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SPECULATIVE VACANCIES 11

EMPTY HOMES IN MELBOURNE 2019-2023

A window onto the economics of waiting and the hidden barriers to housing supply

prosper australia

Prosper Australia acknowledges the Traditional Custodians of the country throughout Australia and we pay our respect to their elders past and present. We honour their unbroken connection to country, and acknowledge that sovereignty was never ceded.

About Prosper

Prosper Australia is an economic research organisation founded in the Georgist tradition of political philosophy. Our work centres on the monopolistic nature of land and how it shapes our economy and society.

Our vision is a just and equitable society, created by ensuring everyone who benefits from our land, natural resources and natural monopolies pays a fair rent for their use.

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CONTENTS

EXECUTIVE SUMMARY

Prosper Australia's 11th *Speculative Vacancy* report examines the extent of unoccupied housing in Melbourne and what it reveals about land and housing markets.

Prosper is a research organisation focused on the monopolistic nature of land and how it shapes our economy and society. Our *Speculative Vacancy* series aims to keep the waste and inequity of empty homes high on the policy agenda.

We base our counts of empty and under-used dwellings for the years 2019 to 2023 on water usage data, averaged over the calendar year.

In 2023, 27,408 dwellings (1.5% of all homes) were left totally empty over the year, and a further 70,453 (3.7% of all homes) were barely used.

Overall, 97,861 dwellings (5.2% of all homes) were vacant – equal to one in 20 homes across the city.

Vacancy rates surged during the pandemic, jumping more than 50% from previous levels. Between 2019 and 2021, an additional 35,000 homes, or 1.8% of the housing stock, became vacant. For every five new homes built over these years, two additional homes were left idle.

Empty homes are widely dispersed across the city, but the fastest growth has been in the City of Melbourne, where 10,000 homes are now vacant – equivalent to half the new builds in this area over the last five years.

That many renters cannot afford to outbid the convenience value of an empty property speaks of deep inequality, the root cause of unaffordable housing.

But vacant homes also illustrate how housing supply is at the mercy of speculative incentives. Low interest rates and taxes that favour capital gains over rental income make it rational for some owners to choose the flexibility of an empty home over the cash it could yield.

The pace of new housing construction results from this same economic trade-off. The report explains how land banking can be more profitable than exercising a development option, and why the market supplies new housing well within regulatory limits as a result.

Land banking and vacant housing are barriers to housing supply that need more recognition in housing policy debates.

Taxing vacant homes or vacant land, as the Victorian Government proposes, can push more properties into use, but also carries risks. Broad-based land taxation would accelerate land development more efficiently, while also raising revenue. Quick wins such as shifting council rating bases to land value can help in moving towards this goal.

SECTION 1
INTRODUCTION

Thirty-thousand people in Victoria have no home. We know that because we count them. But how many homes have no people? That number is hard to find, and is often seen as irrelevant to housing affordability.

Prosper Australia aims to change that. Since 2007, we have measured vacant housing through our *Speculative Vacancy* reports, revealing how land and housing markets truly operate and keeping the spotlight on this hidden issue.

Prosper is a think-tank founded in the Georgist tradition of political philosophy, named after the 19th century economist Henry George. Our research centres on the monopolistic nature of land and how it shapes our economy and society.

This report, the eleventh in the series, examines unoccupied housing in Melbourne from 2019 to 2023. It covers a unique period marked by a sudden and substantial surplus of housing, followed by a rapid tightening after COVID restrictions eased.[1]

We label empty homes as 'speculative' vacancies because, regardless of the reasons for leaving them empty, the outcome is the same: an asset that provides social value only by housing people remains unused, squandering its potential. Holding an asset for capital gain rather than yield is called 'speculation', so we extend that term to housing that yields no housing service.

Why does vacancy matter?

Leaving properties empty is a private decision, reflecting the market allocating resources. What is the public interest?

We see three reasons to care.

First, it is wasteful for homes to sit idle while housing remains scarce and expensive. Whether this is efficient in the economic sense says nothing about whether it is equitable. Nudging even a portion of these homes into use could make housing cheaper for those in need. With activists such as 'Purple Pingers' elevating vacant houses in the public consciousness, the need for systematic attention to this issue is growing.

Second, it shows us something important about housing markets – that housing supply is at the mercy of speculative incentives. Empty dwellings are just the tip of the iceberg. Speculation plays a much larger role in the practice of land banking, where land is parcelled out slowly to maximise future profits. There is clear evidence that developers strategically delay financially feasible developments, and set prices for land and new dwellings to drip-feed property to buyers. To understand housing supply, we have to understand this phenomenon, because new housing supply can only begin when speculation ends.

Finally, vacancy and land banking underscore the unique role of land. In a competitive market, could a firm leave productive assets idle? Speculation happens because land is a monopoly. Tax and housing policy must acknowledge this reality. Policy design must begin with the recognition that land is limited, that it rewards its owners regardless of their effort, and that it captures the benefits of social progress in rising rents and prices.

Our report starts by outlining our data methodology in Section 2. Section 3 presents the results and discusses vacancy trends during the pandemic. Section 4 explores the reasons for vacant property, and section 5 discusses how speculation matters for housing supply. Section 6 considers tax policy solutions, and Section 7 concludes.

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1 The effect of this shock on rental prices was the subject of our May 2023 report Pandemic rental dynamics: an (un)natural experiment in excess supply.

SECTION 2
HOW WE COUNT VACANT HOMES

We measure vacancy rates across metropolitan Melbourne using data from Melbourne's three water retailers – Yarra Valley Water, South East Water and Greater Western Water.

The data comprises postcode-level counts of dwellings with active water connections (i.e. billing) covering 233 postcodes and 93% of residential properties across the 31 council areas making up metropolitan Melbourne. We exclude 33 postcodes corresponding to holiday home areas, leaving 200 postcodes with 1.9 million dwellings.[2]

Our data exists because almost all dwelling units in Melbourne are individually metered, unlike in other capital cities. In principle, electricity metering data could be used similarly, as demonstrated by the ABS in an experimental publication.[3] By contrast, Census counts of unoccupied dwellings are a poor measure of vacancy, since they include ordinarily-occupied homes that are temporarily unoccupied due to the occupant being away or the dwelling being between tenants on Census night.

We use two thresholds of water use to count vacant homes:

- Empty homes: 0 litres per day (LpD) used over the calendar year; and
- Under-used homes: between 0 and 50 LpD used over the calendar year.

The 50 LpD measure is a reasonable proxy for under-used homes. It also captures empty homes recording some water use due to leaks or gardening. Any threshold choice results in false positives (inclusion of mostly-occupied homes with low water use) and false negatives (exclusion of under-used or empty homes with high use, e.g. due to leaks).

Fifty LpD is relatively conservative, given the average water use for a single-person household in Melbourne of around 200 LpD.[4] An occupied dwelling would need to use less than one quarter of this to be counted, which will be rare, while dwellings with average water use occupied for less than one-quarter of the year, a reasonable definition of under-use, will be captured.

The long-term vacancy rates we report are not comparable to the rental vacancy rates reported by real estate analysts such as SQM and REIV, which are calculated as the share of the rental stock under advertisement.

Rental vacancy rates are a barometer for short-term supply and demand pressures in the rental market but are unrelated to long-term vacancy.

They tell us about rental market adjustments, not overall shortages or surpluses. Rental vacancy reflects supply-demand matching and price discovery in the rental market, akin to workers seeking jobs in the labour market, while long-term vacancy is akin to workers that have left the labour force. Those workers aren't counted in job search statistics, and neither are long-term vacancies counted in the rental vacancy rate.[5]

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2 Most of the 85,000 removed from the sample are from the Mornington Peninsula LGA. We remove 55% of Mornington Peninsula dwellings, 28% from Yarra Ranges, 20% from Cardinia, and smaller proportions from Whittlesea, Nillumbik, Casey and Wyndham.

3 ABS (2023), Administrative data snapshot of housing, 29 August.

4 Roberts (2017), 2016 Appliance Stock and Usage Pattern Survey, Yarra Valley Water.

5 Hutchens (2024), What's the link between low rental vacancy rates, housing crises, and unoccupied home taxes?, ABC, 19 May; Murray (2022), Rental vacancy is a symptom of price adjustment, Fresh Economic Thinking, 30 Oct.

SECTION 3

MELBOURNE'S VACANT DWELLINGS

Vacancy in 2023

Our study area of metropolitan Melbourne excluding holiday areas has 1.9 million dwellings with active water connections.

In 2023, 27,408 dwellings (1.5% of the total) recorded zero water use. An additional 70,453 dwellings (3.7% of the total) used less than 50 LpD, or one quarter of the single-person household average (Table 1).

In total 97,861 dwellings sat empty or under-used over the entire year: 5.2% of all dwellings in metropolitan Melbourne, or one in 20 homes.[6]

These vacant dwellings represent a huge pool of valuable resources not being used productively. At the average household size they could accommodate over 250,000 people.

To illustrate the scale of Melbourne's empty housing stock, consider that:

- There are 48,620 applicant households on the Victorian social housing waitlist. Melbourne's vacant homes could house everyone on the waitlist, twice over.
- There are 540,000 rental properties in Melbourne. If vacant homes were all put out for rent, the rental stock would be almost 20% larger.
- Each year, around 37,000 new homes are built. The number of vacant homes equals more than two and a half years of new construction.[7]

Table 1: Long-term vacancies by year, metropolitan Melbourne excluding holiday home areas

YEAR	DWELLINGS WITH ACTIVE WATER CONNECTIONS	EMPTY HOMES (0 LpD)		UNDER-USED HOMES (0-50 LpD)		TOTAL VACANT HOMES (<50 LpD)	
		NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
2018	1,695,811	24,816	1.5%	45,433	2.7%	70,249	4.1%
2019	1,738,860	22,066	1.3%	46,217	2.7%	68,283	3.9%
2020	1,778,570	29,005	1.6%	58,886	3.3%	87,891	4.9%
2021	1,819,676	35,141	1.9%	68,290	3.8%	103,431	5.7%
2022	1,848,442	32,434	1.8%	72,042	3.9%	104,476	5.7%
2023	1,882,518	27,408	1.5%	70,453	3.7%	97,861	5.2%

Source: Prosper calculations based on YVW, SEW, and GWW data.

6 The 0LpD rate can be roughly benchmarked against the ABS (2023) Administrative data snapshot of housing (Table 17). Of the 1,725,632 dwellings with electricity data in the ABS sample, collected in mid-2021, 24,198 dwellings or 1.4% of the total recorded zero use, which is lower than the 1.9% in the water sample. Because vacant homes may record positive water use and/or positive power use for different reasons direct comparison is difficult.

7 Sources: Homes Victoria, Applications on the Victorian Housing Register (VHR), accessed 21 May 2024; SQM, Residential Vacancy Rates, accessed 21 May 2024; sample data from water utilities.

Vacancy over the pandemic

Speculative vacancies shot up during the pandemic, jumping by 51% between 2019 and 2021 (Figure 1). An additional 35,000 homes – 1.8% of the housing stock – were left unoccupied during this time. Over those two years a net 80,000 dwellings were added to the stock by new construction, meaning that for every five new homes built, two were in effect left idle due to rising vacancy rates.

This rise in empty dwellings absorbed about one-quarter of the enormous excess supply of housing created by ongoing construction amid the massive population outflow of 2020 and 2021, as discussed in our 2023 *Pandemic Rental Dynamics* report.[8]

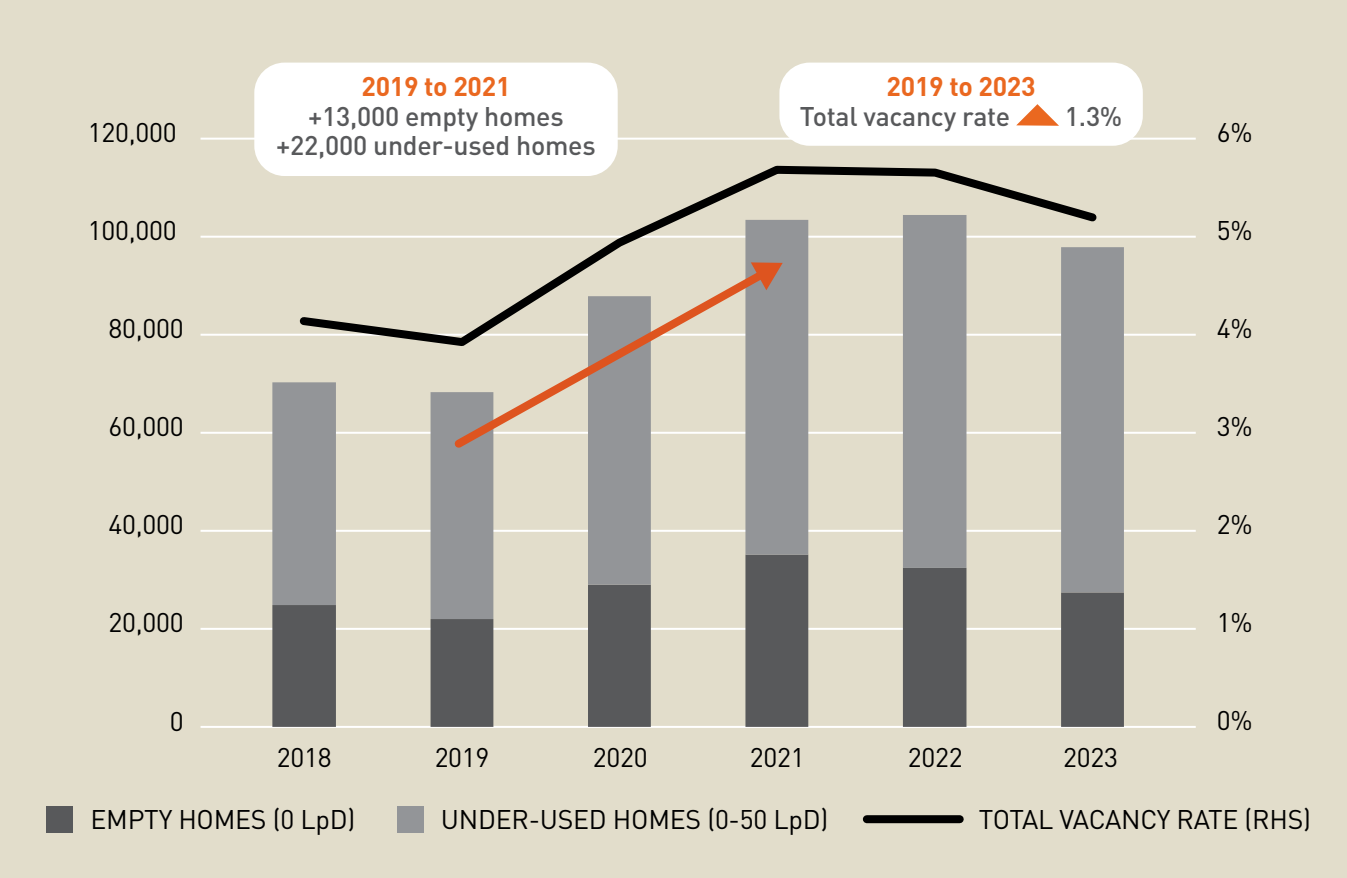
Melbourne's excess supply shock saw average rents fall by 12% to mid-2021 before recovering to pre-pandemic levels by mid-2022.

Had these 35,000 vacant properties remained on the market that decline in rents would have been even larger and lasted longer.

Surprisingly, despite the easing of COVID restrictions in early 2022 and the 20% growth in rental prices over that year, the number of empty and under-used homes in 2022 actually increased compared to 2021.

Only in 2023, with migration at record levels and the rental crisis in full swing, did the number of empty homes begin returning to pre-COVID levels. But the vacancy rate still remains elevated: rental prices are 32% higher than in 2019, yet the number of empty homes remains 25% higher than in 2019, and the number of empty or under-used homes remains 43% higher (Table 2).[9]

Figure 1: Empty and under-used housing measured by water data, calendar year



Source: Prosper calculations based on YVW, SEW, and GWW data.

8 Helm (2023), Pandemic rental dynamics: an (un)natural experiment in excess supply, May.
9 Rental prices: SQM, Melbourne weekly rents, Dec-2023 vs Dec-2019, accessed 21 May 2024,.

Table 2: Increase in speculative vacancies since 2019

YEAR	DWELLINGS	INCREASE			PERCENTAGE INCREASE			INCREASE IN VACANCY RATE		
		EMPTY	UNDER-USED	TOTAL	EMPTY	UNDER-USED	TOTAL	EMPTY	UNDER-USED	TOTAL
		0LpD	0-50LpD	<50LpD	0LpD	0-50LpD	<50LpD	0LpD	0-50LpD	<50LpD
2020	39,710	6,939	12,669	19,608	31%	27%	29%	0.4%	0.7%	1.0%
2021	80,816	13,075	22,073	35,148	59%	48%	51%	0.7%	1.1%	1.8%
2022	109,582	10,368	25,825	36,193	47%	56%	53%	0.5%	1.2%	1.7%
2023	143,658	5,342	24,236	29,578	24%	52%	43%	0.2%	1.1%	1.3%

Source: Prosper calculations based on YVW, SEW, and GWW data.

Where are Melbourne's empty homes?

Melbourne's middle-ring suburbs have historically had the highest vacancy rates. In Prosper's last report, the top five postcodes by zero-use vacancy rate in calendar year 2019 covered the suburbs of Burwood, Box Hill, Malvern, Hawthorn and Glen Waverley.

While this remains the case in 2023, long-term vacancy is becoming less concentrated in the middle ring, with new pockets of vacant properties appearing in central and outer Melbourne.

Looking at local government areas (LGAs), the five areas with the highest vacancy rates in 2019 – Whitehorse, Darebin, Boroondara, Monash and Moreland, all located in the middle ring – all saw either a reduction or no change in zero-use vacancy rate over the four years to 2023. The LGAs with the highest growth in zero-use vacancies, on the other hand, were Melbourne, Wyndham, Casey, Port Phillip, and Maribyrnong, the first four of these being located in central or outer Melbourne.

As the overall metropolitan vacancy rate increases it seems vacancy is becoming more widely dispersed across the city.[10]

In 2023, Whitehorse LGA had the highest zero-use vacancy rate at 2.8%, and the City of Melbourne had the highest zero plus low-use vacancy rate at 10.6% (Table 4 and Figure 2). Both LGAs recorded over 2,000 dwellings with zero water use in 2023.

In recent years the City of Melbourne has seen by far the most significant growth in the vacancy rate and number of vacant properties (Table 6 and Figure 3).

The number of empty dwellings in the City of Melbourne almost tripled from 2019 to 2023, from about 800 to about 2,200. Including dwellings using less than 50 LpD, the central city saw a total of 10,000 dwellings empty or underused in 2023 – a number equivalent to half of the dwellings added to the housing stock in this area by construction over the past five years.

Vacancy rates over the pandemic unsurprisingly rose most in areas hit by the loss of foreign students and workers. Postcode 3000 (Melbourne) had over five times as many empty homes in 2021 as in 2019, and postcodes 3006 (South Wharf and Southbank) and 3053 (Carlton) had four times as many (Table 7). Elsewhere, Craigieburn and nearby new suburbs saw a significant increase, possibly reflecting greenfield developers 'drip-feeding' new homes to market to maintain prices, as documented in our 2022 *Staged Releases* report.[11]

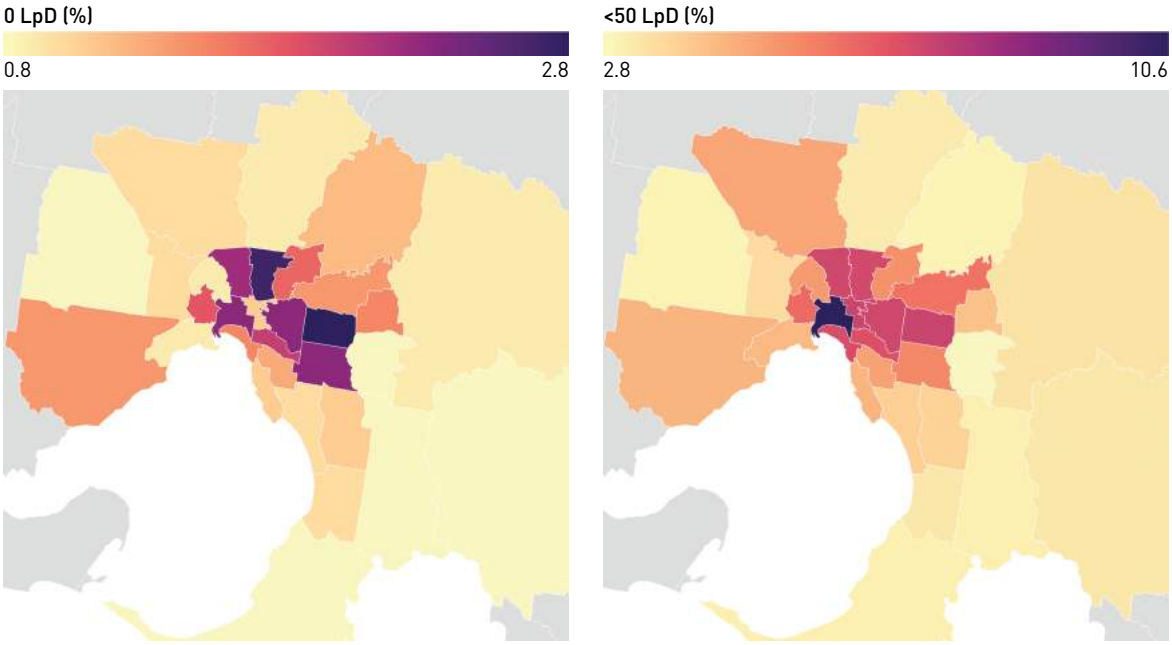
[10] The Gini coefficient, a measure of inequality, bears this out. For the distribution of empty homes it fell between 2019 and 2023 by 8% on a postcode basis (from 0.53 to 0.49) and by 16% on an LGA basis (from 0.44 to 0.37). Gini coefficients for empty homes plus under-used homes also fell.

[11] Prosper (2022), Staged Releases: Peering Behind the Land Supply Curtain, July.

In twelve LGAs, the growth in empty homes was equivalent to a quarter or more of all new builds completed during that time. In Port Phillip and Stonnington, one in three new homes built was effectively left empty due to the rising vacancy rate (Table 8). As we focus on new supply to expand the pool of housing, it seems we also need to plug the leaks.[12]

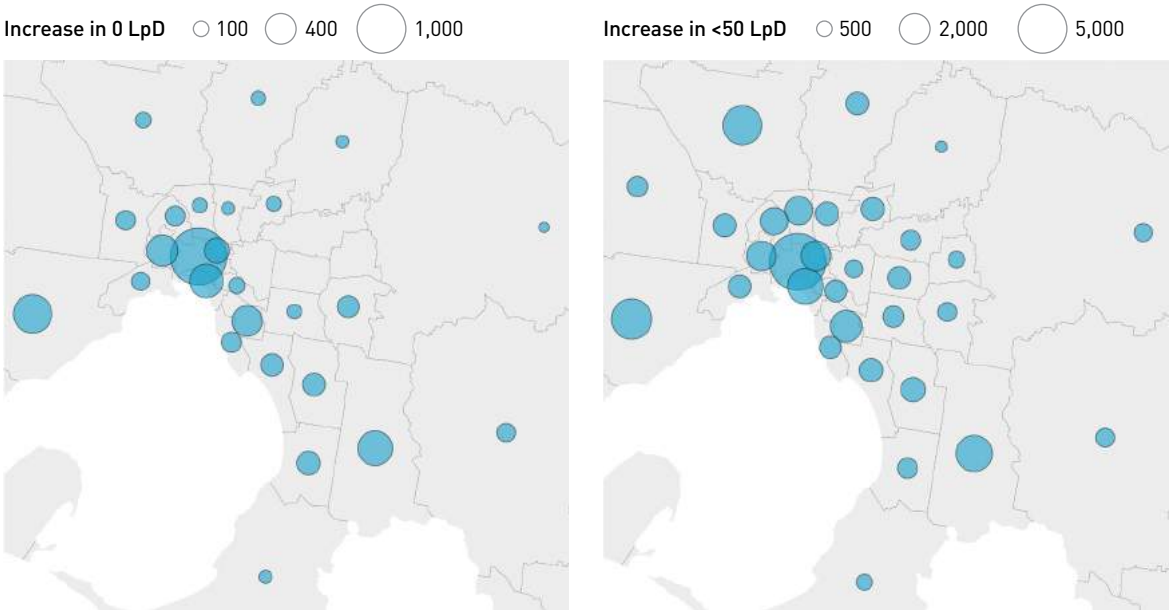
While the pandemic growth in vacancy was most acute in central Melbourne, it was visible across the entire city, including in outer-urban areas which grew more attractive with the rise of remote work. All LGAs, bar Mornington Peninsula, saw their vacancy rates increase by about 20% or more.

Figure 2: Low and zero-use vacancy rates by LGA, 2023



Source: Prosper calculations based on YVW, SEW, and GWW data.

Figure 3: Increase in low and zero-use vacancy by LGA, 2019-2023



Source: Prosper calculations based on YVW, SEW, and GWW data. Negative changes not shown.

12 Leakage to short-term rental is a separate issue to address, one likely not captured in our figures: see Grounded (2024), Airbnb: from a housing problem to solution, June.

Vacancy hotspots: 2023

Table 3: Top 10 postcodes ranked by low and zero-use vacancy rate, 2023

POSTCODE	SUBURBS	DWELLINGS	0LpD	<50LpD	0LpD RATE	<50LpD RATE
3057	Brunswick East	8,020	199	1,015	2.5%	12.7%
3000	Melbourne	32,986	1,248	4,098	3.8%	12.4%
3205	South Melbourne	7,279	227	879	3.1%	12.1%
3067	Abbotsford	5,441	92	609	1.7%	11.2%
3006	South Wharf, Southbank	18,380	508	2,054	2.8%	11.2%
3128	Box Hill, Houston, Wattle Park	12,531	465	1,385	3.7%	11.1%
3125	Bennettswood, Burwood, Surrey Hills South	6,939	404	761	5.8%	11.0%
3004	Melbourne, St Kilda Road	8,171	141	872	1.7%	10.7%
3053	Carlton	8,935	87	948	1.0%	10.6%
3008	Docklands	9,305	82	967	0.9%	10.4%
METROPOLITAN MELBOURNE TOTAL		**1,882,518**	**27,408**	**97,861**	**1.5%**	**5.2%**

Table 4: Melbourne LGAs ranked by low and zero-use vacancy rate, 2023

LOCAL GOVERNMENT AREA (LGA)	DWELLINGS	0LpD	<50LpD	0LpD%	<50LpD%	0LpD (%TOTAL)	<50LpD (%TOTAL)
Melbourne	94,280	2,153	9,990	2.3%	10.6%	7.9%	10.2%
Whitehorse	79,505	2,187	5,833	2.8%	7.3%	8.0%	6.0%
Yarra	41,849	475	3,059	1.1%	7.3%	1.7%	3.1%
Boroondara	80,393	1,851	5,777	2.3%	7.2%	6.8%	5.9%
Merri-bek	80,426	1,738	5,770	2.2%	7.2%	6.3%	5.9%
Darebin	67,593	1,811	4,776	2.7%	7.1%	6.6%	4.9%
Port Phillip	62,895	953	4,404	1.5%	7.0%	3.5%	4.5%
Stonnington	56,056	1,121	3,868	2.0%	6.9%	4.1%	4.0%
Maribyrnong	35,308	621	2,201	1.8%	6.2%	2.3%	2.2%
Manningham	51,273	740	3,052	1.4%	6.0%	2.7%	3.1%
Monash	75,416	1,738	4,145	2.3%	5.5%	6.3%	4.2%
Banyule	53,134	891	2,830	1.7%	5.3%	3.3%	2.9%
Moonee Valley	56,058	492	2,851	0.9%	5.1%	1.8%	2.9%
Glen Eira	64,964	846	3,159	1.3%	4.9%	3.1%	3.2%
Hume	78,411	807	3,740	1.0%	4.8%	2.9%	3.8%
Bayside	43,628	484	1,961	1.1%	4.5%	1.8%	2.0%
Wyndham	110,083	1,523	4,929	1.4%	4.5%	5.6%	5.0%
Hobsons Bay	37,541	337	1,665	0.9%	4.4%	1.2%	1.7%
Maroondah	42,644	620	1,811	1.5%	4.2%	2.3%	1.9%
Kingston	60,804	625	2,369	1.0%	3.9%	2.3%	2.4%
Greater Dandenong	61,519	679	2,357	1.1%	3.8%	2.5%	2.4%
Brimbank	53,211	537	1,897	1.0%	3.6%	2.0%	1.9%
Yarra Ranges	39,438	361	1,352	0.9%	3.4%	1.3%	1.4%
Cardinia	30,234	245	1,010	0.8%	3.3%	0.9%	1.0%
Frankston	52,456	515	1,707	1.0%	3.3%	1.9%	1.7%
Whittlesea	81,167	748	2,560	0.9%	3.2%	2.7%	2.6%
Mornington Peninsula	41,843	316	1,303	0.8%	3.1%	1.2%	1.3%
Casey	127,752	979	3,935	0.8%	3.1%	3.6%	4.0%
Nillumbik	14,910	172	454	1.2%	3.0%	0.6%	0.5%
Melton	42,089	333	1,257	0.8%	3.0%	1.2%	1.3%
Knox	65,638	510	1,839	0.8%	2.8%	1.9%	1.9%
METROPOLITAN MELBOURNE TOTAL	**1,882,518**	**27,408**	**97,861**	**1.5%**	**5.2%**	**100.0%**	**100.0%**

Source: Prosper calculations based on YVW, SEW, and GWW data.

Top movers: 2019 to 2023

Table 5: Top 10 postcodes ranked by increase in low and zero-use vacancy, 2019-2023

POSTCODE	SUBURBS	CHANGE IN DWELLINGS	CHANGE IN 0LpD	CHANGE IN <50LpD	CHANGE IN 0LpD RATE	CHANGE IN <50LpD RATE
3000	Melbourne	8,229	1,053	2,605	3.0%	6.4%
3064	Craigieburn, Donnybrook, Kalkallo, Mickleham, Roxburgh Park	10,315	35	1,494	0.0%	3.1%
3029	Hoppers Crossing, Tarneit, Truganina	10,861	317	1,193	0.5%	2.0%
3006	South Wharf, Southbank	3,829	160	786	0.4%	2.5%
3011	Footscray, Seddon	2,739	270	758	2.0%	5.1%
3024	Fieldstone, Mambourin, Manor Lakes, Mount Cottrell, Wyndham Vale	4,783	176	688	0.8%	3.6%
3978	Cardinia, Clyde, Clyde North	8,247	73	626	0.1%	1.3%
3205	South Melbourne	1,081	183	528	2.4%	6.4%
3121	Burnley, Cremorne, Richmond, Victoria Gardens	1,409	119	446	0.7%	2.4%
3161	Caulfield Junction, Caulfield North	1,160	146	407	1.6%	4.3%
METROPOLITAN MELBOURNE TOTAL		**143,658**	**5,342**	**29,578**	**0.2%**	**1.3%**

Table 6: Melbourne LGAs ranked by increase in low and zero-use vacancy, 2019-2023

LOCAL GOVERNMENT AREA (LGA)	CHANGE IN DWELLINGS	CHANGE IN 0LpD	CHANGE IN <50LpD	CHANGE IN 0LpD RATE	CHANGE IN <50LpD RATE
Melbourne	17,040	1,342	4,593	1.2%	3.6%
Wyndham	21,512	596	2,279	0.3%	1.5%
Hume	12,945	88	2,119	-0.1%	2.3%
Casey	16,085	481	1,802	0.3%	1.2%
Port Phillip	3,451	446	1,760	0.7%	2.6%
Glen Eira	4,323	366	1,348	0.5%	1.9%
Yarra	3,818	240	1,193	0.5%	2.4%
Maribyrnong	4,688	380	1,159	1.0%	2.8%
Merri-bek	4,555	72	1,051	0.0%	1.0%
Moonee Valley	4,383	144	980	0.2%	1.5%
Greater Dandenong	2,250	191	777	0.3%	1.2%
Kingston	2,197	186	707	0.3%	1.1%
Darebin	3,361	54	695	-0.1%	0.7%
Banyule	2,419	78	687	0.1%	1.1%
Brimbank	2,113	139	665	0.2%	1.2%
Whitehorse	4,315	-190	659	-0.4%	0.5%
Hobsons Bay	2,204	119	654	0.3%	1.6%
Whittlesea	3,570	68	654	0.0%	0.7%
Bayside	1,462	150	628	0.3%	1.3%
Stonnington	2,464	91	609	0.1%	0.8%
Monash	4,185	68	576	0.0%	0.5%
Melton	2,604	-5	531	-0.1%	1.1%
Frankston	1,328	212	513	0.4%	0.9%
Manningham	2,407	-152	496	-0.4%	0.7%
Knox	1,965	174	446	0.2%	0.6%
Cardinia	4,665	126	437	0.3%	1.1%
Yarra Ranges	1,425	31	402	0.0%	0.9%
Boroondara	2,967	-203	385	-0.4%	0.2%
Maroondah	1,428	-54	338	-0.2%	0.7%
Mornington Peninsula	1,107	55	302	0.1%	0.7%
Nillumbik	422	49	133	0.3%	0.8%
METROPOLITAN MELBOURNE TOTAL	**143,658**	**5,342**	**29,578**	**0.2%**	**1.3%**

Source: Prosper calculations based on YVW, SEW, and GWW data.

COVID-era vacancy: 2019 to 2021

Table 7: Top 10 postcodes ranked by increase in low and zero-use vacancy, 2019-2021

POSTCODE	SUBURBS	CHANGE IN DWELLINGS	CHANGE IN 0LpD	CHANGE IN <50LpD	CHANGE IN 0LpD RATE	CHANGE IN <50LpD RATE	CHANGE IN 0LpD (%)	CHANGE IN <50LpD (%)
3000	Melbourne	5,034	1,001	4,293	3.2%	13.4%	513%	288%
3064	Craigieburn, Donnybrook, Kalkallo, Mickleham, Roxburgh Park	6,225	968	2,674	2.4%	6.6%	701%	590%
3006	South Wharf, Southbank	2,583	892	1,860	4.8%	9.5%	256%	147%
3053	Carlton	872	174	1,004	1.9%	10.5%	290%	141%
3141	Chapel Street North, South Yarra	856	315	892	1.8%	5.1%	164%	113%
3029	Hoppers Crossing, Tarneit, Truganina	5,624	404	801	0.8%	1.6%	128%	91%
3004	Melbourne, St Kilda	697	279	588	3.4%	6.7%	457%	107%
3051	Hotham Hill, North Melbourne	627	118	586	1.6%	7.6%	454%	128%
3008	Docklands	815	118	562	1.3%	5.6%	190%	80%
3030	Chartwell, Cocoroc, Point Cook, Quandong, Werribee, Werribee South	3,508	312	559	0.6%	1.0%	72%	43%
METROPOLITAN MELBOURNE TOTAL		**80,816**	**13,075**	**35,148**	**0.7%**	**1.8%**	**59%**	**51%**

Table 8: Melbourne LGAs ranked by increase in low and zero-use vacancy, 2019-2021

LOCAL GOVERNMENT AREA (LGA)	CHANGE IN DWELLINGS	CHANGE IN 0LpD	CHANGE IN <50LpD	CHANGE IN 0LpD RATE	CHANGE IN <50LpD RATE	CHANGE IN 0LpD (%)	CHANGE IN <50LpD (%)
Melbourne	11,348	2,319	9,011	2.5%	9.3%	286%	167%
Hume	7,819	1,307	3,356	1.7%	4.3%	182%	207%
Port Phillip	1,715	572	1,725	0.9%	2.7%	113%	65%
Wyndham	11,494	897	1,663	0.8%	1.3%	97%	63%
Stonnington	1,843	617	1,652	1.0%	2.8%	60%	51%
Monash	3,205	879	1,617	1.1%	2.0%	53%	45%
Whitehorse	2,160	651	1,379	0.8%	1.6%	27%	27%
Merri-bek	2,436	634	1,328	0.7%	1.5%	38%	28%
Glen Eira	2,656	463	1,147	0.7%	1.7%	96%	63%
Yarra	2,162	244	1,140	0.6%	2.6%	104%	61%
Whittlesea	2,130	529	1,118	0.6%	1.3%	78%	59%
Darebin	1,756	575	1,085	0.8%	1.5%	33%	27%
Boroondara	1,596	555	1,081	0.6%	1.2%	27%	20%
Manningham	1,656	506	923	0.9%	1.7%	57%	36%
Moonee Valley	2,984	167	832	0.3%	1.3%	48%	44%
Banyule	1,049	460	795	0.9%	1.5%	57%	37%
Maribyrnong	2,503	139	755	0.4%	2.0%	58%	72%
Brimbank	1,102	108	521	0.2%	0.9%	27%	42%
Yarra Ranges	734	248	507	0.6%	1.3%	75%	53%
Casey	7,445	186	468	0.1%	0.3%	37%	22%
Bayside	1,006	137	447	0.3%	1.0%	41%	34%
Maroondah	727	168	428	0.4%	1.0%	25%	29%
Melton	1,118	141	420	0.3%	1.0%	42%	58%
Hobsons Bay	1,079	52	336	0.1%	0.8%	24%	33%
Greater Dandenong	1,087	105	327	0.2%	0.5%	22%	21%
Kingston	1,072	104	296	0.2%	0.4%	24%	18%
Knox	1,020	98	240	0.1%	0.3%	29%	17%
Frankston	730	95	223	0.2%	0.4%	31%	19%
Cardinia	2,355	49	143	0.1%	0.3%	41%	25%
Nillumbik	247	76	138	0.5%	0.9%	62%	43%
Mornington Peninsula	582	-6	47	0.0%	0.1%	-2%	5%
METROPOLITAN MELBOURNE TOTAL	**80,816**	**13,075**	**35,148**	**0.7%**	**1.8%**	**59%**	**51%**

Source: Prosper calculations based on YVW, SEW, and GWW data.

SECTION 4
WHY ARE HOMES LEFT EMPTY?

Why are there 100,000 empty homes in Melbourne? Why were the 35,000 vacated over 2020 and 2021 not filled by new tenants or homeowners? An empty home generates no income or housing service, so it seems the owners are leaving money on the table.

Vacancy is not well understood. There is little research on what drives it, partly due to limited measurement.

Some explanations centre on growth-focused investment strategies, investor inattention, tax avoidance, drawn-out estate settlements, loan conditions for investors, and slow adjustment of price expectations. But there is little evidence on which factors matter most or which policies would have the biggest impact.

On another level vacancy can be explained as a result of inequality – a sign that renters cannot afford to outbid the convenience value of an empty investment property. Some homes remain empty simply because their wealthy owners feel no need to use them.

The economic explanation boils down to the relative value of flexibility versus yield. The decision to leave a home vacant depends on the trade-off between option value and cash returns.[13] (The next section explains how this also applies to land development.)

Empty property offers more options. If rents are low, landlords can avoid locking in low returns and the challenge of raising rent later. When sales prices are low, vendors can postpone sale, keeping the property untenanted to ensure the buyer pool includes owner-occupiers. If an owner plans to occupy their property in the future, keeping it empty makes this easier. The idea that property owners balance flexibility against yield is a catch-all explanation for these many and varied situations.

When flexibility is valued highly, leaving property empty is rational. As a stylised numerical example, with a net rental yield of 2.5% and a 5% sale price premium on an untenanted home, an investor waiting for optimal selling conditions would profit by keeping it vacant for up to two years.

The value of flexibility over yield is higher when yields are low and property is valued more significantly as a growth investment. This has been the case in recent decades, with low and falling interest rates. Taxing capital gains less than rental income reinforces this trend.

Flexibility is also more valuable amid market and policy uncertainty, such as during the pandemic years.

Many investors with departing tenants may have left property empty to await a rental market recovery or be ready for sale, anticipating a prompt end to restrictions. The rising prices and falling yields during that time increased the potential value and lowered the cost of this strategy.

Our *Pandemic Rental Dynamics* report suggested that the increase in vacancy was likely driven in part by these factors.[14] Higher rental vacancy rates in postcodes with falling rents were associated with larger increases in long-term vacancy, a new trend which suggested rising vacancy was due to landlords being unwilling to meet the market as rents fell, either due to mispricing their rentals or the choice to wait out a temporary downturn. As the price of flexibility fell and the value of it rose, it seems investors bought more, with empty homes the result.

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13 Murray (2017), Economics of empty homes, Fresh Economic Thinking, 2 April.
14 Helm (2023), Pandemic rental dynamics: an (un)natural experiment in excess supply, May

SECTION 5

SPECULATION AND HOUSING SUPPLY

Understanding why homes are vacant can help us understand the drivers of speculation more generally, which is critical to understanding housing supply.

Barriers to supply take centre stage in housing debates, with zoning rules often blamed for restricting supply. But this story underplays the role of land speculation. It is true that public rules limit what can be built, but within that, it is private incentives that determine how much housing we actually get.

This section explains how the rate of housing construction results from the same trade-off between flexibility and yield that produces vacant homes.

Investor landowners face an ongoing choice: preserve their development options, or take the cash? In this context, the incentive to speculate on undeveloped land is a key barrier to increasing supply, and it is far from clear that rezoning can materially reduce this incentive.

The extent of land banking

As a stylised fact, most profitable (feasible) development sites are not developed in any given year.[15]

Prosper's *Staged Releases* report showed this for major greenfields developments, where housing lots with trivial value as farmland could have been sold profitably for any price above subdivision costs but were instead priced to be drip-fed to market over an average 40-year timeframe.[16]

Zoned capacity data tells the same story. In South-East Queensland, only 10,000 lots are developed each year from greenfields land zoned for over 400,000 lots. In New Zealand, only 2-3% of feasible opportunities are taken up each year in Auckland and Wellington.[17]

Data from Sydney and Melbourne also shows developers securing planning approvals without acting on them to accumulate a 'buffer stock' of approved sites.[18] Some 120,000 dwellings have been approved and are ready to be built immediately in Victoria.[19]

Built properties are also put to market slowly. Two-thirds of the 340-unit Jewel development on the Gold Coast remained off-market three years after completion, for example, and hundreds of rental units from the 2018 Commonwealth Games village were withheld for years in a "staged release strategy so as not to flood the rental market".[20]

Even with supportive zoning, approvals and feasibility in place, we see profitable development delayed and sales of built property deliberately slowed down. With no public regulation in sight, the private sector is regulating the pace of housing supply. Why?

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15 Feasibility means that the value development adds to the site, net of costs, exceeds the value added by the existing structures. Land acquisition costs are excluded from this calculation because land prices already include the market's valuation of the potential profit from development.

16 Prosper (2022), Staged Releases: Peering Behind the Land Supply Curtain, July.

17 QGSO (2023), Residential land development activity spreadsheets, Tables 1 and 9; Helm (2023), Statement of evidence to hearings on Wellington City District Plan, paras 69-71.

18 Murray (2023), Housing supply and the planning pipeline, Fresh Economic Thinking, 1 May.

19 Municipal Association of Victoria research cited in The Age (2023), The 120,000 homes that are ready to be built – but work hasn't started, 20 Sep.

20 ABC (2023), A Jewel tower in Surfers Paradise remains empty despite ongoing housing crisis, 27 Sep; Murray (2023), Australia's Housing Future Fund - my Senate hearing opening statement and submission, 15 Mar.

Speculative incentives determine the rate of supply

The reason is that speculation pays. Developing land commits it to a specific use, but delaying banks that option for the future, which can be even more profitable.

Development, like renting out a vacant home, means choosing cash over options. This means the true economic (or 'opportunity') cost of development includes not only the construction cost, but the foregone value of the option, which is the growth in the price of undeveloped land.

That makes feasibility – the profitability of changing use – necessary for development but not sufficient. There's a second hurdle to clear: the profitability of strategic, speculative delay.

The trade-off between development profits and land banking profits sets the market pace of new housing supply. The market finds an equilibrium 'absorption rate' where no developer profits from converting land into cash any faster or slower. Developers are not developing as fast as possible: forward-looking landowners do not rush to develop land regardless of the housing price any more than BHP rushes to extract iron ore regardless of the iron ore price.

The construction sector is geared to this absorption rate, so building faster means paying a premium for builders, providing one reason to delay. The other reason to delay is the price effect of new supply. Selling faster when there aren't enough buyers means discounting the price – but when demand is growing quickly, by contrast, new supply can match this pace without prices falling.

Do zoning rules make a difference?

It's far from clear how zoning influences speculative incentives, or that zoning for higher density can materially increase the overall rate of new housing supply.

Zoning regulates housing density, not the pace of construction. The pace of construction depends on how many sites are developed, which is a market choice.[21]

Somewhat paradoxically, that means zoning rules can restrict the housing supplied by each and every new development without restricting supply across the market. (The assumption that site restrictions restrict the market is a 'fallacy of composition'.)

And because upzoning increases the value of developing a site in both present and future periods, it doesn't systematically bring forward development. The market rate of supply balances yield and growth, and both of these can rise without changing their relative level. Developers with upzoned land may simply bank their higher-valued option. Rezoning can move housing around – that's the purpose – but there's no reason to expect faster supply growth overall.[22]

With housing affordability remaining a major issue, it's important to get policy right. Effective supply-side interventions need to be grounded in clear logic.

Understanding speculation is critical here. Speculation isn't a bit player in shaping housing supply – it has a leading role.

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21 Mathematically, the amount of housing built in a period (new dwellings or floorspace per year) equals the average density (amount of housing per site) multiplied by the number of sites developed in the period.

22 The empirical evidence on upzoning and supply is patchy and challenging to interpret. See for instance Freemark (2023), Zoning Change: Upzonings, Downzonings, and Their Impacts on Residential Construction, Housing Costs, and Neighborhood Demographics, Journal of Planning Literature. Identifying policy effects in the data is difficult because localised impacts can represent construction displaced from elsewhere, rather than net increases.

SECTION 6
HOW CAN TAX HELP?

Governments are increasingly turning to taxation of vacant homes to address unaffordable housing and the blight of under-used property. Some, including Victoria, are even taxing vacant land to spur faster development.

Properly enforced, these taxes can nudge land and housing into use. But they also risk deterring investment and prompting costly tax avoidance, making them a second-best solution compared to broad-based land taxes, which can achieve the same goals at lower cost.

The most significant experiment is in Vancouver, British Columbia (BC), which has overlapping vacancy taxes levied by the city and province. Vancouver's Empty Homes Tax, introduced in 2017, is levied at 3% of the taxable value of any home unoccupied for more than six months a year. BC's tax applies on top of that, at rates of 0.5% for Canadian residents and 2% for foreign residents. Each tax requires property owners to submit annual declarations of their occupancy status.

These taxes are effective in reducing vacancy rates. About 0.6% of residential properties are taxed, but that share is decreasing, with the number of taxed properties in Vancouver falling 54% from 2017 to 2022.[23]

Similar taxes have been introduced in recent years by national or local governments in Ireland, Spain, Austria, Belgium, the Netherlands, and the USA (a selection is in Table 9). France has a long-standing vacancy tax, estimated to have reduced vacancy in taxed areas by 13%.[24]

Since 2018, Melbourne's Vacant Residential Land Tax (VRLT) has applied at a rate of 1% of capital value to homes in inner and middle-ring suburbs left vacant for six months of the year. From 2025, it will apply across all of Victoria and will increase to 2% for the second year vacant and 3% for the third and subsequent years. The government is promising increased enforcement, addressing the shortcomings of the current compliance model based on self-declaration, an issue Prosper has highlighted since the tax's introduction.[25]

From 2026 the VRLT will also apply to residential-zoned land in metropolitan Melbourne that has remained undeveloped for at least 5 years, expanding this tax from an incentive to keep built property in use to one that also spurs faster development of land. Victoria is on the policy frontier with this change, and the lessons will be important for other states.

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23 City of Vancouver (2023), Empty Homes Tax Annual Report. A review of BC's tax found that increasing the foreign resident rate to 2% from the initial 0.5% saw foreign owners twice as likely to rent out their properties as taxed resident owners, suggesting the higher penalty provided a stronger incentive. See BC Ministry of Finance (2022), Speculation and Vacancy Tax Act: Review of Act and Regulations.

24 Segu (2020), The impact of taxing vacancy on housing markets: Evidence from France, Journal of Public Economics.

25 Premier of Victoria (2024), Making More Homes Available For Victorians, media release 24 May; Prosper Australia (2020), Speculative Vacancies 10: A Persistent Puzzle.

Table 9: A selection of vacancy taxes around the world[26]

JURISDICTION	TAX	INTRODUCED	RATE (% PROPERTY VALUE P.A.)	CRITERIA
Vancouver, BC	Empty Homes Tax	2017	3% p.a.	Vacant 6+ months p.a.
British Columbia	Speculation and Vacancy Tax	2018	0.5% p.a. (Canadians) 2% p.a. (foreigners)	Vacant 6+ months p.a.
France (selected areas)	Taxe sur les logements vacants (TLV)	1999	12.5% of annual value x2 in years 2+	Vacant 1+ year
Spain	Property tax (IBI) surcharge	2023	50%-150% differential rate	Vacant 2+ years
Washington, DC	Vacant real property tax rate	2011	5% (vacant) 10% (blighted)	No fixed criteria
Oakland, CA	Vacant Property Tax	2018	$3k-$6k p.a. depending on size	Used <50 days p.a.
San Francisco, CA	Empty Homes Tax	2024	$2.5k-$5k p.a. depending on size x2 in year 2, x4 in years 3+	Vacant 6+ months p.a.
Toronto, ON	Vacant Home Tax	2022	1% p.a. in 2022 and 2023 3% p.a. from 2024	Vacant 6+ months p.a.
Ottawa, ON	Vacant Unit Tax	2023	1% p.a.	Vacant 6+ months p.a.
Hamilton, ON	Vacant Unit Tax	2023	1% p.a.	Vacant 6+ months p.a.
Montreal, QC	Vacant Property Tax	2022	1% p.a.	Vacant 6+ months p.a.

Vacancy taxes can clearly work as incentives – but not without cost. Effective enforcement is difficult and costly, and partial enforcement triggers costly avoidance behaviour. It's easy to leave the lights on or convert a vacant lot to a parking lot, for instance.

Heavy-handed enforcement is also intrusive and illiberal, and risks chilling investment. Property rights normally limit certain uses, not mandate them. It's a short hop from taxing empty homes to taxing empty bedrooms, and there comes a point where the worthy aims needed to be weighed against the social control required.

Holding land undeveloped also serves an economic purpose. Delaying feasible development can prevent premature commitment of a site to a currently-profitable use, such as low-density housing, that in time may prove to be an inefficient use of the site, for instance if higher-density housing becomes feasible.

Not developing land when it is first feasible to do so can therefore prevent a rapid depreciation of the economic value of structures that in the event of market or policy shifts have become a sub-optimal use of the site.

Land speculators are over-rewarded for this service. Their private benefit, the rise in land value, exceeds the social benefit, the avoided depreciation of capital value. Accordingly there is too much speculation (a 'market failure').[27] But the value they add is not zero, and punitive vacant land taxes that in effect compel development where and when planners want it might therefore have economic costs, pulling forward development in the short term but raising developers' risk margins over the longer term.

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26 Sources: Investigate Europe (2022), The empty house: a window into Europe's vacant property problem; Social Europe (2023), Unlocking vacant properties to tackle homelessness; Povich (2017), Can Extra Taxes on Vacant Land Cure City Blight?; Legacy Homes SF, The New Vacant Homes Tax Explained; Manzanares, What is the 'empty property tax' in Spain?; US and Canadian municipality websites.

27 Tideman (2004), George on Land Speculation and the Winner's Curse, American Journal of Economics and Sociology.

A better way to achieve the same goals is to tax all land equally, vacant or not. Land tax is simple to administer, and respects property rights and incentives.

Like a vacancy tax, a broad-based land tax can nudge empty homes into better use. It can also reduce land banking and increase housing supply, potentially more efficiently than a vacant land tax.

Economist Nicolaus Tideman has explained how the standard idea, familiar to economists, that land tax is efficient because it is 'neutral' or non-distortionary can, in fact, be squared with the apparently contradictory claim from Georgists that it can spur land into better use.

Tideman argues that land tax is neutral if we all agree about the future (a common simplifying assumption in economics), but is 'better than neutral' in the real world, where we disagree, because optimistic speculators chasing capital gains by leaving land undeveloped will anticipate higher future land taxes than pessimistic developers who would rather get on with building, and so will be bid out of the market. Land tax will therefore nudge land into the hands of those who will use it, pricing out the most over-optimistic speculators, who would otherwise leave land vacant too long for their own and society's interests.[28]

This is a side benefit of a tax with many other merits, including its efficiency relative to economically-harmful taxes on production, and its equity in socialising unearned income. Vacancy taxes are for behavioural change, not revenue, but land tax can perform this corrective role as a by-product of raising revenue. If that revenue replaces taxes on investment, land tax can produce a 'double dividend' for housing, by hastening land development while also reducing the tax penalty on construction.

There are quick wins to move more taxation onto land without unfairly penalising existing landowners. These include shifting council rating bases onto site value, switching stamp duty for land tax, and curtailing capital gains tax discounts which preference speculative asset incomes over rental yield. Vacancy taxes are a reasonable short-term stopgap, but longer-term reform to shift the tax base onto land will ultimately make them unnecessary.

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28 Tideman (1999), Taxing Land is Better than Neutral: Land Taxes, Land Speculation and the Timing of Development, Lincoln Institute of Land Policy.

SECTION 7
CONCLUSION

Prosper reports on vacant homes because they reveal an overlooked economic phenomenon that drives many of the inequities and inefficiencies policy-makers grapple with daily.

Land speculation is fundamental to land markets – a consequence of the natural monopoly that Churchill called "the mother of all other forms of monopoly".

In this context, empty homes are just the tip of the iceberg.

Melbourne's 100,000 vacant homes clue us in to how speculative incentives, stemming from rising land values, play a major role in housing markets, holding back supply and raising prices.

The age-old game of land speculation continues today, enriching some at the expense of others, and concentrating wealth in ways better understood in Henry George's time but still carried forward by Prosper today.

It is evidently wasteful that 35,000 extra dwellings were vacated and left empty throughout 2021 and 2022, and that the equivalent of two-and-a-half years of new construction still sit idle. It speaks to worsening wealth inequality, manifesting in unequal access to housing.

The waste in land banking is less obvious, and its implications for housing are under-appreciated.

Vacant homes illustrate the underlying process of speculative withholding, in which landowners trade away yield for flexibility and the prospect of rising asset prices.

This process is also the root cause of land banking – a barrier to faster housing supply that has been a significant focus of Prosper's work, yet is still ignored in housing debates.

With no regulation in sight, markets regulate new supply all on their own. They do so by way of empty housing and vacant land – and speculative incentives are the driver.

Speculation is a contentious topic. Acknowledging it challenges the dominant narrative on housing supply, supported by vested interests, which blames local democracy and public good regulation for problems not of their making. Problems inherent to land markets – to the natural monopoly that policy can't break – are being unfairly pinned on ordinary people and their desire for stable community, when the reality is far more nuanced.

The divide between the landed and landless remains as stark as Henry George described in *Progress and Poverty* over a century ago: despite our 'progress' in building more, bigger, and better houses than ever, we still face the inexcusable 'poverty' of homelessness.

For effective housing policy, we need to confront not only inequality, but the impact of speculation on supply.

Tax reform can help. Shifting tax off productive activity and onto land rents – the efficient and equitable source of public finance – can undermine the incentive to withhold land from productive use, to make the most of our common wealth.

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