Ys Housing

Site Amalgamation for Social Housing

Discussion Paper

Oscar McLennan,
Dr Stephen Glackin,
Malakai Smith

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About the Authors

Oscar McLennan, CEO at Ys Housing, a design, development and research office, based in Melbourne.
Dr Stephen Glackin, Senior Research Fellow in urban planning and urban geography at Swinburne University.
Malakai Smith, Graduate of Architecture at Ys Housing.

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Image: Anne Street Garden Villas, by Anna O'Gorman Architects from 2021. Side-by-side site amalgamation to achieve 7 social housing dwellings surrounding a central garden, in Southport on the Gold Coast. Funded by Queensland Department of Housing and Public Works. Photo credit: Christopher Frederick Jones

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Executive Summary

Context

Site amalgamation is the process of joining adjacent land parcels to create larger, more productive development sites. This report examines how site amalgamation can significantly enhance the supply of housing in metropolitan areas. While the analysis primarily focuses on community housing, the findings are more widely relevant to public housing and market housing generally, though each with specific opportunities and constraints.

Recent policy initiatives — including Victoria's *Housing Statement*[1] and the *Plan for Victoria*[2] — have set ambitious housing targets. The Government is emphasising the development of apartments and townhouses in metropolitan areas, as demonstrated by recent reforms such as the *Townhouse and Low-Rise Code* and *Activity Centres Program*. To support the development of all housing typologies, including community housing, metropolitan areas require a substantial number of sites primed for redevelopment. This report explores the potential of using site amalgamation for this purpose.

Site amalgamation strategies are based on a simple yet powerful insight: the development potential of the assembled land is greater than the sum of its parts. For example, in a typical suburban-infill project, the strategy can yield a **30% to 50%** increase in dwellings on the same land footprint. As such, the purchase of the adjoining site increases the value of both.

Barriers

While site amalgamation is not a novel concept, its systematic adoption remains elusive. A critical barrier is a timing mismatch: although properties change hands regularly, they rarely do so next to each other at the same time. This coordination problem is a systemic inefficiency affecting all housing sectors—not just community housing. However, as one of the largest non-government owners of residential land in Victoria, the community housing sector is uniquely positioned to overcome this challenge by opportunistically purchasing adjacent lots as they become available.

Immediate Opportunity

This report reveals a significant opportunity to leverage existing community housing landholdings to do just that, by redeveloping aging suburban community housing stock with adjoining market properties through opportunistic purchase and amalgamation, thereby capturing the 'amalgamation uplift' in the process.

The strategy delivers a substantial increase in community housing — at a forecast saving of ~ **$250,000 per new dwelling**. With a State Government investment of less than **$80 million per year** over ten years - allocated to opportunistic site purchase - policymakers can secure the future pipeline of community housing in Victoria, enabling the delivery of more than **8,700 new townhouses**. The efficiency of this strategy drives a **$1.99 billion total saving** over ten

[1] Victorian Government (2022) *Housing Statement*, Department of Transport and Planning.
[2] Victorian Government (2025) *Plan for Victoria*. Department of Transport and Planning, section on Housing for all Victorians.

years, underpinned by lower cost land, increased land use efficiency and larger, more productive construction projects.

Long Term Scale

Over the longer term, with further commensurate investment, the strategy can be scaled up to deliver more than **26,000 townhouses,** or **51,000 three-storey apartments** (assuming low-rise apartment construction viability) or **65,000 four-storey apartments** (unlocked by planning reform to allow four-levels on larger amalgamated sites). Such an expansion would effectively **double** the current community housing stock in Victoria[3] if delivered as townhouses, or **triple** it as low-rise apartments.

For the study, address-level data was provided by 10 community housing organisations — equating to ~66% data coverage for the sector. Conservatively, no scale-up factor has been applied, meaning the analysis underreports the true size of the opportunity. No public housing data was made available for the work, however, preliminary analysis suggests that the public housing opportunity is **five times larger still** - a finding that warrants urgent verification.

Timing

The site amalgamation strategy is about securing the future pipeline of social housing in Victoria in the most efficient and productive way possible. But to take advantage of the opportunity and **ride with the economic tide,** both the sector and government need to act now, before land price increases and missed site purchase opportunities erode the promise. Timeliness and speed are of utmost importance.

This report provides a comprehensive, data-driven foundation to help initiate that process, for the sector and government to consider site amalgamation as a **strategic lever for expanding social housing supply**, reducing cost, and fostering more productive land use in our great suburbs.

[3] 26,105 community housing homes as of March 2025. Include both owned and managed properties. Victorian Government (2025) *Housing Registrar*. Available at: https://www.vic.gov.au/housing-registrar (Accessed: 20 March 2025).

Image: Clyde Street Mews, in Thornbury, Victoria, by Six Degrees architects. Side-by-side site amalgamation to achieve 6 townhouses and 2 apartments. Delivered as private market housing in 2018. Photo credit: Alice Hutchison.

Image: Victoria Street, West Brunswick, Victoria, by Zen Architects and Property Collective. Side-by-side site amalgamation to open up a 30 m street frontage and corner laneway access for cars. Allowed an increase in density from an initial 6 apartments to 10 apartments, showcasing the benefit of amalgamation. Delivered as collective housing in 2024. Photo credit: Property Collective.

1 Introduction

Site amalgamation is the process of joining adjacent land to create larger sites that can unlock between 30% and 50% more dwellings than standalone delivery — transforming underutilised suburban land into vibrant, low-rise housing developments.

As this report will show the strategy offers a significant opportunity to expand community housing supply in Melbourne's established suburbs, with a forecast saving of **$250k per dwelling**, delivering more than **26,000 townhouses**, or **51,000 three-storey apartments,** by leveraging a simple yet powerful insight: the development potential of adjoining land is greater than the sum of its individual parts.

While site amalgamation is not a novel concept, its systematic adoption remains elusive. A critical barrier is a timing mismatch: although properties change hands regularly, they rarely do so next to each other. This coordination problem is a systemic inefficiency affecting all housing sectors—not just community housing. However, as one of the largest non-government owners of residential land in Victoria, the community housing sector is uniquely positioned to overcome this challenge by opportunistically purchasing adjacent lots as they become available, thereby capturing the amalgamation uplift.

This project aims to initiate a process for strategic, large-scale land acquisition — delivering more social housing in good locations, at lower costs, with predictable outcomes for all stakeholders — including government, housing providers, renters, and investors — ensuring broad-based benefits across the community. Ultimately, this strategy is about securing the future of social housing in Victoria. However, to take advantage of the opportunity, both the sector and government must act now, before land price increases and missed site acquisition opportunities erode the long-term promise.

This discussion paper sets out to:

1. **Quantify the opportunity**: Assess the scale of re-developable community housing land suited for amalgamation (sections 2-5)

2. **Evaluate the benefit**s: Measure the additional dwelling yield from amalgamation (sections 6-7)

3. **Evaluate apartment viability:** Identify initial areas of reform (section 8)

4. **Identify funding pathways**: Examine viable financing options and quantify economic benefits to government and the sector (section 9)

5. **Outline next steps**: Provide suggestions for implementation and further policy work (section 10)

This report provides a comprehensive, data-driven foundation for the sector, policymakers and government to consider site amalgamation as a strategic lever for expanding housing supply, reducing costs, and fostering more efficient land use in our suburbs, in line with the Victorian State Government *Housing Statement* and more recent *Plan for Victoria*.

2 Data Coverage

Key Takeaways

- **Study locations:** The analysis focuses on larger urban areas in Victoria, specifically Greater Melbourne, Geelong, Ballarat, and Bendigo.
- **Housing typology:** The study primarily examines single-storey detached houses, which are best suited for infill development due to their underutilised land potential. Higher-density dwellings, such as townhouses and apartments, already exhibit high land utilisation and are less suited to re-development.
- **Data coverage:** There are approximately 14,526 community housing owned dwellings in the study area, with about one-third being detached houses.
- **Under-reporting:** Address-level data was provided by 10 community housing providers, covering 3,154 detached houses—equating to roughly 66% of all detached community housing dwellings in the study area. This suggests that the study figures on scale are underreported.
- **Public housing opportunity:** Although no public housing data was available for this study, preliminary analysis indicates that the potential opportunity in public housing may be up to five times larger than community housing.

2.1 Study scope

This section outlines the study's coverage, including location, housing mix, and comparisons with available public housing data. The collection of address-level data was made possible through direct collaboration with community housing organisations (CHOs), a partnership critical to the study's success.

2.1.1 Location

Location: The study focused on existing community housing dwellings in the Greater Melbourne, Greater Geelong, Ballarat and Bendigo areas.

2.1.2 Housing typology

Detached Houses: Address data for houses—and select townhouses and apartments—were received from CHOs. The focus of the study was on **single storey detached houses**, which are the best for infill redevelopment. Dwellings at a higher density (i.e. townhouses or apartments) already have high land utilisation.

Figure: Typical suburban brick veneer house from the 1970s in Melbourne. Large land size and an ageing house. Well suited to in-fill redevelopment.

Source: Google Street View, 2025

2.2 Community housing data coverage

Within the subject area of Greater Melbourne, Geelong, Bendigo and Ballarat there are approximately **14,526** community housing owned dwellings today, based on data from the federal government Australian Institute of Health and Welfare (AIHW).

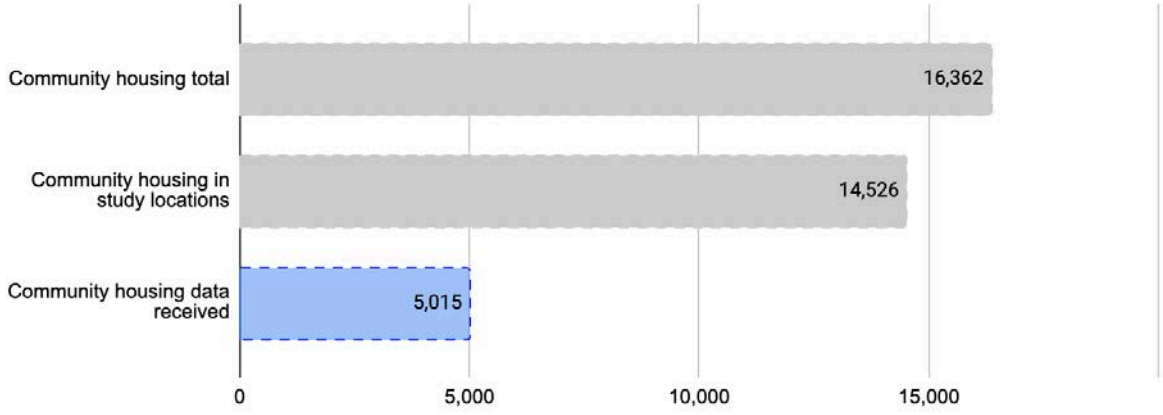
Table: Social housing dwelling count in Victoria

Area	All Housing	Social Housing	Public Housing	Community Housing
Greater Melbourne	2,086,189	56,572	44,366	**12,206**
Geelong	152,632	4,528	3,492	**1,036**
Ballarat	81,488	2,811	2,234	**577**
Bendigo	75,981	2,826	2,119	**707**
Subtotal	2,396,290	66,737	52,211	**14,526**
Other Regional	443,039	14,357	12,520	1,836
Victoria	2,839,329	81,094	64,731	16,362

Notes: Dwelling count, by tenure type. Social housing data from Australian Institute of Health and Welfare (AIHW) 2024, *Housing assistance in Australia 2024*, viewed 10 March 2025, https://www.aihw.gov.au/reports/housing-assistance/housing-assistance-in-australia
All Housing data from the Australian Bureau of Statistics (ABS), Jun-quarter-2022, *Estimated dwelling stock*, viewed at 10 March 2025 https://www.abs.gov.au/statistics/industry/building-and-construction/estimated-dwelling-stock/jun-quarter-2022.
Area using SA4s.

- **Total addresses:** The study received 6,453 property addresses directly from community housing providers. Out of those 5,393 were located within the subject areas of Greater Melbourne, Geelong, Ballarat and Bendigo. When compared with VicMap and Valuer-General Victoria (VGV) data the study was able to data-match 5,015 of those addresses, representing approximately 35% of the total 14,526 community housing owned dwellings within the subject areas.

Table: 35% address data coverage within the study location, before accounting for dwelling mix



Notes: Social housing data from Australian Institute of Health and Welfare (AIHW) 2024, *Housing assistance in Australia 2024*, viewed 10 March 2025, https://www.aihw.gov.au/reports/housing-assistance/housing-assistance-in-australia

2.2.1 Accounting for Dwelling mix

Table: Victorian social housing dwelling mix, 2021 Census

Social Housing Type	Houses	Townhouses	Apartments
Community Housing	**33%**	31%	36%
Public Housing	**43%**	29%	27%
Social Housing	**41%**	30%	29%

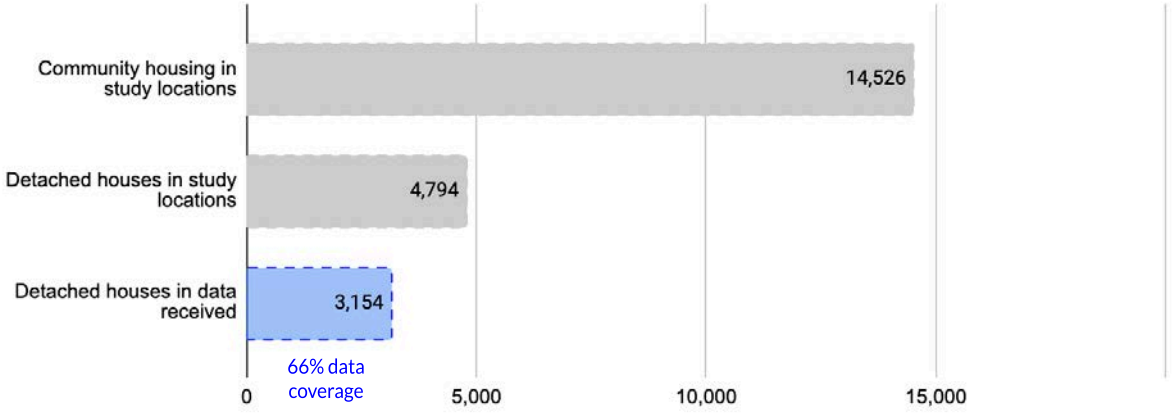
Source: 2021 Census - counting dwellings, place of enumeration. SA4 (EN) by TENLLD Tenure and Landlord Type and STRD Dwelling Structure. Victoria only

Accounting for dwelling mix (e.g. the mix of houses, townhouses and apartments) the data coverage is much higher at around **66% of all detached houses in subject locations.**

From the 2021 Census we know that roughly one-third of community housing dwellings are detached houses, one-third are townhouses, and one-third are apartments.

If the complete community housing dataset was available, a simple extrapolation suggests there should be **4,794 detached houses** (33% of 14,526) classified as community housing in the subject areas. In the study dataset, there are **3,154 detached houses**, implying a **data coverage of approximately 66%** (3,154 divided by 4,794) for the study.

Figure: 66% data coverage for single detached houses owned by community housing



2.2.2 Conservative approach: no scale-up factor assumed

The study's findings likely understate the true figures. While a scale-up factor of **approximately 1.5× (1 ÷ 0.66 ≈ 1.5) could be applied** - based on the assumption that the dataset is a random subset - however this assumption does not hold in practice. Community housing providers volunteered to share their data, and those who participated likely had favourable portfolio characteristics, which biases the sample.

Consequently, although the results represent an under-reporting of actual figures, the precise magnitude of this underestimation remains uncertain. Given this uncertainty, a conservative approach has been adopted, and no scale-up factor has been applied through the study.

2.3 Public housing opportunity is around five times larger

The study focuses exclusively on community housing due to data availability. However, the potential for suburban renewal within public housing is even larger for three primary reasons:

1. **Higher proportion of detached houses:** Public housing comprises a higher proportion of detached houses (43%) compared to community housing (33%), indicating an even greater potential for infill redevelopment.

2. **Greater underutilisation rates:** Public housing demonstrates notably higher rates of dwelling underutilisation (17%) compared to community housing (6%). Underutilisation occurs when dwellings have two or more surplus bedrooms. The high rate of underutilisation suggests a historical mismatch between dwelling sizes and the current needs of tenants. This again underscores the significant opportunity to prioritise suburban renewal for detached houses within the public housing portfolio.

3. **Scale of portfolio:** Public housing also offers significantly greater scale, comprising approximately 25,000–30,000 detached houses—**around five times** the number available in the community housing portfolio.

This comparison highlights the importance and urgency of undertaking a similarly detailed analysis for public housing as has been conducted for community housing.

Table: Victorian social housing, suitability score

Social Housing Type	Suitable	Underutilised	Overcrowded	Not stated
Community Housing	89%	**6%**	4%	1%
Public Housing	73%	**17%**	4%	6%
Social Housing	76%	**15%**	4%	5%

Source: Underutilisation is defined as 2 or more surplus bedrooms. It is based on the Canadian National Occupancy Standard. The data comes from the Australian Institute of Health and Welfare (AIHW). (2024). *Social Housing Suitability, Housing assistance in Australia 2024*. Retrieved from https://www.aihw.gov.au/reports/housing-assistance/housing-assistance-in-australia

3 Redevelopment Potential Index (RPI)

Key Takeaways

- **Purpose of the RPI**: The RPI quantifies development potential. It shows the proportion of a property's value that is attributable to land, with higher values indicating that the housing asset could be undercapitalised and well-suited to future redevelopment.
- **Overall redevelopment potential**: A total of 1,673 properties (**33%** of the dataset) had an RPI greater than 50%, signalling strong redevelopment potential over the next 5-10 years.
- **Redevelopment timing:**
    - **Immediate redevelopment:** (RPI ≥ 90%): 134 properties (**3% of the dataset**) could be redeveloped immediately, with the land constituting more than 90% of the total property value
    - **Short-term redevelopment:** (RPI between 70% and 90%): 561 properties (**20% of the dataset**) are positioned for redevelopment within the next 1–5 years.
    - **Medium-term redevelopment** (RPI between 50% and 70%): 978 properties (**11% of the dataset**) are projected for redevelopment within 5–10 years.
- **Future outlook:** As land values appreciate and housing values depreciate, the RPI increases over time, signalling enhanced redevelopment potential with time (but also increased urgency for site acquisition as land prices rise).
- **Existing land advantage:** The suburban renewal story for social housing improves significantly if the land is already owned. If community housing organisations (CHOs) already own the land, they can capitalise on the gains; otherwise, they face stiff market competition for land at much higher prices over time.
- **Strategic importance of land banking:** Social housing land banking is a critical long-term strategic consideration. Combining land banking with site amalgamation is key to unlocking these redevelopment opportunities.

3.1 Measuring redevelopment potential

The core insight driving the site amalgamation project is that the development potential of suburban land when joined together is greater than the sum of the parts. Two sites joined together yield more than double the number of dwellings compared to two sites alone. The purchase of the site adjacent increases the value of both. This section of the report focuses on quantifying the development potential of each individual site. The subsequent section examines how these sites can be matched.

Measuring development potential is relatively complex and generally requires analysis at the individual site level. For this study, a more programmatic approach is required. Work by the Australian Housing and Urban Research Institute (AHURI)[4] introduced the concept of the Redevelopment Potential Index (RPI), which uses valuation data from Valuer-General Victoria (VGV) to assess development potential. The RPI divides the value of the land (LV) by the capital improved value (CIV) to give a ratio. A higher ratio—meaning land value constitutes a greater proportion of the total property value—indicates greater potential for redevelopment.

- **Use of Valuer-General Victoria data:** The study leverages the VGV 2023 dataset, which provides estimated Land Values (LV) and Capital Improved Values (CIV) for every property in Victoria. Although VGV values typically underestimate actual market prices, this is less significant for the Redevelopment Potential Index, as the index focuses on relative differences rather than absolute values.

- **Setting the RPI thresholds:** The study sets the RPI thresholds at 50%, 70% and 90% respectively. Each threshold indicates a distinct redevelopment threshold. An RPI of **50%** suggests a medium-term redevelopment opportunity, typically emerging within the next **5–10 years**. During this period, the value of existing dwellings will depreciate further, while land value will likely rise, thereby increasing the RPI with time. An RPI above **70%** generally marks the point at which infill development becomes viable, as demonstrated by Newton et al. (2011) in their study of suburban regeneration in Melbourne, which also matches the authors' commercial experience. An RPI at or above **90%** signals a more immediate redevelopment opportunity.

Table: Community housing sites and their respective redevelopment potential

Timeframe	RPI threshold	Sites for redevelopment	% distribution	% of dataset
All	**> 50%**	**1,673**	**100%**	**33%**
Medium Term (5-10 yrs)	50-70%	561	34%	11%
Near Term (1-5 yrs)	70-90%	978	58%	20%
Immediate Term (1 yr)	> 90%	134	8%	3%

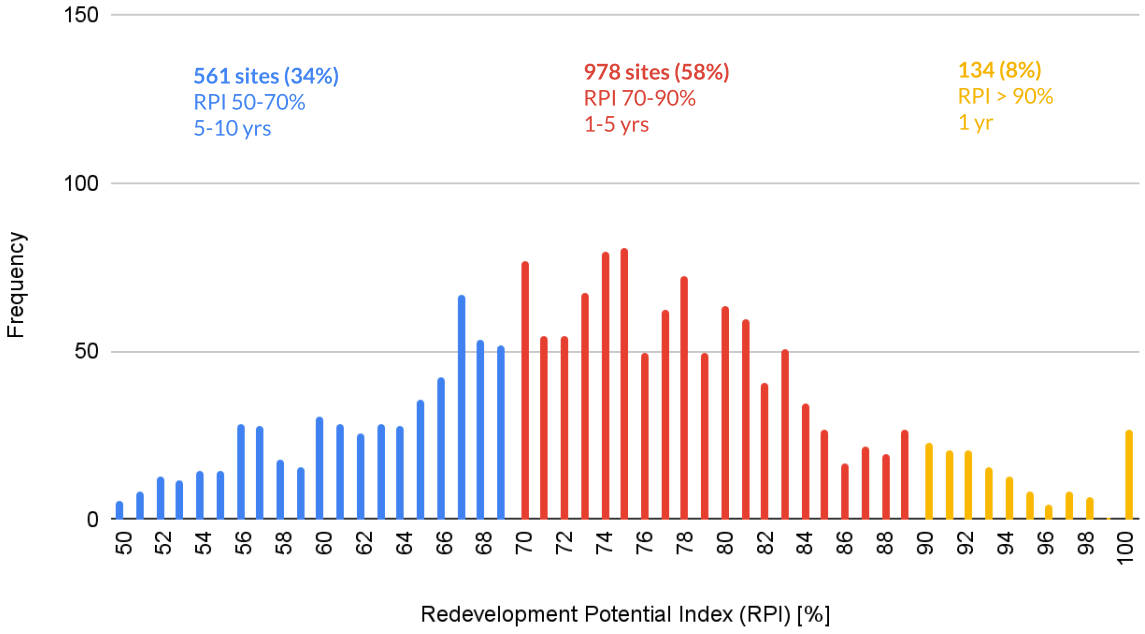
- **Medium-term redevelopment:** Of the 5,015 community housing properties in the dataset, **1,673 sites (33% of dataset)** have a RPI higher than 50%. Of those, **561 sites (11% of dataset)** are between 50-70% meaning they are suited to medium-term redevelopment over the next 5-10 years.

[4] See Newton, P., Murray, S., Wakefield, R., Murphy, C., Khor, L.-A., & Morgan, T. (2011). *Towards a new development model for housing regeneration in greyfield residential precincts.* Australian Housing and Urban Research Institute, Swinburne-Monash Research Centre.

- **Near-term redevelopment:** Zooming in, approximately **978 properties** have a RPI between 70-90% - equivalent to **one-fifth (20% of dataset).** They are well positioned for redevelopment over the next 5 years.

- **Immediate redevelopment:** Approximately **134 properties** have a RPI of 90% or higher, which equates to **3% of the dataset**, meaning they are well suited to immediate redevelopment.

Figure: Redevelopment Potential Index (RPI) for community housing sites today



Note: The chart above illustrates the distribution of the **Redevelopment Potential Index (RPI)**. Most sites currently fall within the **65–85%** RPI range. Over time, this distribution is expected to shift to the right as land values increase and dwelling values depreciate. Each horizontal bar represents the number of sites at a given RPI percentage.

3.2 Forecasting future redevelopment potential

When evaluating property prices over the long-term, it is important to distinguish between land value and building value. Building value refers to the value of the structure, while land value represents the value of the land itself. This distinction is critical because these two components change at different rates. Buildings typically depreciate over time as wear and tear erode their value and newer constructions become more desirable. In contrast, land—particularly when well located with access to jobs and infrastructure—increases in value over time due to its inherent scarcity.

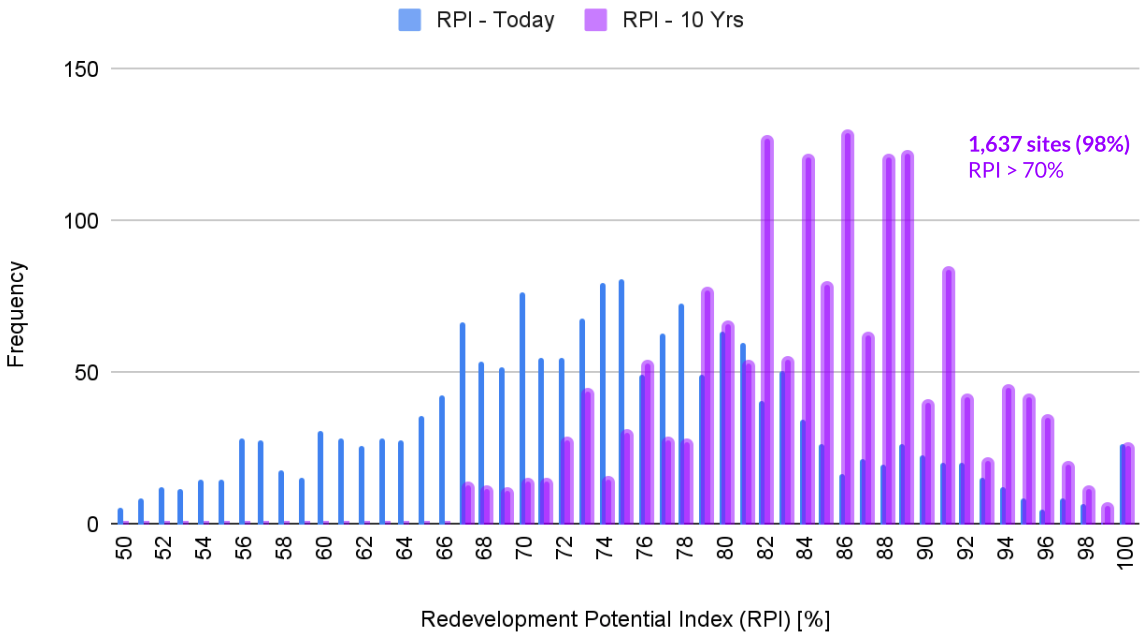
Different types of property have varying proportions of their total value represented by land. Detached houses usually have a significant portion of their value comprising land; townhouses and semi-detached dwellings have a medium proportion, and units or apartments have a low proportion.

Based on this logic, the study projects the Redevelopment Potential Index (RPI) distribution ten years into the future by assuming an annual land appreciation rate (5%) and a dwelling depreciation rate (2%). The assumptions are as follows:

- Land appreciation at **5% per annum** — set under Melbourne's long-term average rate of 7%[5]
- Dwelling depreciation at **2%[6] per annum** — assuming no renovation by the community housing provider over the period

Under these conditions, **98% (1,637)** of the sites would achieve an RPI above 70% within the decade, indicating that they are well suited to redevelopment.

Figure: Moving to the right: RPI distribution today vs RPI distribution in 10 years



Notes: Over ten years, the development opportunity only improves as the land appreciates and the dwellings depreciate, shifting the distribution up and to the right. This is the mechanics of land banking at work.

Table: In 10 years, the suburban redevelopment story only gets better (if you already own the land)

Timeframe	RPI threshold	Redevelopment Sites	% of set
Medium Term (5-10 yrs)	> 50%	1,673	100%
Near Term (1-5 yrs)	> 70%	1,637	98%
Immediate Term (0 yr)	> 90%	373	22%

Notes: Over ten years, all sites become more developable, with 98% reaching a RPI above 70% and 22% a RPI above 90% which signal immediate development.

[5] Lawless, T. (2022, August 29). *The long game… 30 years of housing values.* CoreLogic. https://www.corelogic.com.au/news-research/news/2022/the-long-game-30-years-of-housing-values

[6] ATO depreciation rate for residential dwellings is 2.5%. Note that community housing organisations are required to meet performance standards for property condition, and to ensure their properties are well maintained.

- **What are the implications? The suburban renewal story for social housing only gets better with time, as long as you already own the land.** If you don't already own the land, then you will be competing with everyone else to purchase the land when you need it most, but at higher prices.

- **Social housing land banking is one of the most important long-term strategic considerations for the community housing sector.** As will be shown in the rest of this report, combining land banking with site amalgamation is a critical strategy for any social housing operator, who already has a suburban land portfolio.

4 Amalgamation Matching

Key Takeaways

- **Evaluation of adjacent properties:** Private properties adjoining community housing were assessed for redevelopment suitability through site amalgamation.
- **High match rate at RPI > 50%: 98%** of detached community housing properties with a Redevelopment Potential Index (RPI) above 50% have at least one adjoining private lot that is also redevelopable. This suggests that nearly all high-potential suburban properties could benefit from site assembly.
- **Candidate properties identified:** A total of **3,972** adjoining private properties were identified as potential redevelopment candidates, of which **2,528** are side-by-side (more valuable) and **1,444** are back-to-back.
- **Opportunities across RPI thresholds:** The number of matches decreases at higher RPI thresholds—with 2,138 matches (**89% match rate**) at an RPI above 70% and 146 matches (**67% match rate**) at an RPI above 90%—indicating viable site amalgamation opportunities exist at all levels of redevelopment potential.
- **Underlying reasoning:** The high match rates are driven by the fact that in any given suburban area, houses are typically built around the same time, in similar sizes and styles. Consequently, if a subject site has an RPI above 50%, 70%, or 90%, it is highly likely that its neighbouring properties will too.

4.1 Site matching logic

Figure: Amalgamation match, based on shared development potential

Notes: The logic matches adjoining sites (shown in pink), as long as the sites directly adjoin the community housing property (shown in red) and meets the minimum RPI threshold.

As outlined above, one of the core insights driving the study is that when two suburban sites are joined together, they yield more than the sum of the parts. The study has established a method for measuring redevelopment potential using the RPI. The next step is to estimate how many community housing sites are well-suited to amalgamate with the private dwelling next door.

- **Amalgamation matching logic:** For a property to be a match, both the existing community housing property and at least one of the adjoining properties must meet the minimum RPI threshold.

- **50% RPI:** At an RPI threshold of 50% (indicating medium-term redevelopment within 5-10 years) 98% of properties match (1,637 matches from the 1,673 sites above 50% RPI). A match is when at least one of the adjoining properties also has a RPI > 50%.

- **70% RPI:** When the RPI threshold increased to 70% (indicating near term redevelopment within 5 years) the match-rate was 89% (990 matches from the 1,112 sites above 70% RPI). A match is when at least one of the adjoining properties has a RPI > 70%.

- **90% RPI:** With an even stricter threshold of 90% RPI (indicating immediate redevelopment) the match-rate was 67% (90 matches from the 134 sites above 90% RPI). A match is when at least one of the adjoining properties has a RPI > 70%.

Figure: Site amalgamation matches were higher than expected at each RPI threshold

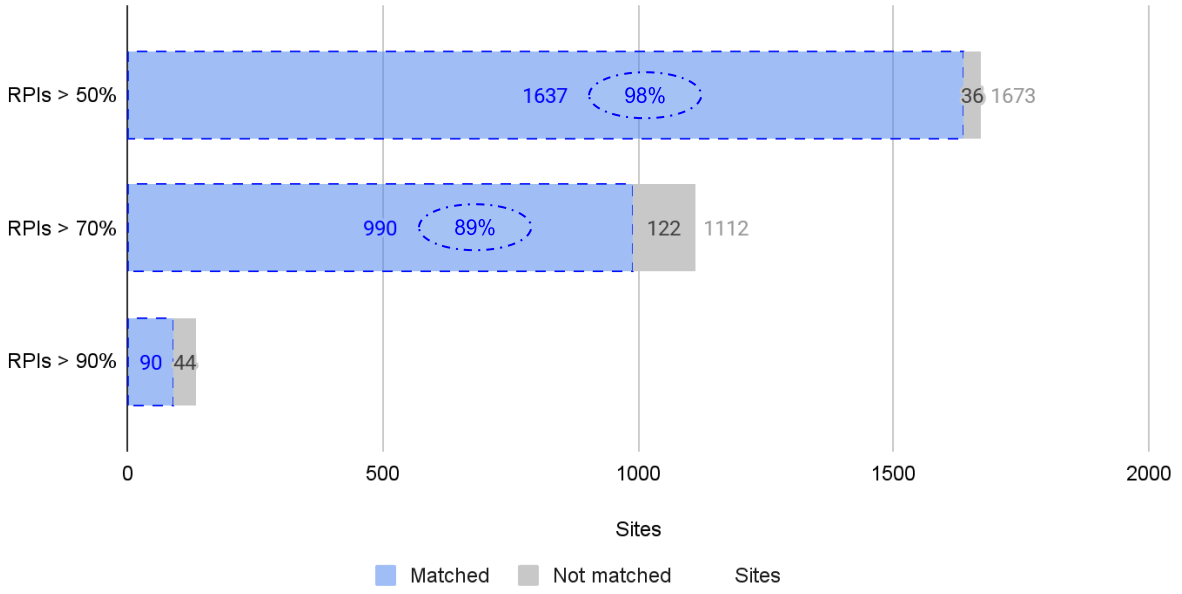


Table: Likelihood of a match at each Redevelopment Potential Index (RPI) threshold

Amalgamation threshold	Total site matches	Likelihood of match	% of total sites
RPIs > 50%	1,637	**98%**	33%
RPIs > 70%	990	**89%**	20%
RPIs > 90%	90	**67%**	2%

4.1.1 Why such a high match-rate?

- **In any given suburban area, the original houses were built around the same time, in a similar style and at a similar size.** Therefore, given the similarity in housing stock and almost identical location, it is highly likely that at least one of the neighbouring properties (left, right, or behind) will have a similar RPI score. If the subject site has an RPI above 50% or above 70% or above 90%, it's highly likely the neighbour will too.

- **The similarity in initial condition explains why infill development often progresses gradually initially,** as the specific area tips to become viable (i.e. higher RPI), starting with the best larger sites and then spreading as the existing houses continue to age, market prices for new dwellings increase and more sites are sold by their owner to a developer.

4.1.2 Adjoining properties per site

The number of adjoining properties at each RPI threshold was higher than expected as well:

- At RPI > 50%, there were on average **2.4 adjoining dwellings** with an RPI > 50%
- At RPI > 70%, there were on average **2.2 adjoining dwellings** with an RPI > 70%
- At RPI > 90%, there were on average **1.6 adjoining dwellings** with an RPI >90%

The benefit of having multiple adjoining dwellings for any given site is that you can be selective on acquisition. It also increases the likelihood that an adjoining property will hit the market in a given year.

The following table breaks down whether the match was side-by-side or back-to-back. This is important because side-by-side benefits substantially more from amalgamation, as will be shown in the later in the paper.

Table: Adjoining property count for each RPI threshold

Amalgamation threshold	Existing sites	Side-by-side matches	*Multiple*	Back-to-back matches	*Multiple*	Total matches	***Multiple***
RPIs > 50%	1637	2528	*1.5x*	1444	*0.9x*	**3972**	***2.4x***
RPIs > 70%	990	1321	*1.3x*	817	*0.8x*	**2138**	***2.2x***
RPIs > 90%	90	92	*1x*	54	*0.6x*	**146**	***1.6x***

5 Site Footprint, Zoning and Land Affordability

Key Takeaways

- **Zoning of sites:** 80% of sites suited to amalgamation are located in the General Residential Zone (GRZ), which permits redevelopment to three storeys. Further research is needed on changes to the Activity Centre Zone (ACZ) coverage to determine potential impacts, though they are not forecast to be substantial.
- **Budget considerations:** The current indicative Homes Victoria budget for a new social housing dwelling is $500k to $650k depending on bedroom count, location and access.
- **Land value threshold:** Feasibility analysis indicates that to meet this budget, the maximum acceptable land value is $1,200 per square metre—a threshold met by 68% of sites in the dataset today.
- **Future market dynamics:** Allowing for a 5% annual increase in land values over the next ten years, only 20% of sites would meet the threshold, shifting the amalgamation opportunity to peripheral urban areas and regional centres
- **Urgency of action:** Assuming no significant increase in per-dwelling budgets, timely site acquisition is critical, as many areas will become too costly within the decade.

5.1 Community housing footprint

In the study, address data was provided by 10 community housing providers. At an individual site level, the amalgamation opportunities identified are relevant to most providers, given their existing suburban housing footprints. However, the top three or four CHOs stand to gain the most.

Table: Amalgamation site-match count by CHO

Community Housing Organisation	Site-match count *RPI > 50%*	Site-match count *RPI > 70%*
CHO1	747	499
CHO2	497	294
CHO3	234	101
CHO4	55	39
CHO5	43	42
CHO6	31	0
CHO7	19	6
CHO8	6	6
CHO9	3	2
CHO10	2	1
Total	1,637	990

5.2 Impact of Zoning

Alongside financial viability, zoning is the major factor that determines what you can develop. In the dataset, **96%** of sites are concentrated in GRZ or NRZ meaning they are suitable for townhouses or three-storey apartments.

Table: 96% of zoning is GRZ or NRZ suitable for townhouses and three-storey apartments

Zone	Storeys	Redevelopment Typology	Site Amal Count RPI > 50%		Site Amal Count RPI > 70%	
General Residential Zone (GRZ)	3	Townhouse / Apartment	**1,308**	***80%***	**720**	***73%***
Neighbourhood Residential Zone (NRZ)	2	Townhouse	**262**	***16%***	**231**	***23%***
Low Density Residential Zone (LDRZ)	2	House	20	*1%*	15	*2%*
Residential Growth Zone (RGZ)	4	Townhouse / Apartment	15	*1%*	11	*1%*
Activity Centre Zone (ACZ)	flexible	Apartment	12	*1%*	5	*1%*
Mixed Use Zone (MUZ)	flexible	Townhouse / Apartment	6	*0%*	6	*1%*
Comprehensive Development Zone (CDZ)	flexible	Townhouse / Apartment	5	*0%*	1	*0%*
Urban Growth Zone	2	House	4	*0%*	0	*0%*
Green Wedge Area	2	House	4	*0%*	1	*0%*
Rural Living Zone	2	House	1	*0%*	0	*0%*
Total			**1,637**		**990**	

5.2.1 Activity centres

Around 12 sites (1% of the data set) are in existing Activity Centres Zones (ACZ) and therefore may benefit from upzoning in those areas, which was recently announced in Plan for Victoria[7]. Further analysis is needed to place any of the existing GRZ or NRZ sites that may also be in the proposed activity centres and not yet rezoned.

The challenge with upzoning generally - if one doesn't already own the land - is that it drives up the value. For social housing that is especially challenging, as the project feasibility is sensitive to land cost increases, as the CHO are unlikely to recoup the uplift, compared to a traditional market developer who is uncapped on the revenue side.

[7] Department of Transport and Planning 2025, *Plan for Victoria*, State Government of Victoria, Melbourne, viewed 17 March 2025, https://www.planning.vic.gov.au/__data/assets/pdf_file/0033/739473/250227-Final-Digital-Plan-for-Victoria-V.01.pdf.

5.3 Land purchase affordability

5.3.1 Land affordability for social housing

The affordability of the adjoining land is critical to the site amalgamation strategy. Social housing is on a narrow budget of between **$500k-$650k[8] total cost per dwelling**. Funding is linked to competitive tenders, with value-for-money as the primary consideration for state and federal government funders.

Therefore, for amalgamation to work the adjoining property must be affordable. A reasonable rule-of-thumb is to pay less than **$1,200 per sqm for the land**, which equates to around $720k for a ~600 sqm block. If the CHO pays more, it pushes the land part of the development feasibility outside of budget, as shown in the table below:

Table: Typical two-storey social housing townhouse project with a budget of $500k to $650k per dwelling, necessitates a land price below $1.2k / sqm to be feasible

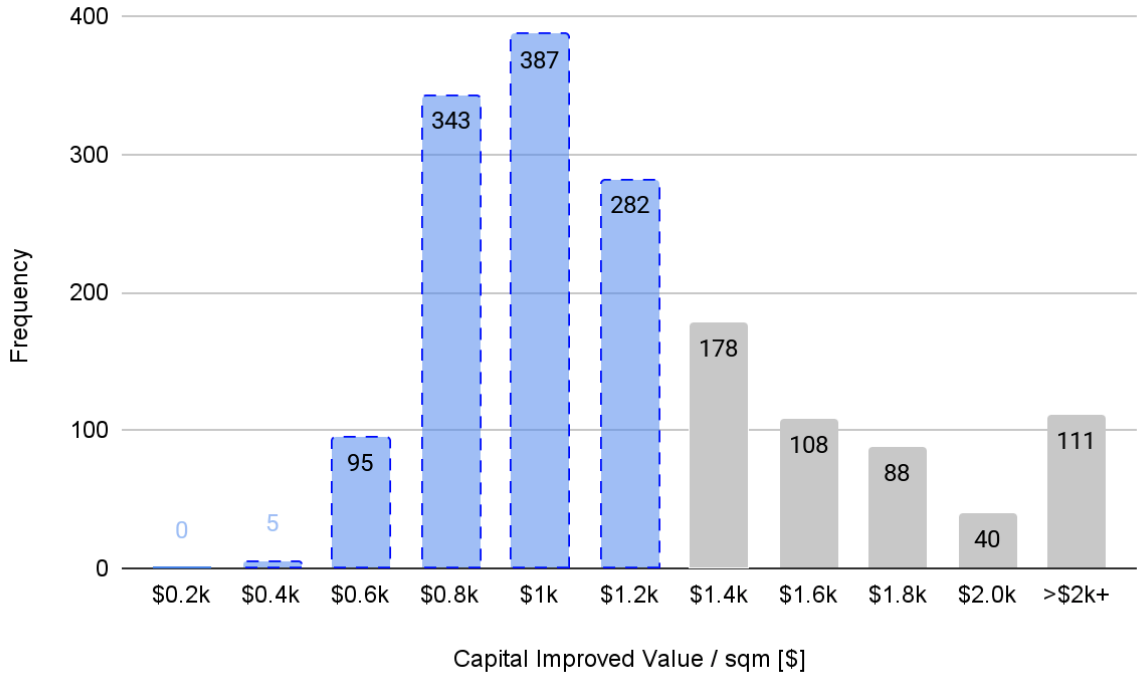
Budget item	Low	High
Construction	$350,000	$400,000
$ / sqm	*$2,900*	*$3,300*
Land	**$100,000**	**$200,000**
$ / sqm	***$600***	***$1,200***
Consultants, Fees, Contingency	$50,000	$50,000
Total Budget	**$500,000**	**$650,000**

[8] Estimate based on conversation with Homes Victoria and community housing providers

5.3.2 Sites viability for purchase today

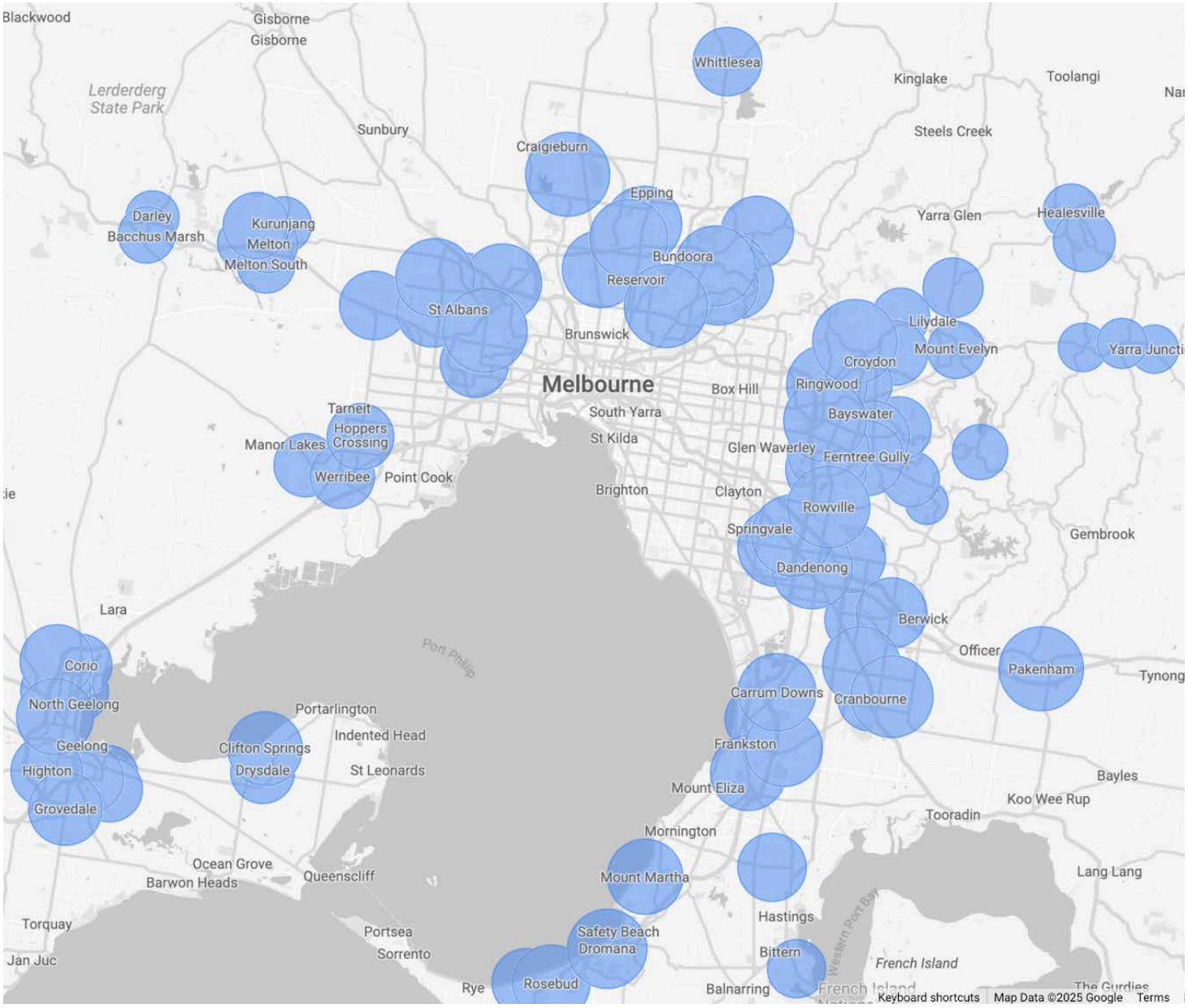
Of the 1,637 sites identified as well-suited for amalgamation over the next 10 years (i.e. matched RPI > 50%), approximately **68% (1,112)** have a site cost per sqm less than $1.2k.

Table: 68% of the 1,637 sites identified for amalgamation are less than $1.2k / sqm.



Notes: Approximately 68% (1,112) have a site cost per sqm less than $1.2k. In the histogram, each bin has a $0.2k width, aside from the highest, which includes all sites above $2k. The data label shows the high end of the bin width. The chart only includes sites with a Redevelopment Potential Index (RPI) greater than 50% only.

Figure: Median site costs at or below $1,200 per sqm track the middle and outer ring. These are also the areas with the highest concentration of detached community housing today.



Notes: Each blue circle represents a suburb in the data set where the median VGV capital improved value for the community housing properties in the dataset are less than $1.2k per sqm. The map only includes areas where the median Redevelopment Potential Index (RPI) is greater than 50%. It is assumed that the abutting properties will have a similar value per sqm, given they share the same location.

5.3.3 Land purchase affordability in 10 years

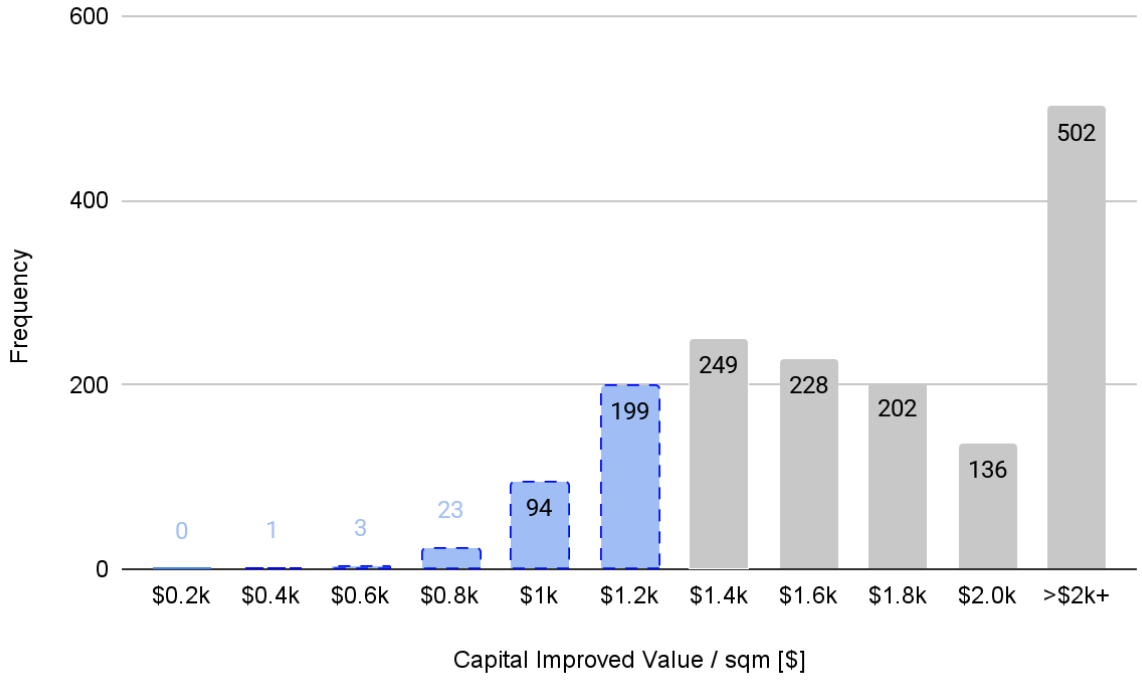
In ten years, the opportunity for opportunistic land purchase for site amalgamation diminishes substantially. There are two primary factors working against the strategy over time, creating an urgency to act now:

1. **Land price increases**: rising land values will progressively reduce the number of suitable suburban locations for affordable land purchase. Modelling suggests that, with an average annual land price increase of 5% over ten years, only around 20% of sites would remain below the target viability threshold of $1,200 per square metre. Consequently, viable suburban infill sites would shift towards Melbourne's outer fringes and regional centres.

2. **Adjoining sites will be transacted away:** further, over time, adjoining properties will increasingly be redeveloped privately, diminishing opportunities for site amalgamation for social housing.

As a counteracting force, social housing per-dwelling budgets are likely to increase over time. However, such adjustments are unlikely to fully offset rising land costs. The net effect is a reduced set of viable site opportunities, increasingly confined to Melbourne's outer suburbs and regional areas. Or simply *fewer* social housing dwellings, at *higher* cost.

Table: 10 Yr forecast: site cost per sqm for adjoining lots: only 20% are less than $1.2k / sqm.



Notes: Forecasting 10 years into the future, only 20% of properties have a site cost per sqm less than $1.2k. The data label for each column shows the high end of the range for that bucket. Each bucket has a $0.2k range, aside from the highest which includes all sites above $2k.

Figure: 10 years into the future, median site costs below $1,200 per sqm are limited to the city fringes in the west and east.

Notes: Median site value is assumed to increase at 5% per year over ten years. Each blue circle represents a suburb in the data set where the median social housing site value in year-10 is less than $1.2k per sqm.

If site values continue to rise at, or near, trend of around 5% per annum, CHOs and government effectively have three options if they want to deliver new suburban social housing, on land CHOs don't already own:

1. **Pay more:** simply increase social housing budgets to keep pace

2. **Build further away:** sacrifice proximity, services and amenity for lower cost

3. **Lock-in the opportunity early:** purchase adjoining suburban sites in the the near term, to lock in the lower price and secure the future amalgamation opportunity

6 Quantifying the Amalgamation Benefit

Key Takeaways

- **Increased floor area through amalgamation:** Joining two or more adjacent sites together produces more buildable floor area than developing each site apart. Planning setbacks and driveway design are the two big drivers.
- **Side-by-side amalgamation:** Yields approximately: 39% more buildable floor area at two storeys, 47% more at three storeys, and 76% more at four storeys, then standalone delivery.
- **Back-to-back assemblies:** Increases floor area by only ~4%, offering benefits mainly in improved street connectivity.
- **Two-storey townhouse yield:** With a central driveway, amalgamation can boost the number of dwellings by roughly 33% (e.g. 6 townhouses compared to 8). With a courtyard driveway, the increase can reach about 50% (e.g. 6 townhouses compared to 9).
- **Apartment yield:** At three storeys, there is an approximate 50% increase in apartment yield. At four storeys, the apartment yield can rise by around 80%.

6.1 Buildable floor-area increase

6.1.1 Understanding setbacks

To this point, the paper has established the number of sites suited to amalgamation. The focus now shifts to quantifying its benefits. **More precisely - the additional yield achieved from joining two or more sites together compared to developing them apart.**

The key factors determining the amalgamation benefit are mostly driven by the planning scheme:

1. Boundary setbacks
2. Number of storeys
3. Garden space area requirement
4. Driveway width

The analysis focused on the main residential zones, which make up 97% of the 1,637 amalgamation sites (RPI > 50%) in the dataset:

- General Residential Zone (GRZ)
- Neighbourhood Residential Zone (NRZ)
- Residential Growth Zone (RGZ)

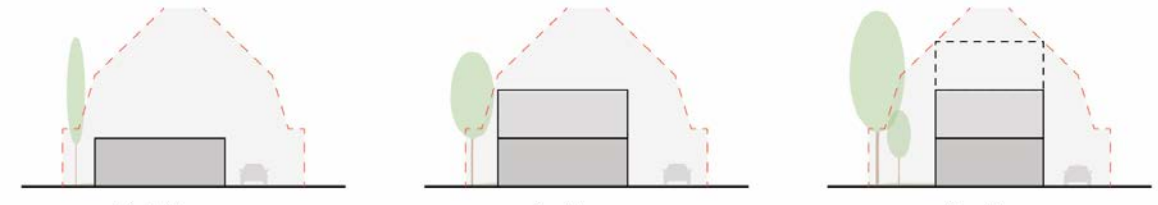
Each of these residential zones follow the ResCode standard, with uniform setback requirements, but with different maximum heights.

Table: Most sites are General Residential Zone (GRZ); suitable for townhouses or low-rise apartments

Zone	Height (max)	Townhouses	Apartments	Amalgamation Sites [#]	Amalgamation Sites [%]
General Residential Zone (GRZ)	11 m	2 or 3-storey	3-storey	1308	80%
Neighbourhood Residential Zone (NRZ)	9 m	2-storey	-	262	16%
Residential Growth Zone (RGZ)	13.5 m	2 or 3-storey	3 or 4-storey	15	1%
Total				**1,585**	**97%**

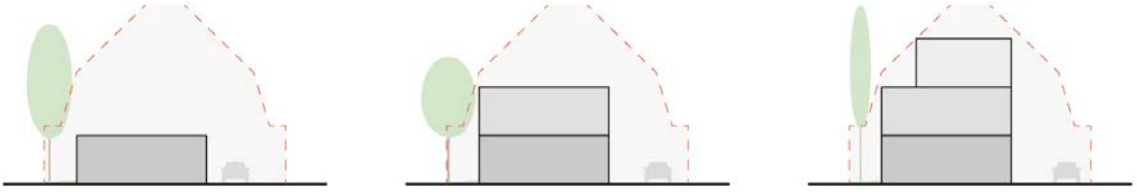
Notes: Proportion of the 1,637 amalgamation sites (RPI > 50%) sites in either GRZ, NRZ or RGZ.

Figure: Uniform setback requirements and height limits dictate the maximum buildable area



Notes: In these examples, the following assumptions are made: (i) standardised 15 m frontage, (ii) 5 m driveway width to accommodate turning circles, (iii) minimum garden area of 30-35% and (iv) shear wall construction. A four-storey building does not fit within the setback envelope.

Figure: A stepped "wedding cake" form yields more buildable area at three storeys and above

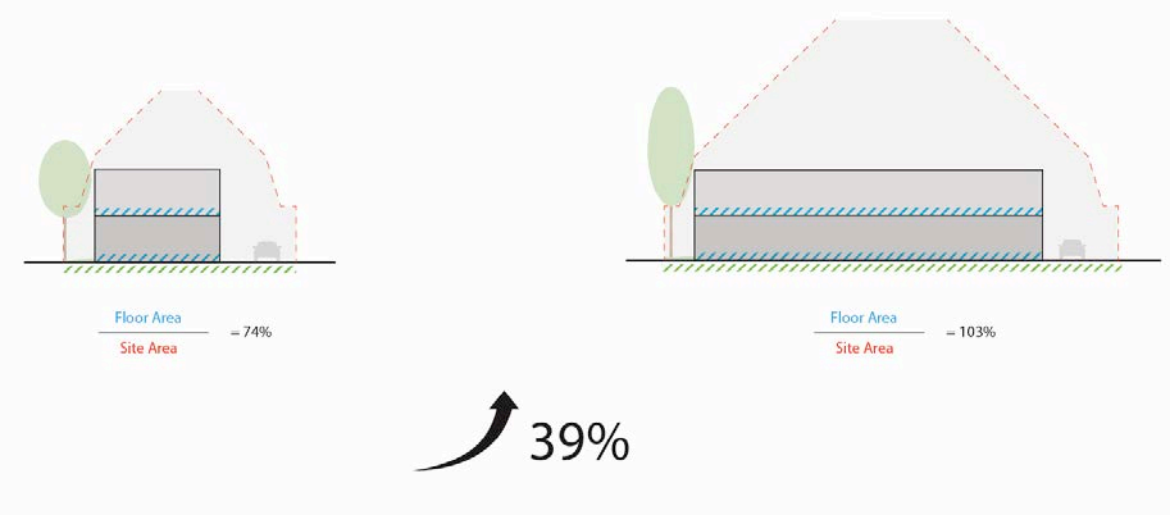


Notes: Typical 15 m frontage, 5 m driveway to accommodate turning circles, minimum garden area (30-35%) and stepped "wedding cake" construction.

6.1.2 Side-by-side amalgamation

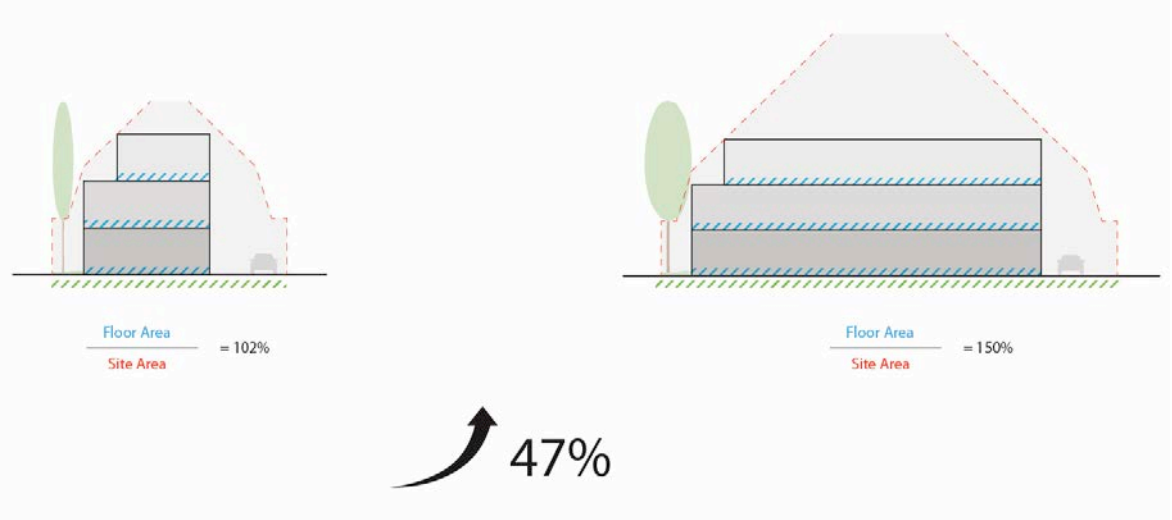
By joining sites together, especially side-by-side, a considerable increase in the buildable floor-area relative to the size of the site is achieved.

Figure: Two storey: floor-area to site-area ratio increases by 39% from side-by-side amalgamation



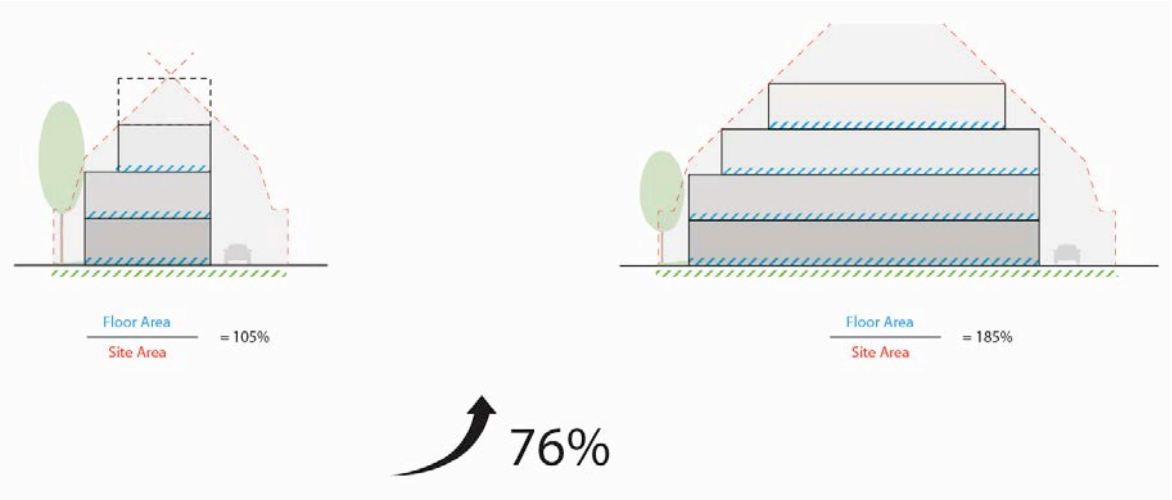
Notes: One two-storey site with 15 m frontage, 5 m driveway, minimum garden area (35%) is joined with an identical neighbouring site, giving a 30 m frontage. At two storeys, the buildable floor-area (per unit area of land) increases by 39%.

Figure: Three storey: floor-area to site-area ratio increases by 47% from side-by-side amalgamation



Notes: One three-storey site with 15 m frontage, 5 m driveway, minimum garden area (35%) and "wedding cake" construction is joined with the neighbour giving an amalgamated site with a 30 m frontage. At three storeys, the buildable floor-area per unit area of land increases by 47%.

Figure: Four storey: floor-area to site-area ratio increases by 76% from side-by-side amalgamation



Notes: One three-storey site with 15m frontage, 5m driveway, minimum garden area (35%) and "wedding cake" construction is joined with the neighbour to give an amalgamated site with a 30m frontage. Now four storeys fit within the setback envelope. The buildable floor-area per unit area of land increases by 76%.

Table: The more storeys, the more the buildable floor-area increases relative to site area

Storeys	Increase in buildable floor-area relative to site area
Two storey side-by-side amalgamation	~39%
Three storey side-by-side amalgamation	~47%
Four storey side-by-side amalgamation	~76%

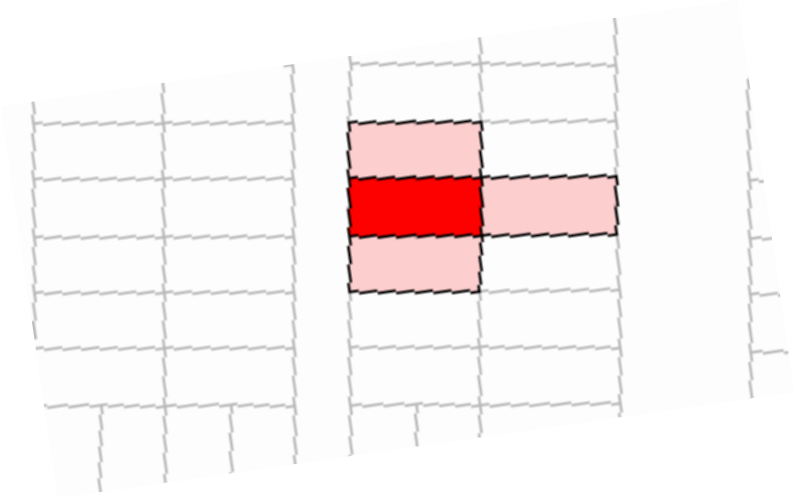
Notes: Summary of the findings above.

6.1.3 Back-to-back amalgamation

The other primary orientation for suburban site amalgamation is back-to-back, effectively connecting two streets. This arrangement produces only a moderate increase in buildable floor area, as rear boundaries are typically shorter and therefore less affected by setback requirements.

Additionally, back-to-back amalgamation does not yield the same efficiency gains in driveway layout, as it does not allow for double-loaded aisles (car parking on both sides of the driveway). This is because the site becomes longer rather than wider.

Figure: side boundaries are typically longer than rear boundaries meaning back-to-back amalgamation yields only a marginal increase in buildable floor area



Notes: Three adjoining sites (shown in pink) with two sites side-by-side and one site back-to-back.

Table: back-to-back amalgamation has a typical increase in buildable floor area of around 4%

	Two standalone sites floor area [m^2]	Back-to-back amalgamation floor area [m^2]	Increase vs standalone [%]	Side-by-side amalgamation floor area [m^2]	Increase vs standalone [%]
Townhouse: 2-storey	966	1,003	4%	1,339	39%
Apartment: 3-storey	1,322	1,373	4%	1,947	47%
Apartment: 4-storey	1,371	1,423	4%	2,407	76%

6.2 Estimating dwelling increase

The greater the buildable floor area, the more dwellings that can be delivered. By establishing typical floor areas for standard townhouses and apartments, the study can estimate the total number of dwellings based on the buildable floor area for each site.

6.2.1 Townhouse increase from amalgamation

Townhouses are the most popular typology for in-fill development for a number of key reasons:

1. **Lower cost:** townhouses cost less to construct - per dwelling and per sqm - than apartments

2. **Customer preference:** townhouses allow for more privacy and a private garden space. They are generally better for pets, better for kids, have fewer owner's corporation charges and tend to have fewer issues between neighbours

3. **Low-rise:** townhouses meet the height restriction in the two most prevalent residential zones: GRZ (three-storey) and NRZ (two-storey)

Typical townhouse: The study assumes a prototypical 120 m^2 two-storey townhouse, with two bedrooms, one flexible study space and one car park. To estimate the number of dwellings, the following methodology is applied:

1. **Calculate the buildable floor-area:** Determine the maximum buildable floor-area for the site, given the site setbacks from ResCode, garden space area minimum from ResCode, and driveway width for turning circles

2. **Circulation factor:** Reduce the buildable floor-area by a 5% factor to allow for site circulations external to the building for people and cars

3. **Dwelling count:** Divide the adjusted buildable floor area by the dwelling area (120 m^2) and the car park area (15 m^2), rounding down to the nearest dwelling.

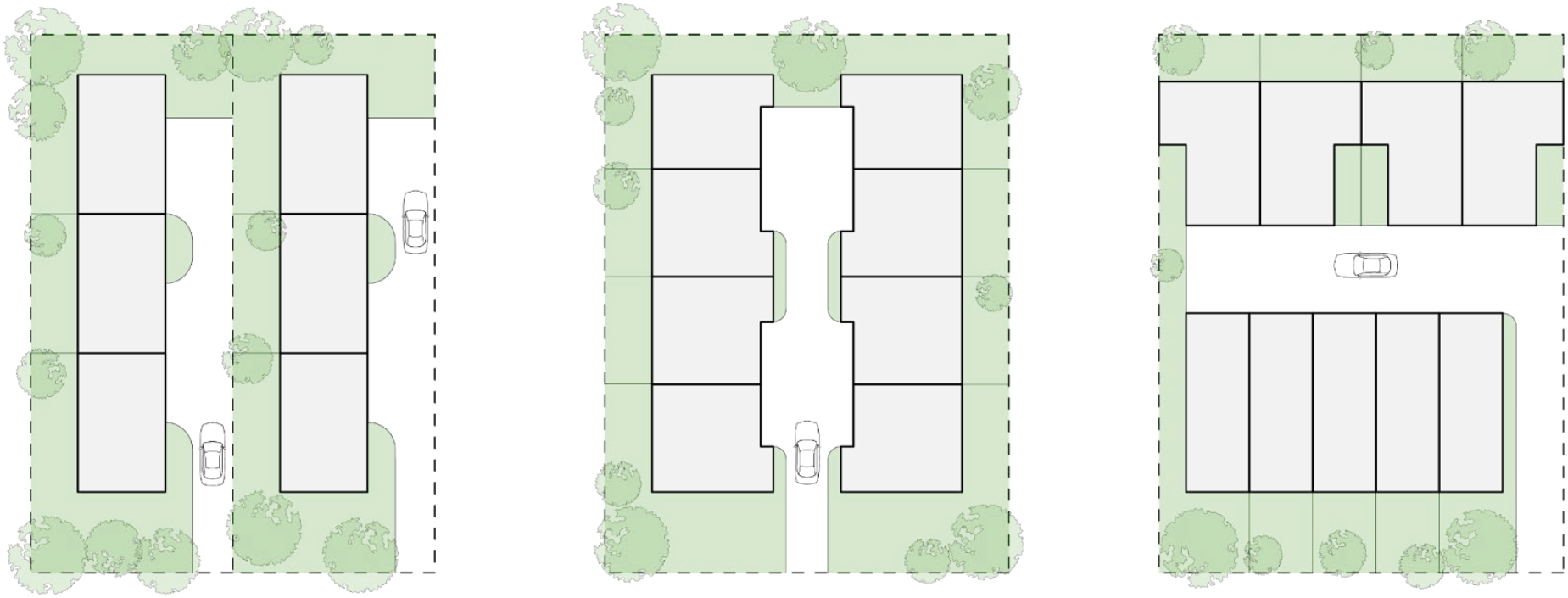
Although approximate, this method enables the research to effectively estimate the number of two-storey townhouses, across a large variety of site sizes and configurations.

Table: Side-by-side site amalgamation gives a 33% increase in the number of dwellings

Typology	Single Site Dwelling [#]	Two Sites Separate Dwellings [#]	Two Sites Amalgamated Dwellings [#]	Dwelling increase [%]
2-storey townhouse - Central Drive	3	6	8	33%
2-storey townhouse - Courtyard Drive	3	6	9	50%

Notes: Assumes two side-by-side amalgamated sites, with 15 m frontage and 600 m^2 site area. When joined together the dwelling yield increases by 33% and 50% depending on the design configuration.

Figure: Townhouse design test: side-by-side amalgamated site with 30 m frontage



Notes: Design test on two individual 600 m^2 sites with 15 m frontage. When amalgamated, a central driveway scheme yields 8 two-storey townhouses, compared to 6 when delivered separately. Alternatively, a courtyard driveway scheme can yield up to 9 two-storey townhouses with the garages off the shared courtyard, arranged with 5 townhouses facing the street and 4 facing to the rear.

6.2.2 Apartment increase from amalgamation

Low-rise apartments also represent an important housing type for suburban social housing. Although apartments typically incur higher construction costs than townhouses, they achieve greater density and can more easily meet Livable Housing Australia (LHA) Gold accessibility standards, primarily due to the inclusion of a lift, for step-free access.

Table: Prototypical townhouse and apartment areas

Dwelling	Description	Floor Area	Car Park	Circulation factor
Townhouses	Two-storey with 2BR, 1 study and 1 car	120 sqm	15 sqm	5% of buildable area
Apartments	Single-level with 2BR and 1 car	80 sqm	15 sqm	12% of buildable area

Typical apartments: The study assumes a prototypical 80 m^2 apartment, with two bedrooms, one flexible study space and one car park. To estimate the number of dwellings, a similar process as above for townhouses is applied:

1. **Calculate the buildable floor-area:** Quantify the maximum buildable floor-area for the site, given the site setbacks from ResCode, garden space area minimum from ResCode, and driveway width for turning circles

2. **Circulation factor:** Reduce the buildable floor-area by a 12% factor to allow for internal building circulations. Apartments have more internal circulations within the building, like e.g. corridors, stairs and lifts.

3. **Dwelling count:** Divide the adjusted buildable floor area by the dwelling area (80 m^2) and the car park area (15 m^2), rounding down to the nearest dwelling.

Table: 3-storey apartments: side-by-side site amalgamation on two 600 sqm sites

Typology	Single Site Dwellings [#]	Two Sites Separate Dwellings [#]	Two Sites Amalgamated Dwellings [#]	Dwelling Increase [%]
3-storey apartment	5	10	15	50%
4-storey apartment	5	10	18	80%

Notes: Assumes two side-by-side amalgamated sites, with 15 m frontage and 600 m^2 site area per lot. It is not possible to deliver a 4 storey apartment building on a standalone 600 m^2, as the setbacks cut off the top storey. When joined together the dwelling yield increases by 50% at 3-storey and 80% at 4-storey.

7 Scale of the Opportunity

Key Takeaways

- This section quantifies the potential increase in community housing dwellings from amalgamation.

- **Baseline scenario (existing sites only):** Redeveloping 1,673 existing community housing sites only with RPI greater than 50% without site assembly, the projected yield is:
    - **4,948** two-storey townhouses
    - **9,420** three-storey apartments
    - **10,305** four-storey apartments

- **Amalgamation scenario (community + adjoining private sites):** Amalgamating 1,637 existing community housing sites with the adjoining private sites (RPI > 50%) would yield:
    - **26,336** two-storey townhouses
    - **51,522** three-storey apartments
    - **65,134** four-storey apartments

  In comparison, standalone delivery of those same sites would yield:
    - **17,933** two-storey townhouses
    - **34,391** three-storey apartments
    - **37,906** four-storey apartments

  Under this comparison, assembly enables an increase in dwelling yield of ~47% for townhouses, ~50% for three-storey apartments, and ~ 72% for four-storey apartments respectively.

- **Targeted side-by-side assemblies at RPI > 70% (medium-term 1–5 years):** Focusing on side-by-side site assemblies only with a higher RPI threshold of greater than 70% yields:
    - **10,500** two-storey townhouses
    - **20,648** three-storey apartments
    - **26,042** four-storey apartments

  This equates to a dwelling yield increase of 35%, 38%, and 58% respectively.

- **Comparative impact:** Delivering **10,500** townhouses would represent a **72%** increase in total owned community housing dwellings across Greater Melbourne, Geelong, Ballarat, and Bendigo today

This section quantifies the potential increase in community housing dwellings from amalgamation. The study forecasts several scenarios to compare outcomes. The baseline scenario examines infill development *without* amalgamation, applying a Redevelopment Potential Index (RPI) threshold of greater than 50%. This is then compared with three amalgamation scenarios:

- **Scenario 1:** Amalgamation, with a RPI threshold above 50%
- **Scenario 2:** Amalgamation, with a higher RPI threshold above 70%
- **Scenario 3:** Side-by-side amalgamation only, with an RPI above 70%

These comparisons allow policymakers to assess the scale of the opportunity in terms of increased dwelling numbers.

7.1 Baseline scenario: total dwelling pipeline without amalgamation

Establishing a baseline for the number of dwellings achievable through redevelopment of existing suburban sites - without any amalgamation - is a useful first step. In the baseline there are 1,673 social housing sites with an RPI greater than 50% (indicating suitability for redevelopment within a ten-year timeframe).

A custom software script was developed to calculate the maximum buildable floor area for each unique site, based on the site frontage (in metres) and site area (in square metres), under the following assumptions:

- A building form of 2, 3, or 4 storeys
- Compliance with ResCode setback requirements
- 'Wedding cake' construction to maximise the buildable envelope
- A 5-metre driveway setback to accommodate turning circles, and
- A garden space requirement of either 30% or 35%, as specified by ResCode

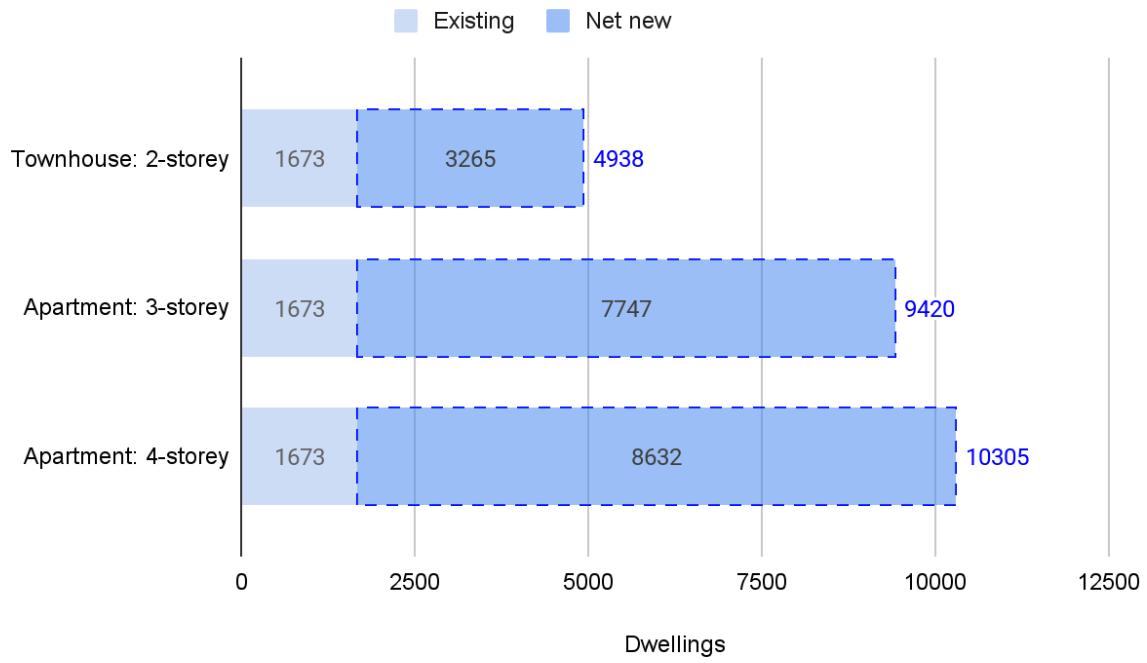
Armed with an estimate of the maximum buildable floor area for each site, the study forecast the total number of prototypical townhouses or apartments using the same methodology as outlined in the previous section. The baseline analysis yielded an estimated **4,938 two-storey townhouses**, **9,420 three-storey apartments**, and **10,305 four-storey apartments**, as summarised in the following table.

Table: Baseline: Total new dwellings *without* adjoining land purchase or amalgamation: RPI > 50%

Typology	Current	Net new	Total	Dwelling Multiple
Townhouse: 2-storey	1,673	3,265	4,938	3x
Apartment: 3-storey	1,673	7,747	9,420	6x
Apartment: 4-storey	1,673	8,632	10,305	6x

Notes: 1,637 existing dwellings with RPI > 50%, redeveloped into two-storey townhouses, or apartments at three or four storeys.

Figure: Baseline: Total new dwellings from redevelopment, *without* adjoining land purchase or amalgamation: RPI 50%



Notes: 1,673 existing dwellings, redeveloped into two-storey townhouses, or apartments.

- **Townhouses are more feasible:** Given where apartment construction costs are today, it is expected that most of these projects will be delivered as two-storey townhouses. Low-rise apartments are difficult to stack up with current construction prices. The fundamental issue is that apartments are more complex. The issue is especially acute for low-rise apartments, which have many of the same requirements under the National Construction Code (NCC) as mid-rise and high-rise, but without the density or economies of scale to compensate. The paper has a deeper discussion on this issue in the following section on apartment viability.

- **Baseline estimate:** Therefore, unless there are significant changes to the National Construction Code (NCC) making low-rise apartments more competitive, or a strong preference from government to simply pay more for apartments, a realistic estimate for the total dwelling pipeline is around 5,000 two-storey townhouses (rounding up from 4,939 in the model). As the analysis has shown, if apartments became more viable the total yield doubles.

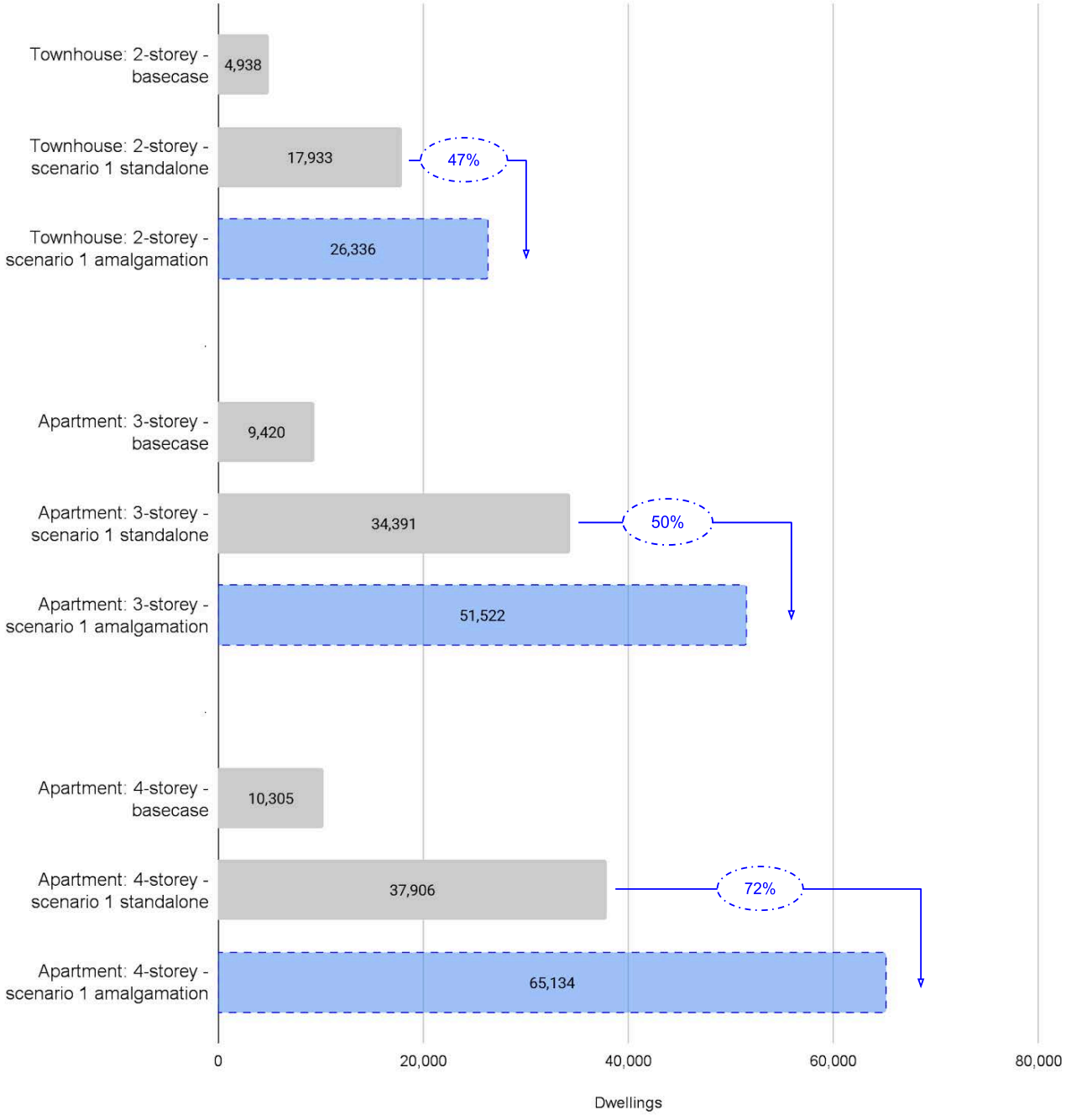
- **Typical project size:** The typical project size is around three townhouses per project: e.g. one existing older house redeveloped into three new two-storey townhouses, for a net increase in housing stock of 200%.

- **Adjustment for 66% data coverage:** The dwelling forecast is likely underreported due to the data gap discussed earlier. However, it is difficult to quantify the magnitude, as the dataset isn't a random sample. For that reason, the study takes a conservative approach and does not apply a scale-up factor.

7.2 Scenario 1: ten-year pipeline with amalgamation (RPI > 50%)

In this scenario, the analysis is repeated with the inclusion of adjoining site purchase and amalgamation. It is assumed that each adjoining site is acquired and merged with the primary site, creating a combined development opportunity. The results are then compared with standalone (individual) delivery on the same footprint, as well as with the baseline established in the previous section with no new land purchase.

Table: Dwelling increase from amalgamation. Sites with RPI > 50%.



Notes: 1,637 existing sites with RPI > 50% are amalgamated with the 3972 adjoining sites also with a RPI > 50%. Together they are redeveloped into townhouses, or apartments and compared to delivering the same sites standalone, or existings sites only.

Table: Dwelling increase of approximately 47% for townhouses

Typology	Existing sites [#]	Adjoining sites [#]	Standalone delivery: dwellings [#]	Amalgamated delivery: dwellings [#]	Dwelling increase [#]	Dwelling increase [%]
Townhouse: 2-storey	1,637	3,972	17,933	26,336	**8,403**	**47%**
Apartment: 3-storey	1,637	3,972	34,391	51,522	**17,131**	**50%**
Apartment: 4-storey	1,637	3,972	37,906	65,134	**27,228**	**72%**

Notes: 1,637 existing sites with RPI > 50% amalgamated with the adjoining 3972 sites also with a RPI > 50%. Together they are redeveloped into townhouses, or apartments and compared to delivering the same sites standalone to give the % comparison.

- **Townhouse increase:** The critical insight is the efficiency gain comparing amalgamation to standalone delivery. For two-storey townhouses, amalgamation delivers a **~47% (equating to an additional 8,403 dwellings)** over standalone delivery. This efficiency gain translates directly into more dwellings, at lower overall cost.

- **Apartment increase is even higher:** The benefits for low-rise apartments are even more pronounced, assuming they can be cost-effectively. The forecast suggests a **50% increase (an extra 17,131 dwellings)** for 3-storey apartments and **72% increase (an extra 27,228 dwellings)** for 4-storey apartments compared to standalone delivery.

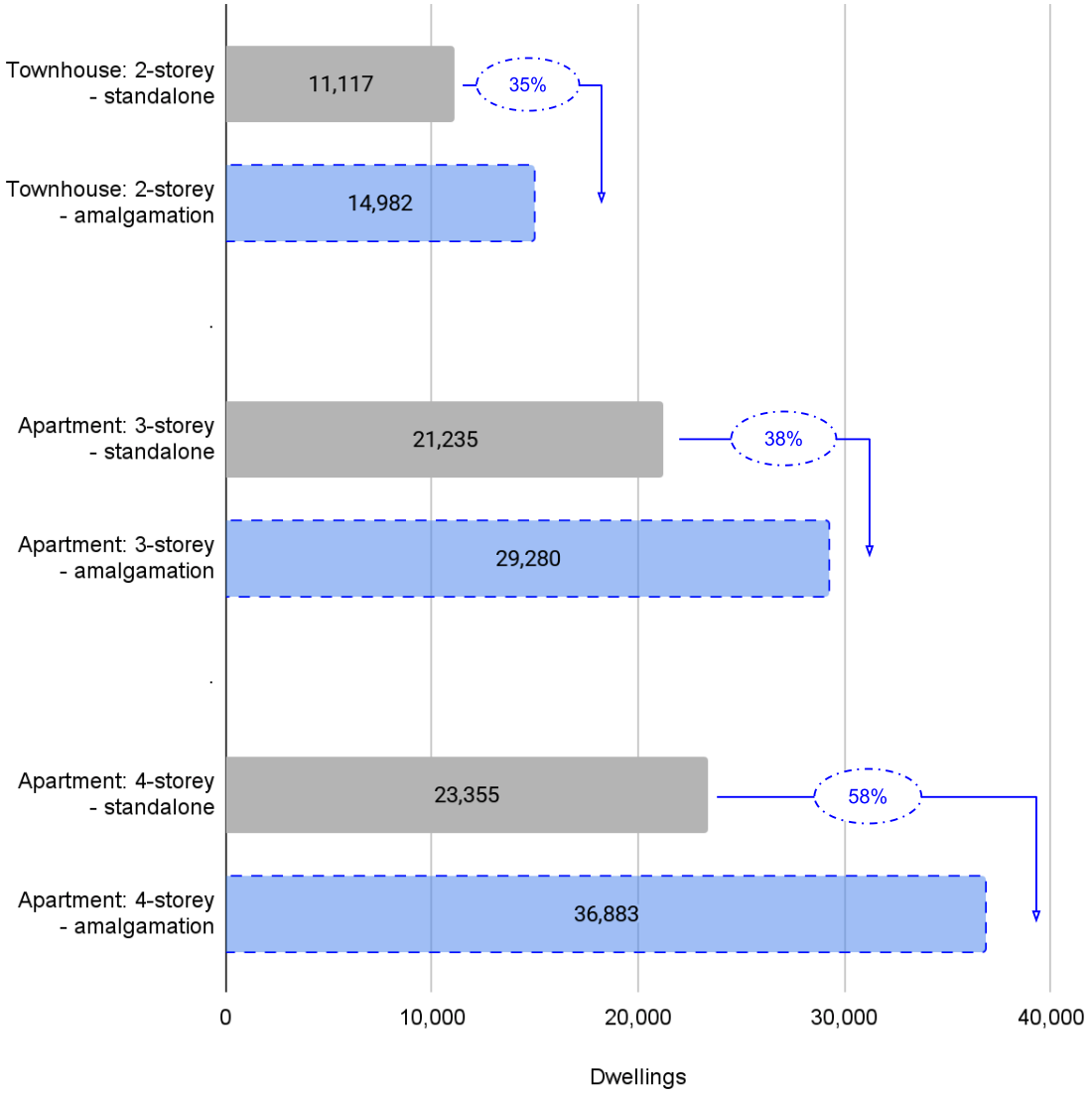
- **Super sites:** Interestingly, the overall dwelling-increase was higher than anticipated under this scenario. This is primarily because at an RPI threshold of 50% or higher a larger number of adjoining sites are available for amalgamation. The result is the formation of larger 'super sites' that, in turn, provide a higher buildable floor area.

- **More dwellings at lower cost:** The key takeaway from this forecast is that the **scale of the opportunity is massive**. Provided that action is taken promptly, the strategy will ultimately translate into a significant increase in social housing dwellings, delivered at lower cost. See the forthcoming section on finance for a more detailed breakdown on cost and benefit.

7.3 Scenario 2: near-term pipeline with amalgamation (RPI > 70%)

For a more near-term outlook - spanning the next 1 to 5 years - the analysis focuses on sites with a Redevelopment Potential Index (RPI) above 70%. These sites are better suited to near-term redevelopment and, therefore, would form the basis of a more targeted initial acquisition strategy.

Table: Dwelling increase from amalgamation. Sites with RPI > 70%.



Notes: 990 existing sites with RPI > 70%. They are amalgamated with the adjoining sites also with a RPI > 70%. Together they are redeveloped into two-storey townhouses, or apartments and compared to standalone delivery of the same sites.

Table: Total dwelling count. Redevelopment with amalgamation. Sites with RPI > 70%

Typology	Existing Sites [#]	Adjoining Sites [#]	Standalone delivery dwelling [#]	Amalgamated delivery dwelling [#]	Dwelling increase [#]	Dwelling increase [%]
Townhouse: 2-storey	990	2,138	11,117	14,982	**3,865**	**35%**
Apartment: 3-storey	990	2,138	21,235	29,280	**8,045**	**38%**
Apartment: 4-storey	990	2,138	23,355	36,883	**13,528**	**58%**

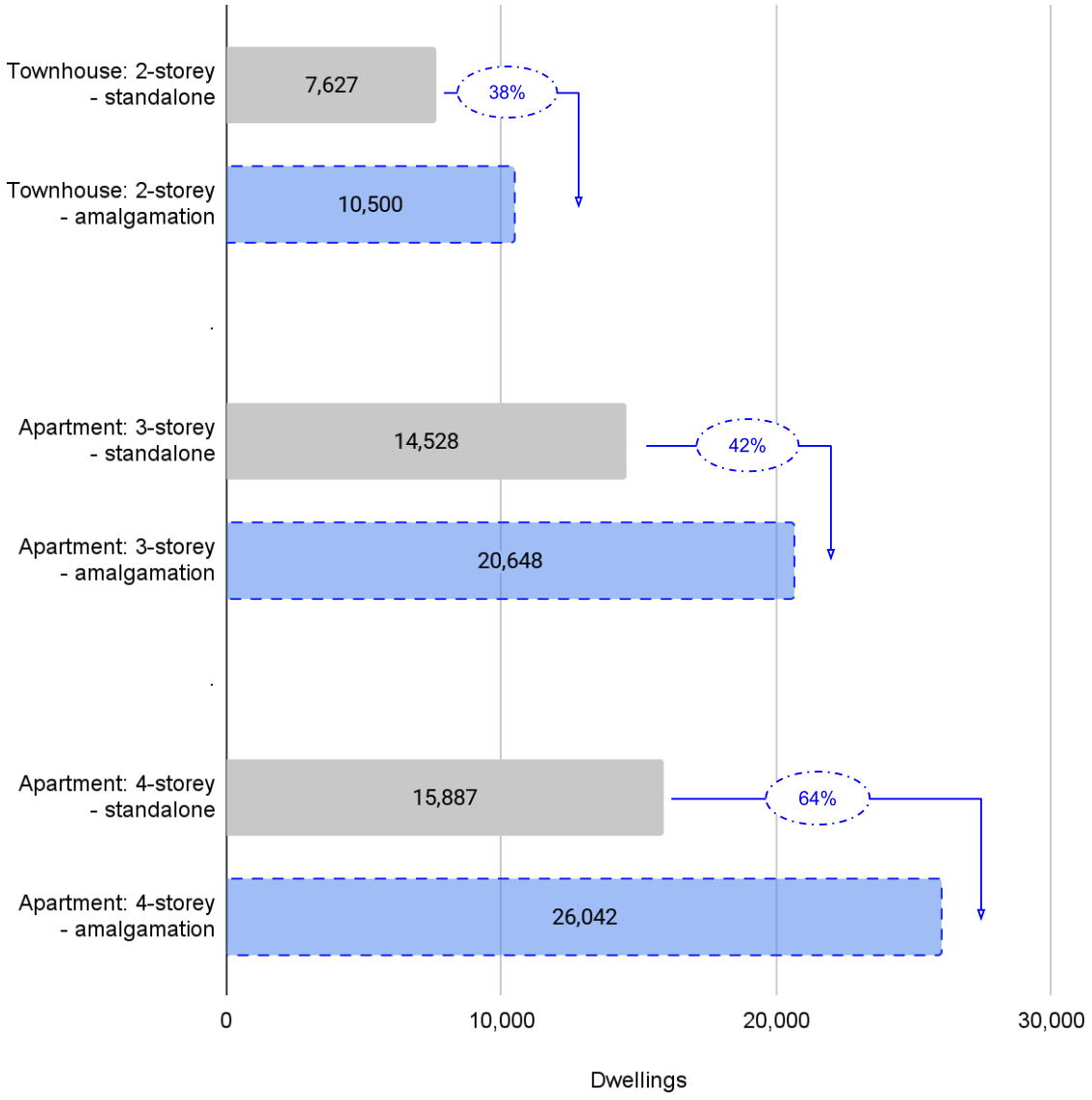
Notes: 990 existing sites with RPI > 70% are amalgamated with the adjoining sites also with a RPI > 70%. Together they are redeveloped into two-storey townhouses, or apartments and compared to the same sites if delivered standalone.

- **Townhouse increase:** Compared to standalone development, the efficiency gain from amalgamation equates to ~35% (3,865) increase in dwellings.
- **Apartment higher again:** The gain for apartments are even more significant, with an estimated increase of 38% - or 8,045 more dwellings - for three-storey apartments, and a 58% increase - equivalent to 13,528 more dwellings, for four-storey apartments compared to standalone delivery.
- **Fewer super sites:** When the amalgamation threshold is tightened to an RPI above 70%, fewer sites are available for joining. This reduction in potential 'super sites' results in a lower overall percentage increase in dwelling numbers.

7.4 Scenario 3: Focused pipeline with side-by-side amalgamation and RPI > 70%

Given that any roll-out of amalgamation will prioritise the highest-value opportunities, a scenario focusing solely on side-by-side amalgamation and a higher RPI threshold (greater than 70%) has been developed. Previous analysis demonstrated that side-by-side amalgamation substantially increases buildable floor area, while back-to-back amalgamation only delivers a modest 4% gain. By narrowing the analysis to side-by-side amalgamation with RPI > 70%, the forecast targets the most promising near-term sites.

Figure: Dwelling increase from side-by-side amalgamation only. Sites with RPI > 70%



Notes: 903 existing sites with RPI > 70% are side-by-side amalgamated with the adjoining sites (i.e. left, right, or both left and right) with a RPI above 70%.

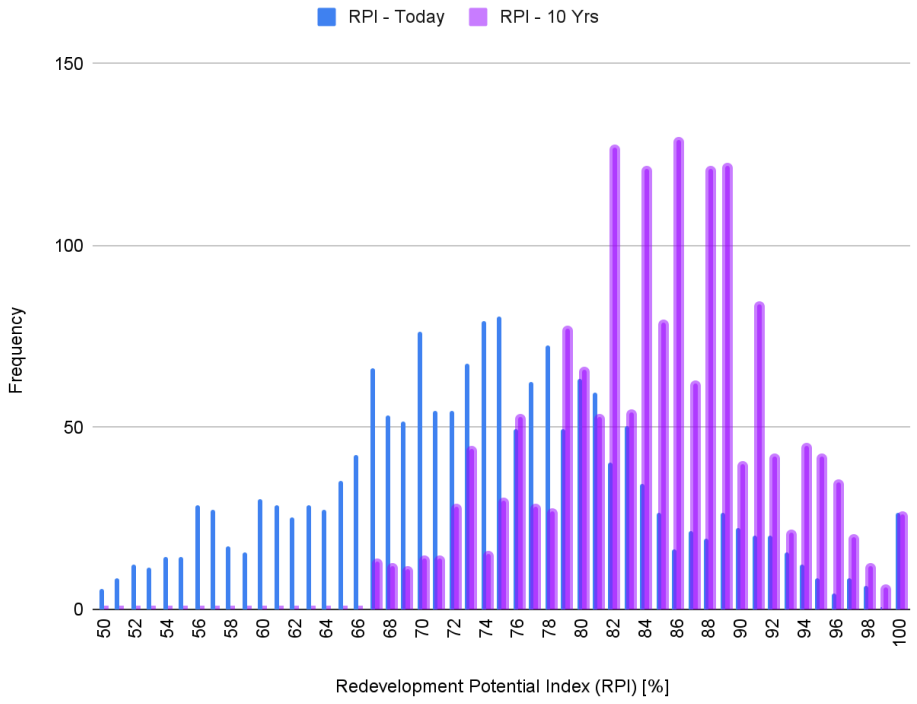
Table: Total dwelling count. Redevelopment with side-by-side amalgamation. Sites with RPI > 70%

Typology	Existing Sites	Adjoining Sites	Standalone Delivery Dwelling [#]	Amalgamated Delivery Dwelling [#]	Dwellings Increase [#]	Dwellings Increase %
Townhouse: 2-storey	903	1,503	7,627	10,500	2,873	38%
Apartment: 3-storey	903	1,503	14,528	20,648	6,120	42%
Apartment: 4-storey	903	1,503	15,887	26,042	10,155	64%

Notes: 903 existing sites with RPI > 70% are side-by-side amalgamated with the adjoining sites (i.e. left or right, or both left and right) if their RPI is also above 70%. Together they are redeveloped into two-storey townhouses, or apartments and compared to standalone development of the same sites.

- **Short-term townhouse pipeline:** The more focused pipeline gives a good indication of where to start. Under current feasibility assumptions, the vast majority of these dwellings are expected to be delivered as townhouses. This yields an estimated pipeline of approximately 10,500 dwellings - a **38%** increase (an additional 2,873 dwellings) compared to standalone delivery.

- **Longer term townhouse pipeline:** Delivering 10,500 townhouses would represent a **72%** increase in total owned community housing dwellings in Greater Melbourne, Geelong, Ballarat, and Bendigo today. As these projects are realised over time, sites with a lower RPI become development-ready, as indicated by the purple section of the chart below (reproduced from earlier in the report).



- **Early ownership is critical:** The problem with this trend is that the adjoining sites become more expensive with time. All else being equal, you therefore want to purchase the adjoining sites as early as you can, which is likely to be the next time it enters the market for sale.

8 Detour into Apartment Viability

Key Takeaways

- **Cost differential:** Low-rise apartments cost between $3,900 and $5,500 per square metre, compared to $2,600–$4,200 for townhouses. Higher costs are driven by the build's complexity (dwelling separation, circulation, additional services and materials) and a heavy compliance burden.
- **International comparison:** In the USA, low-rise apartments are constructed more cost-effectively through streamlined timber construction methods, offering a benchmark for potential improvements in Australia.
- **Regulatory constraints:** The absence of a dedicated low-rise building code forces all multi-unit dwellings to meet the same requirements as mid-rise and high-rise projects, contributing to the "missing middle" in housing supply.
- **Opportunities for reform:**
    - **NCC review:** A review of the NCC should rebalance the framework toward cost and complexity reduction, particularly by supporting timber-based low-rise construction.
    - **Timber prefab apartments:** Timber low-rise apartments, well-suited to prefabrication, could become more competitive if regulatory frameworks actively support low-rise timber adoption.
    - **Disseminate best-practice:** Additionally, establishing a process through the Australian Building Codes Board to rapidly disseminate best-practice Performance Solutions to drive industry-wide improvements.

This section examines the viability of apartments. As the previous section has shown, apartments - even at 3 storeys - provide almost double the dwelling yield, compared to townhouses. The table below presents the total dwellings counts when the RPI is set at greater than 50%. Under an amalgamated delivery scenario, there are **51,522** apartments at three-storey, **65,134** apartments at 4 storey, compared to **26,336** townhouses at two-storey.

Clearly, if apartments could be built at a cost similar to that of townhouses, there would be a strong case for prioritising apartment delivery in social housing, given their substantially higher dwelling yield. In addition, apartments can be smaller and work more efficiently as 1-bedroom and 2-bedroom designs, which are the highest demand dwellings sizes for social housing. Finally, apartments are easier to deliver as step-free dwellings due to lift access, which is important for accessible housing standards and government procurement.

Table: Apartments allow higher density, as you can go higher and smaller

Typology	Existing sites [#]	Adjoining sites [#]	Standalone delivery: dwellings [#]	Amalgamated delivery: dwellings [#]	Dwelling increase [#]	Dwelling increase [%]
Townhouse: 2-storey	1,637	3,972	17,933	26,336	**8,403**	**47%**
Apartment: 3-storey	1,637	3,972	34,391	51,522	**17,131**	**50%**
Apartment: 4-storey	1,637	3,972	37,906	65,134	**27,228**	**72%**

Notes: The analysis is based on 1,637 existing sites with an RPI greater than 50%, which are amalgamated with 3,972 adjoining sites that also meet the RPI threshold. These combined sites are redeveloped as two-storey townhouses, three-storey apartments, or four-storey apartments. The outcomes are then compared with a scenario in which the same sites are delivered as standalone developments, providing a percentage comparison of the increased dwelling yield.

8.1 Apartment cost issue

For apartments, their unique feature is high utilisation of land, which is another way of saying they provide access to better locations in a cost-effective way. In general terms, people are willing to pay more for a great location, which covers the higher relative construction cost.

However, as soon as you move further out and the desirability of the location drops, the feasibility starts to break. Over the past three years, as apartment construction prices have increased in Victoria, the set of viable apartment projects has narrowed to the luxury end of the market, in the best locations, with a 3-bedroom apartment now starting at over $1 million - more than an established house in many Melbourne suburbs today.

The recent Victorian planning reforms to increase density around activity centres and improve the overall productivity of the planning system are useful initiatives, however, they are unlikely to drive more affordable housing, unless the cost of delivery drastically reduces, or a subsidy mechanism is introduced.

The challenge is even more acute for low-rise apartments, which is the relevant typology for suburban in-fill in General Residential Zone (GRZ) relevant to this study. Low-rise apartments have many of the same requirements under the National Construction Code (NCC) as mid-rise and high-rise, but without the density or economies of scale to compensate.

Table: Apartments can cost more than double per sqm than townhouses

	2-storey Townhouse Low	2-storey Townhouse High	Low-rise Apartment Low	Low-rise Apartment High
Construction cost / sqm	$2,600	$4,200	$3,900	$5,500

Notes: Cost data from Rider Levett Bucknall 2025, 'Construction Cost Indicator', *RLB Intelligence*, https://www.rlb.com/ccc/ and authors' own market experience. Low-rise apartments assume a lift.

8.1.1 Smaller apartments reduce cost per dwelling

For social housing, the emphasis is mostly on the total cost per dwelling, rather than the market value as well. One notable advantage of apartments is that they can achieve a more efficient floor plan by sharing circulation spaces—such as lifts, stairs, and corridors—on a single level, which allows for more compact designs while maintaining comparable amenity. However, even with a smaller dwelling size, the higher construction cost per square metre, the per-dwelling cost is still higher, while offering less internal space, as illustrated in the example table below, with the townhouse low-end costing $380,000 compared to $460,000 for the apartment low-end.

Table: Total cost per dwellings for a two-storey townhouse compared to a low-rise apartment

	2-storey Townhouse Low	2-storey Townhouse High	Low-rise Apartment Low	Low-rise Apartment High
Construction cost / sqm	$2,600	$4,200	$3,900	$5,500
Floor Area	120	120	80	80
Share of Common Area	0	0	10	10
Car Park	15	15	15	15
Construction cost / dwelling	$351,000	$567,000	$409,500	$577,500
Consultant cost / dwelling	$30,000	$50,000	$50,000	$70,000
Construction & Consultant cost / dwelling	**$381,000**	**$617,000**	**$459,500**	**$647,500**

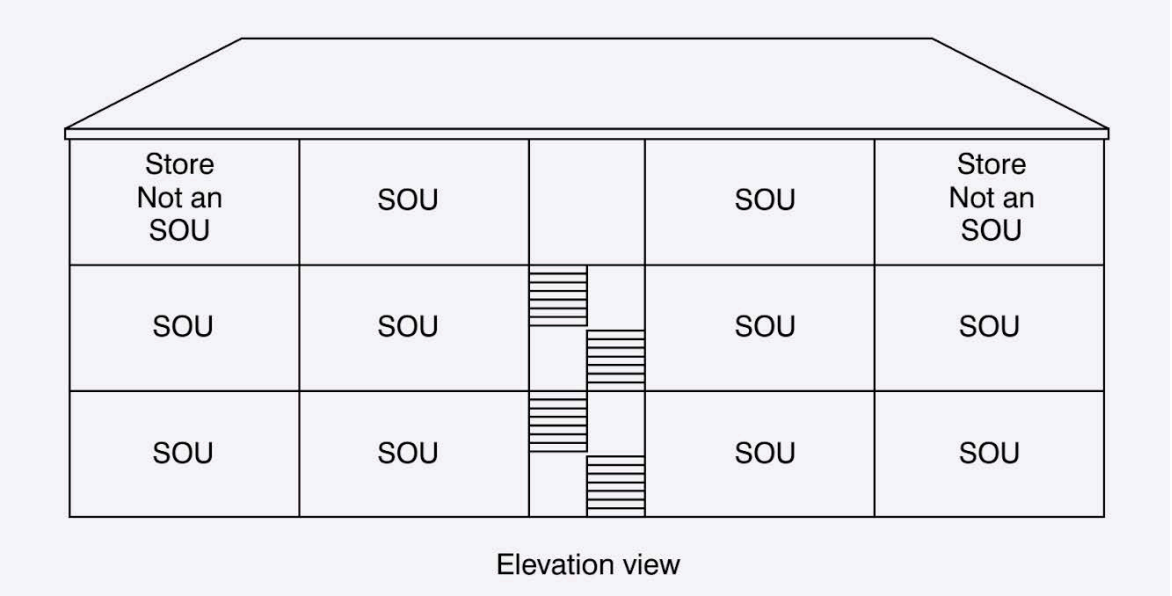
Notes: Cost data from Rider Levett Bucknall 2025, 'Construction Cost Indicator', *RLB Intelligence*, https://www.rlb.com/ccc/ and authors own market experience. Prices for Melbourne from Q4 2024. Low-rise apartments assume a lift.

8.2 Why so much higher?

Apartments are more complex to construct due to several factors:

- **Separation**: There is a need for robust acoustic and fire separation between each apartment and all internal public spaces (such as corridors). Every penetration must meet stringent fire and acoustic rating requirements.
- **Access:** Multi-storey access must be provided via lifts and staircases.
- **Services:** Additional service requirements include mechanical ventilation, centralised fire detection systems, fire sprinklers, and fire hydrants. These systems can also necessitate on-site booster pumps and water storage tanks, particularly where street water pressure is insufficient.
- **Structure:** Although lightweight timber construction is permitted, it is associated with a high compliance burden. As a result, concrete and steel construction is often preferred as it has fewer restrictions and greater predictability.

Figure: Three-storey apartment elevation showing sole occupancy unit (SOUs)



Notes: Diagram from WoodSolutions 2022, 'Timber-framed Construction for Multi-residential Buildings Class 2 & 3', WoodSolutions.

- **Compliance burden:** Apartments are subject to a substantial compliance burden, as they transition into a higher building classification (from Class 1 to Class 2) under the NCC. Consequently, delivering an apartment project requires engaging a broader range of specialised consultants, each of whom requires coordination and incurs additional fees. A significant portion of their scope is driven by regulatory compliance rather than pure engineering design.

  Typically, a low-rise apartment project involves input from more than 20 consultants, including:

  Design

  1. Architect
  2. Landscape architect

  Engineering

  3. Structural engineer
  4. Civil engineer
  5. Geotechnical engineer
  6. Traffic engineer
  7. Electrical engineer
  8. Hydraulics engineer
  9. Mechanical services engineer
  10. Lift engineer
  11. Fire engineer
  12. Performance solution engineer
  13. Acoustics engineer

Surveyors

14. Land surveyor
15. Quantity surveyor
16. Building surveyor

Sustainability & Access

17. Arborist
18. Sustainability consultant
19. Access consultant
20. Waste management consultant

The complexity and coordination required among these consulting parties add considerable cost and time to the project. For a small low-rise apartment development, it becomes particularly challenging to amortise these additional consulting and compliance expenses across a limited number of dwellings, ultimately undermining the project's overall viability.

The above analysis is supported by the recent Productivity Commission report *Housing Construction Productivity: Can we fix it*[9], which underscored that regulatory bottlenecks have contributed to a **53% decline in home-building productivity since 1995**, emphasizing that a comprehensive review of the NCC is essential to unlock more cost-effective construction methods, including timber-based low-rise apartments.

[9]Productivity Commission. (2025) *Housing construction productivity: Can we fix it?* [PDF]. Available at: https://www.pc.gov.au/research/completed/housing-construction (Accessed: 20 March 2025)

8.2.1 U.S. multi-family housing: a path to viability for Australia?

In the United States it is a different story. Apartments - or multi-family housing as they are called - are typically **more cost-effective per square foot than single-family homes**.

Table: U.S. construction costs before square foot is lower for multi-family than houses

Location	Multi-Family Low	Multi-Family High	Single-Family Low	Single-Family High
Boston	275	375	295	410
Chicago	205	470	280	560
Denver	200	355	230	465
Honolulu	280	480	315	590
Las Vegas	200	475	235	470
Los Angeles	255	420	225	400
New York	240	470	345	690
Phoenix	185	280	195	525
Portland	275	385	295	440
San Francisco	400	625	330	550
Seattle	275	465	255	390
Washington DC	210	355	265	390

Notes: Values in the table above represent indicative costs of current building costs in each respective market at Q3 2024. Costs will vary as a consequence of factors such as site conditions, climatic conditions, standards, specification, etc. Values represent hard construction costs based on US dollars per square foot of gross floor area. Source: Rider Levett Bucknall 2025, 'Construction Cost Indicator', *RLB Intelligence*, https://www.rlb.com/ccc/.

This U.S. advantage comes almost entirely from the construction method. Globally, single-family houses are usually built with timber, while apartments are constructed using concrete or steel. In contrast, in the U.S. developers can build 3–5 storey multi-family apartments with timber - similar to how single-family homes are built - but with even higher economies of scale. This approach, combined with lower labour costs in certain U.S. regions and a large homebuilding industry, allows U.S. multi-family projects to be delivered at lower cost compared to those of other Western countries, like Australia.

West coast anomaly: Notably, the data above from major West Coast cities - Los Angeles, San Francisco, and Seattle - reveal anomalies where multi-family construction costs exceed those of single-family homes. The principal explanation is that in these urban, seismically active markets, multi-family projects must adhere to more stringent design and regulatory requirements. These extra layers of complexity and compliance drive up the construction costs per square foot for multi-family buildings relative to single-family homes in these areas.

8.3 Path forward for low-rise apartments in Australia

Under the current Australian regulatory regime, low-rise apartments have become unviable. That is why this report focuses most forecasts on townhouses when considering dwelling pipelines. However, the analysis has shown that the yield increase from apartments can be double, even at 3 storeys, so it is imperative to advocate for change in the interest of improving the overall productivity of housing for all Victorians.

To put the opportunity in perspective a back-of-the-envelope example is in order. There are roughly 50,000 new dwellings delivered per year (giver or take) at an average construction cost of say $500,000 each, yielding a total cost of $25 billion per year. A 10% improvement in productivity would save $2.5 billion per year, every year, that can be reallocated to other higher order activities. That is quite an outsized impact and worthy of serious scrutiny.

Importantly, the United States has demonstrated that a viable pathway does exist for cost-effective low-rise apartments delivery. In Australia, the core problem is that low-rise apartments must meet many of the same requirements as mid-rise and high-rise developments, without benefiting from the economies of scale that higher density projects achieve. Comprehensive regulatory reform is necessary - that acknowledges the real costs and encourages rather than hampers the use of timber for low-rise construction, which is more cost-effective if not for the unambiguously complex regulatory regime. Any reform should aim for pragmatic solutions that reflect the lower risk profile of low-rise apartments and create opportunities for cost savings.

The breakout box below outlines three options for further consideration:

Box: How to fix low-rise construction cost: three areas that warrant further investigation:

- **Review National Construction Code (NCC) for low-rise apartment timber construction:** NCC 2022's performance requirements—particularly around fire safety, structural robustness, and acoustics—combined with fewer streamlined design options, make timber-based low-rise projects unnecessarily complex to deliver in Australia. As the U.S. example shows, apartments can be **more cost-effective under a regulatory framework that actively encourages timber construction.** In Australia, developers typically opt for concrete as it is more straightforward and predictable to meet NCC requirements. This imbalance in the regulatory framework must be comprehensively addressed.

- **Encourage prefabrication by supporting low-rise timber construction:** Off-site prefabricated construction predominantly uses timber due to its higher strength-to-weight ratio and easier transportation. A comprehensive review of the National Construction Code (NCC), specifically targeting low-rise timber apartment construction, will further open the Australian market to prefabrication.

  Prefabrication relies on a high level of repetition and scale to achieve cost-effectiveness. Overseas experiences demonstrate that once these conditions are met, prefabrication becomes more affordable and faster than traditional methods. Low-rise apartments naturally provide the necessary repeatability and scalability. And

unlike prefabrication for houses or townhouses, the inherently higher base cost of traditional apartment construction provides a competitive opening for prefabrication to gain a foothold.

However, regulatory frameworks must actively support timber-based low-rise construction, as concrete is not a viable prefabrication material at this project scale. Reform in this area is critical to unlocking the full potential of prefabrication in Australia.

- **Rapidly disseminate best-practice Performance Solutions through ABCB:** Adopt a structured process, managed through the Australian Building Codes Board (ABCB), to convert industry best-practice Performance Solutions into a catalogue of Deemed-to-Satisfy (DtS) provisions. The primary benefit of this approach is the reduction of repetitive engineering compliance work, by embedding proven solutions directly into the DtS framework. More importantly, this provides an opportunity to rapidly disseminate best-practice solutions, driving industry-wide improvement.

9 How to Pay for Site Amalgamation

Key Takeaways

- **Amalgamation uplift:** Site assembly increases the land value of both lots through more efficient land use allowing more dwellings for the same land. On a typical townhouse project on two 600 m² blocks, the 'amalgamation uplift' boosts value by ~**30%**.
- **Increase existing land value:** By leveraging site amalgamation, CHOs can gain a competitive edge by increasing the value of the land they already own.
- **Power of early purchase:** Purchasing an adjoining site (when it enters the market) allows CHOs to benefit from land appreciation (historically 6–7% per annum in Melbourne) until redevelopment, without the tax drag that private developers face.
- **Long-term capital gains:** The combined benefits of land appreciation and the amalgamation uplift create significant long-term capital gains. These gains are monetised through refinancing when the social housing projects are delivered, ultimately lowering the comparative social housing cost to government.
- **Total cost (1,000 site scenario):** Acquiring **1,000** adjoining sites for side-by-side amalgamation with **1,000** existing sites, costs approximately **$792 million** over ten years, with a total interest cost to government of **$202 million** at 5% per annum over the period. The site acquisition finance for the CHO is assumed to be a grant, or alternatively an interest free loan.
- **Cost savings & increased yield:** The forecast saving is approximately **$250,000** per new townhouse (compared to standalone delivery). Under this scenario over **8,700** new townhouses can be delivered.
- **Overall government savings:** Total savings to government are estimated at more than **$1.99 billion** over ten years, driven by (i) lower cost land, (ii) increased land use efficiency, (iii) leveraging existing community housing sites, and (iv) larger, more productive project delivery.
- **Sensitivity analysis:** indicates that even with 0% land price growth, a saving of **$1.13 billion** is still achievable.
- **Longer-term opportunity:** With further commensurate investment, the strategy can expand to deliver over **26,000** townhouses, or **51,000** 3-storey apartments (assuming apartment viability) or **65,000** 4-storey apartments (with planning reform to allow 4-levels on larger amalgamated sites), **tripling** community housing in Victoria[10].
- **Timeliness is critical:** Immediate action is essential to opportunistically secure adjoining sites, when they come onto the market, while current land prices are still affordable.

[10] 26,105 community housing homes as of March 2025. Include both owned and managed properties. Victorian Government (2025) *Housing Registrar*. Available at: https://www.vic.gov.au/housing-registrar (Accessed: 20 March 2025).

This section of the report is important, as it discusses the methods for measuring the financial benefits of site amalgamation and determining the mechanisms to pay for it. Without a robust financial foundation, the concept will remain a promising idea, rather than a practical solution.

The section first outlines how to quantify the value uplift resulting from site amalgamation. It then examines the strategic importance of 'land banking' and explores methods to monetise the capital gains otherwise locked in the land. Next, it canvasses the different funding structures for the acquisition of the adjoining sites and offers a cost-benefit analysis and sensitivity analysis on the core assumptions to give an indication of the total cost-benefit to government.

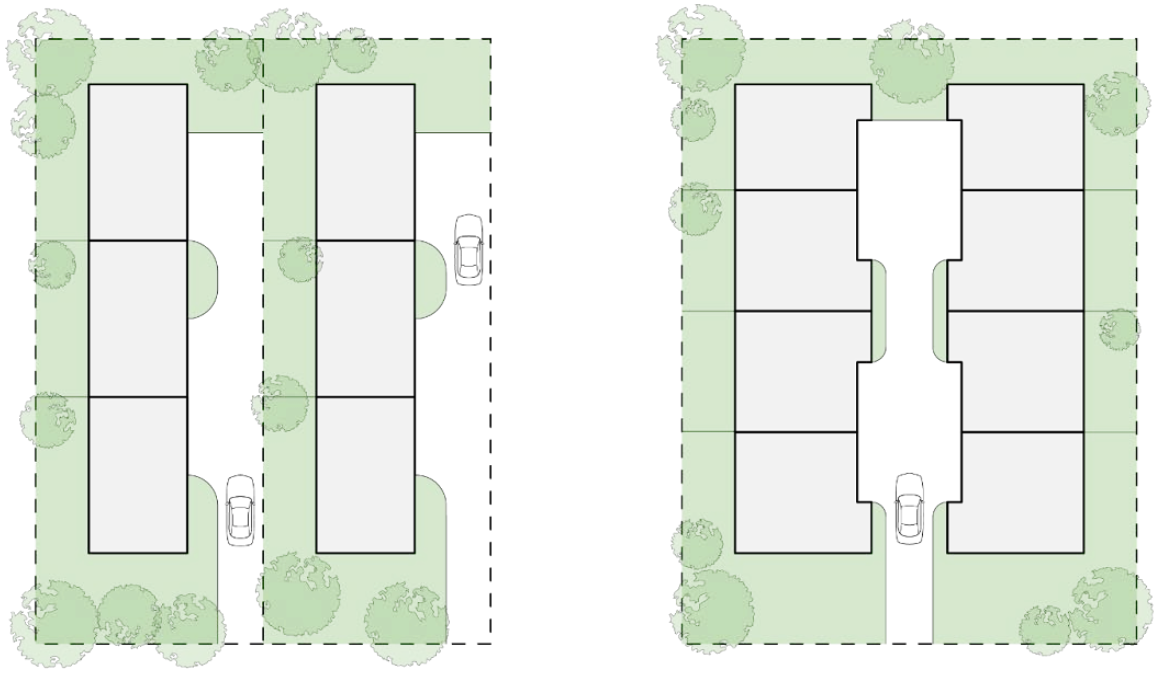
9.1 Amalgamation uplift

As the report has discussed in detail, amalgamating sites can boost the buildable floor area from 30% to 70% compared to standalone delivery—a benefit known as the 'amalgamation uplift.' This increase in yield significantly drives up land values.

A central tenet of the strategy is that social housing providers can capture this uplift by acquiring adjoining properties prior to amalgamation; if the amalgamated site were purchased on the open market, the uplift would already be priced in.

To quantify the value uplift, the report employs a residual land value calculation—a standard valuation method—using a prototypical townhouse project. In this example, two separate adjoining 600-sqm sites yield 6 townhouses, whereas an amalgamated 1,200-sqm site yields 8 townhouses.

Figure: Dwelling increase from amalgamation: 6 townhouses compared to 8 townhouses



Value uplift: As the table below illustrates, amalgamating sites can boost the land's value by 33%, owing to the increased number of dwellings that can be built. This uplift applies equally to the current lot already held by the community housing provider and to the adjoining lot once it is acquired.

Table: Amalgamation uplift of ~33% when two 600 m^2 are joined together

	1 x Standalone Site	**2 x Standalone Sites**	**1 x Amalgamated Site**
Site Area (m2)	**600 m^2**	**1,200 m^2**	**1,200 m^2**
Townhouses	**3**	**6**	**8**
Revenue / Townhouse	*$750,000*	*$750,000*	*$750,000*
Revenue	**$2,250,000**	**$4,500,000**	**$6,000,000**
Construction / Townhouse	*$400,000*	*$400,000*	*$400,000*
Construction	$1,200,000	$2,400,000	$3,200,000
Finance & sales	$60,000	$120,000	$160,000
Consultants & other fees	$150,000	$300,000	$400,000
Total Development Cost (ex Land)	**$1,410,000**	**$2,820,000**	**$3,760,000**
Developer Profit on Cost	*12%*	*12%*	*12%*
Residual Land Value	**$670,800**	**$1,341,600**	**$1,788,800**
Residual Land Value Increase			**33%**

Notes: Two 600 sqm lots are joined together and delivered as a single townhouse project with 8 townhouses, compared to 6 if they were delivered standalone. This yields a residual land value increase of roughly 33%.

- **Economies of scale:** Additional efficiency gains are anticipated from reducing per-dwelling consultant and management overheads as project sizes grow, given their returns to scale. For easier comparison, the example above has not factored that into the calculation.

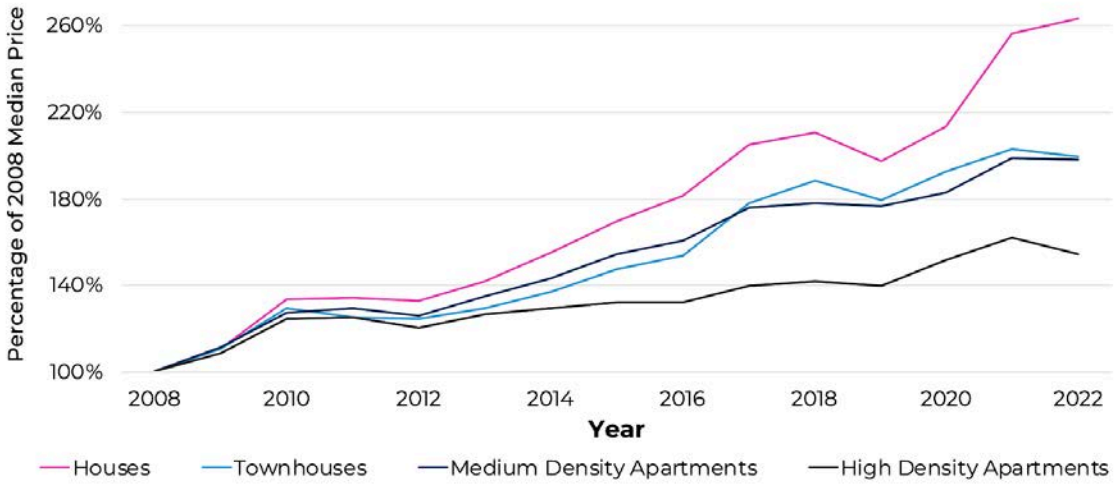
- **Why the 'amalgamation uplift' matters to CHOs:** This analysis is crucial because community housing providers compete in the open land market alongside other developers. By leveraging site amalgamation, they can **gain a competitive edge and convert the land they already own into a higher-value asset.**

- **Why the 'amalgamation uplift' matters to government:** As the principal funder of social housing, the government benefits from increased efficiency in the community housing sector, through reduced cost per dwelling. More efficient land use lowers the overall cost — either reducing total expenditure or enabling more dwellings to be delivered for the same budget. Furthermore, since one of the two amalgamated lots is already owned by the CHO, its value is effectively unlocked through amalgamation, allowing for higher utilisation and a further reduction in per-dwelling costs, as it is not burdened by direct project acquisition expenses.

9.2 Power of early land purchase (i.e. land banking)

In Australia, population growth is a key driver of residential land values over the medium to long-term. In areas with strong access to jobs and infrastructure, residential land remains an inherently scarce resource.

Figure: Relative change in median established house and unit prices Melbourne 2008-2022



Notes: LongView and PEXA (2023) *What drives Australian house prices over the long term?* [whitepaper], available at: https://www.pexa-group.com/statically-media/2023/02/LV-PEXA-Whitepaper-1-What-Drives-House-Prices-Over-the-Long-Term_M-LR-sm-1676869593.pdf (Accessed: 18 March 2025).

By acquiring adjoining sites in the near term, community housing organisations (CHOs) can capitalise on land appreciation without incurring the taxation drag typically faced by for-profit developers. The advantages include exemption from stamp duty at acquisition, no land tax during the holding period, and no GST on redevelopment—factors that significantly enhance the economic viability of early land for social housing providers.

The combined benefits of land appreciation and the amalgamation value uplift create a significant opportunity for long-term capital gains for the sector. However, if action is delayed, these same economic tailwinds lead to higher future prices for both land and dwellings, making future acquisitions significantly more challenging.

The breakout box below provides a worked example that demonstrates how early land purchase combined with site amalgamation can deliver substantial capital returns.

Box: Example for two $500k lots: capital appreciation and the amalgamation uplift in action.

- CHO owns a lot with an existing house, with a market value of $500k and a RPI > 70%
- CHO buys the one next door for $500k, also with an existing house and a RPI > 70%
- Over the next 5 years, both properties increase in value by 5% per year. Each property now has a value of $638k.

- Both lots are then amalgamated, in preparation for development. They increase in value, by a one-off 30% due to the amalgamation uplift. The lots now have an individual value of $830k each, or ~$1.66m in aggregate
- **Total capital appreciation over the 5-year period is 66%**

9.3 Monetisation

Until now, the increases in property value from land appreciation and the amalgamation uplift have been treated as capital gains within the land asset. The next obvious question is how to monetise this value — specifically, how to finance the delivery of social housing redevelopment and repay any loans associated with the land from acquisition. Three broad approaches are identified:

1. **Direct Government Funding:** The project can be packaged for funding through the Housing Australia Future Fund (HAFF) or Social Housing Growth Fund (SHGF) or similar government social housing programmes. Given that the community housing organisation already owns the amalgamated land, funding would only be required for construction and any associated financing.

2. **Cross-Subsidisation within the Project:** This approach involves developing a mixed project where a portion of the dwellings are rented or sold at market rates, thereby subsidising the cost of below-market social housing. Although such projects can be challenging to deliver, the amalgamation uplift and long-term benefits of land appreciation make this option more viable.

3. **Cross-Subsidisation outside the Project:** Under this model, the amalgamated site is sold to a private developer, with the proceeds used to finance other social housing projects.

Of these options, (1) direct government funding and (2) cross-subsidisation within the project are the most attractive to government stakeholders, as they ensure that social housing is delivered on the amalgamated site. The third option (3) also provides an entrepreneurial alternative, as it maximises the proceeds of the amalgamated sale for use on other social housing projects, providing a useful backstop in a funding constrained environment.

9.4 Financing site purchase

One of the more interesting questions for the amalgamation strategy is how to finance the initial purchase of the adjoining land.

Government typically finances the direct delivery of social housing. However, there is a useful precedent in the National Housing Infrastructure Facility (NHIF), run by Housing Australia, that provides concessional loans, grants, and equity investments for the development of critical **housing-enabling infrastructure**. Rather than financing the construction of houses directly, the NHIF helps fund the essential utilities and services—such as roads, electricity, water, sewerage, and telecommunications—that allow new housing developments to proceed or accelerate.

A similar model can also be applied to funding the land purchase for site amalgamation, likely through the State Government, building on the work of the Affordable Housing Investment Partnerships (AHIP) program delivered by the Department of Treasury and Finance (DTF).

Ongoing consultations with the community housing sector and government on the preferred funding avenues is required. A high-level list of options—or combinations thereof—is provided below:

- **Government grants:** Direct grants to cover a portion or the entirety of the site purchase.
- **Recoverable grants:** These are backed by state or federal government and offer two key advantages: (i) the capital can be repaid if specific conditions are met, enabling further re-investment, and (ii) they are de-risked for the CHO as repayment is only required under certain conditions.
- **No-interest concessional loans:** Also backed by state or federal government, these loans offer the benefits of eventual repayment to the government and pose no cash-flow risk for the CHO as there are no monthly interest payments.
- **Low-interest concessional loans:** A viable alternative, provided the interest rate is sufficiently low to ensure the CHO can comfortably service the debt.
- **Government equity loans:** In this model, the government provides equity and receives a return on their loan in line with the asset's capital appreciation, or depreciation.

Further discussion is underway with the sector and government to determine the most appropriate funding structure from here.

9.5 How much does it cost?

How much the strategy costs depends on the scale of ambition and the financing structure adopted. There are numerous permutations, and further detailed study in close collaboration with government and the community housing sector is required. For this section, the study adopts a simple capital grants approach, as one of several possible financing pathways, to quantify the cost and corresponding benefits.

9.5.1 Scenario 4: 1,000 adjoining sites over 10 years

Earlier in the paper, the study forecast the total dwellings from side-by-side site amalgamation (scenario-3) — when the Redevelopment Potential Index (RPI) is above 70% — at ~10,500 for townhouses and 20,648 for three-storey apartments, from 903 existing sites and 1,503 adjoining sites. Scenario-3 targets the highest value, near-term opportunities and represents a robust starting point for investment. The study uses that as the basis for extrapolating the dwelling forecast for 1,000 adjoining sites and 1,000 existing sites (scenario-4).

Table: Scenario-3 reference. Redevelopment, side-by-side amalgamation, sites with RPI > 70%

Typology	Existing Sites	Adjoining Sites	Standalone Delivery Dwelling [#]	Amalgamated Delivery Dwelling [#]	Dwellings Increase [#]	Dwellings Increase %
Townhouse: 2-storey	903	1,503	7,627	10,500	2,873	38%
Apartment: 3-storey	903	1,503	14,528	20,648	6,120	42%
Apartment: 4-storey	903	1,503	15,887	26,042	10,155	64%

Notes: 903 existing sites with RPI > 70% are side-by-side amalgamated with the adjoining sites (i.e. left or right, or both left and right) if their RPI is also above 70%. Together they are redeveloped into two-storey townhouses, or apartments and compared to standalone development of the same sites.

To quantify the level of investment, the study assumes financing **1,000 adjoining sites, alongside 1,000 existing sites**. In practice, policymakers may choose to invest more or less. However, this scenario (4) gives the reader a basis for understanding the cost and value to decide what to do next.

Assuming 1,000 adjoining sites and 1,000 existing sites, the study extrapolates by reference to the ratio of the total number of sites in this scenario (1,000 existing + 1,000 adjoining) divided by the total number of sites in Scenario-3 (903 existing + 1,503 adjoining) to give a ratio of 0.831. The study then applies[11] the ratio to forecast the total number of new dwellings at **8,730** townhouses — or a net increase of **7,730** dwellings (adjusting for the 1,000 existing community housing dwellings that are being renewed). The outcome is more than a **50%** boost in total owned[12] community housing stock once delivered in the study area.

If the approach were extended to three-storey apartments (assuming construction feasibility is resolved), and applying the same extrapolation method as above, the total number of new dwellings would be roughly **17,160** apartments, for a net-increase of **16,160** dwellings (adjusting for the 1,000 existing community dwellings being renewed) - equivalent to **110%** increase in total owned community housing once delivered in the study area.

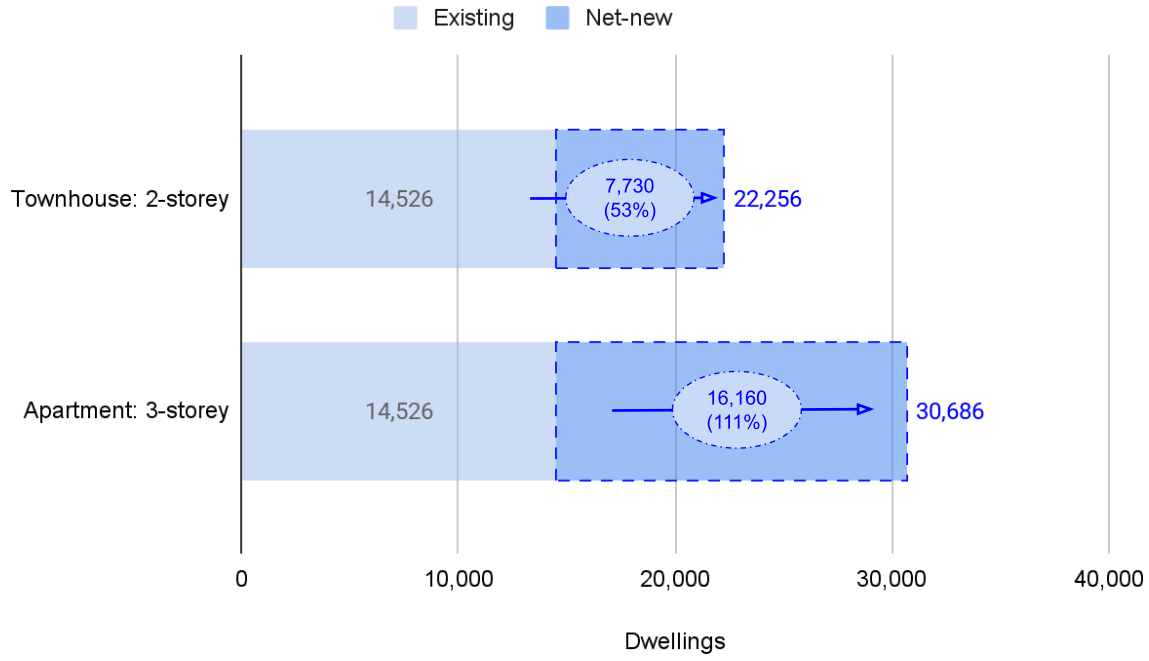
[11] The study applies the comparative site ratio of 0.831 to extrapolate the dwelling yield. Calculated by multiplying 10,500 townhouses (from Scenario-3) by 0.831 = 8,730 townhouses for the current scenario.
[12] 14,526 owned community housing dwellings in the study area, from Australian Institute of Health and Welfare (AIHW) 2024.

Table: Scenario-4: Extrapolate using a comparative site ratio of 0.831

Typology	Scenario-3 Amalgamated Delivery Side-by-Side RPI > 70%	Site Ratio	Scenario-4 Amalgamated Delivery 1,000 adjoining sites & 1,000 existing sites
Townhouse: 2-storey	10,500	0.831	8,730
Apartment: 3-storey	20,648	0.831	17,160

Notes: Extrapolation ratio equal to 0.831 of dwelling yield from Scenario-3. Ratio calculated by dividing the total number of sites in the current Scenario-4 (1,000 existing + 1,000 adjoining) by the total number of sites in Scenario-3 (903 existing + 1,503 adjoining), which yields a ratio of 0.831. The study then applies that ratio to extrapolate the dwelling yield, as 10,500 townhouses (from Scenario-3) x 0.831 = 8,730 townhouses for the current scenario

Table: Scenario-4: Increase in community housing from amalgamating 1,000 adjoining sites with 1,000 existing sites, as townhouses or apartments in the study area



Notes: Existing community housing dwellings count of 14,526 for Melbourne, Geelong, Bendigo, Ballarat and Bendigo only. Community housing data from Australian Institute of Health and Welfare (AIHW) 2024, *Housing assistance in Australia 2024*, viewed 10 March 2025, https://www.aihw.gov.au/reports/housing-assistance/housing-assistance-in-australia

9.5.2 Scenario-4: Why 1,000 adjoining sites over ten years?

One of the critical features of the site amalgamation strategy is that the **land is purchased opportunistically**, so the amalgamation uplift is captured by the CHO. “Door knocking” is not the proposition, as the negotiation in that method favours the seller, who can claim a premium. Instead the sites are likely purchased through a buyer’s advocate, when they enter the market.

The rate of housing turnover in Australian cities is roughly 5% in any given year.[13] The analysis identified **1,637 sites** well-suited for site amalgamation over the next decade (RPI > 50%), with 2,528 sites adjoining **side-by-side**. So in any given year that correlates to approximately **125 properties** available for opportunistic purchase on the open market. The study only had access to ~66% of detached community housing data, meaning these figures are under-reported. Based on the above, **100 site purchases per year over 10 years** is viewed as a reasonable assumption for the scenario. That is the equivalent of more than **800 new townhouses per year**[14], or around **1,600 new low-rise apartments,**[15] outsripping current community housing supply by an order of magnitude.

[13] CoreLogic Australia (2022) *Housing turnover reaches the highest level in nearly 12 years*, CoreLogic Australia. Available at: https://www.corelogic.com.au/news-research/news/archive/housing-turnover-reaches-the-highest-level-in-nearly-12-years (Accessed: 19 March 2025).
[14] The estimate multiples the number of amalgamated sites per year (100) by 8, based on an 8 townhouse project average
[15] The estimate multiples the number of amalgamated sites (100) by 16, based on a 16 project average for 3-storey apartments

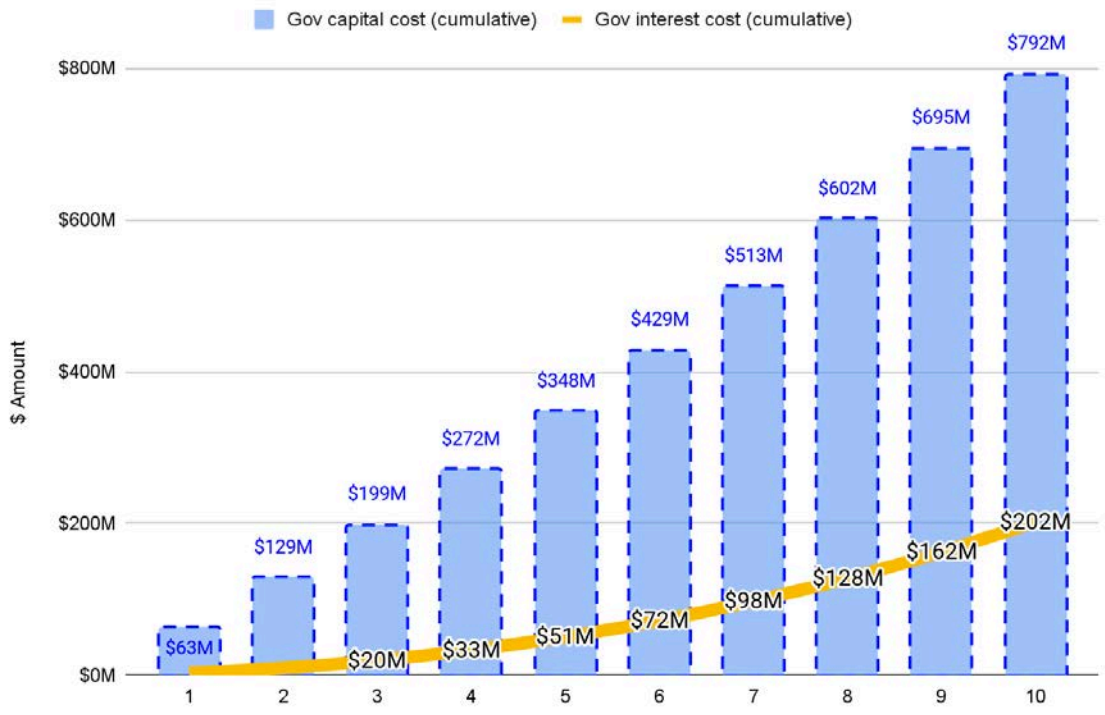
9.5.3 Scenario-4: Capital cost for 1,000 adjoining sites

The analysis now quantifies the capital cost for acquiring the adjoining sites. Assuming 1,000 adjoining sites are purchased over 10 years - at 100 sites per year - at a median site value of $630k[16] in year-1, with prices increasing at 5% per annum during the five acquisition phase, the total acquisition cost is approximately **$792 million**, or **$80 million on average per year over ten years**.

This **$792 million** is assumed to be fully financed by the State Government at the current 10-year rate of around 5%, provided by the Treasury Corporation of Victoria, resulting in total interest costs of roughly $**202 million** over ten years.

Once acquired, each site is held for five years until redevelopment is complete, at which point a new financing structure — tuned for long-term social housing (for example, through the Victorian Social Housing Growth Fund or the federal Housing Australia Future Fund) — would be adopted.

Figure: Total capital cost of $792 million over ten years



Notes: Site acquisition is assumed to ramp at 100 sites per year for 10 years until 1,000 sites are purchased. Redevelopment is assumed to be completed within the 5-year hold period. Grant funding from government is used to partly fund the community housing project

[16] $630k is the median capital improved value of each site in the dataset where the RDI is greater than 70%. Note the data uses VGV capital improved value, which is generally an under reporting of market value.

9.5.4 Scenario-4: Cost-benefit for 1,000 adjoining sites

In the last subsection, the government capital cost and interest costs were estimated. This section focuses on calculating the benefits. The key benefits include (i) lower cost land (through early purchase), (ii) leveraged existing community housing land assets, (iii) increased dwelling yield (via amalgamation), and (iv) increased project efficiency through larger developments — all of which ultimately enable the delivery of more social housing at a lower cost.

For clarity, this framework excludes the additional value of urban design benefits, as these are more difficult to quantify (refer to the following section on urban design). To calculate the value, the report quantifies the cost savings relative to standalone delivery of the same sites.

- **Under the amalgamation scenario**, the assumptions remain as previously outlined. It is assumed that 1,000 adjoining sites are purchased over a ten-year period (100 sites per year) at a median purchase price of $630k, increasing by 5% per annum. Each site is held for five years until redevelopment is complete. The value of the existing site is priced at the median value of $630k, escalated at 5% per year. Based on these assumptions, total capital cost for site acquisition is $792 million, with total interest costs amounting to $202 million. In addition, a 5% reduction in construction and consultancy costs per dwelling is applied, reflecting the economies of scale achieved from larger, more efficient projects.

- **In contrast, for standalone delivery,** it is assumed that the adjoining sites are acquired at the time the project is delivered. Consequently, while there is no government interest cost for early acquisition, the land cost is higher due to the annual 5% p.a. The value of the existing site is priced at market, being the median value of $630k, with a 5% p.a. escalation.

Table: Saving per dwelling with a 1,000 adjoining sites

	Standalone	Amalgamation
Gov interest cost	$0	$202,000,000
Adjoining site cost	$1,011,000,000	$792,000,000
Existing site cost	$1,011,000,000	$0
Construction cost per dwelling	$400,000	$400,000
Consultant cost per dwelling	$50,000	$50,000
Efficiency factor	0%	5%
New dwellings	6,340	8,728
Net-new dwellings	5,340	7,728
Total construction & consultant cost	$2,853,000,000	$3,731,000,000
Total development cost	**$4,875,000,000**	**$4,523,000,000**
Cost per new dwelling	$768,929	$518,207
Saving per dwelling		**$250,722**
Total saving, after gov interest		**$1,986,000,000**

Notes: Total development cost is given by the sum of adjoining site cost, existing site cost and construction cost. Government interest is subtracted from total savings. For the standalone scenario it is assumed that 1,000 adjoining sites are purchased at the time the project is delivered, so no government interest cost is accrued. Also, the value of existing community sites are assumed to be provided to the project at market cost

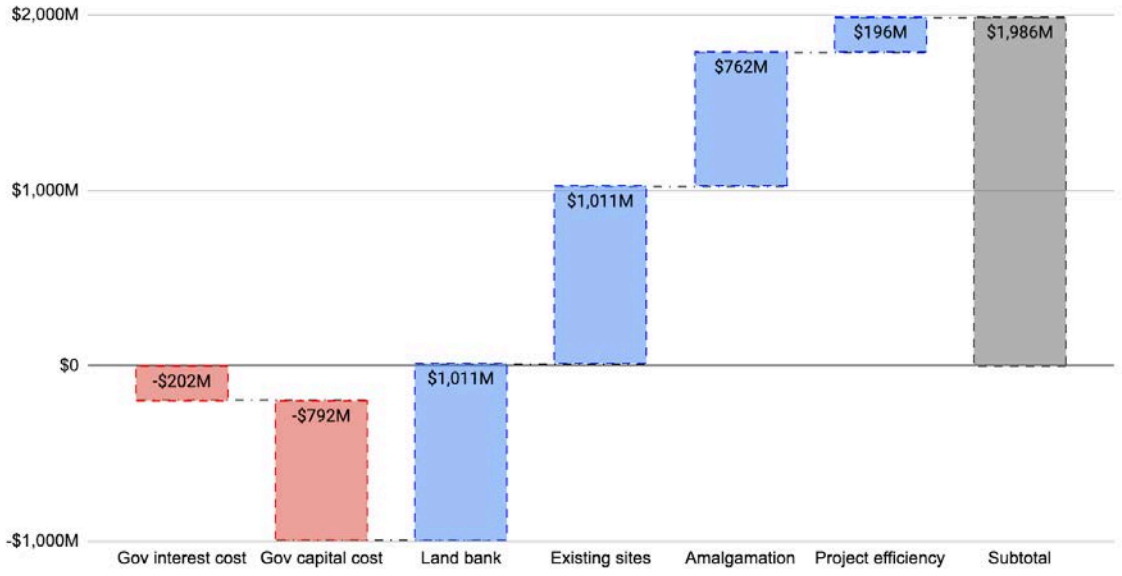
- The total savings from amalgamation is **$250k per new social housing dwelling**.
- The total saving is **$1.99 billion** for around **8,730 new townhouses**.
- The saving results in an undiscounted (simple) **Benefit-Cost Ratio (BCR) of 3.0**, indicating a significant economic benefit. For context, a BCR of 1 indicates that costs and benefits are equal, while a BCR above 3.0 is regarded as excellent.

Table: Benefit-cost ratio from site amalgamation with 1,000 adjoining sites

Cost-Benefit Analysis	New dwellings
Gov capital & interest cost	$994M
Benefit (savings before gov interest & capital cost)	$2,980M
Cost-Benefit	$1,986M
Return on Investment [%]	200%
Simple Benefit-Cost Ratio	**3.0**

Notes: Undiscounted (simple) benefit-cost ratio calculated by dividing benefit ($2,980 million) by cost ($994 million).

Figure: Breakdown of cost and savings from site amalgamation with 1,000 adjoining sites



Notes: Government interest costs shown in red. Savings shown in blue. Total savings shown in grey.

In this scenario, the costs to the government are interest (**$202 million**) and capital (**$792 million**). Savings are driven by the land bank (**$1,011 million**), equal to **$219 million** after capital cost, unlocked existing sites (**$1,011 million**), the amalgamation uplift (**$762 million**), and project efficiency gains (**$196 million**), yielding a total cost-benefit of roughly **$1.99 billion**.

9.5.5 Scenario-4: Sensitivity analysis to site price growth

To assess the robustness of the forecast, the analysis tests the sensitivity of the results by varying the annual increase in site value. Three cases are presented:

- **In the low-case (0% annual increase)**, highlighted in red below, site costs remain static over 10 years. In this scenario, the total **cost-benefit is ~ $1.13 billion** with a **BCR of 2.4** driven primarily by the amalgamation uplift and project efficiency improvements from larger projects. Government interest costs are lower since less capital is required. **Although land banking does not add financial value (as land prices do not grow in this scenario) it remains essential for opportunistically securing adjoining sites.**

- **In the base-case (5% annual increase)**, highlighted in blue, a 5% annual growth rate is assumed over 10 years (with historical data from CoreLogic[17] showing a long-run average of 5.9% for houses in Melbourne). Here, the return from land banking is around **$219 million**, the amalgamation uplift contributes approximately **$762 million**, and project efficiency gains add **$196 million**, yielding a total cost-benefit of roughly **$1.99 billion** and a **BCR of 3.0**.

- **In the high-case (7% annual increase)**, highlighted in purple, a 7% annual growth rate results in a land banking return of about **$351 million** and an amalgamation uplift of around **$921 million**, while project efficiency savings remain constant. This produces a total cost-benefit forecast of approximately **$2.27 billion** for a **BCR of 3.1**

Sensitivity analysis for annual site price growth rate, with existing sites at market value

Site price increase [%]	0%	1%	2%	3%	4%	5%	6%	7%	8%
Interest cost	-$173M	-$179M	-$184M	-$190M	-$196M	-$202M	-$209M	-$215M	-$222M
Capital cost	-$630M	-$659M	-$690M	-$722M	-$756M	-$792M	-$830M	-$870M	-$913M
Land bank	$630M	$693M	$762M	$837M	$920M	$1,011M	$1,111M	$1,221M	$1,341M
Existing sites	$630M	$693M	$762M	$837M	$920M	$1,011M	$1,111M	$1,221M	$1,341M
Amalgamation	$475M	$523M	$575M	$631M	$694M	$762M	$838M	$921M	$1,011M
Project efficiency	$196M	$196M	$196M	$196M	$196M	$196M	$196M	$196M	$196M
Cost-Benefit	**$1,128M**	**$1,267M**	**$1,421M**	**$1,589M**	**$1,778M**	**$1,986M**	**$2,217M**	**$2,474M**	**$2,754M**
Benefit-Cost Ratio	2.4	2.5	2.6	2.7	2.9	3.0	3.1	3.3	3.4

[17] CoreLogic (2022) *The long game… 30 years of housing values*. [Online]. Available at: https://www.corelogic.com.au/__data/assets/pdf_file/0015/12237/220829_CoreLogic_Pulse_30years_Finalv2.pdf (Accessed: 16 March 2025).

9.6 Urban design value

Box: Urban design benefits of amalgamation:

The focus of this study has been to quantify the benefits of amalgamation in terms of increased social housing delivery, at lower cost through more efficient use of land - the most scarce resource in housing development.

However, there are additional benefits to sites amalgamation that are also relevant to improving streets, neighbourhoods and infrastructure. Some examples include:

- **More density in existing suburbs:** Amalgamating suburban sites facilitates higher residential densities in existing areas, allowing better access to existing infrastructure, for more people, closer to transport and employment
- **Greener streets, fewer crossovers:** Fewer driveways and crossovers free up valuable space for tree-lined streets and landscaping.
- **Less impact on neighbours:** Reduced neighbouring interfaces reduce issues with overlooking and overshadowing
- **Easier open space integration:** Larger, contiguous sites offer the flexibility to integrate more public spaces and communal areas
- **Opportunities for mixed-use:** Site amalgamation allows larger developments that blend housing with local community facilities or employment. This mixed-use approach provides more walkable neighbourhoods, where services can be closer.
- **More efficient infrastructure:** Unified sites allow higher infrastructure utilisation, reducing the overall cost to the community

10 Where to Next

Key Takeaways:

- **Coordination problem:** Site assembly leads to significant yield benefits, but the timing of land sale prevents it from eventuating often in the private market.
- **Unique position:** Community housing organisations (CHOs) are uniquely positioned to capitalise on site amalgamation due to their large, existing suburban landholdings, which overcome typical coordination challenges faced by private owners.
- **Public housing opportunity:** While this report shows incredible opportunity for community housing, initial analysis of public housing data indicated a five-fold larger opportunity, which should be verified with urgency.
- **Funding mechanism:** A fast funding stream will be critical to enable opportunistic purchase, as will the sector's capacity to effectively landbank.
- **Policy commitment:** Funding will depend on strong policy alignment, requiring further investigation and collaboration with government stakeholders.
- **Political and budgetary priorities:** While regulatory reforms can support the strategy's rollout, they are not essential. Addressing political and funding challenges is most critical.
- **Future work:** Future policy work must be undertaken in partnership with government and the community housing sector to determine the best implementation approach.
- **Urgency:** To secure the opportunity, government and CHOs must act now, as land prices will rise and site acquisition opportunities will pass by, eroding the long-term promise of the strategy.

10.1 Implementation

10.1.1 Coordination problem

If site amalgamation is such a good idea, with such a significant economic benefit, why is it not more common? As this report has shown, site amalgamation provides significant, measurable increases in housing stock, in addition to well-researched urban design benefits. However, the private-sector uptake has continued to be evasive:

- **Issues of timing:** The main issue is that of timing. While housing changes ownership regularly, it rarely does so at exactly the same time side-by-side. Though it can occur in waves through neighbourhoods, particularly as housing ages and redevelopment potential increases broadly, it is rare that two properties are sold simultaneously or that a buyer has enough capital to buy one and then take the risk of waiting for the other.

- **CHO advantage:** The proposed system in this report resolves a number of these issues: Firstly, the issue of timing is largely overcome. As the community housing sector already owns thousands of suburban lots, it is simply a matter of purchasing the adjacent lot when it becomes available and land banking it until redevelopment.

- **Amalgamation uplift:** Market dynamics are also overcome as the community housing provider is not purchasing the property after amalgamation (at a premium), but at the single lot market price, so they are able to capture the value, rather than the seller.

- **Unique opportunity:** As such, the CHOs are some of the few institutions that can immediately benefit from site assembly. The sector's success may also provide a signal to the market that site assembly can work, leading to more efficient land use policy into the future.

10.1.2 Property sales frequency

The feasibility of this system rests on a number of key factors, including funding, policy direction and political will. In terms of application, and assuming that all other factors align with the system, the rate of housing turnover in Australian cities (5% annually[18]) assures that out of the total opportunity set around **5% will turnover in any given year**.

The report identified **1,637 sites** well-suited for redevelopment over the next decade (RPI > 50%), with **2,528 sites adjoining side-by-side**. Therefore, in any given year that correlates to approximately **125 properties** available for sale on the open market. That is equivalent to more than **1,000 new townhouses per year**[19], or around **2,000 new low-rise apartments,**[20] outstripping current community housing supply by an order of magnitude.

As the study did not have access to all community housing addresses, these estimates are conservative. In addition, public housing data was not included in the study, which likely presents a five-fold larger opportunity again[21].

Box: Example implementation model

The decision on which adjoining sites to purchase is best made by the CHO, as they must deliver the social housing project. Importantly the financing program must be sufficiently agile to allow for opportunistic purchase, as soon as the adjoining property enters the market. The authors envisage that each CHO would undertake an audit of their portfolio and identify the best amalgamation opportunities. From there, the CHO would go through a process to gain financial pre-approval with the program financing partner, so they are armed and ready to purchase the site if or when it comes onto the market. The CHO would likely employ a **buyer's advocate** to manage the

[18] CoreLogic Australia (2022) 'Housing turnover reaches the highest level in nearly 12 years', CoreLogic Australia. Available at: https://www.corelogic.com.au/news-research/news/archive/housing-turnover-reaches-the-highest-level-in-nearly-12-years (Accessed: 19 March 2025).
[19] The estimate multiples the number of amalgamated sites by 8, based on an 8 townhouse project average from earlier analysis in the report
[20] The estimate multiples the number of amalgamated sites by 16, based on a 16 project average for 3-storey apartments, established earlier in the report
[21] See earlier discussion in the paper on the potential scale of the opportunity for public housing.

acquisition on their behalf, to help achieve the best deal and maintain anonymity for the CHO during the transaction.

Before purchase, the sites would need the next level of due diligence. Any process would need to look at both the positive attributes of the site and the potential pitfalls. Some early considerations include:

Positive attributes:

- Site size → bigger is better
- Social housing demand → higher is better
- Redevelopment Potential Index → higher is better
- Proximity to public transport → closer is better
- Proximity to shops & other amenity → closer is better
- Land price / sqm → lower is better, but needs to be balanced with location

Due diligence checks:

- Screen for encumbrances, like covenants
- Screen for sewage or stormwater upgrades (especial that require neighbouring consent)
- Screen for large trees blocking development
- Screen for slopes → flat is best
- Screen for shape → rectangle is best
- Screen for flood risk
- Screen for bushfire risk
- Screen for restrictive overlays

10.2 Policy work

10.2.1 Fast funding mechanisms

When properties go on the market, they are purchased rapidly — far more quickly than typical budgetary approval processes allow. Consequently, a funding mechanism must be established that enables the speedy purchase of sites as they come up. This requires a formal policy framework in advance, prioritising early purchase and aligning funding with that objective as a means of securing the future cost-effective delivery of social housing in Victoria. Such an arrangement would necessitate engagement with key stakeholders in housing policy and funding, including Homes Victoria, the Department of Transport and Planning (DTP) and Department of Treasury and Finance (DTF), as well as the Commonwealth Treasury and Housing Australia at a federal level.

A critical aspect of this strategy is assessing the appetite for long-term investment in early land purchase, as an enabler of social housing, as distinct from the direct investment in the homes themselves. This is particularly important given the assumption that land acquisition and redevelopment funding would be two separate financial streams, meaning that the land would be held for some time prior to redevelopment commencing.

10.2.2 Low-rise timber apartment construction

If low-rise apartments were as feasible to construct as they are in the United States, the site amalgamation strategy would be supercharged—potentially doubling the dwelling yield from **26,000 townhouses** to **51,000 three-storey apartments** or **65,000 four-storey apartments**[22]. A comprehensive review of the National Construction Code (NCC), focused on improving housing productivity for low-rise apartments, could significantly reduce delivery costs for all new housing, not just social housing. Social housing would be one of the largest beneficiaries of such reforms.

Under the current NCC 2022 performance requirements—especially regarding fire safety, structural robustness, and acoustics—timber-based low-rise apartment projects face unnecessarily complexity. The recent Productivity Commission report *Housing Construction Productivity: Can we fix it*[23], underscores that regulatory bottlenecks have contributed to a **53% decline in home-building productivity since 1995**, emphasizing that a comprehensive review of the NCC is essential to unlock cost-effective, modern construction methods, including timber-based low-rise apartments.

In contrast, the United States demonstrates that a regulatory framework actively encouraging timber construction can make apartments more cost-effective. Currently, Australian developers favour concrete for its predictability under the NCC, an imbalance that needs to be addressed.

Encouraging off-site prefabrication, which predominantly uses timber for its superior strength-to-weight ratio and ease of transport, could further open the market. Low-rise apartments inherently provide the repetition and scale required for cost-effective prefabrication, offering a competitive edge market entry point over houses or townhouses. To unlock this potential, regulatory frameworks must actively support timber-based low-rise construction, as concrete is not viable for prefabrication at this project scale.

Furthermore, a structured process managed by the Australian Building Codes Board (ABCB) should convert industry best-practice Performance Solutions into a catalogue of Deemed-to-Satisfy provisions. This approach would reduce repetitive compliance work and rapidly disseminate proven solutions, driving industry-wide improvements in housing delivery.

10.2.3 Planning scheme amendments

Enhancements to the planning scheme, while not essential for the strategy's success, could significantly boost the scale and impact of site amalgamation. For example, a key measure would be to raise the maximum building height in the General Residential Zone (GRZ) **from three to four storeys** for amalgamated sites that meet specific criteria - such as a minimum site area of 1,000 square metres and a minimum frontage of 30 metres—while still ensuring appropriate setbacks for neighbours. This change is justified by the fact that larger sites can accommodate greater setbacks, thereby minimising adverse effects such as overshadowing and adverse sitelines. The study shows that if four-storey development were allowed, **approximately 80% of the sites in the dataset could benefit**, as they are currently zoned GRZ. This could potentially increase the yield to **50,000 four-storey apartments**[24] **in GRZ only**. However, the full impact of these planning scheme amendments would only be realised if coupled with a review of the National Construction Code (NCC) to reduce the costs associated with low-rise apartment construction—the critical typology for capitalising on increased building heights.

[22] Dwelling data from the Scenario-1: ten year pipeline with Redevelopment Potential Index greater than 50%
[23] Productivity Commission. (2025) *Housing construction productivity: Can we fix it?* [PDF]. Available at: https://www.pc.gov.au/research/completed/housing-construction (Accessed: 20 March 2025)
[24] 80% multiplied by 65,000 four-storey apartments identified in the study

10.3 Conclusion:

The discussion paper reveals a significant opportunity for community housing organisations to leverage their existing landholdings by creating amalgamated sites and redeveloping aging stock to deliver a substantial increase in social housing—at a forecast **saving of approximately $250,000 per new dwelling.**

With a State Government investment of less than **$80 million per year over ten years**, policymakers can secure the near-term pipeline of the community housing sector in Victoria, adding more than **8,700 townhouses**, with a total saving to government of **$1.99 billion** through early land purchase, increased land use efficiency, and more productive project delivery.

Over the longer term, with further commensurate investment, the strategy can expand to deliver more than **26,000 townhouses** or **51,000 three-storey apartments** (with National Construction Code reform to improve viability) or **65,000 four-storey apartments** (with planning reform in General Residential Zone).

This opportunity is time-sensitive, as rising land prices will rapidly erode the potential for adjoining site purchases.

Future work should examine how planning and building regulations can be adapted to promote higher yields, particularly for low-rise apartments. Additional assessments of state-owned public housing stock is also needed, which has an even larger opportunity than community housing.

Even more critical are the next steps in operations and policy implementation. Internally, community housing organisations must address constraints such as limited development capacity, balance sheet restrictions, realistic funding needs and rigid spending time frames imposed by housing authorities. This will require deeper engagement to ensure the sector is optimally positioned to deliver the strategy.

Externally, policymakers need to develop robust frameworks that can drive the strategy forward, determine how these reforms can work within existing or future treasury-controlled funding mechanisms, and establish strong linkages between policy and financing. While initial efforts should be pursued at the state level, the federal commitment to future housing means that this ultimately will become a national agenda item.

Appendix 1. Geospatial Research Methodology

Community housing organisation (CHO) datasets were provided to university researchers, with CHIA Victoria performing the outreach to its members. This resulted in ten organisations supplying data to the project. These were supplied as a flat, non-georeferenced, file.

The VicMap address layer (https://discover.data.vic.gov.au/dataset/vicmap-address) was used as a base geospatial layer to geolocate the properties; where the address of the property joins to a point in space. Due to many property addresses not matching with the formal address in VicMap (roughly 27%), significant manipulation of community housing addresses was required.

The Valuer General Victoria (VGV) was presented with a dataset of all CHO matched properties, identified by VicMap Unique Identifier, and asked to supply data relevant to each site. The data included Site Value, Capital Improved Value, Year of Construction and Renovation Year.

The Redevelopment Potential Index (Capital Improved Value/Site Value) for each CHO asset was created, showing a scale from 0-1, with 1 being full value in the land and 0 being full value in the asset. A value of 0.7 (70% of value in the land) is the accepted indicator of high redevelopment potential.

A second VGV data request was initiated to acquire all Victorian data 2024, the negotiation of which resulted in a geocoded point dataset for Melbourne, Geelong, Ballarat and Bendigo, only for single unit dwellings, and only in residential areas. The redevelopment potential of these properties was also created.

All Community Housing with high Redevelopment Potential and all VGV data was mapped to Vicmap property cadastre to show the outline of the property and to assist capturing abutting lots. (https://www.land.vic.gov.au/maps-and-spatial/spatial-data/vicmap-catalogue/vicmap-property).

A one metre buffer was placed on all CHO cadastres, which was overlaid onto VGV properties. VGV properties that intersected CHO data by an area greater to or equal to five metres were captured. This was to ensure that there was considerable abutting land and that lots purely touching at corners were not captured.

Abutting lots with low redevelopment potential were removed, providing a dataset of CHO-abutting, high redevelopment potential, private lots.

All lots (CHO and VGV) were buffered by one metre and overlaid on the Victorian road casement dataset (https://discover.data.vic.gov.au/dataset/vicmap-property-road-casement-polygon). This captured the frontage of each cadastre. In instances where the land parcel was a corner lot, or when more than one polygon was captured, lots were physically examined to remove the effect of corner lots, rear laneways and so forth.

Additional context data was provided through the Victorian Principal Public Transport Network dataset (https://www.planning.vic.gov.au/guides-and-resources/guides/all-guides/principal-public-transport-network) the Victorian land use planning dataset for zones and overlays (https://discover.data.vic.gov.au/dataset/vicmap-planning) and ABS Census data 2021 Dwelling Structure (STRD) to provide qualities housing typologies at the SA2 level.