

Speculative Vacancies 10

A Persistent Puzzle

The study of Melbourne's
vacant land and housing



About Prosper Australia

Prosper Australia is a research institute holding up a light to the dusty corners of an economic system no longer working for the common good. In particular, we believe the missing piece in the analysis of economics and taxation is *land*.

Ineffective vacancy measures are a cover story for inefficient land use.

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Cycling through his neighbourhood at the height of Melbourne's rental affordability crisis, Karl couldn't help but notice the prevalence of vacant land and housing. From this casual observation, Prosper initiated Speculative Vacancies, a more accurate account of Melbourne's vacant stock. This report formed part of the international case for a crisis in housing expounded by the UN Special Rapporteur on Adequate Housing, as documented in the film Push.

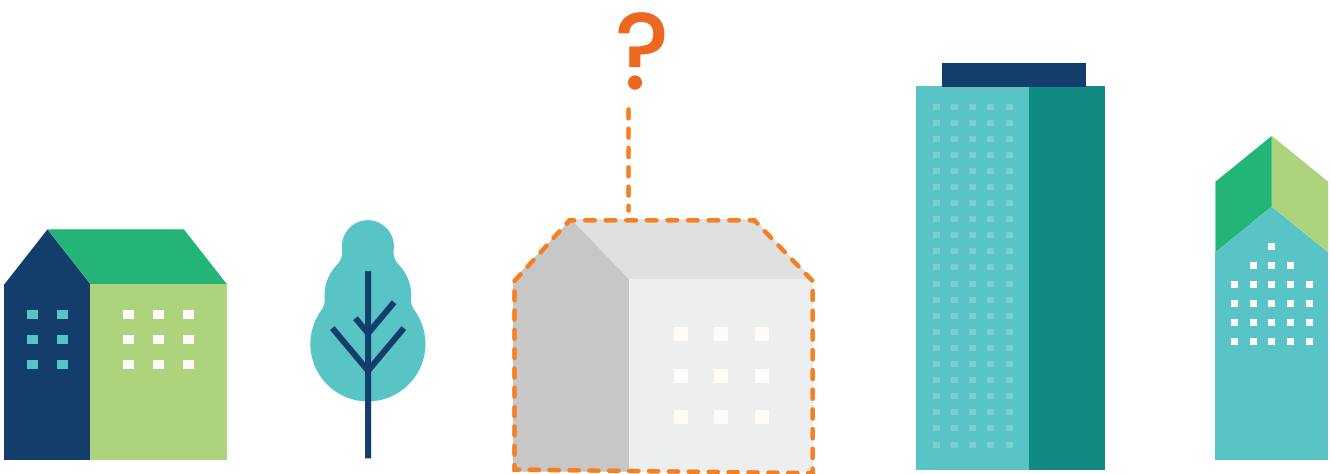
Karl recently established the Global Empty Homes Network along with US NGO Local Initiatives Support Corporation & UK campaigners Action on Empty Homes. His monthly radio program and podcast, Renegade Economists, has been offering listeners heterodox economic perspectives for over twelve years. He holds a Bachelor of Economics from Monash.

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Report

Period of Analysis: 2019.



Speculative Vacancies 10 Report

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Executive Summary

Prosper's tenth analysis of vacant land and housing finds that 69,004 properties were likely vacant in 2019. This represents a 4.1% speculative vacancy rate.

This number of empty or underutilised properties could house over 185,000 people, making short change of Victoria's 80,000 person public housing waiting list.

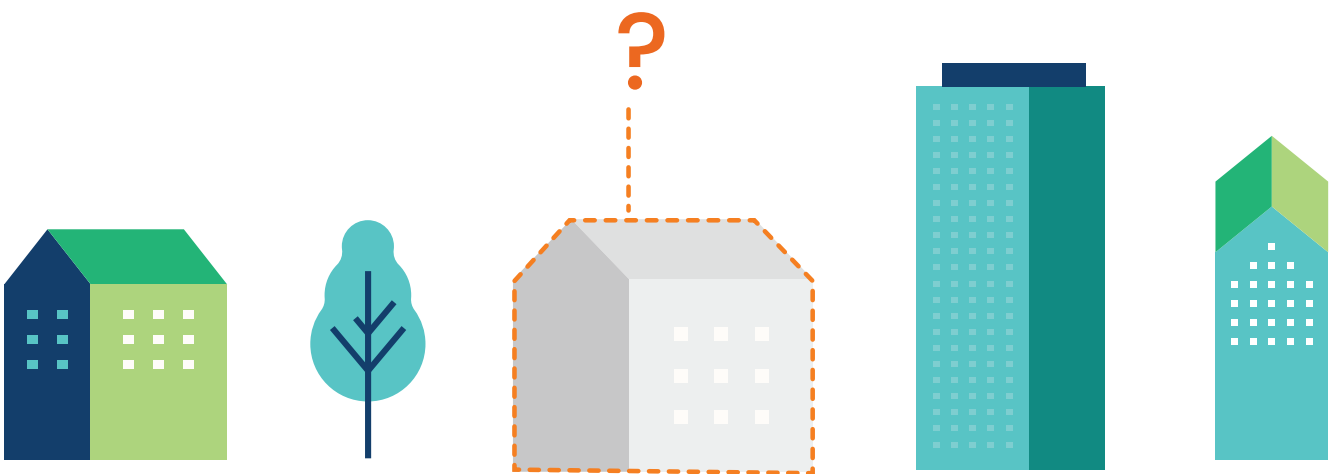
There were 24,042 properties which consumed zero litres of water per day on average over the 12 month period. That is 1.4% of all residential properties observed.

When combined with Melbourne's advertised rental vacancy rate of 2% and expressed as an equivalised ratio, the total vacancy rate reaches 4.7%.¹

For the non-residential property sector, covering commercial and industrial, we found 10.9% of properties used 0LpD (litres per day) over 12 months. That equates to 14,252 properties. This is approximately three-times the number of commercial and industrial properties sold in 2019.

Over the thirteen years Prosper has reported on vacancy in Greater Melbourne, the total number of absolute vacancies has risen to around 20,000 and remained stable for the past five years.

Speculative vacancies, properties consuming <50 liters of water per day over a 12 month period, have a median of 64,500 since 2012.



¹ Based on SQM Marketing's 2019 vacancy rate https://sqmresearch.com.au/graph_vacancy.php?region=vic%3A%3AMelbourne&type=c&t=1 expressed as a percentage of total residential property. https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/2GMEL?opendocument

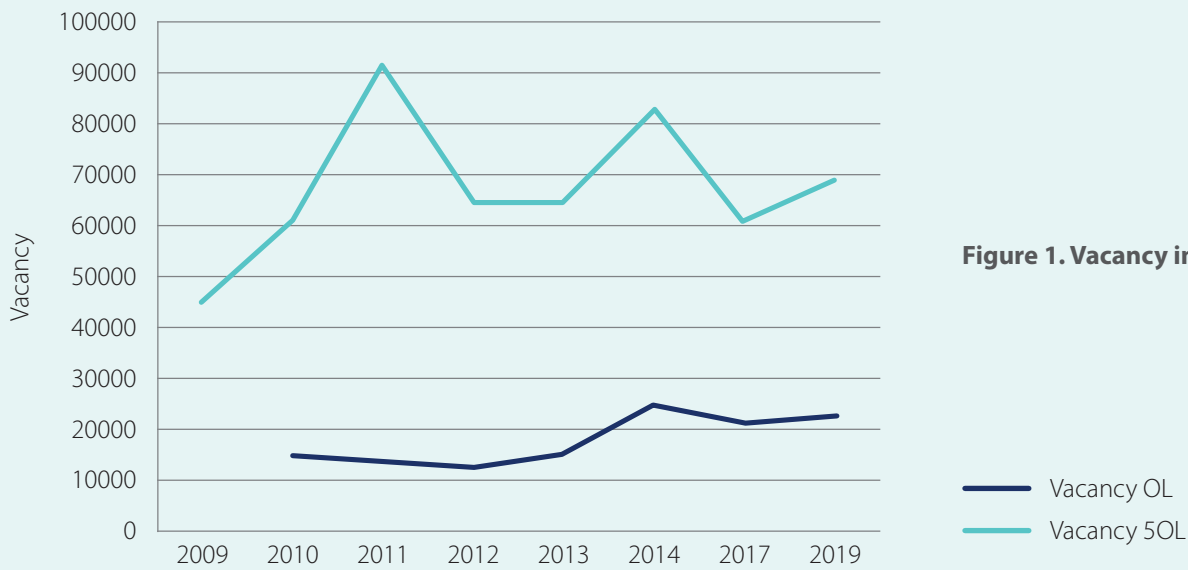


Figure 1. Vacancy in Melbourne

The Victorian government's Vacant Residential Property Tax (VRLT) was introduced in 2018 to deter vacancies in selected inner Melbourne suburbs. The tax relies on voluntary self-reporting.

In 2017-18, 469 property owners self-declared 716 vacant residential sites to the State Revenue Office. This equated to 3.4% of the absolute vacancies we observed in 2017.

In 2018-19 the number of declared vacancies fell to 587 properties. This equated to only 2.6% of properties that used 0LpD over 12 months in 2019.

Either some 20,000 properties met the criteria for exemption, or there are some issues with compliance. If the tax was applied more thoroughly to the postcodes in our study area, state revenue would increase by between \$160 million to \$495 million per year, whilst deterring lazy land use.

This report recommends that the VRLT be extended to cover Greater Melbourne, rebased on site value to reduce distortion, with heavier penalties for non-compliance.

Innovative tax mechanisms such as escalating land taxes should be investigated for rezoned sites and master planned communities to disincentivise 'drip-feeding' market behaviour.

Finally, this report has long advocated for the effective taxation of land as a deterrent to under-utilisation. We expect the replacement of stamp duty with a land value tax will reduce vacancy, if implemented at an effective rate.

Key Findings

- Water usage data finds 69,004 properties vacant, a ratio of 4.1% in 2019.
- Vacancies recorded in 2019 could house 185,000 people at current household averages.
- Vacancies increased 13.3% between 2017 and 2019.
- Properties using zero litres per day on average over 12 months totalled 24,042, a ratio of 1.4%.
- When added to the short term rental rate, some 4.7% of properties were likely vacant.
- Up to 16.1% of investor owned residential properties were potentially vacant.
- Just 12.3% more properties were sold as were likely vacant.
- These findings do not include 370,000 vacant land lots, largely within master planned communities.
- The Valuer General's quantification of residential property 'assessments without buildings' equates to approximately 63,314, a similar volume to our findings.
- Three times the amount of non-residential property stood vacant as was sold in last year's vibrant industrial market.
- The state government's Vacant Residential Land Tax was levied on only 2.6% of absolute vacancies. No fines have been recorded against non-declaring landholders. Water consumption has not been used as a vacancy indicator. Weak enforcement has cost the taxpayer at least \$160 million a year.
- Vacancy rates in the gentrification belt of the inner north, alongside the cultural hotspot of mid eastern suburbs such as Box Hill and Glen Waverley, increased markedly in 2014 remaining >5% over five years.

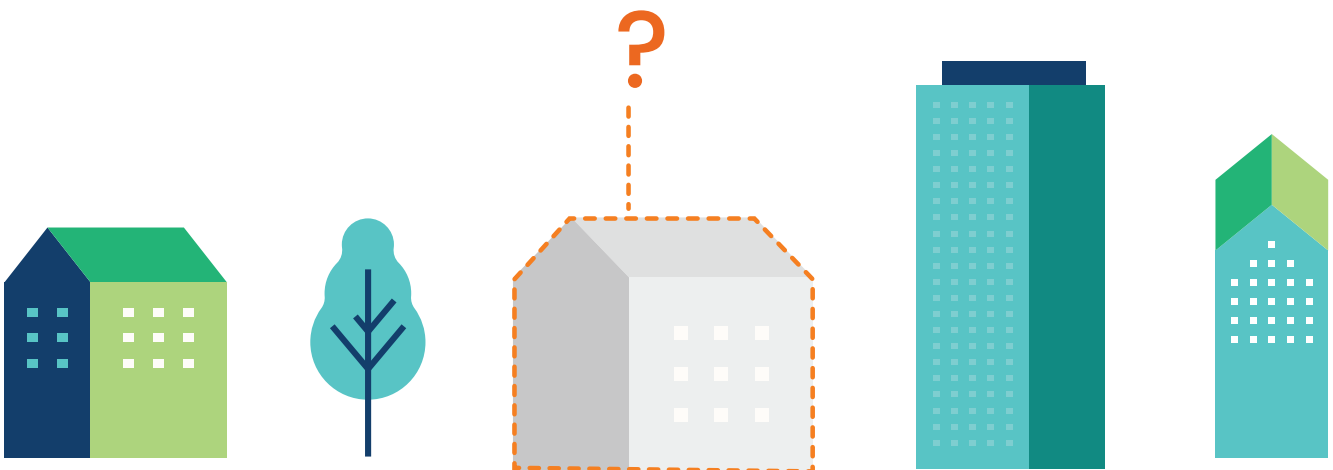




Figure 2. At present those in green are ignored in widely-used vacancy figures.

Current vacancy measures have evolved from a voluntary survey by real estate agents (REIV model) to data scraped from real estate websites of rental properties advertised as available for 3 weeks (SQM Research model).

The ABS also collects data on vacancies in the five yearly census.

In this report, water usage data obtained from Melbourne's three water utility companies, Yarra Valley Water, South East Water and City West Water, is analysed as a proxy for vacancy.

Water usage data provided to Prosper covers 92.13% of total residential property across 237 postcodes for Greater Melbourne over a 12 month period.

Water consumption was chosen as the most effective form of vacancy detection because:

- Nobody can survive without water for 12 months
- Property owners cannot change water retailer mid-reporting cycle
- Data at suburb level involves minimal invasion of privacy.

We provide measures of vacancy at two thresholds:

- Absolute vacancy - 0 litres per day (LpD) on average for 12months; and
- Speculative vacancy - <50LpD on average over 12 months.

Speculative vacancies reflect underutilisation, such as an intermittently inhabited dwellings.

Absolute vacancies represent a further inefficiency, such as a redevelopment site. As such, absolute vacancies may represent a withholding of multiple additional dwelling, depending on the site's potential for redevelopment or land use change.

Is a property using 50 litres per day vacant?

A property using no water (zero litres per day) is clearly vacant, however other factors need to be taken into account that can positively or negatively bias the results (Table 1).

This report has consistently used a criterion of 50 litres or less per day over a 12-month period as the benchmark for assessing vacant and underutilised dwellings. However, it is reasonable to ask whether intermediate changes to Melbourne's water consumption patterns have reduced the relevance of the <50LpD threshold. In short, behaviour has not improved.

Water consumption rates averaged per household have increased over the last seven consecutive years, a reversal of the moderation achieved during the Millennium Drought.

In 2018-19, Melbourne's residential water use averaged 162 litres per person per day.² This was slightly above the state's consumptive target of 155 litres per person per day, and one liter higher per day than the previous year.

The average household size in Melbourne is 2.7 people, meaning on average, each household is consuming some 419 litres per day.³ This is more than 8 times the 50L threshold.

The government has increased its order from the Victorian Desalination Plant, from 15 billion litres to 125 billion litres in 2019-20, indicating that household consumption is forecast to increase.⁴

As of yet, reliable data on the water loss through faults and leaks inside individual property boundaries is unavailable. Queensland's Department of Environment, Land and Water states that a cistern can leak 60,000 litres a year. That's some 164 litres per day.⁵

Some states such as Western Australia and South Australia incentivise leak detection.⁶ WA provides residents with a convenient 'how to calculator' alongside a \$100 rebate for any leak detected.⁷

Despite the state's *Water for Victoria* campaign for 'a future with less water as Victoria responds to the impact of climate change and a growing population', and the campaign to *Make Every Drop Count*, no incentive is provided for leak detection in Victoria.⁸

Melbourne's ageing infrastructure, with piping in some suburbs over 100 years old, results in millions of litres of water being lost each year. Leaks are calculated as the difference between water supplied to the water utilities and water charged by the utilities. Melbourne Water reports that some 47 billion litres were detected as leaks in 2018-19. This accounts for 11.8% of all water consumed.⁹ Water used in firefighting is also included in this figure.

Notably, environmental flows were 30 billion litres during this period, less than the losses from leaking infrastructure.

For non-residential vacancies, we look only at zero litres of water per day findings, averaged over 12 months. Workers need water to drink and flush with. This year we made a minor alteration to our top 20 findings, reducing the threshold for qualification from 1000 to 500 properties per suburb. The previous settings favoured the bigger, eastern suburbs and overlooked the working class north and western suburbs where post-manufacturing land use change demands further focus.

We continue to exclude holiday home regions from analysis.

These trends indicate that Victorians have not markedly improved their water conservation practices, nor are households incentivised to do so. This infers that our 50L threshold remains suitably conservative.

2 <https://www.melbournewater.com.au/about/strategies-and-reports/annual-report>

3 ABS Census, 2016, https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/UCL2010_01

4 Op cit, Melbourne Water, p15.

5 Dept of Environment, Land and Water, Saving Water at Home, <https://www.qld.gov.au/environment/water/residence/use/home/leaks>

6 SA Water, <https://www.sawater.com.au/forms/leakage-allowance-application>

7 WA Water Corporation, Detect a Leak, <https://www.watercorporation.com.au/Help-and-advice/Water-issues/Leaks/Detect-a-leak>

8 <https://www.makeeverydropcount.com.au/why-it-matters/>

9 Melbourne's Water Outlook 2020, Figure 5, <https://www.melbournewater.com.au/media/10276/download>

The following table summarises the variables that may bias the results. A downward arrow indicates a downward bias suggesting our figures may understate that number of vacancies. An upward arrow indicates the converse, that these factors may result in an overstatement of vacancies:

Table 1.

Factor	Bias	Notes
Large development sites	↓	A number of zero litre sites could be suitable for a medium to large redevelopment, resulting in three or more potential dwellings.
Fly in Fly out workers	↑	Low water usage may result
Air BnB	↓	Short term leases have reduced Melbourne's rental stock, with dedicated Air BnB properties often vacant.
Deceased estates	↑	29,173 deaths occurred in Melbourne, 2019. ¹ Settlement times can push sites over the 12 month threshold, particularly for those early in the year.
Land banks	↓	Evidence shows that larger development companies bank land in advance of development. ²
Development delays	↑	Whilst most councils can respond to a development application within three months, other issues may delay a site over the 12 month time period including finance, architectural design and attaining a builder. ³
Detection from point of sale only	↓	Most large estates do not turn water metres on until the point of sale. Due to this, large undeveloped land banks are not covered by this report.
Water leaks	↓	Water leaks rise above the cut-off point and are thus excluded as a speculative vacancy. ⁴
Single water meters in apartment blocks	↓	One or more vacant properties in a large apartment or unit block may not be flagged as a SV given the average aggregate consumption of the block may be greater than the cut-off point if there is only one meter.
Very low water use	↑	Some households may be outliers and consume less than 50L/d. ⁵
Properties for sale	↑	Homes for sale may be not be occupied for extended periods, particularly investment properties.
Properties for rent	↑	Tenants may be difficult to find in depressed or over-supplied suburbs.
Serviced apartments	↑	Long periods of vacancy may occur between outgoing and incoming tenants.
Property renovation	-	Renovation vacancies may cause readings to drop below the cut-off point, but could be balanced by tradespersons' water usage.
Holiday homes	-	Holiday homes within the Urban Growth Boundary have been removed from analysis. City based homes for farmers etc are included.
Sole person households	↑	Those frequently travelling abroad may register less water consumption than the cut-off (fly in-fly out workers). ⁶
Water tanks attached to the home	-	Water usage between households with or without rain water tanks is similar due to unmodified water consumption patterns and failure to plumb water tanks into the property. ⁷

1. ABS 3302, Table 3, Deaths, <https://www.abs.gov.au/ausstats/abs@.nsf/mf/3302.0>

2. C Murray, The Australian Housing Supply Myth, 2019, <https://econpapers.repec.org/paper/osfosfxxx/r925z.htm>

3. Building permits - the fastest and slowest councils in Victoria, <https://www.domain.com.au/news/building-permits-the-fastest-and-slowest-victorian-councils-for-processing-20171110-gzi07n/>

4. A slowly leaking tap can waste an average of 29LpD and an internal leak equivalent to a tap on full can result in 28,000LpD (YVW 2013). Leakage accounts for 2 per cent of total usage by households (Roberts 2012b: 36).

5. Roberts (2012a: 8) notes approximately 3 per cent of households' average water consumption is less than 50LpD and at the other extreme around 3 per cent have an average usage of over 1000LpD.

6. ABS Census 2016 notes Melbourne has a projected 346,965 sole person households or 23.5 per cent of all households. It is unlikely more than a small fraction fall into this category.

7. Moy (2011). ABS (2012b: Table 3a) notes that in 2011, only 27.1 per cent of all Melbourne properties had a water tank installed but only 8.2 percent of all properties have a water tank plumbed into the property

Findings & Analysis



Residential Vacancies

Of the 1,669,151 properties within the study area, we found 22,684 properties using zero litres of water per day averaged over 12 months. This is 1.4% of total residential property. We define these as absolute vacancies. This is a 6.4% increase on the 2017 data findings.

For the 50 LpD threshold, 69,004 properties were found to be speculative vacancies at a rate of 4.1%. This represents a 13.3% higher ratio than 2017.

From this 4.1%, we add $\frac{1}{3}$ of the rental vacancy rate of 2% to produce the total vacancy rate across rental and property ownership of 4.7%.¹⁰

If we assume all speculative vacancies are owned by investors, we find that a potential 16.1% of rental property was vacant.

Table 2. Total residential water consumption by water retailer

Water Retailer	Total	0L/day	Ratio	<50L/day	Ratio
City West Water	324,667	4,074	1.30%	13,106	4.00%
South East Water	646,595	5,028	0.80%	20,593	3.20%
Yarra Valley Water	697,889	13,582	1.90%	35,305	5.10%
Total	1,669,151	22,684	1.40%	69,004	4.10%

*Excluding Holiday home regions

Table 3. Total commercial water consumption by water retailer

Water Retailer	Total	0L/day	Ratio
City West Water	26,790	2,669	10.0%
South East Water	50,710	3,071	6.1%
Yarra Valley Water	52,867	8,512	16.1%
Total	130,367	14,252	10.9%

*Including holiday home regions

¹⁰ SQM Vacancy rate, https://sqmresearch.com.au/graph_vacancy.php?postcode=3000&t=1

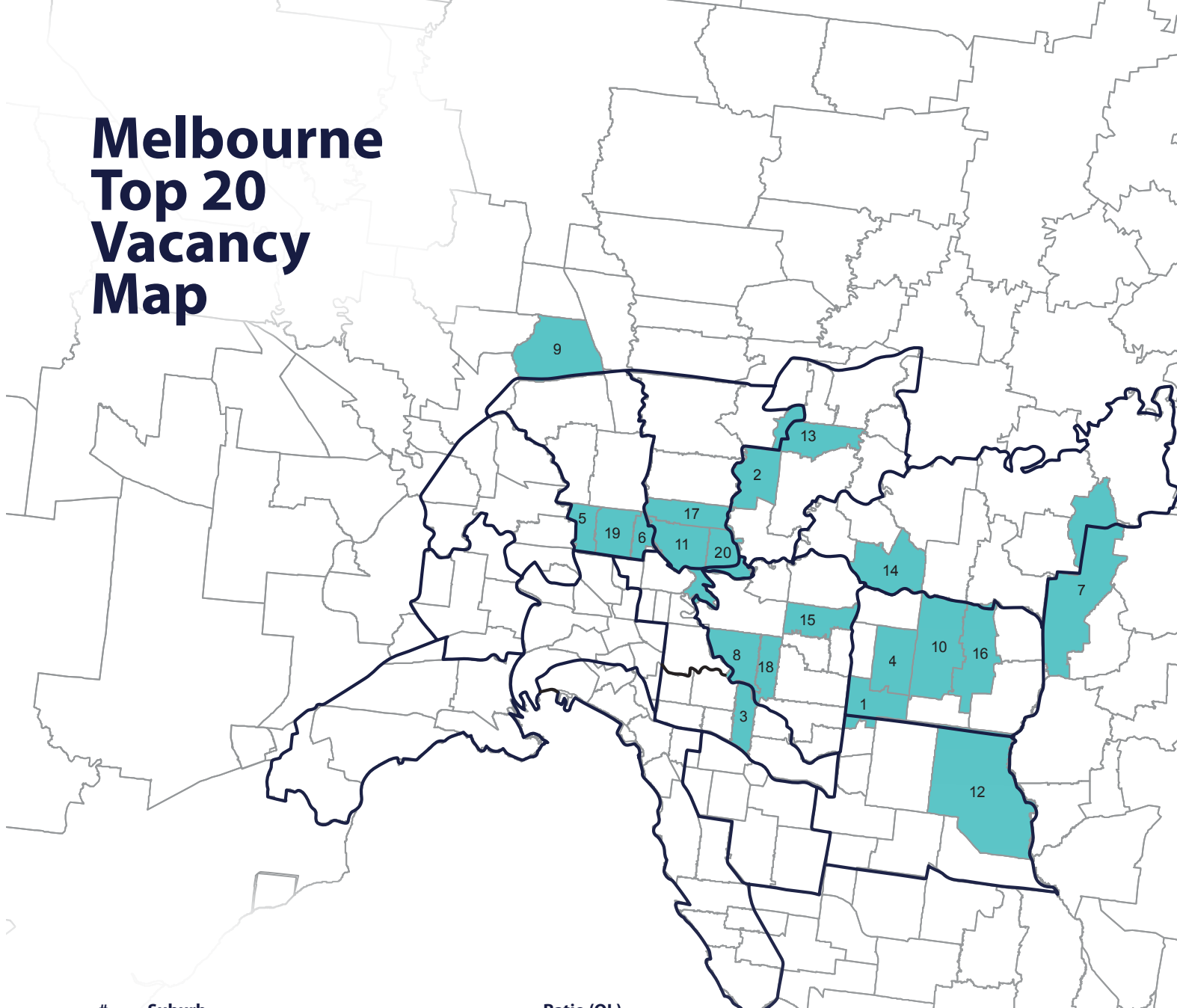
Findings & Analysis

The top listing suburb for vacancy was Burwood/ Camberwell with 412 properties at 6.3% as absolute vacancies and 10.3% using less than 50 LpD over the 12 months. This suburb has been a consistent vacancy hotspot, with elevated numbers seeing it a mainstay in the top 20 rankings over the decade of our reporting.

Table 4. Top 20 Residential Postcodes

No.	Post-code	Suburb(s)	Total	OL/day	Ratio	<=50L/day	Ratio
1	3125	BURWOOD / CAMBERWELL	6,558	412	6.3%	718	10.9%
2	3081	BELFIELD (GREATER MELBOURNE) / HEIDELBERG HEIGHTS / HEIDELBERG WEST	6,583	384	5.8%	673	10.2%
3	3144	KOOYONG / MALVERN	5,076	265	5.2%	418	8.2%
4	3128	BOX HILL / BOX HILL SOUTH	10,459	538	5.1%	1101	10.5%
5	3055	BRUNSWICK / BRUNSWICK WEST	7,537	333	4.4%	607	8.1%
6	3057	BRUNSWICK / BRUNSWICK EAST	6,912	300	4.3%	768	11.1%
7	3134	PARK ORCHARDS / RINGWOOD / RINGWOOD NORTH / WARRANDYTE SOUTH / WARRANWOOD	13,902	585	4.2%	1017	7.3%
8	3122	HAWTHORN	12,215	514	4.2%	1079	8.8%
9	3047	BROADMEADOWS / DALLAS / JACANA	7,663	320	4.2%	548	7.2%
10	3130	BLACKBURN / BLACKBURN NORTH / BLACKBURN SOUTH	13,300	552	4.2%	932	7.0%
11	3070	NORTHCOTE	11,597	472	4.1%	895	7.7%
12	3150	GLEN WAVERLEY / WHEELERS HILL	23,473	939	4.0%	1457	6.2%
13	3085	MACLEOD / YALLAMBIE	5,402	215	4.0%	328	6.1%
14	3108	DONCASTER	11,282	444	3.9%	1255	11.1%
15	3103	BALWYN / DEEPPENE	6,922	269	3.9%	504	7.3%
16	3131	FOREST HILL / NUNAWADING	9,416	352	3.7%	620	6.6%
17	3071	THORNBURY	9,055	334	3.7%	625	6.9%
18	3123	HAWTHORN EAST	7,218	264	3.7%	638	8.8%
19	3056	BRUNSWICK	12,691	439	3.5%	1032	8.1%
20	3078	ALPHINGTON / FAIRFIELD	5,472	180	3.3%	469	8.6%

Melbourne Top 20 Vacancy Map



#	Suburb	Ratio (OL)
1	BURWOOD / CAMBERWELL	10.9%
2	BELLFIELD (GREATER MELBOURNE) / HEIDELBERG HEIGHTS / HEIDELBERG WEST	10.2%
3	KOOYONG / MALVERN	8.2%
4	BOX HILL / BOX HILL SOUTH	10.5%
5	BRUNSWICK / BRUNSWICK WEST	8.1%
6	BRUNSWICK / BRUNSWICK EAST	11.1%
7	PARK ORCHARDS / RINGWOOD / RINGWOOD NORTH / WARRANDYTE SOUTH / WARRANWOOD	7.3%
8	HAWTHORN	8.8%
9	BROADMEADOWS / DALLAS / JACANA	7.2%
10	BLACKBURN / BLACKBURN NORTH / BLACKBURN SOUTH	7.0%
11	NORTHCOTE	7.7%
12	GLEN WAVERLEY / WHEELERS HILL	6.2%
13	MACLEOD / YALLAMBIE	6.1%
14	DONCASTER	11.1%
15	BALWYN / DEEPDENE	7.3%
16	FOREST HILL / NUNAWADING	6.6%
17	THORNBURY	6.9%
18	HAWTHORN EAST	8.8%
19	BRUNSWICK	8.1%
20	ALPHINGTON / FAIRFIELD	8.6%

■ Absolute vacancies
 Vacant Residential Property Tax boundary

Our 2019 findings of 69,004 residential speculative vacancies, when taken with the results over time indicate that sustained vacancy is imposing needless pricing pressure on the market.

In 2019 there were 84,650 property sales in Greater Melbourne.¹¹ The potential 69,004 residential vacancies revealed here could augment supply significantly, placing downward pressure on land and house prices, a stated public policy outcome for close to 20 years.

For the non-residential property sector, covering commercial and industrial, we found 10.9% of properties used 0LpD over 12 months. That equates to 14,252 properties. This is approximately three-times the number of commercial and industrial properties sold in 2019.

While community censure (and legal action) is often directed towards squatters and informal habitation, there is little condemnation of absentee landlordism, land banking and property speculation.¹² This discrepancy in society's attitude towards those who seek shelter at the margins and those who seek to profit from land speculation goes to the heart of our current housing crisis. It must be noted that these vacancies coexist with housing policy that mostly seeks to boost land and housing supply.

Valuer General "assessments without buildings"

The Victorian Valuer General's Office produces an annual Revaluation Outcomes dataset quantifying the number of 'assessments without buildings' i.e. unimproved sites. In 2019 they found 126,431 residential properties without buildings throughout Victoria,¹³ approximately 63,314 falling inside Melbourne's Urban Growth Boundary. This is in the ballpark of our finding of 69,004 speculative vacancies.

This comparison is indicative only. The data is aggregated at different scales making meaningful comparison difficult: water usage is provided at the postcode level, while the VGs 'assessments without buildings' are at the Local Government Area level. Some of the VGs observations occur in LGA's that fall outside our study area. However, this is likely to have a minor impact on these numbers.

If we assume that properties determined to have no buildings are deemed vacant, then the Valuer General's vacancy rate equates to 4.79% - again similar to the findings in this report.

Taken together, the two data sets point to significant underutilisation of vacant land.

The 2016 Census found approximately twice the speculative vacancies rate of 9.6% (156,535 households).¹⁴

11 Victorian Valuer General, Guide to Property Values 2019, p36

12 K Seedy, Abandoned Melbourne: Patterson Lakes, Dandenong, Frankston Among Squatter Hot Spots, <https://www.heraldsun.com.au/leader/outer-east/abandoned-melbourne-patterson-lakes-dandenong-frankston-among-squatter-hot-spots/news-story/74be69ea2f9a8f0527dc8174735e9b0b>

13 Victorian Valuer General, Revaluation Outcomes, https://www.propertyandlandtitles.vic.gov.au/__data/assets/excel_doc/0013/431230/2019-revaluation-outcomes.xlsx#2019%20revaluation%20outcomes

14 op. cit, ABS (2016)

Commercial Vacancies

Vacancies in the non-residential sector (commercial and industrial) are only measured using OLpD. This recognises that not all business premises use water for much more than filling the kettle and flushing the toilet.

The data reveals that nearly triple the number of total commercial and industrial sales lay vacant as were sold in 2019.

For the non-residential property sector, covering commercial and industrial, we found 10.9% of properties used OLpD over 12 months. That equates to 14,252 properties.

According to the Valuer-General, there were 2,871 commercial property sales in 2019. For industrial it was 2,117.¹⁵

During 2019, commercial floorspace commanded premium rents with low reported vacancy rates. News headlines such as *“Inadequate office supply coupled with the lowest vacancy rates in 40 years is driving unrelenting demand for commercial floorspace in Sydney and Melbourne, boosting already high rents”* were common.¹⁶

The 2019 industrial market was particularly vibrant, with ‘warehouse unspecified’ values increasing by 125.13%.¹⁷

Colliers International claimed *“Land values are increasing off the back of strong leasing demand and take-up coupled with the dwindling supply of industrial land across Victoria.”*¹⁸

Little did we know that commercial property markets would be blindsided by the pandemic. However, prior to COVID there were persistent signals that advertised rental vacancies told only half the story.



15 Victorian Valuer General, A Guide to Property Values 2019, p39, https://www.propertyandlandtitles.vic.gov.au/__data/assets/pdf_file/0021/478020/GuidetoPropValues2019Merged.pdf

16 Office vacancy dips, rents surge in Sydney and Melbourne, <https://www.jll.com.au/en/trends-and-insights/investor/office-vacancy-dips-rents-surge-in-sydney-and-melbourne>

17 op. cit, Victorian Valuer General, A Guide to Property Values 2019, p38.

18 Tyson & Sallas, Industrial Second Half 2019 report, p9

Commercial Vacancies

Table 5. Top twenty suburbs featuring non-residential vacancies

No.	Post-code	Suburb(s)	Total	OL/day	Ratio
1	3128	BOX HILL / BOX HILL SOUTH	1249	472	37.8
2	3088	BRIAR HILL / GREENSBOROUGH / ST HELENA / WATSONIA	603	206	34.2
3	3122	HAWTHORN	1294	374	28.9
4	3170	MULGRAVE	774	217	28
5	3047	BROADMEADOWS / DALLAS / JACANA	645	179	27.8
6	3150	GLEN WAVERLEY / WHEELERS HILL	1083	296	27.3
7	3109	DONCASTER / DONCASTER EAST	546	143	26.2
8	3043	GLADSTONE PARK / GOWANBRAE / TULLAMARINE	809	208	25.7
9	3134	PARK ORCHARDS / RINGWOOD / RINGWOOD NORTH / WARRANDYTE SOUTH / WARRANWOOD	1361	347	25.5
10	3101	KEW	944	237	25.1
11	3131	FOREST HILL / NUNAWADING	1027	246	24
12	3124	CAMBERWELL	1150	245	21.3
13	3072	PRESTON	1717	349	20.3
14	3013	YARRAVILLE/YARRAVILLE WEST	1162	232	20
15	3123	HAWTHORN EAST	617	118	19.1
16	3095	ELTHAM / ELTHAM NORTH / RESEARCH	659	124	18.8
17	3127	MONT ALBERT / SURREY HILLS	521	98	18.8
18	3084	EAGLEMONT / HEIDELBERG / ROSANNA / VIEW BANK / VIEWBANK	590	110	18.6
19	3130	BLACKBURN / BLACKBURN NORTH / BLACKBURN SOUTH	902	159	17.6
20	3144	KOOYONG / MALVERN	788	138	17.5

Commercial Vacancies

The combination of industrial and commercial sales during 2019 equated to 4,998.¹⁹ However, non-residential vacancies totalled 14,252. Sales represented just 35% of vacant business premises. National non-residential sales are circa 25,000, implying that 57% of the national sales supply lay dormant in Greater Melbourne alone.²⁰

This report has continually raised concerns about under-performing non-residential sites. Post-manufacturing suburbs such as Broadmeadows (27.8%), Preston (20.3%) and Moorabbin (9.8%) are likely hotspots for landbankers buying and holding over time in the hope of residential rezoning and the inevitable loft apartments that follow.

As the economy works to rebuild itself post-pandemic, the need for enterprise to access competitive, well located sites is paramount. It is innovators on inexpensive industrial land that will drive productivity. We can no longer afford to look the other way as insiders push for favourable planning decisions at great cost to the state's growth potential. Windfall capital gains from rezonings decisions are not taxed by the state (unlike in the ACT for example where Lease Variations attract a betterment levy). Failing to tax these planning windfalls are costing the Victorian budget some \$5.2 billion per year and incentivising corruption.²¹



¹⁹ op. cit, Victorian Valuer General, A Guide to Property Values, p39

²⁰ Core Logic, Property Information Monitor, <https://www.corelogic.com.au/products/property-information-monitor>

²¹ Prosper submission to the Thodey Review, Dec 2019.

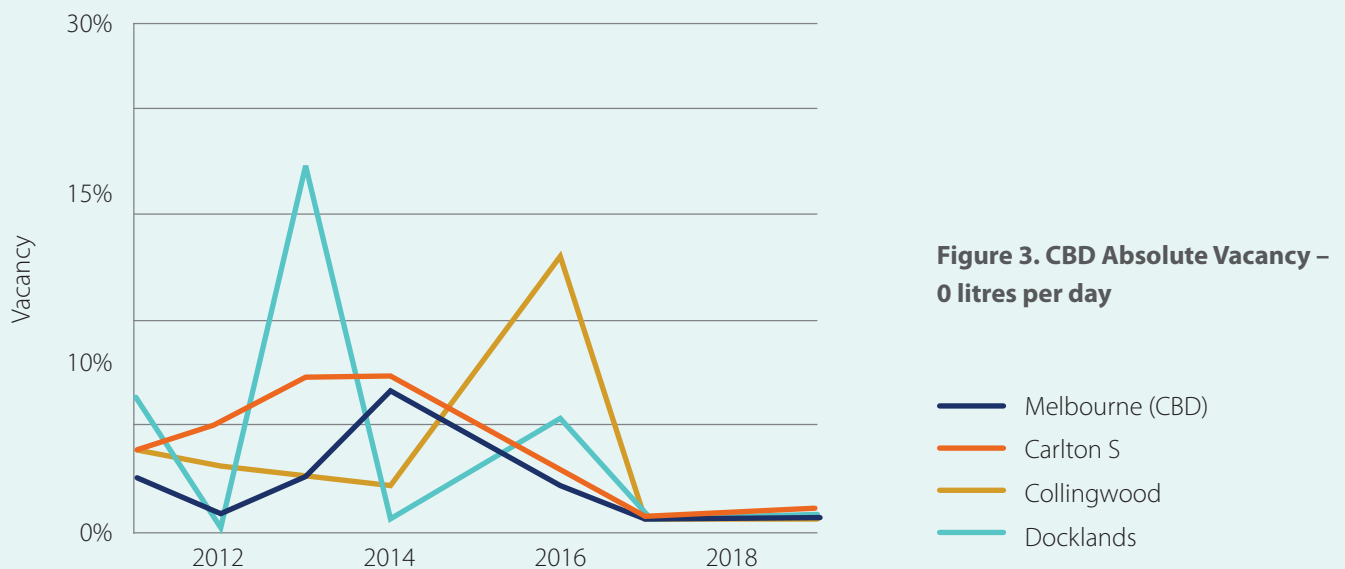
Historical Speculative Vacancy Trends

As illustrated in Figure 1, the total number of absolute vacancies across Greater Melbourne have risen to around 25,000 and remained stable for the past five years. Speculative vacancies have trended down from a peak of 90,700 in 2011.

After thirteen years reporting on this issue, we can start to build a picture of market behaviours over time. Data is taken between 2009 - 2019 for selected suburbs that feature consistently in the Top 20 residential vacancies.

CBD & City Fringe 0LpD

Vacancy rates in the Melbourne CBD and city fringe have decreased over time, with all former vacancy hotspots converging at a vacancy rate of <1% for absolute vacancies. Docklands reported high levels of vacancy in 2013, while Collingwood peaked at 13% in 2016.



Speculative vacancies (Figure 4) have averaged 9.57% over time, indicating elevated vacancy rates during a time of housing crisis.

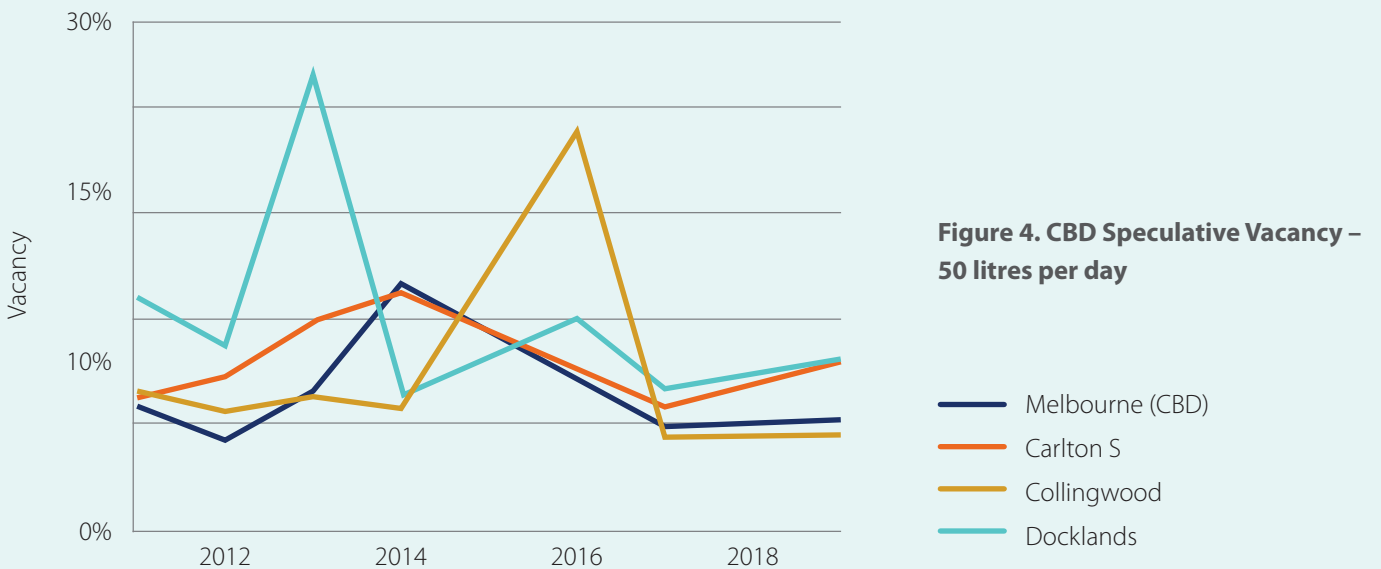


Figure 4. CBD Speculative Vacancy – 50 litres per day

In the CBD, absolute vacancies appear to follow the development trajectory of new apartment towers. We expect that properties were held by developers and slowly released to the market. These vacancies roughly correspond to the tenure of Planning Minister Matthew Guy between 2010 -2014. Due to his deregulatory approach and controversial tower approvals (Guy was dubbed Mr Skyscraper by the media), this period was seen as an aggressive supply side response to affordability pressures.

Apartment prices increased 7.1% during the same period, with prices up 25.8% by 2019.²²

West 0LpD

Vacancy rates in Melbourne’s western hotspots have also decreased over time.

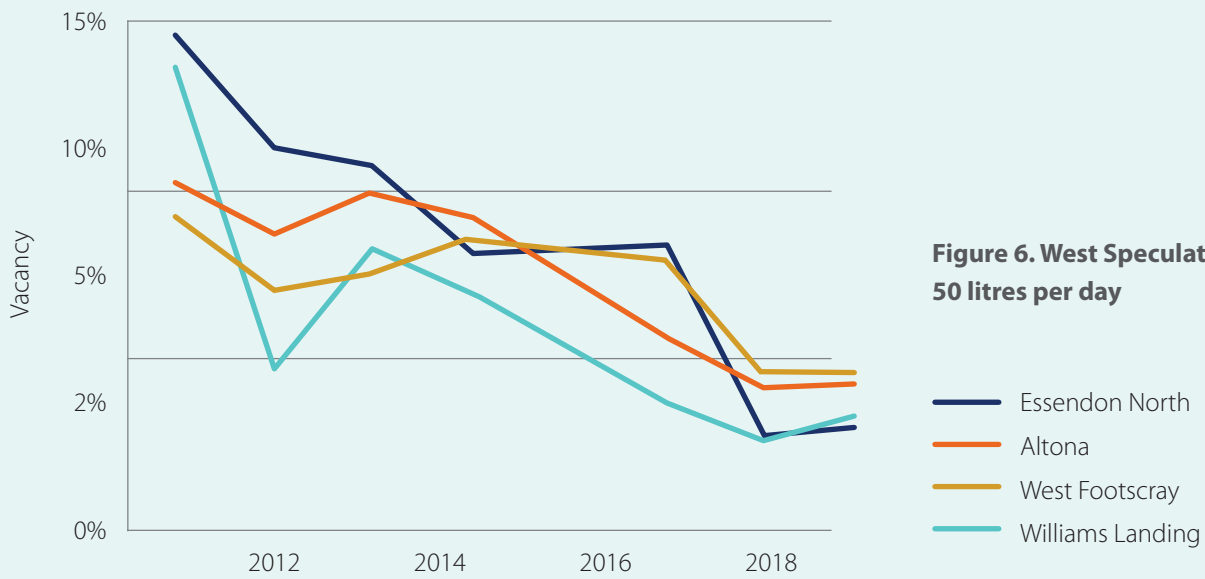
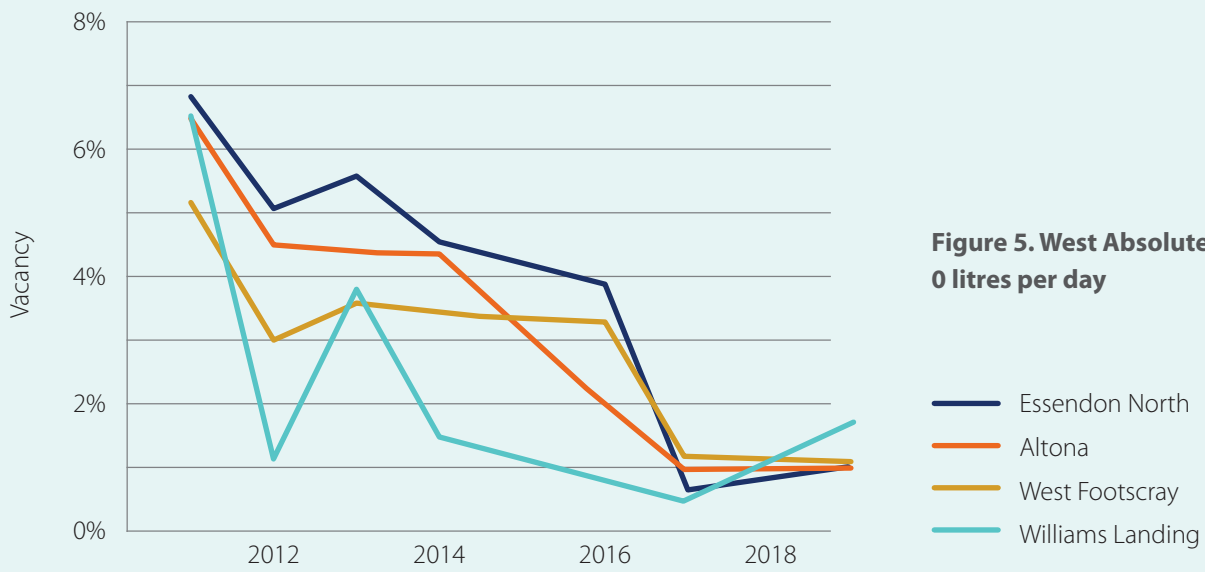
A master-planned community on a former RAAF base, Williams Landing’s construction commenced in early 2008 and is due for completion by 2030.²³ A train station was opened in 2013. The suburb had high vacancy in the early phases with the developer clearing stock over a few years, with vacancies rising in 2019.

While the vacancy rates have tightened, house and land prices have increased, and allotments have shrunk.²⁴ This seems unnecessary and may point to ‘drip feeding’ whereby construction rates are kept low to support development profit margins. However, it may also speak to the type of buyer prevalent in Melbourne’s western greenfields, typically owner-occupiers constructing new homes.

²² op. cit, Valuer General, Guide to Property Values 2019, p36

²³ https://en.wikipedia.org/wiki/Williams_Landing

²⁴ UDIA, State of the Land, p44, <https://www.udiaqld.com.au/state-of-the-land/>



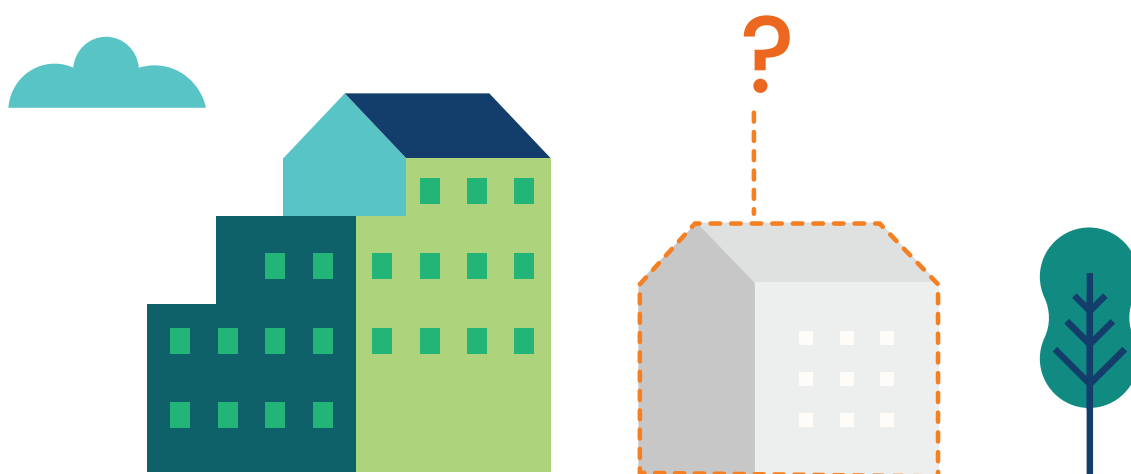
Vacancies in the remaining western hotspots of Essendon North, Footscray West, and Altona have also fallen to rates under 2% for 0L but above 4% for 50L. The standard deviation between the two datasets (0L & 50L), converged from an initial deviation of 3.45% (2011) to 1.63% (2019), suggesting that latency in the market had tightened over time.

The peak vacancy rate in these traditionally working class suburbs coincided with the rise in the land tax threshold from \$85,000 (2001) to \$250,000 (2009).²⁵ This change may have encouraged speculation in localities where many sites were valued under \$250,000. Vacancy rates are dropping with new construction, suggesting the absolute vacancies recorded were 'greyfield' redevelopment sites or 'brownfield' renewal sites.

Inner North & Mid Eastern 0LpD

Vacancies have increased overtime in Melbourne's inner north and mid eastern suburbs, with vacancy hotspots moving to Camberwell, Malvern and Box Hill, with several suburbs demonstrating persistent vacancy rates above 5% since 2016.

As investors soaked up the gains, pushing CBD and western suburbs prices higher, the rent gap in the gentrification belt of the inner north (Fitzroy, Brunswick to Heideberg) and middle eastern suburbs (Box Hill, Burwood, Glen Waverley and Doncaster) appeared to become more attractive.



²⁵ <https://www.sro.vic.gov.au/historical-rates-land-tax>

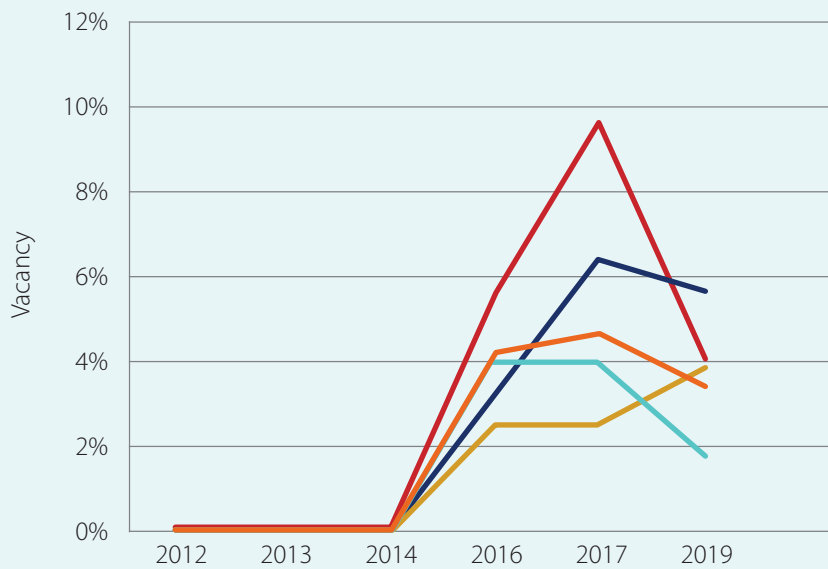


Figure 7. Mid East Absolute Vacancy – 0 litres per day

- Burwood / Camberwell
- Box Hill / Box Hill South
- Glen Waverley / Wheelers Hill
- Doncaster
- Forest Hill / Nunawading

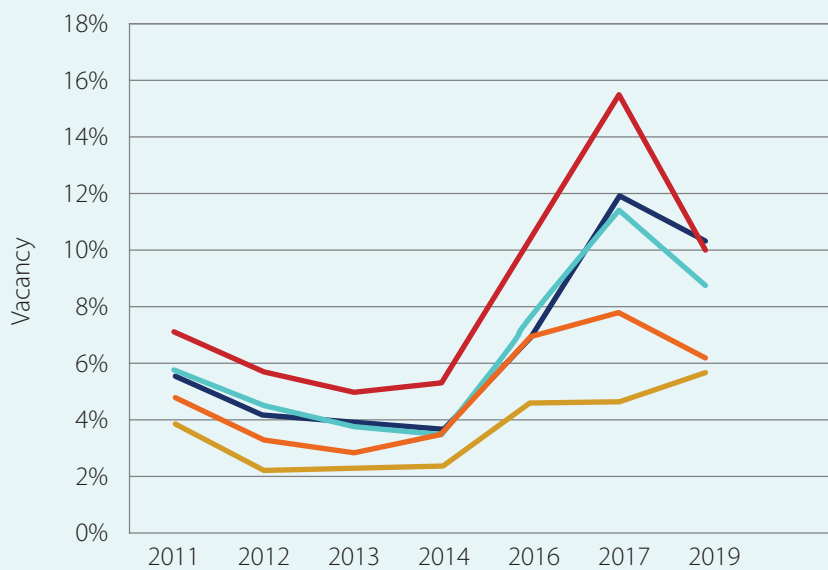
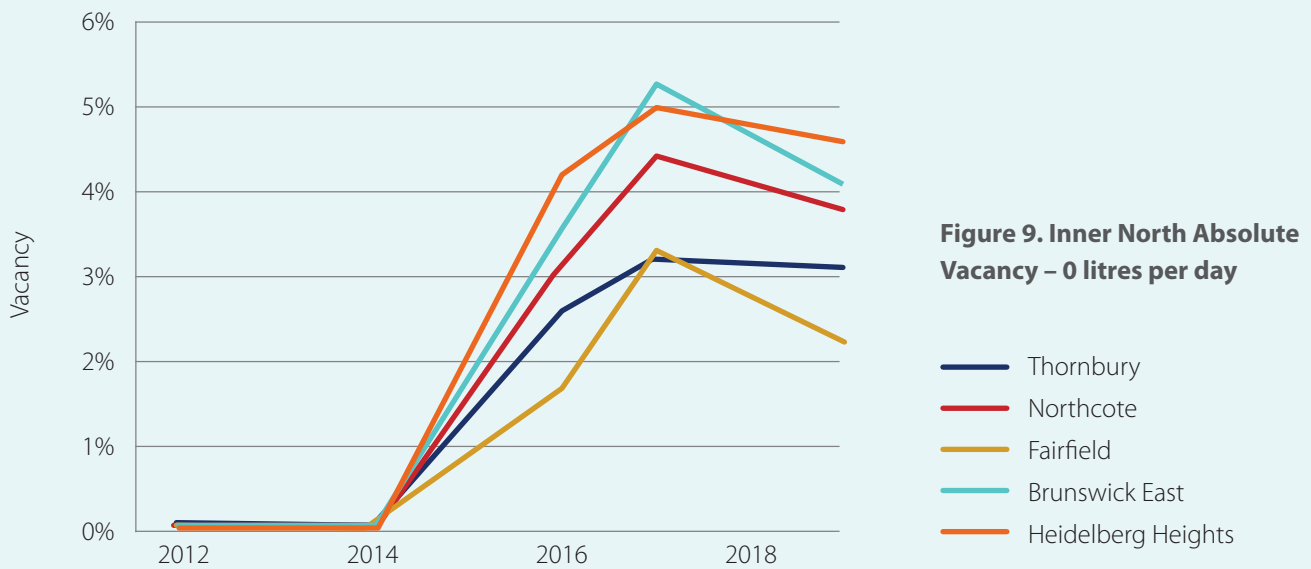
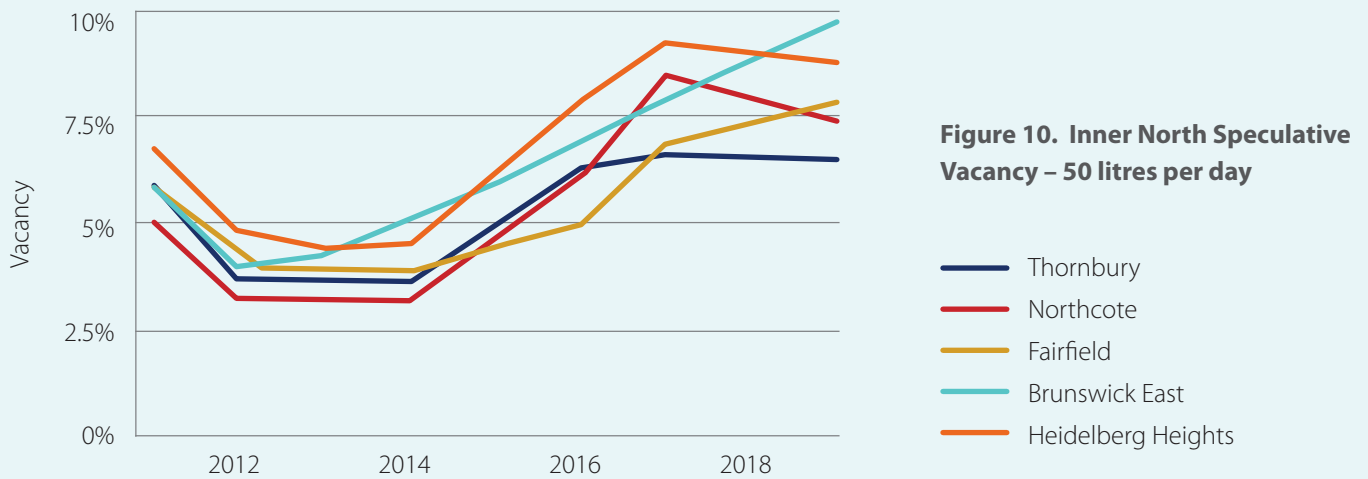


Figure 8. Mid East Speculative Vacancy – 50 litres per day

- Burwood / Camberwell
- Box Hill / Box Hill South
- Glen Waverley / Wheelers Hill
- Doncaster
- Forest Hill / Nunawading



Whilst elevated vacancy had been apparent using the 50L, after 2014 the vacancy rate jumped up markedly suggesting that a different category of investor had entered the market. This could indicate the assembly of parcels for multi-density development.



Speculative vacancies have a median of 5.8% across the gentrification belt over time.

Investor behaviour, gentrification and vacancy

This section describes trends in investor behaviour based on the location of vacancies.

Breaking down the top 20 residential list, we infer four motivating factors for investor behaviour based on the suburbs that recorded high levels of vacancy.

Table 6

Cohorts	Suburbs
Demographic	Heidelberg, Brunswick, Brunswick West, Northcote, Fairfield, Thornbury
Cultural	Burwood, Box Hill, Ringwood, Blackburn, Glen Waverley, Doncaster, Balwyn, Forest Hill
Capital Growth	Camberwell, Malvern, Hawthorn, Hawthorn East
Land banking	Broadmeadows

As detailed in Speculative Vacancies 9 - Impeding the Market,²⁶ the motivation for investors to hold sites in demographic hotspots where gentrification is likely to occur, is driven by the accelerated price growth associated with such change.

A rent gap appears where the purchasing cost can be repaid with higher rents. This higher yield is welcomed by financiers.

This gentrification belt in the inner north accounted for six of the top 20 with suburbs for absolute vacancies: Heidelberg (5.8%), Brunswick West (4.4%), Brunswick East (4.3%), Northcote (4.1%), Fairfield (3.3%) and Thornbury (3.7%). Macleod (4.0%) may have been earmarked by speculators as the next suburb artists will move towards to escape high rents.

As a cohort, these suburbs had a higher proportion of rented properties, with the median at 43% rented. This is higher than the 30% of Greater Melbourne dwellings rented.²⁷ With such a high proportion of rental properties in the hipster belt of inner north Melbourne, the likelihood of speculative vacancies increases. Like a canary in the coal-mine, the existence of continual vacancy gives weight to the demographic change high vacancy imposes on long term renters. Gentrification is an acknowledged pressure point on this community.²⁸

The role of renting is much lower in the following suburbs, with the following cohort holding a median 31.75% as a percentage of rental property, much more closely aligned with the city-wide average. Hence, cultural factors are a likely a determining factor in significant numbers of vacant properties in Burwood/ Camberwell (6.3%), Box Hill (5.1%), Ringwood (4.2%), Blackburn (4.2%), Glen Waverley (4.0%), Doncaster (3.9%), Balwyn (3.9%), and Nunawading/ Forest Hill (3.7%). A significant percentage of residents in most of these suburbs were born in the People's Republic of China, suggesting that residents of these neighbourhoods may be more globally mobile, living between countries.²⁹

²⁶ K Fitzgerald, Speculative Vacancies 9 - Impeding the Market, p16, <https://www.prosper.org.au/2019/04/09/speculative-vacancies-9-impeding-the-market/>

²⁷ op. cit, ABS (2016)

²⁸ E Sorrenson, Why gentrification matters for your next property purchase, <https://www.realestate.com.au/advice/why-gentrification-matters-for-your-next-property-purchase/>

²⁹ op cit, ABS (2016)

The largest change in cohorts since our 2017 analysis was the fall in the number of land banking suburbs from the top 20, falling from four to one. These have been replaced by blue-ribbon type suburbs such as Camberwell (6.3%), Malvern (5.2%), Hawthorn (4.2%) and Hawthorn East (3.7%). These types of sites are often favoured for the higher capital gains when markets are awash with cash and speculation on 'future capital gains' drives prices to eye-watering levels. Such intense buying activity often leads to significant volatility in downturns.³⁰

Rent and Rent Gaps in Explaining Pricing Trends

To explain these changing market conditions in more detail we look at Ricardo's law of rent which makes two major claims.³¹ First, that the difference in productive value between land on fertile soils and the most marginal land was an economic rent (given the same inputs). This is a windfall that requires no productive contribution to society. Second, that wages are set by labour's productivity on marginal land. If labour could earn more working for themselves on the most marginal land, it would. Wages have to be competitive with this opportunity cost. Therefore land prices on the margin played a key role in determining wage levels. As land on the commons was enclosed into the private market, less options availed. Independence was reduced and wages were ground downwards.

From there, taxes were removed off land and placed on labour, capital and goods and services. These were less efficient taxes, meaning that whilst they raised revenue, they also fostered poorer economic outcomes. These included both poor land use (vacancy or under-utilisation) at a higher price.

The law of rent today sees that properties in the inner north attracted wage earners who had higher disposable incomes than the west. Prices and rents could therefore be pushed higher. With the more marginal land in the western suburbs having increased in value, there was little option for those in the gentrification belt but to pay higher rents. Speculative vacancies enforce this market rigidity, denying housing supply and consolidating the power of landholders over renters.

This process could also be explained in terms of the rent gap.³² Such a gap exists when the market rental for a property is seen to be below the highest available rental. A landlord may have purchased the property years ago and has set rents based on that purchase price. The previous generation of landlords have left some free lunch on the table! Investors move into the area and push prices higher. Advertised rents increase for new properties.

With vacant property allowed to stand with very little financial incentive to let it to the market, renters must take what they can get at the price offered.

30 L Osbourne, Most expensive suburbs in Melbourne, <https://www.openagent.com.au/blog/most-expensive-suburbs-in-melbourne-2019>

31 https://en.wikipedia.org/wiki/Law_of_rent

32 N Smith, Gentrification and the Rent Gap, <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-8306.1987.tb00171.x>

Many renters feel exasperated when they are forced to move out of yet another rental property because the owner wants to sell. The renter may be paying rents of \$17,500 based on a purchase price from 2006 of say \$350,000. That rent sets a base price for the historical value of the site - typically the rent multiplied by twenty years.

Real estate agents often advise that it is better to sell without a lease in place, as this removes the historical rent limitation on the future price. Our hypothetical agent advises that the site is now worth \$500,000 and can expect an annual rent of \$25,000. At auction, an investor outbids a young family with a bid of \$580,000 in the understanding that expected future capital gains will cover the added debts. This acts as a domino, with competition inflating prices based on future speculative prices, rather than what the market fundamentals suggest (median incomes, job prospects).

The ageing mum and dad investor nears retirement and sells for a \$150,000 capital gain.

Another likely key factor in the growth of the mid-eastern vacancies following 2014 (Figure 8) was the announcement of reformed planning zones, including the restrictive Neighborhood Residential Zone in mid-2013. This curtailed multi-density builds in some middle ring suburbs, reducing infill development opportunities, and in the process compounding affordability pressures.³³ Demand was being driven into the CBD apartment wave or out onto the sprawl.

Investors may have recognised this and bought patiently in Box Hill, Burwood and Glen Waverley, expecting high-density housing demand to shift from the inner to middle ring suburbs. They could simply hold and hope that rezoning towards multi-density would become more likely. Plan Melbourne's 2017 release confirmed suburbs such as Box Hill as major activity centres, where density was encouraged.

The sites held vacant in the CBD and west may have provided speculative investors with either a handy windfall, or the ability to increase their borrowing via extended leveraging of increasing land values. A common practice amongst savvy investors is to employ a friendly property valuer who is able to provide a supportive property valuation, attesting that a property has increased in value by say \$100,000. The investor can then apply to have their loan facility extended by a supportive bank by some \$300,000. This can provide the necessary liquidity to purchase a Northcote or Box Hill property for example.

It appears that this wave of investment occurred in 2014 as absolute vacancies increased significantly in the gentrification belt of the inner north and the cultural hotspot of Burwood et al.

City development often varies due to government intervention. The key question is who is to benefit, the voter or the landholder?

³³ C Peterson, New Residential Zones - what does this mean for Melbourne? <https://www.urban.com.au/news/new-residential-zones-what-does-this-mean-for-melbourne>

Housing Supply, Speculation and Vacancy



Housing Supply, Speculation and Vacancy

Housing supply has been the centrepiece of national and state government affordability policy for over twenty years. Prosper has spent a decade advocating for more accurate, timely vacancy data, so those properties withheld from use could be added to advertised vacancies to deliver a holistic analysis of land use.

Land and housing supply is recognised as a key ingredient to affordability, yet we fail to effectively gauge inefficient land use.

Meanwhile, industry bodies regularly call for more land supply in the form of rezoning, or deregulation of existing land supply.³⁴ Such advocacy occurs even when the development lobby aggressively cuts supply in response to falling demand or weak market conditions.

Housing Industry Australia (HIA) Economist Angela Lillicrap stated in October 2019: “A shortage of land is one of the factors that has driven home prices to increase over the past decade. *The process of making land ‘shovel ready’ can often last a decade, therefore, responding to shortages cannot be met with increased supply in the short term. An adequate supply of land is required to avoid a deterioration in affordability.*”³⁵

A more objective take was presented by the Urban Development Institute of Australia (UDIA):

*“Developers responded to the subdued market conditions by releasing lower levels of stock to market in 2019, with a total of 11,964 annual lot releases which was 35% lower than 2018 and 48% lower than 2017.”*³⁶

The most recent Urban Development Plan - Broadacre report found available land supply averaged 21 years across our growth areas.³⁷ Plan Melbourne states 15 years supply as a sufficient public policy aim. Melton has 42 years and Hume-Mitchell 30 years available land supply.

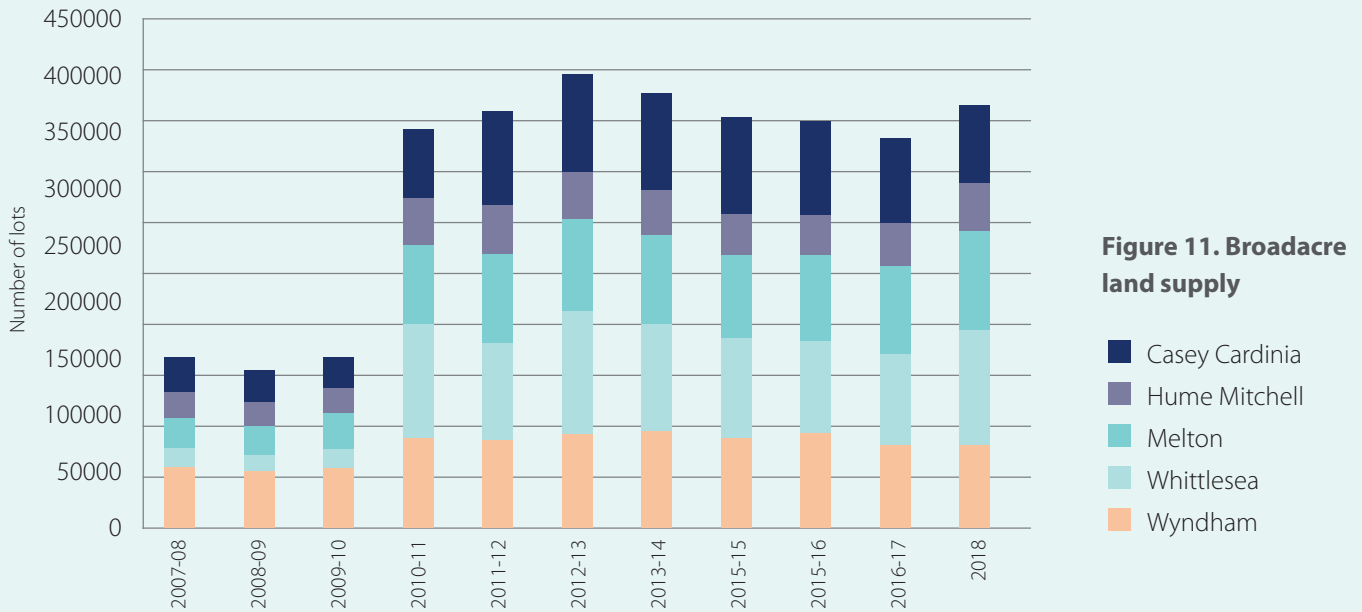
34 See for example Urban Task Force submission to the NSW Productivity Commission’s Green Paper – Continuing the Productivity Conversation <https://www.urbantaskforce.com.au/wordpress/wp-content/uploads/2020/09/200918-UTA-submission-NSW-Productivity-Commission-Green-Paper-final.pdf> 18 Sep 2020

35 HIA, Residential land prices - a key to affordability, press release October 2019.

36 Op cit, UDIA

37 Urban Development Plan - Broadacre Metropolitan Melbourne report, table 2, p14 <https://www.planning.vic.gov.au/land-use-and-population-research/urban-development-program>

Housing Supply, Speculation and Vacancy



Source: Department of Environment, Land, Water and Planning 2018

Figure 11 demonstrates that the government has more than doubled the broadacres supply from the pre 2010 era of 150,000 lots to some 350,000 lots over the following 8 years.

This supply pipeline has not rectified affordability concerns or reduced the price of housing.

“While land prices have come down during 2019, over the last decade the price of new residential land per square metre in Sydney has doubled and more than doubled in Melbourne,” stated HIA Economists Angela Lillcrap.³⁸ The HIA press release then continues to counsel that land prices are the sole responsibility of limited land supply.

Furthermore, greenfield median lot sizes have fallen by 23.5% since 2009. Per metre costs have increased by more than double, from \$327 per metre to 837 p/m - up 256%.³⁹

38 Op cit, HIA

39 Op cit UDIA

Housing Supply, Speculation and Vacancy

Let's turn our attention to the relationship between pricing and supply responsiveness in three growth area suburbs:

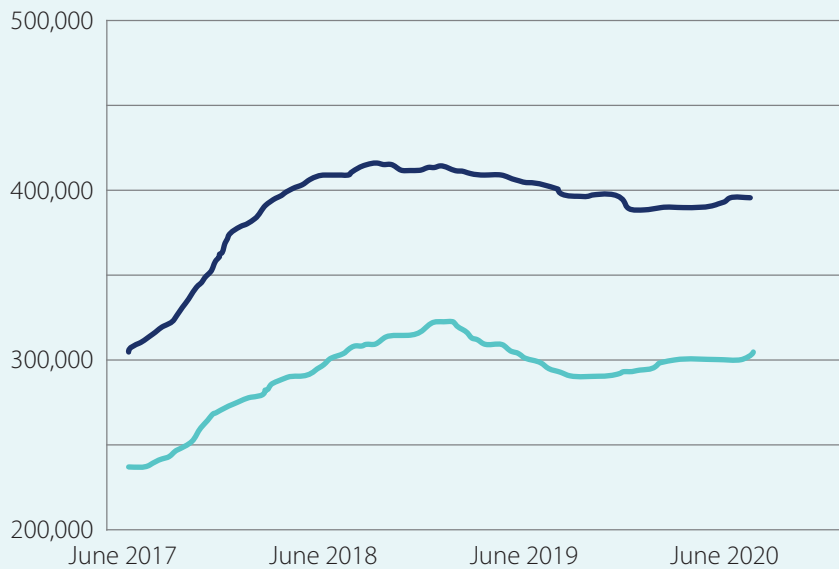


Figure 12. Suburb profile for Melton South VIC (3338)

— House
— Unit

Melton South House: Median price \$395,000, annual capital growth 6.09%, number of sales 164, weekly median advertised rent \$320

Melton South Unit: Median price \$306,000, annual capital growth 3.83%, number of sales 36, weekly median advertised rent \$290

Source: CoreLogic RP data

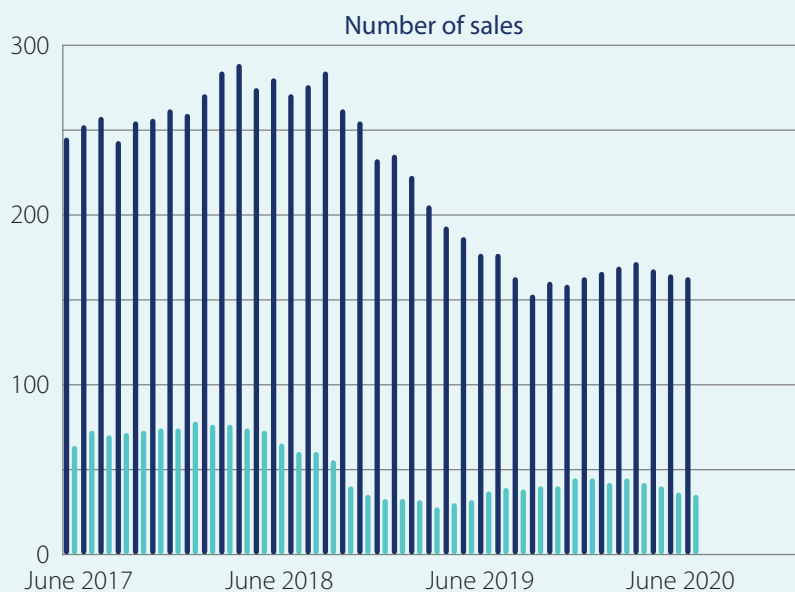


Figure 12 shows recent pricing trends in the suburb of Melton South. We can see immediately above that sales reduced from 2018 and throughout 2019 whilst prices have stayed fairly constant.⁴⁰ In a softening market, reduced stock acts to maintain prices.

⁴⁰ Your Investment Property, Free Suburb report, <https://www.yourinvestmentpropertymag.com.au/top-suburbs/vic-3338-melton-south.aspx>

Housing Supply, Speculation and Vacancy

Mernda, in the Whittlesea district (with an available land supply of 22 years), has also seen supply trending downwards.⁴¹

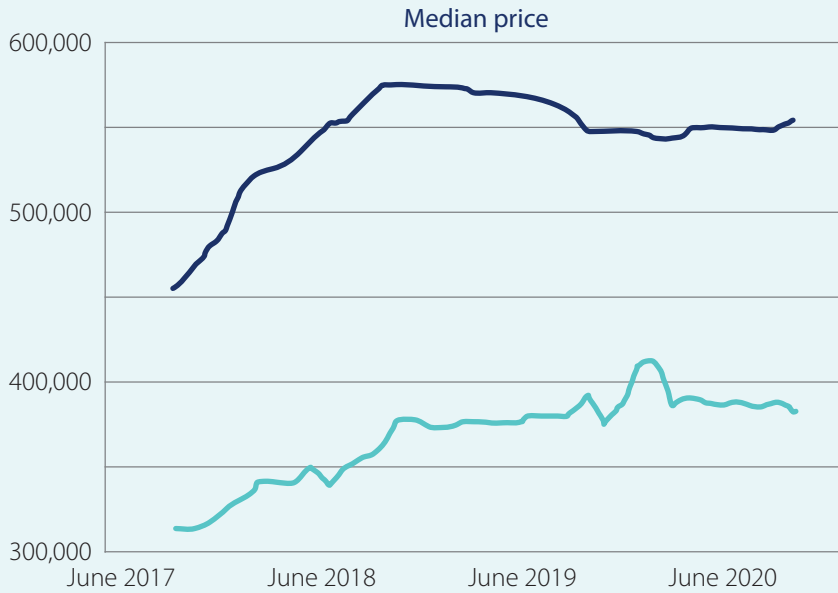


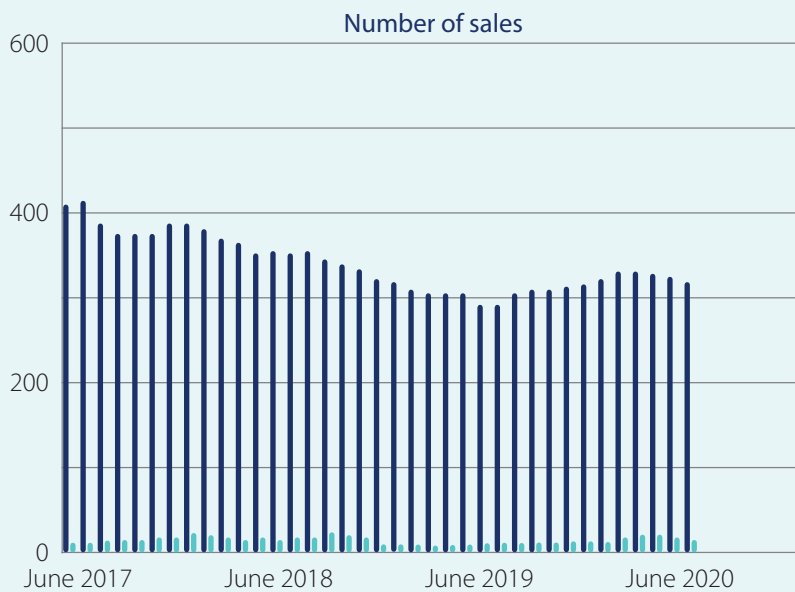
Figure 13. Suburb profile for Mernda VIC (3754)

— House
— Unit

Mernda House: Median price \$555,000, annual capital growth 4.48%, number of sales 323, weekly median advertised rent \$390

Mernda Unit: Median price \$382,500, annual capital growth 3.31%, number of sales 20, weekly median advertised rent \$350

Source: Your investment Report



41 Your Investment Property, Free Suburb report, <https://www.yourinvestmentpropertymag.com.au/top-suburbs/vic-3754-mernda.aspx>

Housing Supply, Speculation and Vacancy

A similar theme repeats in Mickleham, one of the growth area suburbs within the Hume-Mitchell catchment.⁴²

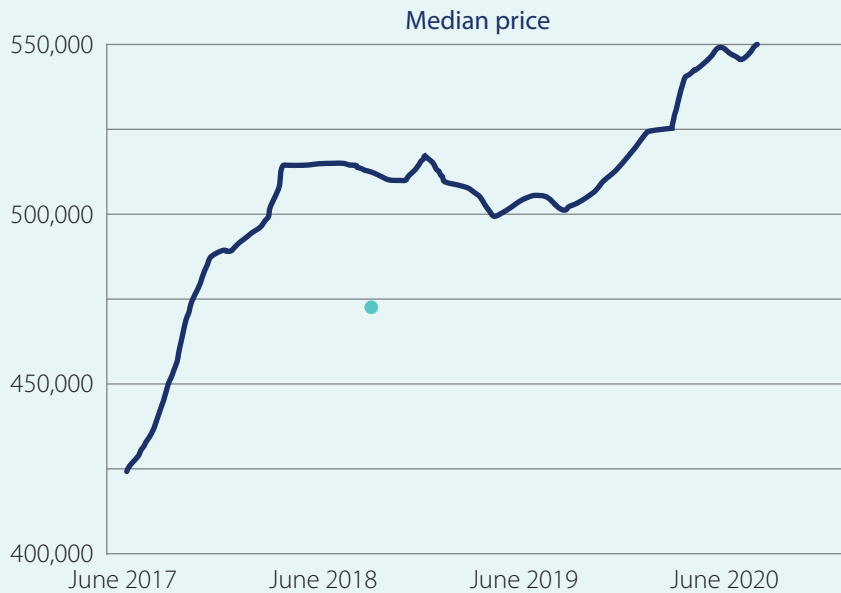
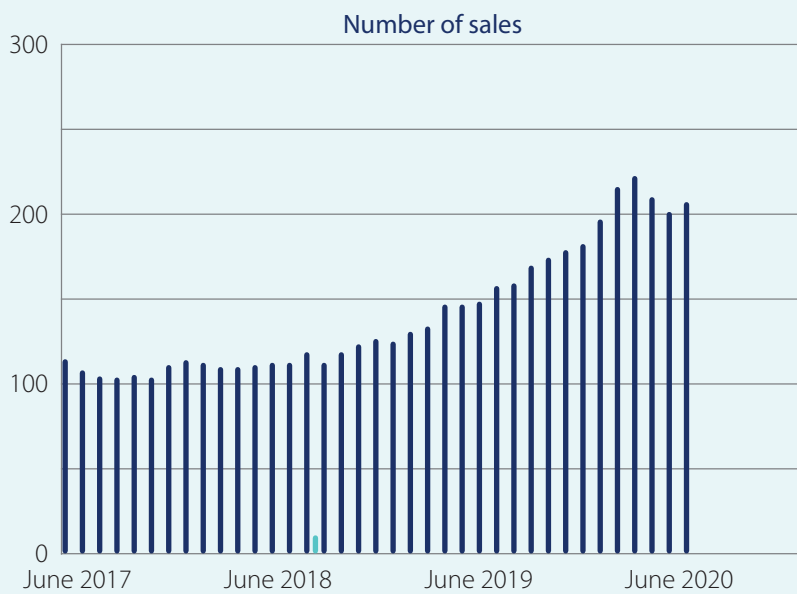


Figure 14. Suburb profile for Mickleham VIC (3064)

— House
— Unit



Mickleham House: Median price \$550,000, annual capital growth 21.90%, number of sales 206, weekly median advertised rent \$395

Source: CoreLogic RP data

⁴² Your Investment Property, Free Suburb report, <https://www.yourinvestmentpropertymag.com.au/top-suburbs/vic-3064-mickleham.aspx>

Housing Supply, Speculation and Vacancy

Figure 14 shows how supply appears to lag housing pricing trajectory. Despite more than 30 years available land supply (double the amount of supply Plan Melbourne sees as appropriate to enable affordability), prices continue to head northwards in Mickleham, home to some of the nation's largest master-planned communities. The slight pricing downturn in early 2020 was immediately followed by the countervailing change in supply, indicative of price preservation.

We highlight these examples because urban economic theories, upon which much housing policy has been based, claim that private housing markets will continue to supply equilibrium homes until a new, affordable equilibrium is reached.

This overlooks the market signals private developers must adhere to in order to remain in business. It is as if developers are expected to be pro-cyclical in the good times but when challenging market conditions change, are expected to behave as good samaritans, holding production steady to provide housing for all.

This only exists in theoretical models with questionable assumptions.

That's not how it plays out in reality.

Private markets act rationally to maintain land and housing prices by reducing supply. Financiers deter land price discounts in order to preserve their balance sheet, reducing the impact on credit creation. Lobbyists move quickly to create a distraction: be it the shortage of labor, the ubiquitous planning delays, or the need for yet more supply.

Similar behaviour is apparent in many markets where a scarce number of producers can influence market prices with their monopoly power.

Government must step in to ensure there is adequately affordable housing. Only government can repair the market failure generated by land's status as a monopoly resource. And it is the government who can ensure that everybody shares the benefits of urban economic development.

All the way along, the absence of accurate data on the time taken for housing to reach the market is overlooked. Inaccurate vacancy figures have allowed these "supply-side" narratives to dominate the public debate.

Housing Supply, Speculation and Vacancy

Questioning the theoretical assumptions of supply-side narratives

One of the criticisms the economics profession faces centres around static models. These are models calculated at a 'given point in time'. This limits its ability to address how behaviour changes over time. In the past it was seen as too difficult. Dynamic equilibrium modeling makes use of larger data sets over time to evaluate market behaviour.

As a measure of how widespread static modelling and the assumptions behind it are, a widely critiqued paper⁴³ by the Reserve Bank of Australia found that zoning controls added \$355,000 to apartment prices in Sydney, but only \$97,000 to Victorian prices.⁴⁴

Dr Cameron Murray (University of Sydney) applied the predominant Glaeser and Gyourko modeling to 'find a high "regulatory tax" even in the absence of regulatory constraints using both simulated data and historical land sales data from colonial Australia and ancient Mesopotamia.'⁴⁵ The model used to justify land market deregulation failed the counter-factual of application in periods prior to the existence of planning controls.

Building on this research, Murray has developed an alternative theoretical approach based on property options, which helps to explain why developers are motivated to hold land vacant over time.

In his dynamic equilibrium model, the return to not developing i.e. leaving a property vacant or underutilised, comes from the changing value of the option to develop as society grows. This model sees land not only becoming more valuable over time, but as development sites become relatively scarce, or market conditions tighten, a higher return to waiting due to increasing options i.e. higher density development becoming more feasible/allowed.⁴⁶ This helps explain why prime corner blocks or sites near train stations are left vacant in the hope of an apartment rezoning.

Further, "return-maximising developers will limit new housing supply per period independently of the optimal or allowable development density. They will increase supply in rising markets, but decrease it in falling markets. This means there are no private incentives to generate market supply-led price reductions."⁴⁷ The end result is that price falls are stymied by rapid supply constraints when pricing trajectories are threatened.

43 See for T Sneesby, Why the RBA is wrong about zoning and house prices again, <https://www.thefifthestate.com.au/urbanism/planning/why-the-rba-is-wrong-about-zoning-and-house-prices-again/>

44 Jenner and Tulip, The Apartment Shortage, <https://rba.gov.au/publications/rdp/2020/2020-04.html>

45 C Murray, Marginal and average land lots should not be equal: A critique of Glaeser and Gyourko's method for identifying residential price effects of town planning regulations, <https://journals.sagepub.com/doi/abs/10.1177/0308518X20942874?ai=1gvoi&mi=3ricys&af=R>

46 Dr C Murray, Time is money: How landbanking constrains housing supply, <https://www.sciencedirect.com/science/article/abs/pii/S1051137720300449>

47 Dr C Murray, A housing supply absorption rate equation, <https://osf.io/7n8rj/>

Housing Supply, Speculation and Vacancy

Macroeconomic drivers of vacancy trends

Monetary policy has been a key driver of housing price rises and construction rates.⁴⁸ Low interest rates also contribute to the spread of speculative vacancies.

In mid 2013 the Australian property boom was re-ignited with three interest rate cuts from 3.25% to 2.50% (Dec 2012 - Aug 2013).⁴⁹ With the northern hemisphere already enjoying an interest rate differential with Australia, it became apparent that rates would continue their downward trajectory.

'Jawboning' was used by central bankers to telegraph future intentions and push the currency further southward to support export growth. Policymakers responded inadequately to the impact this was having on housing affordability.

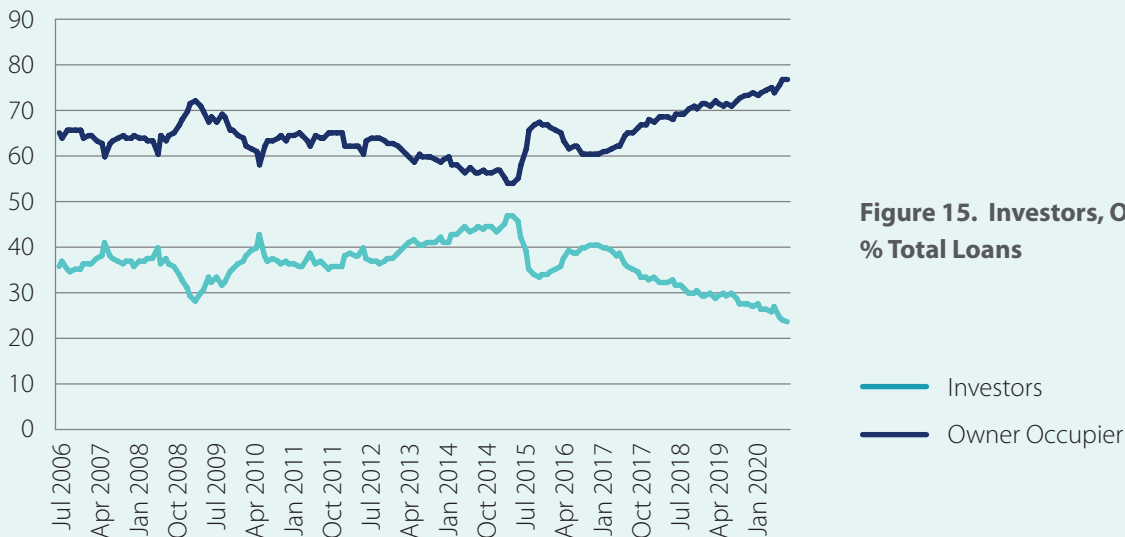


Figure 15. Investors, Owner Occupiers as % Total Loans

— Investors
— Owner Occupier

Figure 15 reflects the growth in national housing loans to investors between mid 2013 and late 2015. Investors grew from 37.4% of all loans (Jan 2013) to a peak of 46.4% (April 2015). APRA's December 2014 announcement of a tightening in lending conditions, with the 10% cap on investor loans per annum,⁵⁰ started the process of winding back investor influence.

Further deterrents included the announcement of the Royal Commission into Banking,⁵¹ alongside the looming Federal election where the ALP opposition was favoured to sweep into power to deliver on their promise of negative gearing and capital gains tax reform.

48 Saunders, T., & Tulip, P. (2020). A model of the Australian housing market. *Economic Record* Volume 96, Issue S1.

49 <https://www.rba.gov.au/statistics/cash-rate/>

50 M Janda, APRA, ASIC Increase Surveillance of Risky Home Lending, <https://www.abc.net.au/news/2014-12-09/apra-asic-increase-surveillance-of-risky-home-lending/5955342>

51 <https://www.royalcommission.gov.au/royal-commission-misconduct-banking-superannuation-and-financial-services-industry>

Housing Supply, Speculation and Vacancy

Interest rates are a significant holding charge for property investors. With their recent cut to 0.10%, holding charges on property are at an all time record low. Melbourne's median house value was \$730,000 in 2019.⁵²

Assuming that the land component equated to 60% of the median house price, a typical investor with a single investment property would be liable for \$650 in land taxes. In our opinion, when combined with low interest rates, these are insufficient holding charges to encourage highest and best use of land.

With investor share of credit falling, the combination of government responses to vacancy may have been having the desired effect. At the state level, the VRLT and the foreign investor surcharge, plus existing land tax on investors targets speculative behaviour. At the federal level, macroprudential lending controls and absentee surcharges on foreign investors may have worked to counteract what might otherwise be an alarming level of vacancy.

We expect Speculative Vacancies to significantly increase if these policies are wound back. Treasurer Frydenberg has recently announced the Commonwealth's intention to remove responsible lending obligations from the National Consumer Credit Protection Act 2009 (Cth). This has been criticised as encouraging risky lending behaviour.⁵³

The Victorian Government has waived the VRLT in response to the COVID crisis, and has not signalled if or when it will be reinstated. These developments take us backwards.

Whilst record low inflation of 1.3% was heralded in March 2015,⁵⁴ house prices increased 18.4% (Sydney) and 11.5% (Melbourne).⁵⁵ Such a disparity alludes to another key statistical indicator that needs further reform to reflect the reality of daily living. With many spending significant amounts of their weekly budget on housing costs, a more accurate weighting within the basket of goods used to calculate inflation is required.⁵⁶

In summary, it appears vacancy levels will remain an affordability constraint under current policy settings - despite adequate supply.

52 Victorian Valuer General, Guide to Property Values 2019, p36

53 Janda, M, Josh Frydenberg's planned responsible lending changes defy Hayne's banking royal commission, <https://www.abc.net.au/news/2020-09-25/government-responsible-lending-changes-home-loan-credit-cards/12702260>

54 <https://www.rba.gov.au/inflation/inflation-target.html>

55 M Janda, Home Prices Surge, Melbourne and Sydney Lead Gains Again, <https://www.abc.net.au/news/2015-08-03/home-prices-melbourne-and-sydney-lead-gains/6667236>

56 Gareth Aird on Imitation Inflation, <http://www.earthsharing.org.au/2017/05/imitation-inflation/>

International Efforts to Curb Vacancy



International Efforts to Curb Vacancy

Vacant land and housing is a concern in many cities across the world. This section describes how vacancies are being investigated and addressed in selected international jurisdictions.

London - Pretty Vacant: The negative impact of wealth investment on access to housing in London.⁵⁷

Advocacy group *Action on Empty Homes* found some 125,000 empty homes in London during 2019. Using a combination of declared vacancies (via local council), second homes and short term rentals (Airbnbs), they determined a ratio for under-utilised housing. Their findings revealed that 'second homes' declared to council could actually be third or fourth homes, with landholders adopting this definition to avoid council taxes on empty homes.

Vancouver

Implemented in 2017, the Vancouver vacancy tax is likely the most effective in the world. The number of vacant homes has fallen over the three years the tax has been in operation, falling 21.6% in its second year of operation and on preliminary figures, a 60.4% reduction in 18-19.



Figure 16. Vancouver vacancies

At the 0.5% rate, vacancy taxes averaged \$14,972 (2017) and \$19,809 (2018).⁵⁸ Such high averages indicate vacancy paying property owners were from wealthier neighborhoods, with valuations between CA\$2.9 to \$4 million. These are significant penalties for lazy land use and appear to be having the desired effect (Figure 16). In 2019 the Vancouver rate increased from 0.5% to 1%.

⁵⁷ C Bailey, *Pretty Vacant*, <https://www.actiononemptyhomes.org/pretty-vacant>

⁵⁸ *Empty Homes Tax Annual Report*, City of Vancouver, <https://vancouver.ca/files/cov/vancouver-2019-empty-homes-tax-annual-report.pdf> Revenues for 2019 have not been released.

International Efforts to Curb Vacancy

With a stiff \$10,000 per day fine for failure to self-report,⁵⁹ only four cases have been challenged in court. A recent case saw a property owner of a CA\$26.9 million derelict property contesting a \$279,000 vacancy tax. After the second appeal the landholder was given an exemption due to planning application delays.⁶⁰

Acting as a further deterrent is the British Columbia Speculation and Vacancy Tax in major urban centres. It is levied at 0.5% for Canadian citizens and 2% for foreign investors.⁶¹

With median prices in Vancouver at CA\$869,211,⁶² it suggests an average total vacancy bill between both the Vancouver and BC vacancy taxes of \$13,038 for Canadians and some \$26,000 for foreign investors.

According to the median 2019 apartment rent, the vacancy tax accounts for 37% of rental income for domestic investors. When applied to foreign investors⁶³ and the various surcharges they face, the vacancy taxes account for an imposing 75% of potential rental income. By raising the vacancy tax to such high proportions of potential rental income, the opportunity cost of wasting a prime location makes it increasingly uneconomic to hold property empty.

In Vancouver, it is unclear whether the vacancy tax has helped improve affordability, or whether the real estate cycle has played a more influential role in recent corrections.

Further analysis is needed of vacancy and the loopholes surrounding exemptions, planning applications and the resultant gaming of the system. Declared vacancies are significantly down on the 25,502 vacant homes declared in the 2016 Canadian census.⁶⁴

The revenue raised has been invested in affordable housing initiatives, building the support base for the new tax.

The following property market effects were also observed:⁶⁵

- Taxed speculative vacancies fell by 22% from 2,538 to 1,989. This represents a drop from 1.36% of properties to 1.05% of properties. Tax exempt properties also dropped from 5,383 to 4,256.
- Owner-occupied properties increased by 1.12% and tenanted properties by 7.12%.
- Out of 2,538 declared vacancies in 2017, 1,199 (47%) were occupied in 2018.
- The number of Condo long term rentals (which benefit from rent control) which have recently entered the rental stock, greatly exceeds the number built. In one area the amount that entered the market was 11,118 despite only 9,142 in new supply. In another area 2,996 entered the market despite only 318 in new supply.⁶⁶ The tax has subsequently increased housing supply.

59 <https://vancouver.ca/your-government/vacancy-tax-bylaw.aspx>

60 S Boynton, Vancouver home owner avoids paying empty homes tax after winning court battle, <https://globalnews.ca/news/6342784/vancouver-empty-homes-tax-lawsuit-won/>

61 <https://www2.gov.bc.ca/gov/content/taxes/speculation-vacancy-tax/how-tax-works/tax-rates>

62 <https://www.vancourier.com/real-estate/vancouver-has-second-least-affordable-north-american-housing-market-infographic-1.23775227>

63 Average median monthly rent rates Vancouver, Daily Hive, <https://dailyhive.com/vancouver/average-median-monthly-rent-rates-vancouver-report-2019>

64 Vancouver's empty homes tax might not affect as many homeowners as predicted, Helgren, C, <https://www.theglobeandmail.com/news/british-columbia/vancouver-empty-homes-tax-might-not-affect-as-many-homeowners-as-predicted/article38246745/>

65 op. cit, City of Vancouver

66 Vecina, E, Investor-targeted rules helping improve Vancouver condo supply, <https://www.mortgagebrokernews.ca/news/investortargeted-rules-helping-improve-vancouver-condo-supply-325293.aspx>

International Efforts to Curb Vacancy

Washington D.C

The DC Office of Tax and Revenue has implemented a vacancy tax based around two cohorts. A Class 3, vacant property, is taxed at \$5.00 per \$100 of assessed value. A \$250,000 property would incur a \$12,500 penalty. They also make a distinction for a Class 4, blighted property, which is taxed at \$10.00 per \$100, implying a \$25,000 annual charge.⁶⁷

A number of loopholes exist to avoid payment of such steep penalties. These include perennial planning applications, listing a property for sale at unrealistic prices and the use of shelf companies to hide ownership. Vacant land is not regarded as taxable.⁶⁸

Oakland, California

Voted into practice with a 70% approval rate, a property is considered vacant if it used less than fifty (50) days in a calendar year. It has eleven exemptions that aim to balance fairness with progress. Exemptions include:

- Owners for whom paying the tax would constitute a financial hardship
- Low-income senior owners'
- 'Owners who are unable to develop their parcel due to a demonstrable hardship that is not financial.'⁶⁹

The flat tax includes a \$6,000 fee for house and land, or \$3,000 for an apartment. Some have criticised the flat fee nature of the charge as unfair, with one property owner saying "we shouldn't be balancing somebody's project for helping homeless people and urban blight on a tiny minority of people in the city."⁷⁰

Barcelona

The city recently conducted its first survey of vacant homes via an analysis of water usage. It revealed 3,609 unused flats in 28.8% of the city's housing stock surveyed.⁷¹ Fourteen companies own 194 vacant apartments.⁷² Court filings against just two banks who own five related companies has recently begun.

With substantial fines of between €90,000 and €900,000 a likely deterrent, we ask how long the legal strategy could last over multiple administrations? Appropriation, whilst popular in some circles, is likely to lead to costly, drawn out legal proceedings. Similar efforts in Venezuela under Hugo Chavez could not be maintained over time due to legal and cultural ambiguity.⁷³

67 Vacant Real Property, Office of Tax and Revenue, Washington DC https://otr.cfo.dc.gov/page/otr-vacant-real-property?mod=article_inline

68 Gottfried and Shoen, DC will have even fewer vacant properties if a new law makes these changes, <https://ggwash.org/view/41741/dc-has-way-more-vacant-properties-than-it-thinks>

69 SPUR policy note, Measure W on Vacant Property Tax, <https://www.spur.org/voter-guide/oakland-2018-11/measure-w-vacant-property-tax>

70 Pender, K , Oakland's vacant-property tax takes effect, sparking hope — and alarm <https://www.sfchronicle.com/business/networth/article/Oakland-s-vacant-property-tax-takes-effect-13563273.php>

71 First results from the census of empty homes, Barcelona International Welcome, https://www.barcelona.cat/internationalwelcome/en/noticia/_638777

72 Fergus O'Sullivan, Barcelona's Latest Affordability Housing Tool: Seize Empty Apartments, July 2020, <https://www.bloomberg.com/news/articles/2020-07-16/to-fill-vacant-units-barcelona-seizes-apartments>

73 Class Struggle and Human Rights in the Bolivarian Revolution: A Conversation with Ana Barrios, Marquina C, Aug 2020, <https://venezuelanalysis.com/analysis/14968>

International Efforts to Curb Vacancy

France

France has been monitoring vacancies since 1996, and taxing them since 1999 with the *Taxe sur les logements vacants* (TLV), and from 2006 with the *Taxe d'habitation sur logements vacants* (THLV). However the tax regime is subject to significant fraud, and faces poor tax design principles e.g. taxes are based on 1970 rental value valuations, exempts houses if they require reinvestment to make them habitable for a tenant (which in turn fails to incentivise landlords to undertake necessary investments or to divest the asset to those who can).⁷⁴

Despite these shortcomings, a recent study found that the tax has had significant impacts on reducing vacancies. The introduction of the tax in 1999 to 2001 resulted in a decrease of 0.8 percentage points of the vacancy rate for treated municipalities, compared to control ones. In a four year period vacancy rates were reduced by 13% in taxed municipalities. The effect is higher in municipalities with an initially higher level of vacancy. The tax seems to have been especially effective in reducing long-term vacancy.⁷⁵

The Global Empty Homes Network

With vacancy trends continuing to evolve alongside the commodification of land and housing, the Global Empty Homes Network was launched to build synergy across jurisdictions.⁷⁶ With representatives in the UK, USA and Australia, they plan 'to study the magnitude of the problem, understand how vacancies are impacting different markets, and share best practices for solving the problem.' The author is a founding member.

74 Blossier, F. (2012). Is taxing inhabitation effective? Evidence from the French tax scheme on vacant housing (Doctoral dissertation, Ph. D. thesis, Ecole polytechnique).

75 Segú, M. (2020). The impact of taxing vacancy on housing markets: Evidence from France. *Journal of Public Economics*, 185, 104079.

76 W McMahon, Global Empty Homes network launches in UK, USA and Australia with call for worldwide housing protections during covid crisis, Aug 2020, <https://www.actiononemptyhomes.org/news/global-empty-homes-network-launches-in-uk-usa-and-australia-with-call-for-worldwide-housing-protections-during-covid-crisis>

Victoria's Vacant Residential Property Tax



Victoria's Vacant Residential Property Tax

The Victorian Vacant Residential Land Tax was introduced in January 2018 to be levied on selected inner and middle ring Local Government Areas.⁷⁷

The current rate is a 1% tax on the Capital Improved Valuation of a property, and is therefore charged on the land plus improvements (the house). This implies that the holder of vacant land will pay less than the holder of a vacant apartment. They are both market inefficiencies and should be taxed without distinction.

From 2020, the VRLT has been extended to include residential properties that have been uninhabitable for two years or more.⁷⁸

If anything, vacant land should face a higher rate due to the cost it imposes on society in terms of sprawl and the additional cost of infrastructure to those new sites.⁷⁹

The State Revenue Office has made available the number of properties that self-declared as vacant.⁸⁰

Table 7.

Year	Property Owners	Vacancies self-declared	Absolute vacancies	% of self declared to absolute vacancies	Revenue Raised	Revenue Forgone on Absolute Vacancies
2017-18	469	716	21,326	3.4%	\$6,244,158	\$147,303,042
2018-19	414	611	-		\$6,528,503	
2019-20	369	587	22,684	2.6%	\$6,170,342	\$157,154,458

For the 2019-20 financial year, there were 369 active VRLT assessments, comprising 587 vacant residential properties. In other words, 369 property owners holding 587 vacant properties did the right thing and self-declared.

77 Including Banyule, Bayside, Boroondara, Darebin, Glen Eira, Hobsons Bay, Manningham, Maribyrnong, Melbourne, Monash, Moonee Valley, Moreland, Port Phillip, Stonnington, Whitehorse, and Yarra.

78 State Revenue Office Vacant Residential Land Tax, <https://www.sro.vic.gov.au/vacant-residential-land-tax>

79 With that in mind, we find it concerning that the tax has been renamed from the original Vacant Residential Property Tax (reflecting land and improvements) to in recent years the Vacant Residential Land Tax. Language matters. Land increases in value. Buildings depreciate. The VRLT is levied on land and the improvements.

80 Private correspondence, State Revenue Office of Victoria, September 24, 2020

Victoria's Vacant Residential Property Tax

Absolute vacancy findings for the 2019 year, using 0L water per day over 12 months, reached 22,684. The government tax only addressed 2.6% of absolute vacancies.⁸¹

Either some 20,000 properties met the criteria for exemption, or there are some issues with compliance.

In response to 2020's COVID-19 pandemic, Treasurer Tim Pallas announced that the Vacant Residential Land Tax would be waived to "assist the industry";⁸² at a cost of \$6m.⁸³ This was not long after announcing a \$150m homeless in hotels package to assist 2000 homeless people during the pandemic.

Based on our calculations, a well-implemented vacancy tax should have earned between \$160 million to \$495 million. This could have both funded the hotels for homeless package and, at the same time, improved housing market behaviour by deterring vacancy. Instead taxpayers received a limited public policy return whilst rewarding systemic failure.

Prosper wrote to the Treasurer asking why those two related issues, of the vacant property revenue and the hotel expenditure, were not aligned through effective policy.

The response we received from the Treasurer's office raised further questions.

"The State Revenue Office achieves maximum compliance with Victoria's taxation laws, including those relating to vacant residential land tax, by using the latest forensic analytical tools, including data matching, to investigate, identify and target non-compliance. This includes sharing and comparing data with a wide range of organisations including utility companies, such as water and electricity providers."⁸⁴

In preparation for this report we were made aware that:

- No water data is being collected by government to identify vacancy
- Not one fine has been issued due to the investigation of the 97.4% of vacant properties that have not self-declared.

We are concerned that weak enforcement will limit the success of the VRLT tax.

As outlined above, Vancouver has an effective engagement program surrounding their vacancy tax.⁸⁵ Vancouver policy makers engaged proactively with the community to educate on the need for the tax and hypothecated the revenues towards affordable housing initiatives.

81 We acknowledge that we are comparing a financial year (SRO figures) with a calendar year (water). The difference is minor with 362 property owners self declaring, versus the 369 for the FY. Complete calendar year figures were not available at the time of publishing.

82 J Clegg, Victorian Landlords to avoid land tax on properties vacant, <https://www.domain.com.au/news/victorian-landlords-to-avoid-land-tax-on-properties-vacant-in-2020-986235/>

83 Business Survival and Adaptation Package, <https://www.business.vic.gov.au/support-for-your-business/grants-and-assistance/business-survival-and-adaptation-package>

84 Letter from the Treasurer, D20/181616, 8/10/2020

85 op. cit, K Fitzgerald

Victoria's Vacant Residential Property Tax

Further limitations of the VRLT include the exemption of vacant land and the ring-fencing of master-planned communities, excusing liability for the tax as large landholdings are drip fed to the market over decades.⁸⁶

Whilst the speculative and absolute vacancies we have consistently reported have remained at similar levels for close to a decade, there has been some fall in the number of property owners self-declaring as vacant. Is this a policy win or indifference by property owners in the knowledge there is no enforcement?

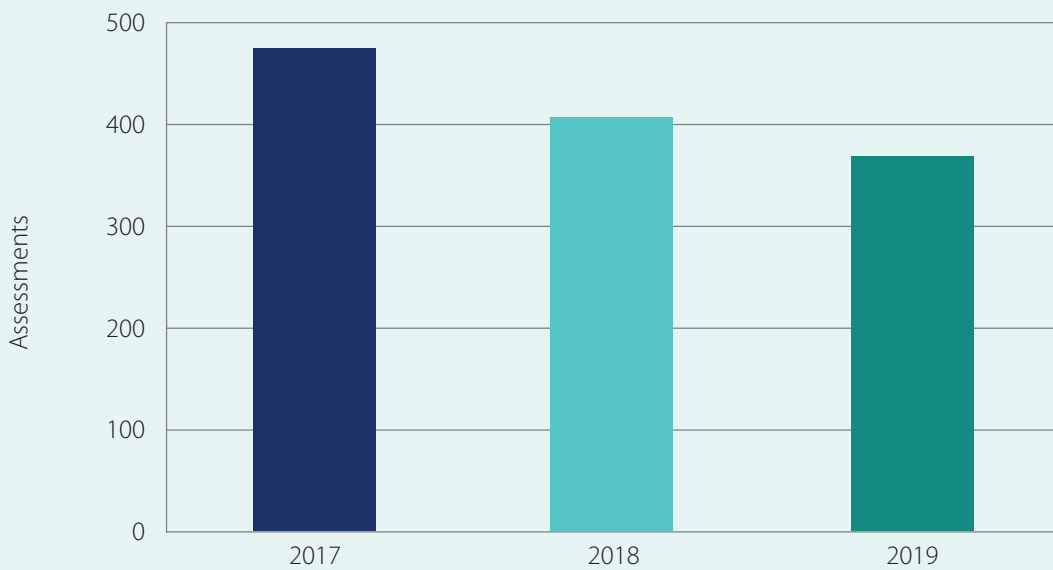


Figure 17. Victoria's vacancy tax

⁸⁶ M Dunlevy, Stockland lands \$4bn project, <https://www.theaustralian.com.au/business/stockland-lands-4bn-project/news-story/1c33f5f58848cf49cd611dc6261caa95>

Victoria's Vacant Residential Property Tax

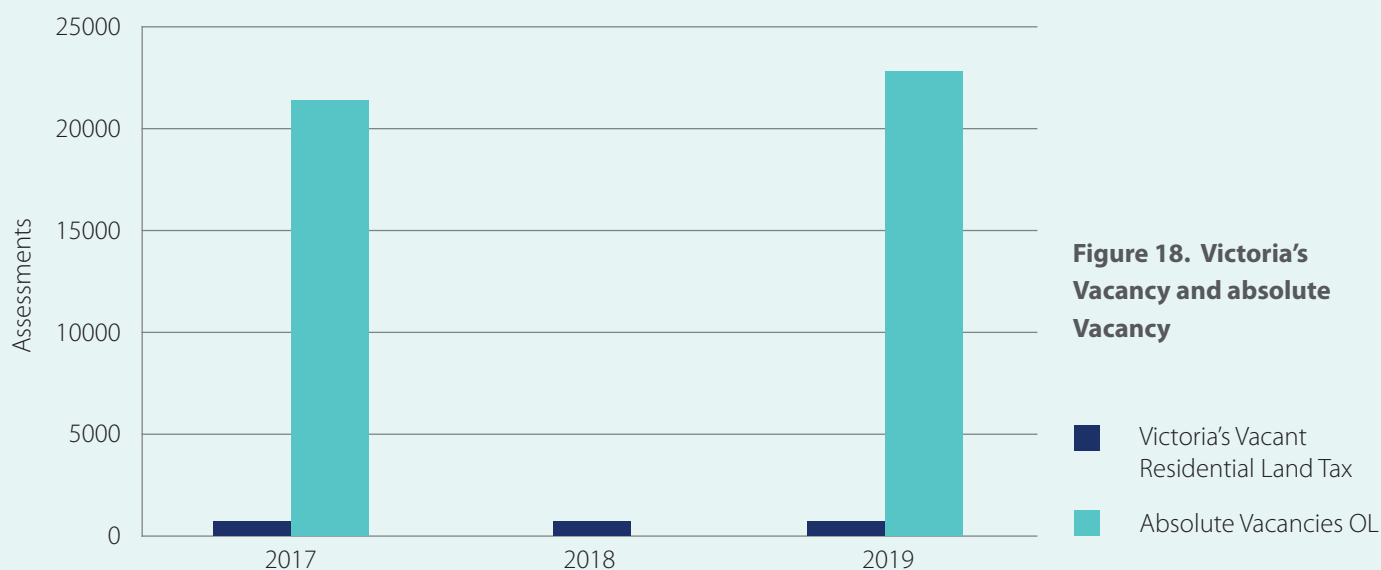


Figure 18. Victoria's Vacancy and absolute Vacancy

Addressing Vacancy - Best Practices

For those jurisdictions where a vacancy tax is preferred, the following principles should be applied:

1. Self-declaration of vacancy.
 - a. Significant fines worth at least half a year's yield plus capital gains for failure to disclose.
2. Oversight of vacancy through utility charges such as water. In the Melbourne context this is appropriate due to the geographical assigning of customers to the one service provider i.e. customers can't switch providers mid-billing cycle.
3. A percentage tax on the land component only - also known as the site value. This ensures vacant landholders pay a similar tax to empty apartment holders. Both are important for supply with vacant land able to provide net additional dwellings.
 - a. A percentage rate deters those in the best locations from engaging in speculative vacancies. Flat fee sums are to be avoided as they favour landholders in better locations.
4. Annual valuations of the site value ensure market rates are charged, further deterring hoarding over time.
5. Taxation to be preferred over costly and lengthy court trials.
6. No exemptions for failure to rent a property. Rents should be lowered to clear the market.
7. Limited exemptions for properties with sequential planning applications pending, as in Washington D.C..
8. The property titling system must make sure shelf companies are clearly identified with a discernible ownership trail.
9. Effective public outreach signposting why the policy is needed, engaging proactively to counter misinformation by vested interests.
 - a. hypothecating revenues to cogent affordable housing models (e.g. community land trusts).

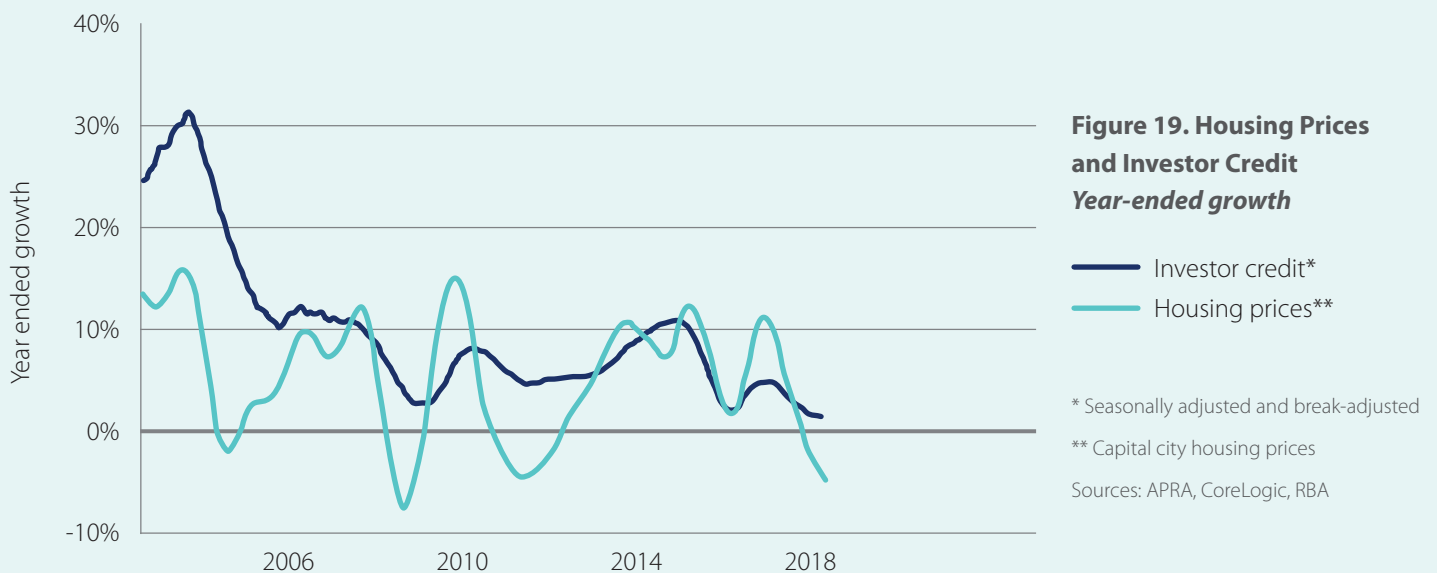
Victoria's Vacant Residential Property Tax

Land Taxes - a simpler, passive vacancy tax?

Land Value Taxes automatically act to raise the costs of vacancy. A significant annual financial fee for services provided to a location not only deters speculative use, but encourages sites to adopt highest and best uses. Such a penalty also avoids the privacy and enforcement issues that vacancy taxes may face.

Land taxes act as a holding charge on land. With yearly land valuations in place, those landholders in the best locations pay proportionally more than others. This locational value alters according to population growth, infrastructure development, the supply of credit and rezoning potential.

Savvy investors recognise that yearly holding costs affect total returns. They therefore reduce their upfront purchasing bids accordingly. This takes heat out of the market, allowing greater room for home buyers to compete, as we are seeing in Canberra with their transition away from stamp duty and towards land taxes.⁸⁷ This RBA graph⁸⁸ shows a strong correlation between house prices and investor credit.



87 W Smith, J Hermans, The Second Interval: Evaluating the ACT's 20 Year Land Value Taxation transition after 8 years, <https://www.prosper.org.au/2020/10/the-second-interval-the-evaluation-in-brief/>

88 Reserve Bank of Australia chart pack, <https://rba.gov.au/chart-pack/>

Victoria's Vacant Residential Property Tax

In terms of vacancy and underutilisation, as land tax increases, the financial pressure to earn money today, rather than waiting for future land price inflation and higher rents, rises. Passive land users must either rent the site out, build more housing or sell it. These behaviours place downward pressure on both rents and prices.

Land taxes act as a counterweight to land price. The greater the charge, the lower the speculative incentive. Land tax discounts future profits for those considering delaying development and devalues the relative option value of leaving a property vacant.

Victoria increased the land tax threshold throughout the 2000's from \$85,000 to \$250,000. This made it more attractive to invest in more affordable regions, as we saw with the rise in vacancies in the western suburbs (Figure 6). Thresholds should be reduced over time to ensure that our most affordable suburbs are not attractive for speculative investors intent on buying and holding a site over time.

Treasury should investigate the supply incentives for an escalating land tax or other regulatory tools applied to master-planned communities. For sites in designated growth areas e.g. those within precinct plans that have not been built out after five years, an escalating land tax rate⁸⁹ could be applied. This would offset the market power developers have over home buyers.

89 A surtax on vacant land is levied in Seoul, Korea, Rep. Land left vacant for 2+ years is taxed at an increasing marginal rate over time. The highest rate is 10% after 10 years. Hass, A., & Kopanyj, M. (2017). Taxation of Vacant Urban Land: From Theory to Practice. International Growth Center, London School of Economic and Political Science: London, UK.

Recommendations

Our policy recommendations to reduce vacancy, improve affordability and encourage the productive sector include:

1. Fiscal measures to combat speculative vacancies
 - a. Gradually reduce land tax thresholds so non-owner occupier land in more affordable areas is subject to land tax.
 - b. **Replace stamp duty with a broad based land tax.** This improves allocative efficiency, making vacancy less attractive relative to leasing.⁹⁰
 - c. **Reform and reinstate a Vacant Residential Land Tax**
 - i. Apply to all land within Greater Melbourne.
 - ii. Use Site Value as the tax base to incentivise development.
 - iii. Levy at a rate greater than 1%, to account for strata titles that have a lower land value share of total property value.
 - iv. Heavy penalties e.g. up to \$10,000 per day, should be imposed for the failure to lodge a vacancy notification.
 - v. Vacancy to be monitored by a means that includes water consumption.
 - vi. Tax auditing should focus on high risk, high vacancy and unaffordable areas.
 - d. **Investigate tax mechanisms (e.g. escalating land taxes)** for rezoned sites and master planned communities to ensure developers quickly put land to best use. Land taxes could escalate once planning permissions or rezoning is granted to make supply rationing uneconomic.
 - e. **Reform Victoria's foreign purchaser surcharge exemption⁹¹ to ensure housing supply is maintained over time, not just the first 12 months.**⁹² Some developments involve hundreds, if not thousands of dwellings, and take between 12 - 33 years to complete. Precautions must be taken to ensure supply is not rationed after the first year to maximise profits.
 - f. **Relax the rate capping index** to grow more closely in line with land price inflation.^{93 94}

90 Further information is provided in our Stamp Duty to Land Tax: Designing the Transition report. https://www.prosper.org.au/wp-content/uploads/2019/07/Designing-the-Transition_Final_Helm.pdf

91 Foreign Purchaser - Build To Rent exemption, <https://www.sro.vic.gov.au/foreignpurchaser>

92 Victorian Government Gazette, 1 October, 2018, www.gazette.vic.gov.au/gazette/Gazettes2018/GG2018S450.pdf#page=5

93 Further investigation of the cost burden of privatised services and consultancies should be encouraged. Too much pressure has been applied on the revenue side, not enough analysis of the cost pressures for council.

94 Victorian Auditor General, Delivering Local Government Services, 2018, <https://www.audit.vic.gov.au/sites/default/files/2018-09/20180919-Delivering-Local-Government-Services.pdf>

Recommendations

2. Vacancy Quantification by the ABS:

- a. Quantify **vacant residential property and land** via the use of abnormally low water.
- b. Quantify **vacant land banks** using geo-spatial analysis to reveal the quantity of rezoned but unbuilt sites.

3. Regulations

- a. **Restrict short term rental properties** by adopting Vancouver's *Short-term rental business licence*. This limits use to Principal Place of Residence only, and only to offset housing costs.

4. Transparency measures to reduce criminal demand

- a. **Prohibit cash purchases for property.** Financial institutions, real estate agents, conveyancers and solicitors should all be responsible for oversight. **Mandate Suspicious Transactions Reports** be filed by these related parties.
- b. **Compile a registry of recently nationalised citizens with large property holdings and low income tax lodgings.** This should extend to all Australian citizens, to track potential money laundering behaviour.



Conclusion

Property ownership has shaped Australia's democratic institutions. It was only in 1950 that members of Victoria's Legislative Council (upper house) no longer needed to qualify with a land holding.⁹⁵ All other Australian states had removed this qualification by 1900. The privileged position of property ownership in our democracy holds sway to this day, reflected in the preferential treatment of housing assets in our taxation system.

However, everyone needs somewhere to live.

The unquestioned commodification of housing into an income stream rather than a home has made vacancy far more acceptable and prevalent than it ought to be.

Vacancies increased 13.3% between 2017 - 2019. With 389,000 expats returning to Australia so far,⁹⁶ it remains unclear whether the impact of COVID-19 on Victoria will deter purchases and thus impact vacancy. We expect land and housing prices to increase into 2021 as government pump priming aims to reduce the recessionary impact.

The COVID disruption to migration, along with the Victorian Government's VRLT holiday and further stimulus to the property industry, prompt an expected increase in vacancies in 2021.

This could be averted with a reinstated and reformed vacancy tax. A strong incentive would spur property owners towards making their homes available for those who need housing, ensuring market expectations fall quickly to meet the new conditions.

Despite experiencing a challenging financial year, Victorian residential land prices increased by \$135.6 billion dollars in 2019-20, the fourth largest on record. For the nation, total land values increased by \$422.6 billion dollars.⁹⁷ GDP growth plummeted around the world, but in Australia land prices barely paused for breath.

The state's Housing Assistance budget of \$648.3 million (2019-20) was equivalent to 0.5% percent of land price increases over the same period. To fund necessary programs like Housing Assistance, the state recaptured just 0.00264 of total state land values.

We welcome the announcement of an expansion of Victoria's housing program by 12,000 dwellings.

With national debt levels at eye watering levels and the state government announcing a record deficit, this investment in social housing must be supported by a significant tax reform agenda.

To paraphrase the NSW's Federal Financial Relations draft report, efficient state taxation is a critical hinge between economic recovery and fiscal recovery – attempting to repair fiscal capacity with economically damaging taxes will hold back progress on both goals.⁹⁸

We urge the Victorian Treasurer to pursue his stated objective and replace stamp duties with a broad-based land tax.

If land prices are to continue their ever increasing trajectory, the pain we witnessed during the pandemic as the economy was slammed shut will endure with the climate challenged future.

95 Department of the Legislative Council, The Legislative Council's History, <https://parliament.vic.gov.au/council/publications-a-research/information-sheets?id=721>

96 M Bell, Australians returning home due to covid-19 could lead to extremely high housing demand, <https://www.realestate.com.au/news/australians-returning-home-due-to-covid19-could-lead-to-extremely-high-housing-demand/>

97 ABS System of National Accounts, Table 61, <https://www.abs.gov.au/statistics/economy/national-accounts/australian-system-national-accounts/latest-release>

98 NSW Treasury, Federal Financial Review Draft report, Chapter 4, p43, <https://www.treasury.nsw.gov.au/draft-report>

Conclusion

The struggle faced by tenants and mortgagees to keep a roof over their heads when the economy closed for business brings focus to the age old power imbalance between landlord and tenant.

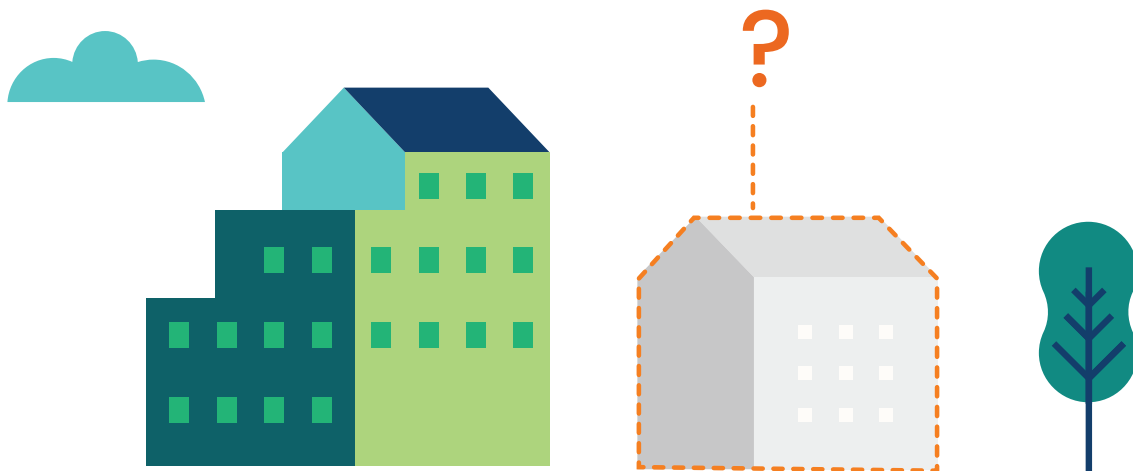
The ease of online property purchases supported by an army of property buyers, stylists and repair teams infers that commodification is here to stay. Looming tax cuts for institutional investors in the Build to Rent industry will enhance their ability to manufacture scarcity to maintain rents. Government must use the tax system to counter this power imbalance.

The COVID pandemic also highlighted the essential nature of land and its returns: as merely residue of the productive capacity of the economy.

High housing costs are a drag on consumer demand. They are a weight around the neck of those who need to quickly adapt to changing circumstances. Land tax provides an important counterweight to housing commodification, and the land hoarding, exclusion and vacancy that comes with it.

Victoria's COVID-19 recovery will be hamstrung by the prevalence of commercial and industrial vacancies. With nearly three times the properties that were sold in 2019 lying vacant, It is no surprise that wage growth remains at record lows. High fixed rents or lack of employment land amplify the downside of risky, innovative enterprise.

The pandemic offers the best chance in a lifetime to redirect land and housing prices back towards prices our wages can justify. The persistent puzzle of speculative vacancy demands a commitment from government to address this fundamental power imbalance.



Appendix 1: Greater Melbourne Residential

Postcode	Suburb(s)	Total	OL/day	Ratio	<=50L/day	Ratio
3000	MELBOURNE (CBD)	16,520	192	1.2%	1,170	7.1%
3002	EAST MELBOURNE	1,659	16	1.0%	126	7.6%
3003	WEST MELBOURNE	2,571	29	1.1%	165	6.4%
3004	St Kilda Rd Business District (Melbourne)	7,394	91	1.2%	614	8.3%
3006	Southbank/South Wharf	15,194	537	3.5%	1,762	11.6%
3008	Docklands	5,604	52	0.8%	532	10.8%
3011	SEDDON /SEDDON WEST/FOOTSCRAY	7,562	86	1.1%	342	4.5%
3012	TOTTENHAM/WEST FOOTSCRAY/KINGSVILLE/MAIDSTONE/BROOKLYN	8,983	93	1.0%	314	3.5%
3013	YARRAVILLE/YARRAVILLE WEST	5,433	64	1.2%	192	3.5%
3015	SPOTSWOOD/NEWPORT/SOUTH KINGSVILLE	6,195	73	1.2%	208	3.4%
3016	WILLIAMSTOWN NORTH/WILLIAMSTOWN	5,398	36	0.7%	173	3.2%
3018	ALTONA /SEAHOLME	4,796	48	1.0%	218	4.5%
3019	ROBINSON/BRAYBROOK	2,899	33	1.1%	110	3.8%
3020	SUNSHINE/SUNSHINE WEST/SUNSHINE NORTH/GLENGALA/ALBION	14,311	146	1.0%	469	3.3%
3021	KEALBA/ALBANVALE/ST ALBANS/KINGS PARK	16,974	150	0.9%	443	2.6%
3022	DEER PARK EAST/ARDEER	1,128	19	1.7%	48	4.3%
3023	RAVENHALL/BURNSIDE HEIGHTS/BURNSIDE/CAROLINE SPRINGS/CAIRNLEA/DEER PARK NORTH/DEER PARK	18,361	205	1.1%	383	2.1%
3024	MAMBOURIN/MOUNT COTTRELL/WYNDHAM VALE	8,112	146	1.8%	321	4.0%
3025	ALTONA EAST/ALTONA GATE/ALTONA NORTH	4,292	34	0.8%	140	3.3%
3026	LAVERTON NORTH	2,192	15	0.7%	27	1.2%
3027	WILLIAMS LANDING	2,391	41	1.7%	105	4.4%
3028	ALTONA MEADOWS/LAVERTON/SEABROOK	9,895	115	1.2%	277	2.8%
3029	HOPPERS CROSSING/TARNEIT/TRUGANINA	30,784	372	1.2%	826	2.7%
3030	WERRIBEE SOUTH/WERRIBEE/QUANDONG/POINT COOK/DERRIMUT/COCOROC	32,131	549	1.7%	1,243	3.9%
3031	KENSINGTON/FLEMINGTON	5,930	52	0.9%	234	3.9%
3032	TRAVANCORE/MARIBYRNONG/HIGHPOINT CITY/ASCOT VALE	10,088	104	1.0%	427	4.2%
3033	KEILOR EAST	5,276	65	1.2%	164	3.1%
3034	AVONDALE HEIGHTS	4,232	37	0.9%	115	2.7%
3036	KEILOR NORTH/KEILOR	1,955	24	1.2%	48	2.5%
3037	SYDENHAM/TAYLORS HILL/DELAHEY/HILL-SIDE/CALDER PARK	14,768	432	2.9%	575	3.9%
3038	TAYLORS LAKES/WATERGARDENS/KEILOR DOWNS/KEILOR LODGE	8,667	178	2.1%	238	2.7%
3039	MOONEE PONDS	5,254	64	1.2%	276	5.3%
3040	ESSENDON/ESSENDON WEST/ABERFELDIE	8,748	82	0.9%	379	4.3%
3041	STRATHMORE/STRATHMORE HEIGHTS/ESSENDON NORTH/ESSENDON FIELDS/CROSS KEYS	4,304	47	1.1%	136	3.2%
3042	NIDDRIE NORTH/NIDDRIE/AIRPORT WEST/KEILOR PARK	6,097	70	1.1%	199	3.3%
3043	GLADSTONE PARK / GOWANBRAE / TULLAMARINE	7,209	92	1.3%	237	3.2%

Postcode	Suburb(s)	Total	OL/day	Ratio	<=50L/day	Ratio
3044	PASCOE VALE / PASCOE VALE SOUTH	12,325	221	1.8%	611	5.0%
3046	GLENROY / HADFIELD / OAK PARK	15,608	243	1.6%	749	4.8%
3047	BROADMEADOWS / DALLAS / JACANA	7,677	276	3.6%	498	6.5%
3048	COOLAROO / MEADOW HEIGHTS	5,716	114	2.0%	182	3.2%
3049	ATTWOOD / WESTMEADOWS	3,760	52	1.4%	159	4.2%
3051	HOTHAM HILL/NORTH MELBOURNE	4,731	55	1.2%	348	7.4%
3052	MELBOURNE UNIVERSITY/PARKVILLE	1,606	34	2.1%	100	6.2%
3053	CARLTON/CARLTON SOUTH	5,369	67	1.2%	566	10.5%
3054	CARLTON NORTH/PRINCES HILL	2,845	24	0.8%	128	4.5%
3055	BRUNSWICK / BRUNSWICK WEST	7,647	317	4.1%	632	8.3%
3056	BRUNSWICK	12,868	369	2.9%	1,003	7.8%
3057	BRUNSWICK / BRUNSWICK EAST	6,955	168	2.4%	674	9.7%
3058	BRUNSWICK / COBURG / COBURG NORTH	15,076	285	1.9%	780	5.2%
3059	GREENVALE	6,389	41	0.6%	210	3.3%
3060	FAWKNER	5,392	44	0.8%	183	3.4%
3061	CAMPBELLFIELD	1,734	36	2.1%	93	5.4%
3064	CRAIGIEBURN / DONNYBROOK / KALKALLO / MICKLEHAM / ROXBURGH PARK	32,722	213	0.7%	1,651	5.0%
3065	FITZROY	3,087	23	0.7%	197	6.4%
3066	COLLINGWOOD NORTH/COLLINGWOOD	2,697	27	1.0%	170	6.3%
3067	ABBOTSFORD	3,443	30	0.9%	236	6.9%
3068	CLIFTON HILL/FITZROY NORTH	6,361	43	0.7%	257	4.0%
3070	NORTHCOTE	11,662	441	3.8%	867	7.4%
3071	THORNBURY	9,100	280	3.1%	595	6.5%
3072	PRESTON	15,499	349	2.3%	1,013	6.5%
3073	RESERVOIR	22,465	560	2.5%	1,294	5.8%
3074	THOMASTOWN	8,113	88	1.1%	268	3.3%
3075	LALOR	8,695	70	0.8%	254	2.9%
3076	BUNDOORA / EPPING	11,777	272	2.3%	473	4.0%
3078	ALPHINGTON / FAIRFIELD	5,506	123	2.2%	372	6.8%
3079	BELLFIELD (GREATER MELBOURNE) / EAGLEMONT / IVANHOE / IVANHOE EAST	7,734	160	2.1%	533	6.9%
3081	BELLFIELD (GREATER MELBOURNE) / HEIDELBERG HEIGHTS / HEIDELBERG WEST	6,694	308	4.6%	592	8.8%
3082	MILL PARK	10,703	36	0.3%	175	1.6%
3083	BUNDOORA / KINGSBURY	12,720	96	0.8%	382	3.0%
3084	EAGLEMONT / HEIDELBERG / ROSANNA / VIEW BANK / VIEWBANK	11,155	143	1.3%	487	4.4%
3085	MACLEOD / YALLAMBIE	5,444	192	3.5%	295	5.4%
3087	WATSONIA / WATSONIA NORTH	3,711	32	0.9%	95	2.6%
3088	BRIAR HILL / GREENSBOROUGH / ST HELENA / WATSONIA	10,647	88	0.8%	271	2.5%
3089	DIAMOND CREEK	4,318	65	1.5%	149	3.5%
3093	LOWER PLENTY / PLENTY LOWER	1,592	26	1.6%	52	3.3%
3094	MONTMORENCY	3,738	36	1.0%	89	2.4%
3095	ELTHAM / ELTHAM NORTH / RESEARCH	10,170	87	0.9%	215	2.1%


Postcode	Suburb(s)	Total	OL/day	Ratio	<=50L/day	Ratio
3099	ARTHURS CREEK / COTTLES BRIDGE / HURST-BRIDGE / NUTFIELD	1,320	17	1.3%	42	3.2%
3101	KEW	10,699	200	1.9%	547	5.1%
3102	KEW EAST	2,648	63	2.4%	120	4.5%
3103	BALWYN / DEEPDENE	6,932	251	3.6%	509	7.3%
3104	BALWYN NORTH	8,067	119	1.5%	357	4.4%
3105	BULLEEN	4,690	96	2.0%	275	5.9%
3106	TEMPLESTOWE	6,336	65	1.0%	232	3.7%
3107	LOWER TEMPLESTOWE / TEMPLESTOWE LOWER	5,586	91	1.6%	228	4.1%
3108	DONCASTER	11,443	204	1.8%	1,000	8.7%
3109	DONCASTER / DONCASTER EAST	11,865	96	0.8%	592	5.0%
3111	DONVALE	4,756	42	0.9%	127	2.7%
3113	NORTH WARRANDYTE / WARRANDYTE	2,935	56	1.9%	110	3.7%
3115	WONGA PARK	1,255	21	1.7%	33	2.6%
3116	CHIRNSIDE PARK / MOOROOLBARK	4,295	29	0.7%	122	2.8%
3121	RICHMOND/RICHMOND NORTH/RICHMOND EAST/RICHMOND SOUTH/BURNLEY/BURNLEY NORTH/CREMORNE	11,054	98	0.9%	588	5.3%
3122	HAWTHORN	12,282	495	4.0%	1,007	8.2%
3123	HAWTHORN EAST	7,316	222	3.0%	540	7.4%
3124	CAMBERWELL	9,159	153	1.7%	417	4.6%
3125	BURWOOD / CAMBERWELL	6,679	375	5.6%	687	10.3%
3126	CANTERBURY	3,253	42	1.3%	132	4.1%
3127	MONT ALBERT / SURREY HILLS	7,758	142	1.8%	404	5.2%
3128	BOX HILL / BOX HILL SOUTH	10,987	453	4.1%	1,068	9.7%
3129	BOX HILL NORTH / MONT ALBERT NORTH	7,353	93	1.3%	327	4.4%
3130	BLACKBURN / BLACKBURN NORTH / BLACKBURN SOUTH	13,352	407	3.0%	800	6.0%
3131	FOREST HILL / NUNAWADING	9,439	312	3.3%	581	6.2%
3132	MITCHAM	7,002	69	1.0%	287	4.1%
3133	VERMONT / VERMONT SOUTH	8,468	51	0.6%	203	2.4%
3134	PARK ORCHARDS / RINGWOOD / RINGWOOD NORTH / WARRANDYTE SOUTH / WARRANWOOD	13,994	346	2.5%	853	6.1%
3135	HEATHMONT / RINGWOOD EAST	8,199	96	1.2%	293	3.6%
3136	CROYDON / CROYDON HILLS / CROYDON NORTH / CROYDON SOUTH	19,024	316	1.7%	677	3.6%
3137	KILSYTH / KILSYTH SOUTH	5,856	69	1.2%	235	4.0%
3138	MOOROOLBARK	8,564	76	0.9%	236	2.8%
3139	DON VALLEY / HODDLES CREEK / LAUNCHING PLACE / SEVILLE / SEVILLE EAST / WANDIN EAST / WANDIN NORTH / WOORI YALLOCK / YELLINGBO	4,181	95	2.3%	230	5.5%
3140	LILYDALE / MOUNT EVELYN	6,882	102	1.5%	266	3.9%
3141	South Yarra	15,937	208	1.3%	849	5.3%
3142	Hawksburn/Toorak	5,912	102	1.7%	257	4.3%
3143	Armadale/Armadale North	5,215	100	0.8%	332	5.5%

Postcode	Suburb(s)	Total	OL/day	Ratio	<=50L/day	Ratio
3144	KOOYONG / MALVERN	5,114	261	5.1%	403	7.9%
3145	Darling/Central Park/Malvern East/Darling South/Wattletree Rd PO/Caulfield East	10,446	210	1.1%	687	2.8%
3146	GLE IRIS / GLEN IRIS	10,895	132	1.2%	486	4.5%
3147	ASHBURTON / ASHWOOD	6,175	142	2.3%	387	6.3%
3148	ASHWOOD / CHADSTONE	4,043	51	1.3%	194	4.8%
3149	GLEN WAVERLEY / MOUNT WAVERLEY	13,822	140	1.0%	545	3.9%
3150	GLEN WAVERLEY / WHEELERS HILL	23,807	901	3.8%	1,354	5.7%
3151	BURWOOD EAST	4,152	123	3.0%	216	5.2%
3152	Wantirna South/Knox City Centre/Studfield/Wantirna	12,699	54	0.4%	310	2.4%
3153	Bayswater/Bayswater North	8,797	76	0.7%	252	3.1%
3154	The Basin	1,575	6	0.4%	39	2.5%
3155	Boronia	9,877	61	0.6%	256	2.6%
3156	Ferntree Gully/Lysterfield	14,287	78	0.5%	327	2.3%
3158	Upwey	2,519	11	0.4%	56	2.2%
3159	Menzies Creek/Selby	233	3	1.3%	6	2.6%
3160	Tecoma/Belgrave South/Belgrave Heights/Belgrave	3,183	26	0.8%	80	2.5%
3161	Caulfield North/Caulfield Junction	7,359	89	1.2%	247	3.4%
3162	Caulfield/Hopetoun Gardens/Caulfield South - Glen Hunly	7,447	53	0.7%	217	2.9%
3163	Carnegie/Booran Rd PO/Glen Huntly/Murrumbena	15,423	126	0.8%	501	3.2%
3165	Bentleigh East	11,391	63	0.6%	320	2.8%
3166	Oakleigh/Oakleigh East/Hughesdale/Huntingdale	9,907	115	1.1%	405	3.7%
3167	Oakleigh South	3,943	24	0.6%	123	3.1%
3168	Notting Hill/Clayton	8,477	160	1.0%	417	4.1%
3169	Clarinda/Clayton South	7,597	48	0.6%	167	2.2%
3170	MULGRAVE	7,337	36	0.5%	167	2.3%
3171	Sandown Village/Springvale	7,418	78	1.1%	258	3.5%
3172	Dingley Village/Springvale South	8,009	33	0.4%	92	1.1%
3173	Keysborough	9,395	53	0.6%	187	2.0%
3174	Noble Park/Noble Park North	14,778	101	0.7%	402	2.7%
3175	Bangholme/Dandenong/Dandenong East/Dandenong North/Dandenong South/Dunearn	19,715	214	1.1%	601	3.0%
3177	Doveton/Eumemmerring	4,339	50	1.2%	158	3.6%
3178	Rowville	11,655	36	0.3%	162	1.4%
3179	Scoresby	2,190	3	0.1%	35	1.6%
3180	Knoxfield	2,842	15	0.5%	54	1.9%
3181	Windsor/Prahran East/Prahran	11,167	101	0.9%	583	5.2%
3182	St Kilda/St Kilda West/St Kilda South	14,518	118	0.8%	595	4.1%
3183	St Kilda East/Balaclava	9,481	103	1.1%	284	3.0%
3184	Elwood/Brighton Rd	8,441	86	1.0%	288	3.4%
3185	Gardenvale/Elsternwick/Ripponlea	6,075	32	0.5%	174	2.9%

Postcode	Suburb(s)	Total	OL/day	Ratio	<=50L/day	Ratio
3186	Brighton/Were St PO/Brighton North/Dendy - Brighton East	10,335	84	0.8%	349	3.4%
3187	North Road/Brighton East	6,649	47	0.7%	218	3.3%
3188	Hampton East/Hampton North/Hampton	7,579	77	1.0%	272	3.6%
3189	Wishart/Moorabbin/Moorabbin East - Highett	2,656	17	0.6%	101	3.8%
3190	Highett	5,078	51	1.0%	202	4.0%
3191	Sandringham	4,564	23	0.5%	149	3.3%
3192	Cheltenham East/Southland Centre/Cheltenham - Highett	10,132	56	0.6%	278	2.7%
3193	Cromer/Black Rock North/Black Rock/Beaumaris	8,156	64	0.8%	200	2.5%
3194	Morrabbin Airport - Mentone	6,459	63	1.0%	222	3.4%
3195	Aspendale/Waterways/Parkdale/Mordialloc/Braeside/Aspedale Gardens - Mentone	14,178	119	0.8%	383	2.7%
3196	Edithvale/Chelsea Heights/Chelsea/Bonbeach	11,398	103	0.9%	384	3.4%
3197	Carrum/Patterson Lakes	5,399	27	0.5%	127	2.4%
3198	Seaford	7,769	63	0.8%	226	2.9%
3199	Frankston/Frankston East/Frankston Heights/Frankston South/Karingal/Karingal Centre/	23,941	141	0.6%	632	2.6%
3200	Frankston North/Pines Forest - Frankston	2,512	18	0.7%	74	2.9%
3201	Carrum Downs	8,435	55	0.7%	162	1.9%
3202	Heatherton	1,010	9	0.9%	17	1.7%
3204	Bentleigh/McKinnon/Patterson/Ormond	13,214	117	0.9%	423	3.2%
3205	South Melbourne	6,353	103	1.6%	460	7.2%
3206	Albert Park/Middle Park	4,908	31	0.6%	170	3.5%
3207	Garden City/Port Melbourne	8,666	52	0.6%	399	4.6%
3211	LITTLE RIVER	223	9	4.0%	15	6.7%
3752	EPPING / MILL PARK / SOUTH MORANG	8,481	61	0.7%	173	2.0%
3754	DOREEN / MERNDA	17,108	120	0.7%	544	3.2%
3756	WALLAN	4,903	82	1.7%	253	5.2%
3757	WHITTLESEA	2,070	50	2.4%	93	4.5%
3765	MONTROSE	2,322	14	0.6%	43	1.9%
3770	COLDSTREAM / GRUYERE / YERING	751	25	3.3%	36	4.8%
3775	CHRISTMAS HILLS / DIXONS CREEK / TARRAWARRA / YARRA GLEN	1,054	34	3.2%	58	5.5%
3777	BADGER CREEK / CHUM CREEK / HEALESVILLE / HEALSEVILLE	4,050	146	3.6%	275	6.8%
3782	AVONSLEIGH / CLEMATIS / EMERALD / MACCLESFIELD	2,575	19	0.7%	79	3.1%
3783	Gembrook	633	10	0.0%	39	7.4%
3788	OLINDA	611	18	2.9%	45	7.4%
3793	MONBULK	1,112	21	1.9%	39	3.5%
3795	SILVAN	237	10	4.2%	19	8.0%
3796	MOUNT EVELYN / MT EVENLYN	3,410	42	1.2%	104	3.0%
3797	YARRA JUNCTION	1,056	43	4.1%	102	9.7%
3799	EAST WARBURTON / MCMAHONS CREEK / MILLGROVE / REEFTON / WARBURTON / WESBURN	2,554	80	3.1%	245	9.6%

Postcode	Suburb(s)	Total	OL/day	Ratio	<=50L/day	Ratio
3802	Endeavour Hills	8,497	30	0.4%	121	1.4%
3803	Hallam	3,731	16	0.4%	45	1.2%
3804	Narre Warren East/Narre Warren North	2,541	17	0.7%	36	1.4%
3805	Narre Warren/Narre Warren South - Berwick	18,454	54	0.3%	229	1.2%
3806	Berwick/Harkaway	16,776	72	0.4%	237	1.4%
3807	Beaconsfield/Guys Hill	2,337	11	0.5%	35	1.5%
3808	Beaconsfield Upper/Dewhurst	698	7	1.0%	21	3.0%
3809	Officer/Officer South - Pakenham	5,610	35	0.6%	285	5.1%
3810	Rythdale/Pakenham Upper/Pakenham South/Pakenham	17,944	88	0.5%	404	2.3%
3812	Nar Nar Goon North/Nar Nar Goon/Maryknoll	329	7	2.1%	16	4.9%
3813	Tynong/Tynong North	164	2	1.2%	8	4.9%
3814	Garfield North/Garfield/Cora Lynn/Vervale	674	9	1.3%	31	4.6%
3815	Tonimbuk/Iona/Bunyip North/Bunyip	929	17	1.8%	48	5.2%
3816	Modella/Longwarry North/Longwarry/Laber-touche	732	14	1.9%	47	6.4%
3910	Langwarrin	8,590	35	0.4%	119	1.4%
3911	Langwarrin South/Baxter	1,256	16	1.3%	39	3.1%
3912	Somerville/Pearcedale	5,294	38	0.7%	89	1.7%
3913	Tyabb	1,172	7	0.6%	18	1.5%
3915	Hastings/Tuerong	3,957	22	0.6%	106	2.7%
3916	Shoreham/Point Leo/Merricks	566	7	1.2%	55	9.7%
3918	Bittern	1,343	10	0.7%	39	2.9%
3919	Crib Point	1,427	11	0.8%	37	2.6%
3926	Balnarring/Merricks North/Balnarring Beach/Merricks Beach	1,362	8	0.6%	87	6.4%
3927	Somers	1,158	8	0.7%	84	7.3%
3929	Flinders	802	16	2.0%	74	9.2%
3930	Mount Eliza/Kunyang	6,771	38	0.6%	109	1.6%
3931	Mornington	11,405	57	0.5%	334	2.9%
3933	Moorooduc	41	1	2.4%	1	2.4%
3934	Mount Martha	8,201	61	0.7%	247	3.0%
3936	Safety Beach/Dromana/Arthurs Seat	7,919	133	1.7%	905	11.4%
3938	McCrae	2,122	38	1.8%	187	8.8%
3939	Boneo/Fingal/Cape Schanck/Rosebud/Rosebud Plaza - Rye	8,925	102	1.1%	805	9.0%
3940	Rosebud West	2,990	41	1.4%	372	12.4%
3941	Rye/St Andrews Beach/Tootgarook	11,862	176	1.5%	1,638	13.8%
3942	Blairstown	3,503	41	1.2%	425	12.1%
3943	Sorrento	3,135	48	1.5%	327	10.4%
3944	Portsea	1,448	12	0.8%	66	4.6%
3975	Lynbrook/Lyndhurst - Hampton Park	4,490	15	0.3%	82	1.8%
3976	Hampton Park	8,390	31	0.4%	113	1.3%

Postcode	Suburb(s)	Total	0L/day	Ratio	<=50L/day	Ratio
3977	Cannons Creek/Bontanic Ridge/Cranbourne East/Cranbourne/Cranbourne/Cranbourne South/Cranbourne North/Junction Village/Sandhurst/Cranbourne West/Devon Meadows/Skye	34,992	164	0.5%	791	2.3%
3978	Clyde/Clyde North/Cardinia - (Cranbourne South)	9,991	78	0.8%	680	6.8%
3980	Blind Bight/Tooradin/Warneet	1,170	12	1.0%	46	3.9%
3981	Koo Wee Rup North/Koo Wee Rup/Heath Hill/Dalmore/Yannathan/Bayles/Catani	1,228	14	1.1%	39	3.2%
3984	Tenby Point/The Gurdies/Corinella/Caldermeade/Adams Estate/Lang Lang/Jam Jerrup/Grantville/Coronet Bay/Queensferry/Pioneer Bay/Monomeith/Lang Lang East	718	12	1.7%	42	5.8%

 Top twenty suburbs featuring residential vacancies

 Excluded holiday home regions

Appendix 2: Greater Melbourne Non Residential

Postcode	Suburb(s)	Total	OL/day	Ratio
3116	CHIRNSIDE PARK / MOOROOLBARK	417	215	51.6%
3128	BOX HILL / BOX HILL SOUTH	1,249	472	37.8%
3068	CLIFTON HILL/FITZROY NORTH	76	26	34.2%
3088	BRIAR HILL / GREENSBOROUGH / ST HELENA / WATSONIA	603	206	34.2%
3042	NIDDRIE NORTH/NIDDRIE/AIRPORT WEST/KEILOR PARK	259	81	31.3%
3938	McCrae	33	10	30.3%
3053	CARLTON/CARLTON SOUTH	123	36	29.3%
3122	HAWTHORN	1,294	374	28.9%
3170	MULGRAVE	774	217	28.0%
3047	BROADMEADOWS / DALLAS / JACANA	645	179	27.8%
3038	TAYLORS LAKES/WATERGARDENS/KEILOR DOWNS/KEILOR LODGE	349	96	27.5%
3150	GLEN WAVERLEY / WHEELERS HILL	1,083	296	27.3%
3041	STRATHMORE/STRATHMORE HEIGHTS/ESSENDON NORTH/ESSENDON FIELDS/CROSS KEYS	286	77	26.9%
3109	DONCASTER / DONCASTER EAST	546	143	26.2%
3752	EPPING / MILL PARK / SOUTH MORANG	300	78	26.0%
3043	GLADSTONE PARK / GOWANBRAE / TULLAMARINE	809	208	25.7%
3134	PARK ORCHARDS / RINGWOOD / RINGWOOD NORTH / WARRANDYTE SOUTH / WARRANWOOD	1,361	347	25.5%
3101	KEW	944	237	25.1%
3102	KEW EAST	254	63	24.8%
3131	FOREST HILL / NUNAWADING	1,027	246	24.0%
3143	Armadale/Armadale North	473	110	23.3%
3775	CHRISTMAS HILLS / DIXONS CREEK / TARRAWARRA / YARRA GLEN	135	29	21.5%
3124	CAMBERWELL	1,150	245	21.3%
3788	OLINDA	108	23	21.3%
3072	PRESTON	1,717	349	20.3%
3809	Officer/Officer South - Pakenham	153	31	20.3%
3059	GREENVALE	80	16	20.0%
3013	YARRAVILLE/YARRAVILLE WEST	1,162	232	20.0%
3123	HAWTHORN EAST	617	118	19.1%
3111	DONVALE	68	13	19.1%
3151	BURWOOD EAST	204	39	19.1%
3103	BALWYN / DEEPDENE	469	89	19.0%
3095	ELTHAM / ELTHAM NORTH / RESEARCH	659	124	18.8%
3127	MONT ALBERT / SURREY HILLS	521	98	18.8%
3084	EAGLEMONT / HEIDELBERG / ROSANNA / VIEW BANK / VIEWBANK	590	110	18.6%
3108	DONCASTER	290	54	18.6%
3756	WALLAN	163	30	18.4%
3126	CANTERBURY	265	47	17.7%
3130	BLACKBURN / BLACKBURN NORTH / BLACKBURN SOUTH	902	159	17.6%
3144	KOOYONG / MALVERN	788	138	17.5%
3066	COLLINGWOOD NORTH/COLLINGWOOD	86	15	17.4%
3149	GLEN WAVERLEY / MOUNT WAVERLEY	1,163	193	16.6%
3136	CROYDON / CROYDON HILLS / CROYDON NORTH / CROYDON SOUTH	1,105	182	16.5%
3051	HOTHAM HILL/NORTH MELBOURNE	194	31	16.0%
3026	LAVERTON NORTH	521	83	15.9%
3129	BOX HILL NORTH / MONT ALBERT NORTH	277	43	15.5%

Postcode	Suburb(s)	Total	OL/day	Ratio
3115	WONGA PARK	58	9	15.5%
3104	BALWYN NORTH	323	48	14.9%
3132	MITCHAM	688	101	14.7%
3048	COOLAROO / MEADOW HEIGHTS	308	45	14.6%
3795	SILVAN	96	14	14.6%
3944	Portsea	35	5	14.3%
3202	Heatherton	204	29	14.2%
3032	TRAVANCORE/MARIBYRNONG/HIGHPOINT CITY/ASCOT VALE	472	67	14.2%
3168	Notting Hill/Clayton	1,449	205	14.1%
3145	Darling/Central Park/Malvern East/Darling South/Wattletree Rd PO/Caulfield East	510	72	14.1%
3046	GLENROY / HADFIELD / OAK PARK	527	74	14.0%
3146	GLE IRIS / GLEN IRIS	429	60	14.0%
3031	KENSINGTON/FLEMINGTON	487	67	13.8%
3085	MACLEOD / YALLAMBIE	117	16	13.7%
3037	SYDENHAM/TAYLORS HILL/DELAHEY/HILLSIDE/CALDER PARK	395	54	13.7%
3023	RAVENHALL/BURNSIDE HEIGHTS/BURNSIDE/CAROLINE SPRINGS/CAIRN-LEA/DEER PARK NORTH/DEER PARK	691	94	13.6%
3065	FITZROY	104	14	13.5%
3138	MOOROOLBARK	254	33	13.0%
3030	WERRIBEE SOUTH/WERRIBEE/QUANDONG/POINT COOK/DERRIMUT/COCOROC	493	64	13.0%
3099	ARTHURS CREEK / COTTLES BRIDGE / HURSTBRIDGE / NUTFIELD	116	15	12.9%
3083	BUNDOORA / KINGSBURY	999	129	12.9%
3058	BRUNSWICK / COBURG / COBURG NORTH	1,881	240	12.8%
3105	BULLEEN	285	36	12.6%
3770	COLDSTREAM / GRUYERE / YERING	143	18	12.6%
3139	DON VALLEY / HODDLES CREEK / LAUNCHING PLACE / SEVILLE / SEVILLE EAST / WANDIN EAST / WANDIN NORTH / WOORI YALLOCK / YELLINGBO	430	54	12.6%
3113	NORTH WARRANDYTE / WARRANDYTE	161	20	12.4%
3975	Lynbrook/Lyndhurst - Hampton Park	210	26	12.4%
3049	ATTWOOD / WESTMEADOWS	178	22	12.4%
3056	BRUNSWICK	1,484	183	12.3%
3078	ALPHINGTON / FAIRFIELD	588	72	12.2%
3777	BADGER CREEK / CHUM CREEK / HEALESVILLE / HEALSEVILLE	320	39	12.2%
3754	DOREEN / MERNDA	274	33	12.0%
3919	Crib Point	25	3	12.0%
3054	CARLTON NORTH/PRINCES HILL	110	13	11.8%
3057	BRUNSWICK / BRUNSWICK EAST	601	71	11.8%
3079	BELLFIELD (GREATER MELBOURNE) / EAGLEMONT / IVANHOE / IVANHOE EAST	502	59	11.8%
3033	KEILOR EAST	469	55	11.7%
3039	MOONEE PONDS	342	39	11.4%
3067	ABBOTSFORD	79	9	11.4%
3025	ALTONA EAST/ALTONA GATE/ALTONA NORTH	524	59	11.3%
3052	MELBOURNE UNIVERSITY/PARKVILLE	181	20	11.0%
3024	MAMBOURIN/MOUNT COTTRELL/WYNDHAM VALE	657	72	11.0%
3135	HEATHMONT / RINGWOOD EAST	329	36	10.9%

Postcode	Suburb(s)	Total	OL/day	Ratio
3757	WHITTLESEA	174	19	10.9%
3147	ASHBURTON / ASHWOOD	381	41	10.8%
3133	VERMONT / VERMONT SOUTH	382	41	10.7%
3804	Narre Warren East/Narre Warren North	56	6	10.7%
3064	CRAIGIEBURN / DONNYBROOK / KALKALLO / MICKLEHAM / ROXBURGH PARK	719	77	10.7%
3981	Koo Wee Rup North/Koo Wee Rup/Heath Hill/Dalmore/Yannathan/Bayles/Catani	122	13	10.7%
3076	BUNDOORA / EPPING	1,105	117	10.6%
3044	PASCOE VALE / PASCOE VALE SOUTH	420	44	10.5%
3939	Boneo/Fingal/Cape Schanck/Rosebud/Rosebud Plaza - Rye	502	52	10.4%
3913	Tyabb	242	25	10.3%
3006	Southbank/South Wharf	292	30	10.3%
3106	TEMPLESTOWE	176	18	10.2%
3916	Shoreham/Point Leo/Merricks	59	6	10.2%
3980	Blind Bight/Tooradin/Warneet	89	9	10.1%
3799	EAST WARBURTON / MCMAHONS CREEK / MILLGROVE / REEFTON / WARBURTON / WESBURN	150	15	10.0%
3797	YARRA JUNCTION	123	12	9.8%
3073	RESERVOIR	1,059	103	9.7%
3765	MONTROSE	144	14	9.7%
3197	Carrum/Patterson Lakes	124	12	9.7%
3805	Narre Warren/Narre Warren South - Berwick	527	51	9.7%
3008	Docklands	1,484	143	9.6%
3189	Wishart/Moorabbin/Moorabbin East - Highett	1,843	176	9.5%
3125	BURWOOD / CAMBERWELL	495	47	9.5%
3060	FAWKNER	306	29	9.5%
3154	The Basin	32	3	9.4%
3978	Clyde/Clyde North/Cardinia - (Cranbourne South)	118	11	9.3%
3000	MELBOURNE (CBD)	2,107	196	9.3%
3081	BELLFIELD (GREATER MELBOURNE) / HEIDELBERG HEIGHTS / HEIDELBERG WEST	947	88	9.3%
3815	Tonimbuk/Iona/Bunyip North/Bunyip	110	10	9.1%
3070	NORTHCOTE	819	74	9.0%
3036	KEILOR NORTH/KEILOR	412	37	9.0%
3094	MONTMORENCY	125	11	8.8%
3140	LILYDALE / MOUNT EVELYN	823	72	8.7%
3943	Sorrento	127	11	8.7%
3071	THORNBURY	616	53	8.6%
3184	Elwood/Brighton Rd	186	16	8.6%
3810	Rythdale/Pakenham Upper/Pakenham South/Pakenham	1,349	116	8.6%
3915	Hastings/Tuerong	495	42	8.5%
3016	WILLIAMSTOWN NORTH/WILLIAMSTOWN	910	76	8.4%
3190	Highett	385	32	8.3%
3018	ALTONA /SEAHOLME	904	74	8.2%
3011	SEDDON /SEDDON WEST/FOOTSCRAY	1,400	114	8.1%
3181	Windsor/Prahran East/Prahran	1,010	82	8.1%
3816	Modella/Longwarry North/Longwarry/Labertouche	62	5	8.1%

Postcode	Suburb(s)	Total	OL/day	Ratio
3148	ASHWOOD / CHADSTONE	100	8	8.0%
3172	Dingley Village/Springvale South	328	26	7.9%
3984	Tenby Point/The Gurdies/Corinella/Caldermeade/Adams Estate/Lang Lang/Jam Jerrup/Grantville/Coronet Bay/Queensferry/Pioneer Bay/Monomeith/Lang Lang East	114	9	7.9%
3141	South Yarra	963	76	7.9%
3977	Cannons Creek/Bontanic Ridge/Cranbourne East/Cranbourne/Cranbourne/Cranbourne South/Cranbourne North/Junction Village/Sandhurst/Cranbourne West/Devon Meadows/Skye	1,128	89	7.9%
3028	ALTONA MEADOWS/LAVERTON/SEABROOK	496	39	7.9%
3020	SUNSHINE/SUNSHINE WEST/SUNSHINE NORTH/GLENGALA/ALBION	801	62	7.7%
3926	Balnarring/Merricks North/Balnarring Beach/Merricks Beach	104	8	7.7%
3121	RICHMOND/RICHMOND NORTH/RICHMOND EAST/RICHMOND SOUTH/BURNLEY/BURNLEY NORTH/CREMORNE	53	4	7.5%
3191	Sandringham	255	19	7.5%
3204	Bentleigh/McKinnon/Patterson/Ormond	720	53	7.4%
3813	Tynong/Tynong North	82	6	7.3%
3910	Langwarrin	137	10	7.3%
3782	AVONSLEIGH / CLEMATIS / EMERALD / MACCLESFIELD	195	14	7.2%
3918	Bittern	42	3	7.1%
3194	Morrabbin Airport - Mentone	576	41	7.1%
3166	Oakleigh/Oakleigh East/Hughesdale/Huntingdale	1,196	85	7.1%
3169	Clarinda/Clayton South	753	53	7.0%
3082	MILL PARK	270	19	7.0%
3075	LALOR	274	19	6.9%
3002	EAST MELBOURNE	1,890	127	6.7%
3796	MOUNT EVELYN / MT EVENLYN	195	13	6.7%
3012	TOTTENHAM/WEST FOOTSCRAY/KINGSVILLE/MAIDSTONE/BROOKLYN	1,278	85	6.7%
3182	St Kilda/St Kilda West/St Kilda South	860	57	6.6%
3201	Carrum Downs	1,638	107	6.5%
3188	Hampton East/Hampton North/Hampton	401	26	6.5%
3137	KILSYTH / KILSYTH SOUTH	666	43	6.5%
3107	LOWER TEMPLESTOWE / TEMPLESTOWE LOWER	155	10	6.5%
3089	DIAMOND CREEK	203	13	6.4%
3021	KEALBA/ALBANVALE/ST ALBANS/KINGS PARK	756	48	6.3%
3003	WEST MELBOURNE	1,737	110	6.3%
3199	Frankston/Frankston East/Frankston Heights/Frankston South/Karingal/Karingal Centre/	999	63	6.3%
3179	Scoresby	286	18	6.3%
3055	BRUNSWICK / BRUNSWICK WEST	239	15	6.3%
3192	Cheltenham East/Southland Centre/Cheltenham - Highett	1,473	91	6.2%
3806	Berwick/Harkaway	535	32	6.0%
3185	Gardenvale/Elsternwick/Ripponlea	485	29	6.0%
3812	Nar Nar Goon North/Nar Nar Goon/Maryknoll	134	8	6.0%
3196	Edithvale/Chelsea Heights/Chelsea/Bonbeach	387	23	5.9%
3074	THOMASTOWN	2,288	135	5.9%
3034	AVONDALE HEIGHTS	460	27	5.9%
3162	Caulfield/Hopetoun Gardens/Caulfield South - Glen Hunly	342	20	5.8%

Postcode	Suburb(s)	Total	OL/day	Ratio
3931	Mornington	1,233	71	5.8%
3040	ESSENDON/ESSENDON WEST/ABERFELDIE	296	17	5.7%
3167	Oakleigh South	418	24	5.7%
3029	HOPPERS CROSSING/TARNEIT/TRUGANINA	494	28	5.7%
3161	Caulfield North/Caulfield Junction	230	13	5.7%
3940	Rosebud West	180	10	5.6%
3174	Noble Park/Noble Park North	560	31	5.5%
3936	Safety Beach/Dromana/Arthurs Seat	399	22	5.5%
3793	MONBULK	164	9	5.5%
3163	Carnegie/Booran Rd PO/Glen Huntly/Murrumbeena	586	32	5.5%
3929	Flinders	92	5	5.4%
3173	Keysborough	889	48	5.4%
3941	Rye/St Andrews Beach/Tootgarook	241	13	5.4%
3171	Sandown Village/Springvale	1,243	67	5.4%
3156	Ferntree Gully/Lysterfield	824	44	5.3%
3976	Hampton Park	150	8	5.3%
3198	Seaford	1,020	54	5.3%
3175	Bangholme/Dandenong/Dandenong East/Dandenong North/Dandenong South/Dunearn	5,465	288	5.3%
3183	St Kilda East/Balaclava	287	15	5.2%
3180	Knoxfield	557	29	5.2%
3027	WILLIAMS LANDING	505	26	5.1%
3061	CAMPBELLFIELD	2,661	137	5.1%
3186	Brighton/Were St PO/Brighton North/Dendy - Brighton East	721	35	4.9%
3814	Garfield North/Garfield/Cora Lynn/Vervale	104	5	4.8%
3019	ROBINSON/BRAYBROOK	864	41	4.7%
3206	Albert Park/Middle Park	297	14	4.7%
3093	LOWER PLENTY / PLENTY LOWER	65	3	4.6%
3160	Tecoma/Belgrave South/Belgrave Heights/Belgrave	195	9	4.6%
3022	DEER PARK EAST/ARDEER	747	34	4.6%
3015	SPOTSWOOD/NEWPORT/SOUTH KINGSVILLE	920	41	4.5%
3153	Bayswater/Bayswater North	2,333	103	4.4%
3912	Somerville/Pearcedale	603	26	4.3%
3165	Bentleigh East	334	14	4.2%
3152	Wantirna South/Knox City Centre/Studfield/Wantirna	440	18	4.1%
3930	Mount Eliza/Kunyang	221	9	4.1%
3207	Garden City/Port Melbourne	1,288	52	4.0%
3803	Hallam	1,102	44	4.0%
3802	Endeavour Hills	78	3	3.8%
3205	South Melbourne	1,284	49	3.8%
3178	Rowville	551	21	3.8%
3195	Aspendale/Waterways/Parkdale/Mordialloc/Braeside/Aspedale Gardens - Mentone	2,065	78	3.8%
3087	WATSONIA / WATSONIA NORTH	133	5	3.8%
3927	Somers	28	1	3.6%
3934	Mount Martha	113	4	3.5%
3807	Beaconsfield/Guys Hill	170	6	3.5%
3911	Langwarrin South/Baxter	114	4	3.5%

Postcode	Suburb(s)	Total	OL/day	Ratio
3155	Boronia	833	28	3.4%
3158	Upwey	60	2	3.3%
3783	Gembrook	61	2	3.3%
3193	Cromer/Black Rock North/Black Rock/Beaumaris	307	10	3.3%
3200	Frankston North/Pines Forest - Frankston	31	1	3.2%
3004	St Kilda Rd Business District (Melbourne)	486	15	3.1%
3177	Doveton/Eumemmerring	199	6	3.0%
3187	North Road/Brighton East	100	3	3.0%
3808	Beaconsfield Upper/Dewhurst	36	1	2.8%
3942	Blairstown	36	1	2.8%
3142	Hawksburn/Toorak	197	5	2.5%
3159	Menzies Creek/Selby	1	-	0.0%
3933	Moorooduc	31	-	Ratio

