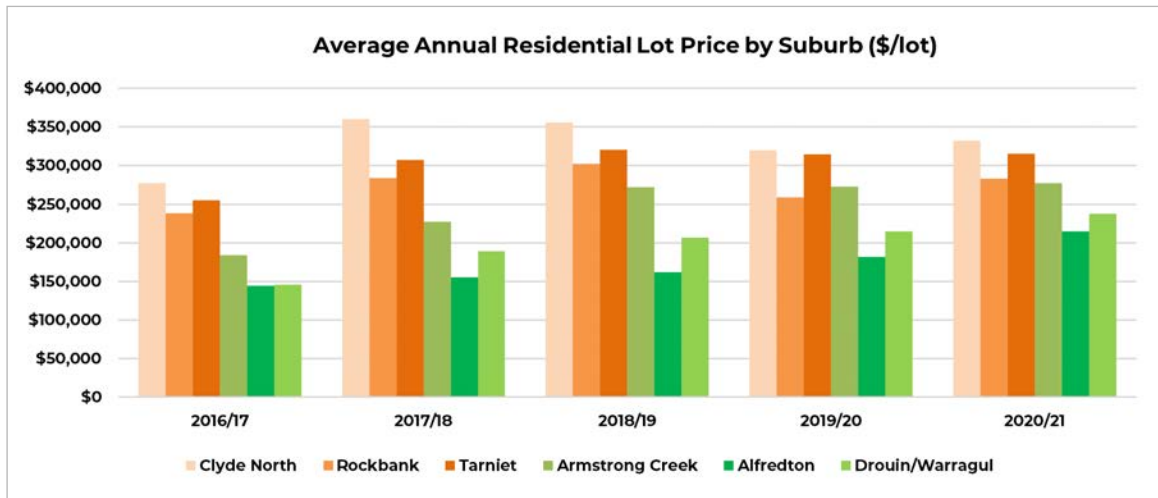
There has been evidence of an increase in dwelling approvals in regional Victoria, with this trend expected to continue as lot pricing in the Growth Areas remains high. It is expected that lot sales in the last 12 months will continue to translate to new dwelling approvals.

Lot prices and lot sales

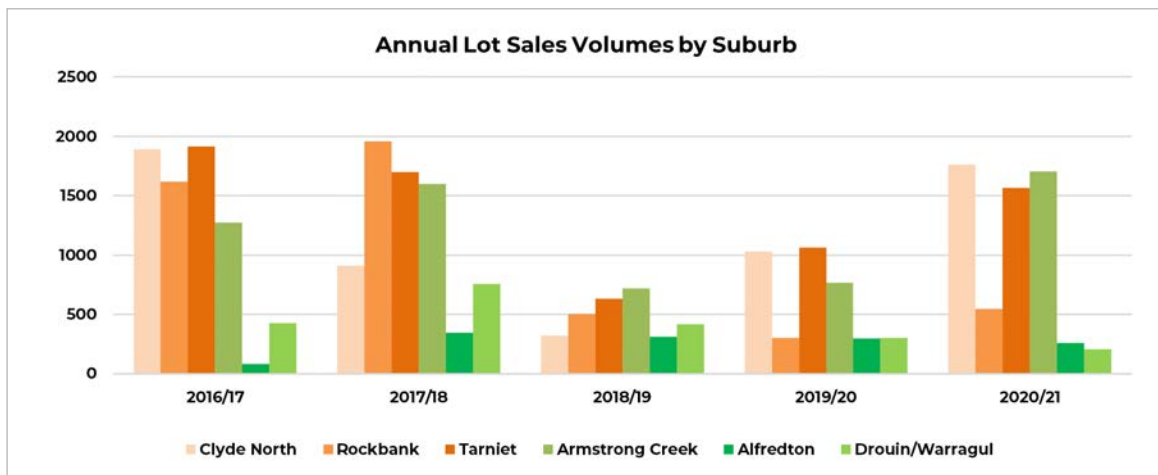
RPM, a UDIA Victoria Member, has provided the following information about lot sales in regional Victoria:



- ◆ Market price data for lots in regional Victoria confirm a reduction in the price gap between Melbourne's growth areas and the regions when comparing to FY18/19 and FY19/20. This gap has reduced further over the past twelve months.

- ◆ Median lot prices in Greater Geelong now sit at circa \$280,000, consistent with the pricing for Rockbank in Melbourne's outer west. However, lot prices in Bendigo, Ballarat and the Drouin/ Warragul area are still price competitive with markets like Melton and Hume. This may suggest opportunity for further escalation over time, particularly where Regional Areas and Growth Areas start to directly compete against each other in terms of pricing.
- ◆ In the June Quarter FY20/21 Greater Geelong achieved 1,050 sales relative to 1,200 in Casey and 1,900 in Melton. Growth in lot sales in Armstrong Creek outside Geelong is now outpacing Melbourne's traditional south-eastern growth corridor. These are trends that are not expected to ease anytime soon.



Source: RPM, 2021



Growth Area Suburb	
Regional Area Suburb	

Source: RPM, 2021

ECONOMIC IMPACT OF THE RESIDENTIAL DEVELOPMENT SECTOR

In this section

Contribution to the Victorian Economy	36
Contribution to Employment	37
Spotlight: COVID Recovery Drivers	38

Contribution to the Victorian Economy

The total expenditure in the new residential construction sector (inclusive of the sector for four or more storey buildings) in FY20/21 amounted to just over \$22.2 billion. Based on the economic value add measure, this expenditure generated a further \$26.25 billion for the Victorian economy. Of this, around \$6.45 billion was directly generated by the residential sector. These figures indicate the construction industry has seen fewer pandemic-related impacts than expected, and it has played a key role in sustaining the Victorian economy.

Expenditure (\$m, Jan 2021, real), total residential construction					
	FY16/17	FY17/18	FY18/19	FY19/20	FY20/21
Expenditure (\$m)	\$20,370	\$24,658	\$20,860	\$21,602	\$22,247

Economic value add (\$m, Jan 2021, real), total residential construction					
	FY16/17	FY17/18	FY18/19	FY19/20	FY20/21
Direct value add (\$m)	\$5,887	\$7,126	\$6,028	\$6,265	\$6,452
Indirect value add (\$m)	\$18,149	\$21,970	\$18,586	\$19,226	\$19,800
Total value add (\$m)	\$24,036	\$29,096	\$24,615	\$25,490	\$26,251

Note:

*Expenditure has been updated to reflect prices as of 1 January 2021

** Total values may not be the sum of direct and indirect values due to rounding

*** The input/output multipliers used to calculate economic activity are from the 2018-19 financial year

Source: EY, 2021

Contribution to Employment

The residential development sector was estimated to sustain 200,222 direct and indirect jobs in Victoria in FY 20/21. This figure is inclusive of some lost jobs during the tail end of 2020, as well as the recent lockdown in Melbourne. The impact includes jobs sustained directly in the sector as well as in support industries such as property and business services, financial services, transport and distribution, manufacturing and other sectors.

Direct employment in the residential construction has remained relatively stable over the last four years averaging approximately 43,000 jobs. Indirect jobs creation in other sectors supporting residential construction increased to 156,000 in FY2021 relative to 151,000 over the previous year.

It is important to note that these estimates of impact and revenue do not include the contribution that the residential development sector makes to the Victorian Government's own source tax collections. State taxes including stamp duty and land tax are supported by the sector. While off-the-plan stamp duty concessions will apply to first home buyers and those residing in new properties, it is important to note that developers fund large stamp duty and land tax collections as part of the land acquisition and development process.

Other charges including open space contributions and developer levies also provide State and Local Government with a diversity of revenue streams to fund capital projects and services.

Job creation (\$m, Jan 2021, real), total residential construction					
	FY16/17	FY17/18	FY18/19	FY19/20	FY20/21
Direct jobs creation	40,739	49,315	41,720	43,203	44,494
Indirect jobs creation	142,587	172,603	146,018	151,209	155,728
Total jobs	183,326	221,918	187,738	194,411	200,222

SPOTLIGHT:

Covid Recovery Drivers

National Economic Overview

The Reserve Bank of Australia's (RBA) October Statement on Monetary Policy explained that the Delta variant of the COVID-19 virus has interrupted the recovery of the Australian economy, yet will only be temporary. It is expected the Australian economy will begin to grow again in the December quarter and represent some normality similar to pre-Delta times in the second half of 2022. Prior to the August/September lockdowns in Victoria and New South Wales, Australia's GDP had experienced an increase of 0.7 per cent in the June quarter and an almost 10 per cent increase over the year. The unemployment rate rose from 4.5 per cent to 4.6 per cent, the result of reduced working hours and jobs losses due to COVID-19, with NSW and VIC most prominently reflected in national figures. The participation rate hit a 15-month low of 64.5 per cent.

As a result of lockdowns affecting most of Victoria and New South Wales, the positive economic activity is now expected to significantly contract over the September quarter. The RBA anticipates the GDP to be supported by strong exports despite a sharp fall in domestic demand. Household consumption is expected to decline by 15 per cent and the construction sector and investments have been impacted. Overall, the expected setback is likely to be at least 2 per cent if not more. However, due to significant progress in vaccination rates, the negative influence of the latest Delta induced lockdown is expected to be temporary as easing of restrictions allows for greater movement and economic activity.

The RBA's monetary policy measures are providing ongoing support to the Australian economy. This is supported by maintaining the record low 0.1 per cent cash rate, targeting of 10 basis points for the April 2024 Australian Government bond, a bond purchase program which has already completed \$200 billion worth of transactions and a low-cost term funding facility for Australia's banks. The RBA will continue future government bond purchases until at least mid-February 2022 at the rate of \$4 billion a week.

The NAB monthly business survey released 12 October 2021 reported both sharp improvements and declines for the month of October. Business confidence significantly rebounded, increasing 19 points to +13 points which is well above the long-run average. Meanwhile business conditions deteriorated significantly, decreasing by 9 points from 14 to 15 index points as a result of continued lockdowns and restrictions, particularly in NSW and Victoria.

Key National Economic Indicators

Metric	Period	Current Value	Prior Value	Basis	Change on Prior Period
Reserve Bank Cash Rate	Oct-21	0.10%	0.10%	Monthly	Stable
GDP Growth Rate	Q2-21	0.7%	1.8%	Quarterly	Decline
Unemployment Rate	Sep-21	4.6%	4.5%	Monthly	Slight Increase
Population Growth Rate	Mar-21	0.1%	0.50%	Quarterly	Slight Decline
Business Confidence	Sep-21	+13	-5	Monthly	Increase
Business Conditions	Sep-21	+5	+14	Monthly	Sharp Decline
Dwelling Unit Approvals	Aug-21	+6.8%	-8.6%	Monthly	Sharp Increase

Source: RBA, NAB, ABS, 2021

Market Demand Drivers

Gross Domestic Product

- ◆ According to the Australian National Accounts data provided by the ABS, the Australian economy expanded by 0.7 per cent in the June quarter, leaving the economy 9.6 per cent larger than the June quarter in 2020.
- ◆ Encouragingly economic activity was broad based, however the June data is dated. It reflects the period before the Delta outbreak and widespread lockdowns, which will have a devastating impact on economic activity, particularly in New South Wales and Victoria. Modelling suggests that the lockdown of Greater Sydney alone is likely to detract around 2.5 percentage points from Gross Domestic Product (GDP) in the September quarter.

Labour market

- ◆ The worst of the labour market pain is behind us, with New South Wales, Victoria and the ACT adjusting to a steady state of hibernation while waiting for vaccination rates to pick up, and the rest of the country performing strongly.
- ◆ However, the economic narrative is expected to shift from being under-worked to under-resourced – with Westpac's unemployment expectations predicting a six month low nationally and a 16 year low in New South Wales, reinforcing the anecdotes of a tight labour market.
- ◆ The unemployment rate rose modestly to 4.6 per cent, a reflection of participation falling more than employment (employment declined by 138,000 in September). Encouragingly hours worked rose during the month led by gains in Queensland, as that state saw easing restrictions, and surprisingly New South Wales as full-time employment rose during the month in anticipation of rising vaccination rates and the reopening of the economy.

Inflation (CPI)

- ◆ CPI rose 0.8 per cent over the September quarter of 2020, up 3 per cent over the

year. Inflation data continues to be impacted by the pandemic, both directly through policy and base effects – such as the unwinding of HomeBuilder grants - and indirectly from global supply chain disruption, which saw price rises across motor vehicles, furniture, household appliances and electrical equipment.

- ◆ The impact of lockdowns are also evident if you look to rents, which rose across the country except for Sydney and Melbourne.

Wages (WPI)

- ◆ Wages rose by 0.4 per cent over the June quarter, up 1.7 per cent over the year to June 2021. Isolated examples of skills shortages are placing pressure on employers to meet market wage expectations, however wage prices remain generally subdued with private wages up 1.9 per cent over the year.
- ◆ The public sector experienced the slowest level of wages growth since the series began in 1997 at 1.3 per cent over the year.

Interest Rates

- ◆ As of September 2021, the RBA has maintained the cash rate at a record low 0.10 per cent. The Board intends to maintain supportive monetary conditions as the economy transitions from recovery to expansion.
- ◆ The RBA does not plan to increase the cash rate until after actual inflation is sitting comfortably within the 2 to 3 per cent target range.

Property Market Overview

Annual house price growth is now at its fastest pace since June 1989. Residential house prices continued to soar over September, rising by 1.5 per cent across the country, including in locked down areas.

Retail trade fell by 1.7 per cent in August which is reflective of lockdowns across the nation, notably in NSW and Victoria. As the economy sets to re-open, and spending in the services sector is anticipated to increase, retailers still face hardship; facing shifting demand, increased inventory carrying levels and elevated workforce disruption.

Tenant take-up of industrial property including warehouses in the year to the March quarter 2021 was 45 per cent higher than its 10-year average, the result of enhanced online shopping as retail property is closed.

Most notably, office vacancy rates in Melbourne's CBD have hit its highest level (10.4 per cent) over the past six months, increasing 2 per cent since the previous period. This is the highest vacancy rate reported since January 2000 resulting from repeated long lockdowns and accompanying reduced demand for office space. Sydney also saw negative demand over the past six months, while all other capital cities enjoyed decreases in office vacancy.

Other Housing Indicators

Regulation

- ◆ There has been recent action by Australian Prudential Regulation Authority (APRA) to increase the interest rate buffer assessment. This is has formed part of a suite of measures expected to be realised over coming months in an attempt to soften house price growth and support financial stability within the market.

Population Growth

- ◆ According to data provided by the ABS, Australia's estimated population has grown by 35,000 people over the 12 months to March 2021, with the national population reaching 25.7 million people.
- ◆ Population growth of just 0.1 per cent over the year is the lowest rate of population growth ever recorded for Australia. Population growth is not expected to recover until international borders open and international travel resumes.

Migration trends and student migration

In 2019, the value of Australian education related exports was \$40.3 billion, being the third largest export behind coal and iron ore, and contributed to approximately 2.1 per cent of total GDP. This has since fallen to \$26.7 billion in the 12 months to June 2021 as a result of the pandemic and the closing of international borders.

The strain that the pandemic has put on universities and the local economies which revolve around them - relying on employment both directly and indirectly through universities - cannot be understated. In light of this the government has recently announced a number of priority demographics in which will be able to return to Australia before entry is opened to general tourists.

It is noted that international students are included under the definition of priority demographic by the Department of Home Affairs. One estimate puts the number of enrolled students who cannot get back into Australia at 150,000. This policy shift is expected to drive a surge in demand for rental properties in close proximity to universities.

Given Melbourne's historical trend of receiving net population growth from international and interstate migration, a gradual rebound in the net migration can be expected into Melbourne from the start of next year when borders re-open and the vaccination rate rises above 80 per cent. This will primarily be driven by the international students in which have been forced abroad during the pandemic, but also from new students who are eager to study at Melbourne's highly ranked universities. Further, this is consistent with the Victorian state budget in which predicts a growth rate of 1.2 per cent in FY22/23, and 1.7 per cent in the years that follow.

METHOD AND DATA SOURCES

In this section

Method of Calculating Economic Impacts	43
Data Sources and Glossary	44
Geographical Study Areas	46

Method of Calculating Economic Impacts

ABS dwelling approvals data (value estimates) has been used to calculate estimated expenditure in the new residential construction sector and employment generation.

Economic contribution is a measure comprising all market related expenditure generated by a specified industry or an activity. Economic contribution studies do not consider the substitution impacts to other industries (i.e. what might happen to expenditures if the specific industry or activity were lost). As such economic contribution is a gross measure rather than a net measure.

To estimate economic contribution, this study adopts an input/output approach to calculate the direct and indirect (wider) economic impacts. REMPLAN¹ was engaged to develop input/output multipliers that reflect the specific characteristics of the Victorian economy.

REMPAN is essentially an input/output model of the Australian economy and regional economies. Input/output models trace the revenue and expenditure flows that link industries and workers within and outside economic regions. For instance, an increase in output in one industry (the “direct impact”) would give rise to demand for inputs from other industries (industrial effect) as well as labour (consumption effect). In turn, these support industries would demand further inputs, labour, and so on. This may be referred to as the multiplier or indirect effect.

REMPAN modelling provides the ability to calculate the value of gross regional product. REMPLAN’s key advantage over other input/output models or “off the shelf multipliers” is that it is region specific.

Three common indicators of an industry or economic size or value are:

- ◆ **Gross industry output** – Market value of goods and services produced, often measured by turnover/revenue. Gross output is also referred to as ‘gross economic contribution’ or ‘gross expenditure’
- ◆ **Value added (Gross State/Regional Product)** – Market value of goods and services produced, after deducting the cost of goods and services used.
- ◆ **Jobs** – Number of jobs generated by an industry or attraction.

Based on the expenditure estimates, it is possible to estimate the value add to an economy from the construction of new dwellings as well as the number of jobs sustained by this industry.

Data Sources and Glossary

Abbreviations	
ABS	Australian Bureau of Statistics
EY	Ernst & Young
Census	Census of population and housing
DA	Dwelling Approvals
DBA yield	Estimated yield of dwellings to dwelling approvals (used to forecast supply)
DELWP	Department of Environment, Land, Water, and Planning (Victoria)
DTF	Department of Treasury and Finance (Victoria)
LGA	Local Government Area
OxEcon	Oxford Economics
Pandemic	Covid-19 global health pandemic
UDIA	Urban Development Institute of Australia
RDI	Residential Development Index
RPM	RPM Real Estate Group
State Budget	Budget Papers released by DTF

Study Areas & Usage of Data
<p>For the dwelling approvals analysis the following assumptions have been made:</p> <ol style="list-style-type: none"> Each geographical catchment has been referenced against defined LGA's. For the Melbourne geographical catchments (also shown on the following page's map): <ul style="list-style-type: none"> » Inner Ring // This term throughout the Report refers to Melbourne's inner ring LGA's (<10km from CBD). LGA's within inner ring Melbourne include; Melbourne, Port Phillip, Yarra, Maribyrnong and Stonnington. » Middle Ring // This term throughout the Report refers to Melbourne's middle ring LGA's (10-20 kms from CBD). LGA's analysed within middle ring Melbourne include; Moreland, Darebin, Banyule, Boroondara, Glen Eira, Manningham, Whitehorse, Monash, Bayside, Kingston, Moonee Valley, Brimbank and Hobsons Bay. » Outer Ring // This term throughout the Report refers to Melbourne's established outer ring LGA's (>20kms from CBD). LGA's analysed within outer ring Melbourne include; Nillumbik, Maroondah, Knox, Greater Dandenong and Frankston. » Growth Areas // This term throughout the Report refers to the defined Melbourne growth areas. LGA's analysed within Melbourne growth areas include; Hume, Whittlesea, Mitchell, Casey, Cardinia, Melton and Wyndham. » Regional Victoria // This term throughout the Report refers to parts of Victoria excluding metropolitan Melbourne.

Data & Information Sources

In completing components of this report, existing sources of data have been utilised, including the following:

- » Australian Bureau of Statistics.
- » DTF Budget Papers including forecasts of population and employment.
- » EY proprietary data and research.
- » RPM – UDIA Member

Geographical Study Areas





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