



FINAL REPORT

Costs of Housing Regulation in Queensland

*Prepared for
Queensland Productivity Commission
5 September 2025*

The Centre for International Economics is a private economic research agency that provides professional, independent and timely analysis of international and domestic events and policies.

The CIE's professional staff arrange, undertake and publish commissioned economic research and analysis for industry, corporations, governments, international agencies and individuals.

© Centre for International Economics 2025

This work is copyright. Individuals, agencies and corporations wishing to reproduce this material should contact the Centre for International Economics at one of the following addresses.

CANBERRA

Centre for International Economics
Ground Floor, 6 Brindabella Cct South
Canberra Airport ACT 2609

Telephone +61 2 9250 0800
Email cie@TheCIE.com.au
Website www.TheCIE.com.au

SYDNEY

Centre for International Economics
Level 7, 8 Spring Street
Sydney NSW 2000

Telephone +61 2 9250 0800
Email ciesyd@TheCIE.com.au
Website www.TheCIE.com.au

DISCLAIMER

While the CIE endeavours to provide reliable analysis and believes the material it presents is accurate, it will not be liable for any party acting on such information.

Contents

Executive Summary	1
1 Introduction	4
Background	4
This project	4
2 The residential development process	6
Stages of residential development	6
Measuring the cost of delivering housing	10
3 Housing regulation in Queensland	14
Categories of regulation	14
Economic framework for considering the costs of regulation	16
4 Planning regulation in Queensland and its costs	18
Summary	18
The Queensland Planning System	19
Quantifying the costs of planning regulation	25
5 Building regulation in Queensland and its costs	35
Summary	35
Rationale for building regulation	35
Overview of regulatory framework for buildings	36
Estimating the costs of building regulation in Queensland	38
6 Construction labour regulation in Queensland and its costs	43
Summary	43
Occupational licensing	43
Occupational health and safety regulation	48
Levies	49
A Development Costing and Zoning Premium Methodology Details	51
B Additional Building Regulation Details	65
References	73
 BOXES, CHARTS AND TABLES	
1 Regulatory Costs in Housing Construction	1
2 Components of housing costs	2
3 Individual regulatory costs, by development type	3

2.1	Steps in provision of a greenfield house and land package for Brisbane	6
2.2	Steps in provision of an apartment or townhouse	7
2.3	Multi-dwelling assessment times, Brisbane and Sydney	9
2.4	Assumed Development Timeframes	9
2.5	Costs of providing housing	10
2.6	Approach to estimating each component cost stacks	11
2.7	Cost components, by development type	13
3.1	Categorisation of regulation affecting residential construction	15
3.2	Framework for impact of regulations on supply and demand for housing	16
4.1	Costs of planning regulations, by development type	18
4.2	Responsibility of Local and State Governments in Queensland Planning System	19
4.3	Selected high-level zones, Brisbane City Council	21
4.4	Brisbane River Flood Overlay, Bulimba and Albion	22
4.5	Stylised development market with binding constraint	25
4.6	Zoning premiums, by development type	26
4.7	Median New Apartment Price, Brisbane, Sydney and Melbourne	26
4.8	Median Serviced Greenfield Lot Price, Sydney and Brisbane	28
4.9	Complexity of applications and assessment times	29
4.10	Assumed Development Timeframes	30
4.11	Additional cost per dwelling of unreasonable delays	30
4.12	Cost of higher development margins from planning system risk	31
4.13	Parking per dwelling in new multiple dwelling developments, Brisbane	32
4.14	Parking per dwelling in multiple dwellings pre- and post-Amendment J	33
4.15	Parking provision in areas affected by Brisbane City Council Amendment J	34
4.16	Excess cost of parking minimums	34
5.1	High-level estimate of the contribution of building regulation to costs	35
5.2	Key elements of existing compliance and enforcement measures	37
5.3	Estimated cost of NCC2022 energy efficiency changes	39
5.4	Estimated cost of complying with the Liveable housing standard	39
5.5	Certification costs — greenfield house	40
5.6	Home warranty insurance premium	42
6.1	High-level estimate of the contribution of labour regulation to costs	43
6.2	Estimated contribution of occupational licensing requirements to construction costs	44
6.3	Estimated direct annual licence-related costs	45
6.4	Estimated licensing costs per dwelling	46
6.5	Occupational health and safety costs as a share of total project costs — frequency distribution	48
6.6	Estimated OH&S costs per dwelling	49
6.7	Contribution of levies to building costs	49

A.1	Components of land costs in Brisbane, by development type	52
A.2	Greenfield agricultural land prices by size	53
A.3	Share of apartment approvals, by SA2	54
A.4	Character zones in Brisbane City Council, by SA2	55
A.5	Land Acquisition Costs, Character Zones	55
A.6	Consultant costs, by development type	56
A.7	Development application fees, by development type	56
A.8	Site preparation costs	57
A.9	Stamp duty costs on land acquisition	57
A.10	Council rates per dwelling	58
A.12	Queensland land tax rates	58
A.13	Cost of land tax, by development type	58
A.14	Greenfield Infrastructure Charges	59
A.15	Inner City Apartment Infrastructure Charges	59
A.16	Character zone townhouse infrastructure charge	59
A.17	Water charges during development, by typology	60
A.18	Finance charges, by type	61
A.19	Marketing and Sales Costs, by typology	61
A.20	Apartment Hard Construction Costs	62
A.21	Detached house hard construction costs, Brisbane	63
A.22	Builder's finance costs, by development type	64

Executive Summary

The Centre for International Economics (CIE) has been commissioned by the Queensland Productivity Commission (QPC) to identify and estimate the costs of regulation on residential construction in Queensland. Regulations considered in this report include planning regulations that control where and what kind of dwellings can be built, as well as building and labour regulations that set out standards and rules for the construction of new dwellings.

It should be noted that as well as costs, these regulations bring benefits, which may outweigh these costs. Quantifying these benefits is beyond the scope of this report and we do not attempt to compare costs to benefits.

Costs of Housing Regulation

The costs of each of these regulations has been assessed for three representative housing development typologies:

- A greenfield house on a newly-serviced lot on Brisbane's outer fringe
- An apartment in an inner-city suburb of Brisbane
- An infill townhouse in a 'character zone' in an inner-ring suburb

Estimated regulatory costs are shown in table 1. These costs are large across all three typologies, with the largest costs in dollar terms for greenfield houses and smallest for inner city apartments. The costs of planning regulations are significantly larger than the costs of building and labour regulations, ranging from two to six times higher across the dwelling types.

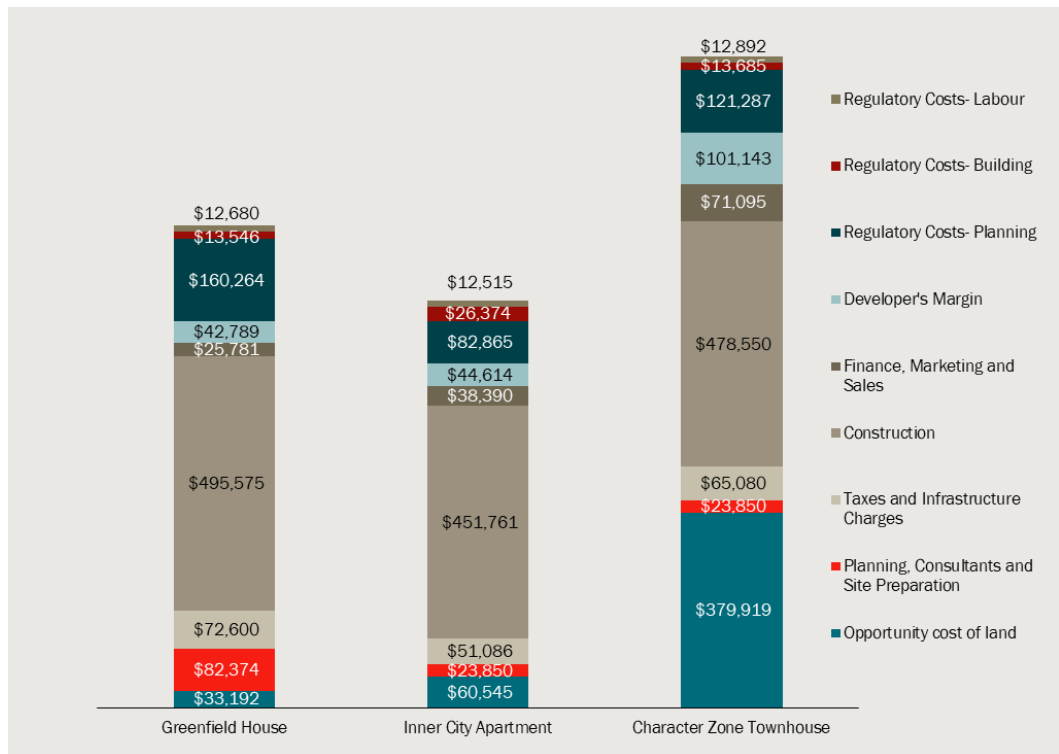
1 Regulatory Costs in Housing Construction

Regulation Category	Greenfield House	Inner City Apartment	Character Zone Townhouse
	\$/dwelling	\$/dwelling	\$/dwelling
Planning	160 264	82 865	121 287
Building	13 546	26 374	13 685
Labour	12 680	12 515	12 892
Total	186 490	121 754	147 864
Total (% of sales price)	19.9	15.4	11.7

Source: The CIE Note: Totals may not add exactly due to rounding. Includes low range of additional margin due to risk and OH&S costs and excludes parking minimum costs.

These costs are shown alongside the other components of a new dwelling in figure 2. Combined, regulatory costs are either the second or the third-largest component of the cost of providing a dwelling, representing between 11 and 20 per cent of a dwelling's final sales price.

2 Components of housing costs



Data source: The CIE

Note: Low range estimates for costs of additional margin due to risk and occupational health and safety used.

The individual components of regulatory costs are shown in table 3.

3 Individual regulatory costs, by development type

Regulation Category	Regulatory Cost	Greenfield House	Inner City Apartment	Character Zone Townhouse
		\$/dwelling	\$/dwelling	\$/dwelling
Planning	Zoning premium	127 709	66 802	89 951
	Additional margin on zoning premium	21 710	11 356	15 292
	Unreasonable planning delays	7 609	3 403	11 166
	Parking requirements (where applied)*	0	34 500	15 800
	Additional margin due to risk	3 236	1 304	4 878
Building	Energy efficiency standards	804	2 390	804
	Liveable housing standards	4 933	7 319	5 330
	Certification	2 500	11 888	2 500
	Home Warranty Insurance	5 309	4 777	5 051
Labour	Occupational licensing (direct costs)	4 019	4 455	4 527
	Occupational health and safety	5 723	5 326	5 527
	Levies	2 938	2 734	2 838

Note: Low range estimate for additional margin due to risk and occupational health and safety shown. *Costs of parking minimums excluded from totals as these are only applied in certain areas.

Source: The CIE

The costs of housing regulation in Queensland represent a substantial proportion of the cost of a new home, with the ‘zoning premium’, reflecting the cost of planning regulations that limit housing supply, being the most significant regulatory cost for each development type. We assess this cost as being high for greenfield houses and moderate for apartments and townhouses. The indirect and flow-on effects of planning regulations, such as additional margins required from more expensive land and unreasonable delays during assessment are smaller, but still significant.

The costs of building and labour regulations are smaller and less certain. The most significant building regulations are inefficient National Construction Code (NCC) changes such as energy efficiency and liveable housing standards, as well as certification for apartments. Occupational health and safety (OHS) costs are the largest of the labour regulations, but should be interpreted with caution, as these estimates rely on overseas studies and are not specifically estimated for the Queensland OHS regulations.

1 Introduction

Background

In recent years, Queensland has experienced extremely rapid growth in housing costs. Rents in Brisbane have increased at an average rate of 7.8 per cent each year since over the last seven years, accelerating to almost 10 per cent over the last three years.¹ Since 2020, detached house prices have increased by more than 80 per cent, and unit prices have increased by more than 60 per cent.²

The reasons for these increases are complex and include both demand- and supply-side factors. One significant factor is the high and increasing costs of housing construction, driven by increases in labour and material costs as well as declining productivity in the construction sector.³ Increasingly, the complex planning, building and labour regulations that apply to the construction sector have been identified as a factor driving up construction costs and contributing to lower productivity.⁴

In this context, the Queensland Productivity Commission (QPC) has been asked by the Queensland Government to undertake an inquiry into opportunities to improve the productivity of the Queensland construction industry.

This project

To inform the QPC's inquiry, the Centre for International Economics (CIE) has been commissioned to identify and estimate the costs of regulation on residential construction in Queensland.

-
- ¹ SQM Research, 2025, *Weekly Rents, Brisbane*. Available at: <https://sqmresearch.com.au/weekly-rents.php?region=qld-Brisbane&type=c&t=1>
 - ² Proptrack, 2025, *Home Price Index*, Available at: <https://www.proptack.com.au/home-price-index/>
 - ³ CEDA, 2025, *Size Matters: Why Construction Productivity is so Weak*. Available at: <https://www.ceda.com.au/researchandpolicies/research/workforce-skills/size-matters-why-construction-productivity-is-so-weak>
 - ⁴ Productivity Commission, 2025, *Housing construction productivity: Can we fix it?* Available at: <https://www.pc.gov.au/research/completed/housing-construction>

This project identifies and describes:

- the stages and timing of development (from land acquisition to sale),
- the specific Queensland regulatory requirements associated with each stage (across planning, building, and labour regulation), and
- the effect of those requirements on the cost of delivering representative projects.

This project is focused at a higher-level than regulatory impact analysis of specific regulation. Instead, it is focussed on yielding high-level estimates, limited to the impact of regulation on costs, productivity and delays for dwelling construction. It is also focussed on those aspects of regulation likely to impose the highest costs.

It should be noted that the estimates in this report reflect only the additional costs associated with the extra regulatory requirements, and do not account for any potential benefits these regulations may deliver. In many cases, it is likely that these benefits may outweigh the regulation's costs, in which case the regulations would be justified. Estimating these costs is beyond the scope of this report and we do not attempt to compare costs to benefits.

This project examines the effects of regulation on 3 stylised projects:

- House and land package in a greenfield subdivision on the fringe of Brisbane
- Townhouses in a character zone common in inner-ring suburbs of Brisbane
- High-rise apartments in the inner city of Brisbane.

Other specifics about each development are detailed where relevant to calculation of a cost category throughout this report.

Report structure

The remainder of the report is structured as follows:

- Chapter 2 provides an overview of the development process and provides estimates of the costs of providing each of the three kinds of dwellings we consider in this project.
- Chapter 3 identifies the key planning, building and labour regulations affecting housing construction in Queensland and our conceptual framework for considering their impacts.
- Chapter 4 provides additional details on planning regulations and quantifies their costs, including the zoning premium, impact of delays and risk and parking minimums.
- Chapter 5 provides additional details on building regulations and quantifies their costs, including technical standards, certification and home warranty insurance.
- Chapter 6 provides additional details on labour regulations relevant to housing construction and quantifies their costs, including occupational licensing and workplace health and safety.
- Appendices provide additional methodological details and data sources.

2 *The residential development process*

This chapter explains each step of the development process and the costs that go into providing each type of new dwelling.

Stages of residential development

Housing development is a lengthy process with many stages, each of which have associated costs, risks and challenges. Table 2.1 shows the steps identified for delivery of a greenfield house and land package in Brisbane. The time period relevant to delivery of a new dwelling begins with the point of a developer purchasing a lot, since this is the period relevant for holding costs.

2.1 Steps in provision of a greenfield house and land package for Brisbane

Step	Start	End
Exchange of contracts for land purchase	Developer exchanges contracts to purchase a large parcel of developable raw land on the city fringe	Exchange of contract for the final site.
Design and Planning	Starts after the exchange of contracts for the purchase of land. Includes rezoning and infrastructure provision.	Preparation and lodgement of DA.
Land settlement and DA preparation	Developer settles on land purchase While developer waits for DA to be granted, they incur interest on land purchase costs	Local council grants relevant development applications. Land now consists of individual blocks ready for development
Land development	Developer pays development charges to local council and state government (covers roads, public space, etc.) Developer incurs land preparation costs and other development costs	Individual blocks are ready for the construction of a dwelling Buyer of new house & land purchases a block
Development application and building application	Buyer of new house & land package applies for development application and building application	Relevant authorities issue approvals
Construction	Buyer of new house & land package commissions builder to construct dwelling	Construction is complete
Transaction period	Buyer of new house & land package pays stamp duty on developed block and new dwelling	Buyer of new house & land package takes ownership of completed project

Source: The CIE.

The steps required to provide an infill dwelling (either townhouse or apartment) are shown in table 2.2 below. The primary difference between the process for infill dwellings and house and land packages is that infill dwellings only have one assessment process,

whereas there are separate assessments for subdivision and construction in a greenfield context.

2.2 Steps in provision of an apartment or townhouse

Step	Start	End
Exchange of contracts for site purchase	Developer exchanges contracts to purchase land, which may happen over a period of time for sites that need to be amalgamated.	Exchange of contract for the final site.
Design and Planning	Starts after the exchange of contracts for the purchase of land.	Preparation and lodgement of DA.
Land settlement and DA preparation	Developer settles on land purchase While developer waits for DA to be granted, he/she incurs interest on land purchase costs	Local council grants relevant development applications. Land is now ready for development
Land development	Developer pays development charges to local council and state government (covers roads, public space, etc.) Developer incurs land preparation costs and other development costs	Land is ready for construction of new dwellings Buyer purchases townhouse/apartment
Development application and building application	Buyer of dwelling applies for development application and building application	Relevant authorities issue approvals
Construction	Construction of dwellings starts, which may involve basement construction and construction of townhouses/apartments themselves	Construction is complete
Transaction period	Buyer of dwelling pays stamp duty	Buyer of dwelling takes ownership of completed project

Source: The CIE.

The time taken for each step is a key assumption for modelling the development process, as these time periods determine interest and holding costs for developers and builders, a significant component of the cost of delivering new dwellings.

Within our calculations, the two most important timing assumptions are:

- The time that it takes for a project's development application to be prepared and approved, including related infrastructure and state agency approvals.
- The time that dwellings and lots take to construct, once approval is granted.

Industry and other stakeholders report that regulation and inefficient processes can significantly add to the length of time for these processes.⁵ Most directly, slow and inconsistent approvals processes directly add to timeframes. While a developer waits for approval, they must continue to pay interest and other holding costs. Construction timeframes are less able to be influenced by government but can be delayed where

⁵ Property Council of Australia, 2024, *Release the pressure*. Available at: <https://www.propertycouncil.com.au/submissions/release-the-pressure-alleviating-taxes-and-charges-to-build-new-homes>

regulations add additional complexity or require construction of unwanted components, such as excess parking spaces.

However, administrative processes and regulation are not inherently excessive or wasteful. There are strong justifications for many of these processes in addressing market failures and ensuring that developments align with reasonable community expectations. For this project, we therefore split timings of each stage of the development processes into two components:

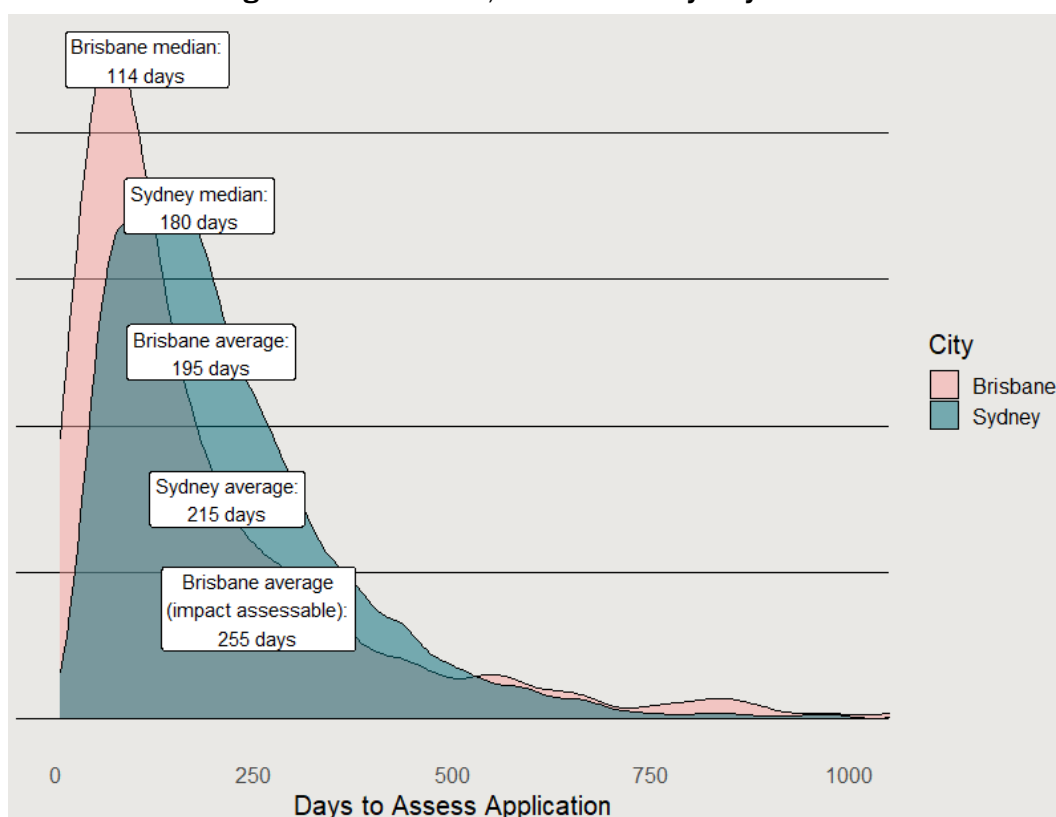
- 1 A 'reasonable' period of time, allowing for the relevant authority to apply a level of scrutiny consistent with economic principles and reasonable community expectations, as well as typical land preparation and construction timeframes.
- 2 An additional period of time that reflects excessive or unreasonable assessment delays, as well as additional construction delays caused by excessive regulation.

There is limited data on planning preparation and approval processes, and in particular the component of this which can be considered reasonable. It is particularly difficult to estimate assessment timeframes for large greenfield subdivisions.

What data is available generally suggests that Brisbane's assessment system is somewhat more efficient than other states (figure 2.3), however it is difficult to compare this data directly as it reflects a very wide range of projects and is likely not making an 'apples-to-apples' comparison. As a result, it is necessary to make a judgement. For this project, this judgement was informed by available data and submissions made to the QPC from developers, builders and other stakeholders. We also draw on assumptions developed in consultation with industry in The CIE (2025).⁶

⁶ The CIE, 2025, *Taxation of the housing sector*. Available at: <https://hia.com.au/our-industry/advocacy/taxations-major-impact-on-housing?srsId=AfmBOopeblSS0VHkATeQAmYEn4yOWpDX9zRQfHLBSEJurhtKX2L8XnZM>

2.3 Multi-dwelling assessment times, Brisbane and Sydney



Note: Brisbane refers to Brisbane City Council. Sydney refers to Greater Sydney, as defined by in the 2021 ASGS.

Data source: Brisbane City Council, NSW Department of Planning, Housing and Infrastructure, The CIE.

Our timing assumptions are shown in table 2.4 below and explained in more detail in chapter 4. These timeframes broadly align with consultation and available data. For example, our assumption for necessary planning times is close to the average multi-dwelling assessment time in Brisbane, and the ‘unreasonable’ component is close to the average time for impact assessable projects – a subset of developments which attract a greater degree of scrutiny.

2.4 Assumed Development Timeframes

Stage of Development	Category	Greenfield House	Character Zone Townhouse	Inner City Apartment
		Months	Months	Months
Planning and infrastructure	Necessary	7	7	7
	Unreasonable	4.5	2.5	2.5
Site preparation	Necessary	4	4	4
Construction	Necessary	4.2	4.7	17.9
	Unreasonable, where minimum parking requirements bind			5
Total Time		16.6	18.2	36.4

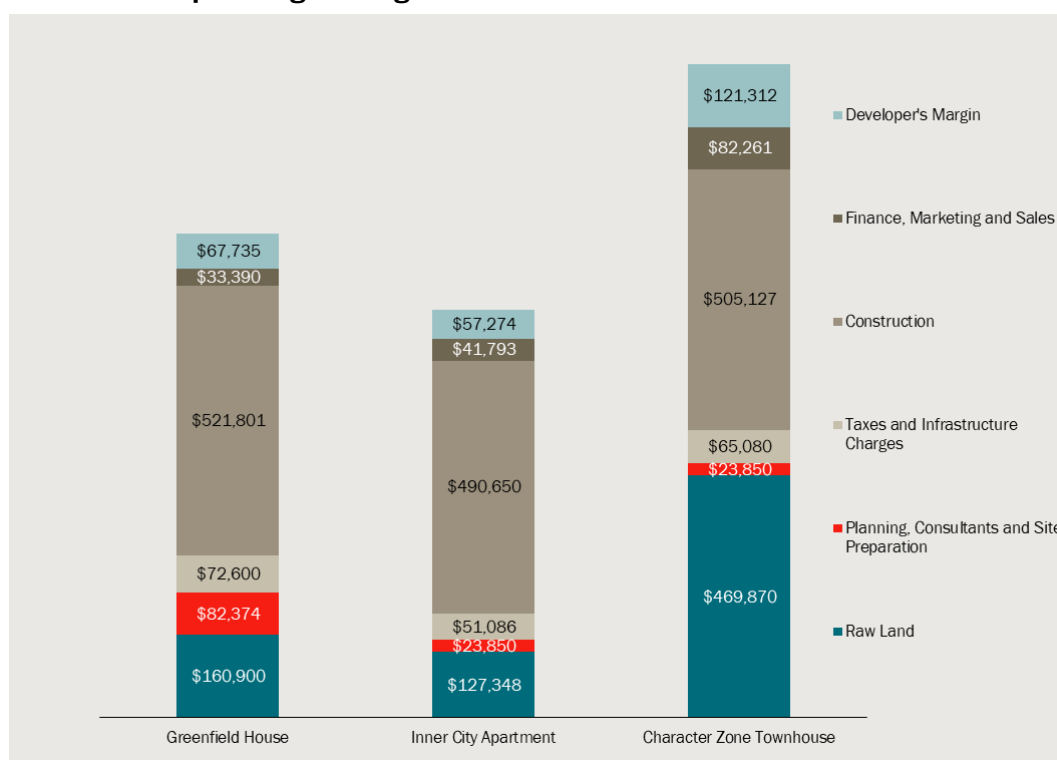
Source: ABS, QPC & CIE Consultations. Note: Totals may not add exactly due to rounding

Construction timeframes draw on data from the ABS Building Activity survey and are generally considered necessary.⁷ Drawing on information provided in submissions to the QPC, we assume that 5 months of apartment construction times are due to parking requirements, where they apply. For further details on this assumption, refer to chapter 4.

Measuring the cost of delivering housing

The ‘cost stack’ of providing each type of housing is shown in figure 2.5. We estimate that a typical greenfield house and land package costs \$938 801 to deliver, a typical inner city apartment \$792 000 and a typical character zone townhouse \$1 267 500.

2.5 Costs of providing housing



Data source: The CIE

A brief description of the approach we have taken to quantifying each cost category in the baseline cost stack is shown in table 2.6. For further details and data sources, refer to appendix A.

⁷ ABS, 2024, *Building Activity*, available at <https://www.abs.gov.au/statistics/industry/building-and-construction/building-activity-australia/jun-2024>

2.6 Approach to estimating each component cost stacks

Component	Approach
Raw land purchase	
Residual Land Value	Raw land values are estimated as the 'residual' left over after other costs are subtracted from final sales prices. This is comprised of two components: the opportunity cost of land and the 'zoning premium'.
Planning, Consultants and Site Preparation	
DA application fees	Estimates from The CIE (2024) ^a , developed from consultation with industry participants and stakeholders.
Consultant fees	Estimates from The CIE (2024) ^a , developed from consultation with industry participants and stakeholders.
Land preparation costs	<p>We developed estimates of land preparation costs via consultations with HIA as part of The CIE (2025), including estimates of NBN connection charges.^b Where relevant, these have been updated to present values with the average of growth in the PPI for road & bridge construction and the PPI for housing construction.</p> <p>For inner city apartments and character zone townhouses, land preparation is included in construction costs.</p>
Taxes and Infrastructure Charges	
Stamp duty on land purchase	Queensland stamp duty rates from Queensland Revenue Office.
Council rates during development	Council rates for Brisbane City Council, applied during period from land purchase to completion of construction.
Land tax during development	Queensland land tax rates, applied during period from land purchase to completion of construction.
Water charge during development	Estimates from The CIE (2024) ^a , developed from consultation with industry participants and stakeholders.
Infrastructure charges	<p>Differs by type of development</p> <ul style="list-style-type: none"> Greenfield house: Collated from Development Charges and Offset Plans (DCOPs) for greenfield priority development areas. Townhouse in a character zone: Brisbane City Council charges. Inner city apartment: Collated from DCOPs for infill areas of Brisbane that contain substantial numbers of apartments.
GST in developed land	10 per cent GST on each of the costs that go into preparing a developable site
Construction	
Construction costs	<p>Differs by type of development:</p> <ul style="list-style-type: none"> Greenfield house: Average of benchmarks from Rawlinsons (Brisbane), Riders Digest (Brisbane) and ABS average construction cost estimates (from the <i>Building Activity, Australia</i> publication) (Queensland). Inner city apartments: Average of the benchmark costs from Rawlinsons, Riders Digest and ABS, adjusted to be relevant to Brisbane based on the relative value of building approvals. Character zone townhouses: Benchmark costs from Riders Digest for Brisbane.

Component	Approach
Builder sales & marketing	We assume that builders incur sales and marketing costs of 1.5 per cent and 1.0 per cent of construction costs, respectively, consistent with our assumptions in The CIE (2025). ^b This cost only applies to greenfield houses, as sales and marketing is done by the developer for infill projects.
Builder's finance cost	We use the same interest rate as for developers of 10.1 per cent, but assume that builders fund 50 per cent of construction costs with debt. Builders are also able to use a draw-down facility which in effect reduces the interest bill in half.
Developer's project management	We assume project management costs are 3 per cent, consistent with The CIE (2025). ^b
GST in construction costs	10 per cent GST on construction costs.
Finance, Marketing & Sales	
Developer Sales and Marketing costs	We assume developer sales cost and marketing cost is 1.5 per cent and 1.0 per cent of the price of the developed block of land, based on consultations with HIA as part of The CIE (2025). ^b This applies to land development costs only for greenfield houses (with builder sales and marketing costs added separately) and to the entire development (land plus building) costs for infill.
Finance charge: land holding	We assume an interest rate of 10.1 per cent for the holding period, which is consistent with the interest rate assumed in The CIE (2024). ^a This rate combines: <ul style="list-style-type: none"> ■ The average interest rate on medium business variable rate loans, based on the average rates for new loans funded in each year, ^c and A premium of 3.8 per cent to reflect the higher rates charged on developer finance, which was chosen based on consultation with development finance professionals.
Finance charge: development and marketing	As per finance charge during land holding, except the principal being financed includes costs other than the cost of land purchase, such as sales and marketing and infrastructure charges.
Developer's Margin	
Developer's margin	Following Tulip & Jenner (2020), we assume a developer's margin of 17 per cent. This is the margin applying to land development costs. A margin of 5 per cent applies to construction costs, reflecting lower risk. This is consistent with the approach used in The CIE (2025) ^b .

^a The CIE, 2024, *Cost and feasibility estimates for supplying new residential dwellings in New South Wales*, see table 2.1 and pp.50-51 for details, available at: https://www.productivity.nsw.gov.au/sites/default/files/2024-11/20241114_CIE-report-Cost-and-feasibility-estimates-for-supplying-residential-dwellings.pdf.pdf

^b The CIE, 2025, *Taxation of the housing sector*, available at: <https://www.thecie.com.au/publications-archive/taxation-of-the-housing-sector>

^c Data about this rate is available from the Reserve Bank of Australia in the Business lending rates – F7 table, available at: <https://www.rba.gov.au/statistics/tables/xls/f07hist.xlsx?v=2024-07-23-23-26-06>.

^d Jenner, K & Tulip, P, 2020, *The Apartment Shortage*, RBA RDP 2020-04. Available at: <https://www.rba.gov.au/publications/rdp/2020/pdf/rdp2020-04.pdf>

Data source: As noted, The CIE.

The specific costs for each component are shown in table 2.7. These costs include regulatory costs. Where relevant, we decompose regulatory costs out of each of these costs in chapters 4, 5 and 6.

2.7 Cost components, by development type

Cost Category	Greenfield House	Inner City Apartment	Character Zone Townhouse
	\$	\$	\$
Total Raw (Residual) Land Value	160 900	127 348	469 870
DA Fees	278	252	252
Consultant Fees	6 893	23 597	23 597
Site Preparation	75 203	Included in Construction Costs	Included in Construction Costs
Total Planning, Consultants and Site Preparation	82 374	23 850	23 850
Stamp duty on land purchase	9 057	6 933	25 070
Council rates during development	140	97	356
Land tax during development	1 183	576	1 958
Water charges during development	2 110	481	481
Infrastructure charges	41 554	33 994	17 034
GST in developed land	18 556	9 005	20 180
Total taxes and infrastructure charges	72 600	51 086	65 080
Underlying construction costs	455 509	410 739	493 477
Builder sales & marketing	11 570	N/A	N/A
Builder finance	7 286	23 465	7 539
GST in construction costs	47 436	43 420	44 702
Developer project management	N/A	13 026	13 410
Total Construction	521 801	490 650	505 127
Developer sales & marketing	10 425	19 800	31 688
Finance: Land	18 950	12 765	41 878
Finance: Development and Marketing	4 016	3 506	1 800
GST in sales and marketing	N/A	5 722	6 896
Total sales, marketing and finance	33 390	41 793	82 261
Developer's Margin	67 735	57 274	121 312
Total Costs	938 801	792 000	1 267 500

Source: The CIE, refer to appendix for detailed sources and assumptions.

Note: Totals may not add exactly due to rounding.

3 *Housing regulation in Queensland*

This chapter explains the conceptual framework we apply to consider the impact of regulation on the costs of housing in Queensland and identifies the specific regulations that we consider and quantify.

Categories of regulation

There are many forms of regulation affecting the construction of dwellings. These can broadly be categorised into planning, building and labour regulation (table 3.1). There are several takeaways from this categorisation:

- 1 There are many interlinkages between different components of regulation. For example, environmental planning has its effect mainly through its impact on development assessment.
- 2 There are cascading effects from regulation. For example, delays due to inefficiently long development approval processes can lead to increases in the cost of land tax and council rates during the holding period.
- 3 Some categories are mainly determined by other levels of government. For example, development assessment is often undertaken by council staff, but the Queensland Government does undertake some assessments and sets the rules for how the process should be undertaken by councils.
- 4 In some cases, the costs of regulation may be related not to how onerous the regulation itself is, but the extent to which it differs from other jurisdictions. For example, it can be challenging for mass builders to operate across multiple states due to differences in regulation.

Table 3.1 below briefly identifies the specific regulations that we consider for this report. In chapters 4, 5 and 6, we provide additional details of these regulations and our approach to quantifying their impact on the costs of providing new housing.

3.1 Categorisation of regulation affecting residential construction

Category	Subcategory	Examples
Planning	Land use planning	Low density residential zone, neighbourhood centre zone
	Overlays	Traditional Building Character, Heritage, Flood Hazard, etc. which are supported by Environmental impact assessment, Biodiversity planning assessments, bioregional planning, etc.
	Infrastructure planning	Shaping SEQ, Local Government Infrastructure Plans
	Development assessment	Process for assessing development in the Development Assessment Rules, assesses applications for State facilitated Development
Building	Building codes and standards	National Construction Code 2022, Queensland Development Code, elements of divergence between Queensland and the national scheme. Can include building waste regulations
	Building approvals and inspections	Building Regulation 2021 s44 addresses inspection requirements, Building Certifier Professional Indemnity Insurance
	Building product and contract regulation	Queensland Building and Construction Commission (QBCC)
	Home Warranty Insurance and long service leave levy	Queensland Home Warranty Scheme for work over \$3300, covering residential construction work only
	Financial requirements	Minimum financial requirements and trust accounts to ensure contractor licencees have sufficient working capital and can manage their debts
Labour regulation	Occupational licencing	QBCC regulates builders, trade contractors, supervisors, apprentices and licencees, non-participation in Automatic Mutual Recognition scheme
	Labour hire licensing	Under the Labour Hire Licensing Act 2017, all labour hire providers in Queensland are required to obtain a license, demonstrating compliance with relevant laws and financial requirements.
	Workplace Health and Safety	Work Health and Safety Regulation 2011, regulations affecting residential apartment buildings

Data source: The CIE.

Chart 3.2 shows our broad framework for considering the impact of regulation on new housing.⁸

Price

Demand for housing (reflects preferences, population and size of economy)

Effect of regulatory cost on fixed resource

P-outlay

P-transfer

P-untaxed

P-resources

Supply plus regulatory costs on variable resources

Supply of housing (reflects resource costs)

Demand

Quantity

Q-actual

Q-untaxed

The demand curve for new housing captures willingness of Queenslanders to pay for new housing, driven by their preferences, the size of the economy (which determines the income of residents) and population.

The supply curve for new housing captures the resource costs incurred by housing developers and builders to create and provide new housing. Governments can also impose regulatory costs. For example, if developers are forced to hold land for an unreasonably long period of time while they wait for appropriate approvals to commence development, this adds to their costs to finance the land holding (interest costs on debt). We capture these costs with a new supply curve, shifted up to reflect higher costs.

Governments also impose regulatory costs on land, the fixed resource in the supply of new housing. In this paper, we present data, evidence and estimates on these costs. In essence, the system of zoning and associated controls on land use and development, at any single point in time, acts like a quota or upper limit on the amount of housing that can be supplied. If this quota is not adjusted appropriately, and demand runs ahead of it, this results in consumers competing for an inadequate amount of housing, which pushes

⁸ This framework is consistent with the framework we applied in: The CIE, 2025, *Taxation of the housing sector*, available at: <https://www.thecie.com.au/publications-archive/taxation-of-the-housing-sector>

up its price. The upper limit on the supply of housing at any given time, caused by the system of zoning and associated land and development controls, is captured with a vertical line in Figure 3.2, which sets an effective upper limit on the housing that can be supplied at Q_{actual} .

If the government policies/regulations that we consider in this paper were not enacted the price of new housing and quantity traded would be P_{untaxed} and Q_{untaxed} , respectively. As a result of the regulatory costs created by the government, the quantity traded for new housing falls from Q_{untaxed} to Q_{actual} . The total (average) outlay made by purchasers of new housing is P_{outlay} . The cost of the resources used to create and provide new houses is $P_{\text{resources}}$ (on average).

The new homebuyer does not receive a better or a larger home if they are forced to pay for more regulatory costs. The government does not directly benefit either, as most of these measures do not explicitly raise revenue. In fact, the main beneficiaries of regulatory costs are existing landowners. This is because new homes and existing homes are substitute products. If the government creates a policy that imposes regulatory costs on the creation and provision of new homes, this will cause the price of these new homes to increase; it will also cause the price of existing homes to increase, as buyers who can no longer afford a new home will try to acquire an existing home, and their demand will push up the price of existing homes.

An important insight from this simplified model is that to the extent that planning constraints are binding, reductions in costs will not pass through to purchase prices, as the gains will be captured by existing landowners. In reality, planning constraints are not strictly binding in all cases, and reductions in cost will likely be partially passed through to purchasers.

4 *Planning regulation in Queensland and its costs*

Summary

Land use planning regulations in Queensland include zones, overlays, codes and neighbourhood plans, and are generally set by local government. These rules restrict the types and scale of development that can occur, and the process of development assessment can add delays and uncertainty to projects.

We have quantified five costs of the planning system:

- The ‘zoning premium’ which measures the impacts of planning restrictions limiting housing supply
- The additional developer’s profit margin that is required on this zoning premium
- The cost of unreasonable delays
- Additional margins required for developers due to the risk and uncertainty introduced by planning regulations
- Construction costs of excess parking required by planning regulations

4.1 Costs of planning regulations, by development type

Category	Greenfield House	Inner City Apartment	Character Zone Townhouse
	\$/Dwelling	\$/Dwelling	\$/Dwelling
Zoning Premium	127 709	66 802	89 951
Margin on Zoning Premium	21 710	11 356	15 292
Unreasonable Delays	7 609	3 403	11 166
Additional Margin due to risk	3 236	1 304	4 878
Parking Minimums (where applicable)	0	34 500	15 800
Total Costs	160 264	82 865-117 365	121 287-137 087

Note: Low-range estimate of additional risk margin shown. Parking minimums do not apply to all locations. Totals shown with and without parking minimum costs.

Source: The CIE

This chapter provides a brief description of the Queensland Planning System’s operations and then provides additional details on the estimates above.

The Queensland Planning System

In Queensland, the land use planning system is governed by the *Planning Act 2016*, which sets out the four main components of the planning system. Three of these systems are most relevant to housing development:

- 1 **Plan-making**, which sets out principles and frameworks for undertaking strategic planning at a state, regional and local level.
- 2 **Development assessment**, which sets out the process by which proposals are assessed against plans developed in the plan-making system.
- 3 **Dispute resolution**, which defines the process for resolving disputes that may occur within the planning system through Development Tribunals and the Planning and Environment Court.

As with other jurisdictions in Australia, responsibility for operating these systems is split between state and local governments. The key responsibilities of each level of government are summarised in table 4.2 below.

4.2 Responsibility of Local and State Governments in Queensland Planning System

Component of Planning System	State Government Responsibilities	Local Government Responsibilities
Plan Making	<ul style="list-style-type: none"> ■ Ultimately responsible for plan-making, determines when plan-making is delegated to local governments. ■ Establishes processes and requirements for local plan-making, such as community consultation requirements and key factors that must be considered. ■ Approves local planning schemes and amendments proposed by local governments. ■ Prepares regional plans for areas and precincts where there is a significant state interest. Regional plans overrule local plans when they are inconsistent. 	<ul style="list-style-type: none"> ■ Prepares a local planning scheme, the primary document for each council area that sets out the medium-term land use plan for the region. Local planning schemes are the main mechanism that govern what can be built and where- for example, Brisbane City Plan 2014. ■ Prepares local planning instruments to make more detailed plans for specific precincts or issues. ■ Prepares local infrastructure plans that identify key infrastructure needs, allowing councils to levy infrastructure charges on developers.
Development Assessment	<ul style="list-style-type: none"> ■ Establishes rules and processes for assessing development against strategic plans. ■ Directly assesses certain developments, such as state facilitated development and those in priority development areas (PDAs). 	<ul style="list-style-type: none"> ■ Assesses most developments, particularly for smaller-scale developments. Considers the merits of the proposal as well as submissions and comments from the public.

Component of Planning System	State Government Responsibilities	Local Government Responsibilities
Dispute Resolution	<ul style="list-style-type: none"> ■ Sets the rules about appeal rights, establishing in what circumstances proponents, assessment authorities or third parties can appeal a decision. ■ Manages the Planning and Environment Court as a legal process for resolving planning and land use disputes. ■ Runs the Development Tribunal as a lower-cost dispute resolution service for some matters. 	<ul style="list-style-type: none"> ■ Participates in appeals either as the appellant or respondent.

Source: The CIE.

Strategic Planning in Queensland

Zones

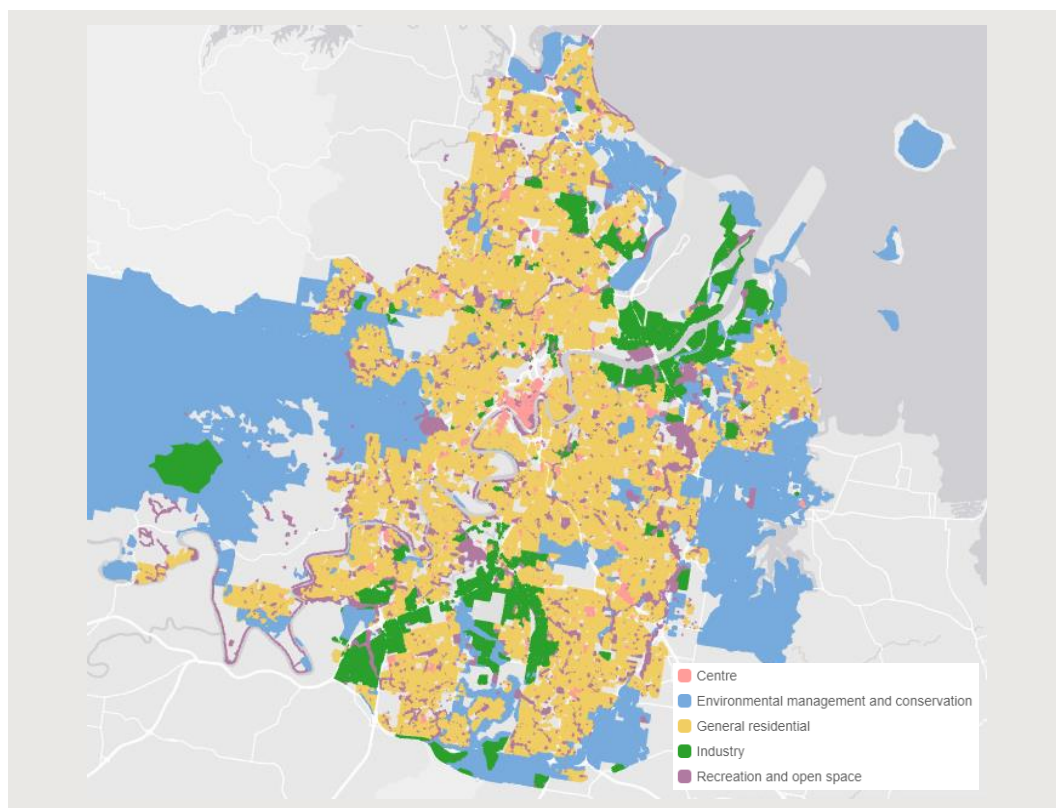
The most important component of Queensland's plan-making (or strategic planning) system is its zones. Each parcel of land in Queensland is allocated a zone, which sets out the permitted types and scales of development. The specifics of each zone vary by council, and are set out in the council's local planning scheme (such as Brisbane City Plan 2014, the planning scheme for Brisbane City Council).

Each zone sets out specific controls that apply to land zoned for that type. For example, in Brisbane City Council, houses in a low-density zone need to have a maximum height of two storeys, a minimum lot size of 400sqm, and multiple dwellings and significant commercial developments are generally not permitted.⁹ By contrast, high-density residential zones explicitly encourage high-rise apartment buildings of up to 15 storeys.

In Brisbane, most land is zoned for some form of residential purpose (figure 4.3), with large industrial zones located in the north-east and south.

⁹ Brisbane City Council, Low Density Residential Zone Code, available at: https://docs.brisbane.qld.gov.au/City%20Plan/v19_00_20200501/TEXT/Part%206%20-%20Zones/LowDensityResZC.docx

4.3 Selected high-level zones, Brisbane City Council



Note: 'Level 1' zones shown.

Data source: Brisbane City Council.

Development Overlays and Other Controls

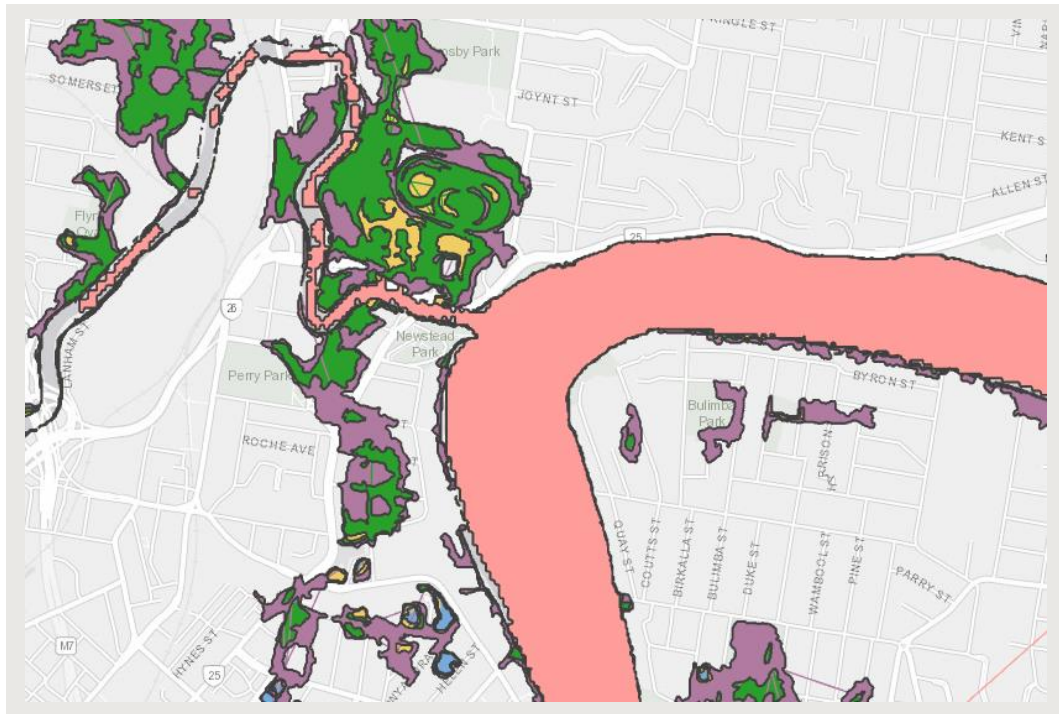
In addition to zones, planning schemes contain a variety of additional controls that impose more detailed controls than those set out in the zoning scheme. These additional controls include overlays, development codes and neighbourhood plans. These are each described briefly in turn.

Overlays

Overlays are additional controls that apply to specific locations and limit development in a more precise manner. They reflect more fine-grained strategic planning such as detailed flood mapping and heritage assessments. For example, the flood overlay sets out detailed mapping and categorisation of locations based on the risk of flooding.¹⁰

¹⁰ Brisbane City Plan 2014, Flood overlay code. Available at:
https://docs.brisbane.qld.gov.au/City%20Plan/v02_00_20160219/TEXT/Part%208%20-%20Overlays/FloodOC.docx

4.4 Brisbane River Flood Overlay, Bulimba and Albion



Data source: Brisbane City Council.

Development Codes

Development codes provide detailed regulation and guidance for specific aspects of development. There are many development codes covering a large number of issues, such as transport access and parking, landscaping and infrastructure.

Development codes are key to Queensland's performance-based planning system, setting out both 'acceptable' and 'performance' outcomes for most controls. Acceptable outcomes are prescriptive requirements, such as specific rates of parking to be provided as part of a development, or requiring specific-sized trees in front gardens. Performance outcomes are more flexible principles, allowing for developers to not deliver the acceptable outcome if they can demonstrate that the performance outcome is still met. For example, in Brisbane City Council's *Transport, access, parking and servicing code*, the acceptable outcome for on-site provision of end-of-trip facilities sets out specific rules for the amount of spaces that must be provided- 2 lockers per bicycle parking space and at least 2 shower cubicles. The performance outcome simply states 'development provides shower cubicles and lockers in sufficient numbers to meet the needs and volumes of predicted pedestrian and cyclist users'.

Neighbourhood Plans

Neighbourhood plans are geographically-limited development codes that set out more detailed planning for a specific area, allowing for more fine-grained strategic planning. They set out local priorities and desired outcomes, as well as more detailed, specific planning controls for individual sites and precincts.

For example, the Fortitude Valley Neighbourhood Plan identifies a number of specific sub-precincts in the region and identifies key outcomes for each, such as identifying specific areas where nightclub and bars should be concentrated, and others where residential development is most appropriate. They generally set out lot- and area-specific height and use controls via performance and acceptable outcomes, as well as more detailed controls such as setbacks, street frontages and building character.

Development assessment

Development assessment is the process via which specific proposals are assessed against local, regional and state planning schemes, and is governed by the *Development Assessment Rules*.¹¹ Most development assessment occurs at the local government level, with developments being assessed against local planning schemes. On a high level, there are five steps to the assessment process:

- 1 **Application-** where a developer prepares the documents required to complete the application and ensure that it meets the requirements in the assessment rules.
- 2 **Referral-** where a development application impacts a 'state interest' it triggers a referral to the State Assessment and Referral Agency (SARA), which coordinates input from state agencies. For example, developments that impact a major state road require input from the Department of Transport and Main Roads, while those with significant environmental impacts will require input from the Environment Department.
- 3 **Information Request-** where any additional information required for the assessment manager to make a decision, it can request this from a developer. The *Assessment Rules* define timeframes and limits on information requests.
- 4 **Public Notification-** for some developments, a period of public notification and comment is required. This allows for members of the public to comment on and provide feedback on a proposal, which is considered by the assessment manager.
- 5 **Decision-** having considered the application, the assessment manager makes a decision to refuse or approve the development and the conditions on the approval. The *Assessment Rules* set out the timeframes that an assessment manager has to make their decision.

Code and Impact Assessment

Within this process, there are two main categories of development assessment- code and impact assessment.

Code assessment is intended for lower-risk developments that meet established expectations and are unlikely to meaningfully impact neighbours. It is a faster process that avoids public notification and comment periods. For example, a proposal to build a

¹¹ Queensland Government, 2024, *Development Assessment Rules*, available at: https://www.planning.qld.gov.au/__data/assets/pdf_file/0015/102255/da-rules-version-3.pdf

detached house in a low-density residential zone, or a set of townhouses in a medium-density zone, would likely be code assessable.

For developments that are categorised as code assessable, the development is compared against the specific outcomes of the zone and each relevant code, such as a neighbourhood plan and overlay codes. It can be thought of as a 'box checking exercise' where if a development meets the specific criteria set out in the various codes, it is approved. Most development applications are code assessable, with approximately 74% of applications in Brisbane City Council going through a code assessment process.¹²

Impact assessment proposals are for larger and more complex proposals that may have more significant negative impacts that need to be considered. Impact assessment proposals require public consultation, and as a lengthier and more complex process, impact assessments bring a greater level of risk and delay.

¹² Brisbane City Council Development.i data, available at <https://developmenti.brisbane.qld.gov.au/>

Quantifying the costs of planning regulation

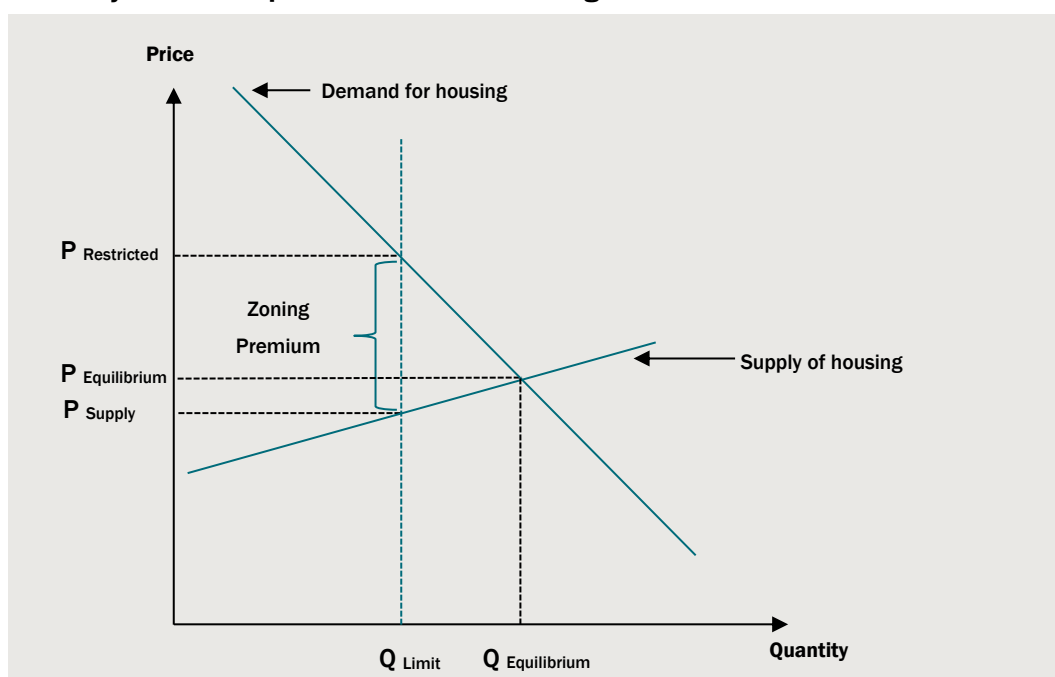
Zoning Premium

The zoning premium, also known as the zoning tax, is a common method of quantifying the overall impact of planning regulations on housing prices. Put simply, it is the difference between the marginal cost of providing a dwelling (either a house, townhouse or apartment) and the price at which that dwelling can be sold.

Consider the (stylised) market shown in figure 4.5, with a binding constraint on the quantity of housing set at Q_{Limit} . Compared to the unrestricted equilibrium of the market, this reduces the supply of housing from the equilibrium point $Q_{\text{Equilibrium}}$ and raises its price from $P_{\text{Equilibrium}}$ to $P_{\text{Restricted}}$. The zoning premium is an estimate of the gap between $P_{\text{Restricted}}$ and P_{Supply} , the marginal cost of producing an additional unit of housing.

This can be considered as an estimate of the impact of the overall planning system, and can't be attributed to a specific component of the planning system.

4.5 Stylised development market with binding constraint



Data source: The CIE.

In order to estimate the zoning premium, we decompose the raw land (or residual land) purchase price estimated in chapter 3 into its two components:

- The opportunity cost of land, which is the cost of land under alternative policy settings. This is assumed to be agriculture for greenfield houses and detached housing for inner city apartments and character zone townhouses.
- The zoning premium, which is the remainder of the residual land value above the opportunity cost.

In addition to the zoning premium itself, the additional developer profit margin on the zoning premium can be considered a cost of planning regulation. The zoning premiums and additional developer profit associated with the zoning premium for each development type are shown below.

4.6 Zoning premiums, by development type

	Greenfield House	Inner City Apartment	Character Zone Townhouse
	\$/dwelling	\$/dwelling	\$/dwelling
Raw Land Value	160 900	127 348	469 870
Opportunity Cost of Land	33 192	60 545	379 919
Zoning Premium	127 709	66 802	88 084
Margin on Zoning Premium	21 710	11 356	15 292

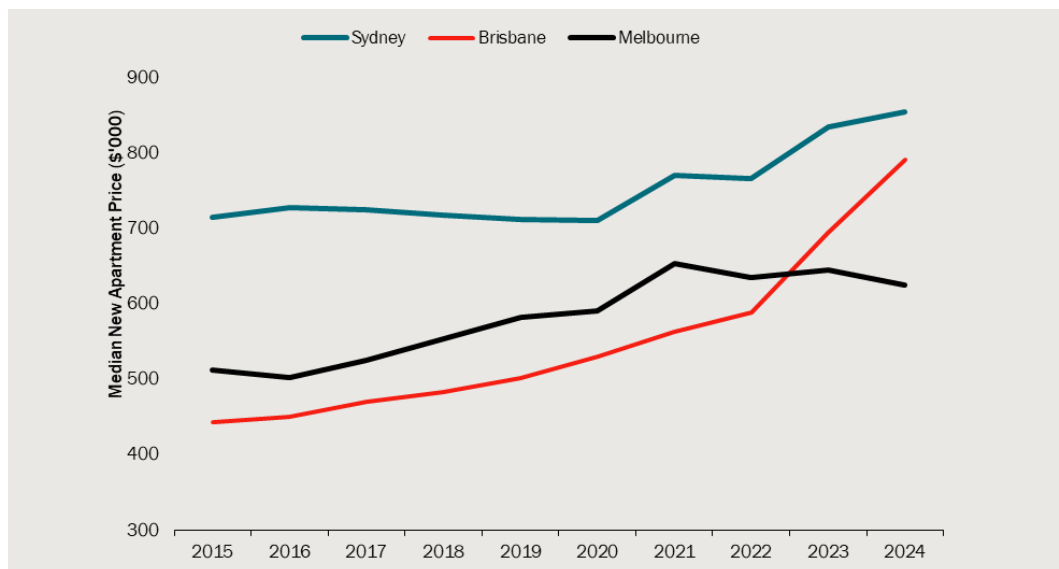
Source: The CIE Note: May not align exactly due to rounding

We briefly discuss each estimate below. Additional details on methodology, assumptions and data sources are available in the appendix.

Inner City Apartments

In 2024, the median new apartment in Brisbane sold for \$792 000.¹³ This is a result of extremely rapid growth in recent years, with prices rising by almost \$100,000 in one year from 2023 to 2024, and growth of nearly 60% since 2019 (chart 4.7). These price rises have been much larger in Brisbane than in other major cities.

4.7 Median New Apartment Price, Brisbane, Sydney and Melbourne



Data source: UDIA State of the Land.

¹³ UDIA (2025), *State of the Land 2025*, available at: <https://udia.com.au/wp-content/uploads/2025/03/State-Of-The-Land-Report-2025-Final-Report.pdf>

This rapid, recent increase in prices in a short run suggests that previous estimates of the zoning premium in Brisbane, such as Jenner and Tulip (2020), which find it to be relatively small, may now be out of date.¹⁴

Subtracting other construction costs from this sales value gives the raw (residual) land value for an inner city apartment- estimated to be \$127 348. Refer to chapter 2 and the appendix for details on the costs of construction. We estimate that the opportunity cost of this land, when reserved for detached houses, is \$60 545. This opportunity cost has been estimated by projecting forward estimates from Jenner and Tulip (2020) using the Proptrack Home Price Index for detached houses in Brisbane.¹⁵

The difference between these two figures, \$66 802, is therefore the estimate of the zoning premium for inner city apartments.

Character Zone Townhouses

A new townhouse in a character zone is estimated to sell for \$1 267 500.¹⁶ With detached houses in many character suburbs costing more than \$2 million¹⁷, townhouses represent a substantially more affordable option, allowing households to economise on expensive urban land.

Subtracting construction costs except for land from this price gives a raw land value of \$469 870. This is substantially higher than apartments, reflecting that townhouses consume significantly more land.

We estimate that the opportunity cost of this land, reserved for detached houses is \$379 919. This opportunity cost has been estimated by re-weighting the opportunity cost of land for inner city apartments to reflect the lower land values in inner- and middle-ring character zones compared to inner-city locations. Refer to the appendix for additional details.

The difference between these two figures, \$89 951, is the estimate of the zoning premium for character zone townhouses.

Greenfield House and Land Package

To estimate the zoning premium for a greenfield house and land package, we exclude the costs of house construction and focus only on the lot itself. This allows for a cleaner identification of the zoning premium as it allows for issues with measuring construction costs to be ignored. This substantially simplifies and improves the estimates.

¹⁴ Jenner & Tulip (2020), *The Apartment Shortage*, available at: <https://www.rba.gov.au/publications/rdp/2020/2020-04/full.html>

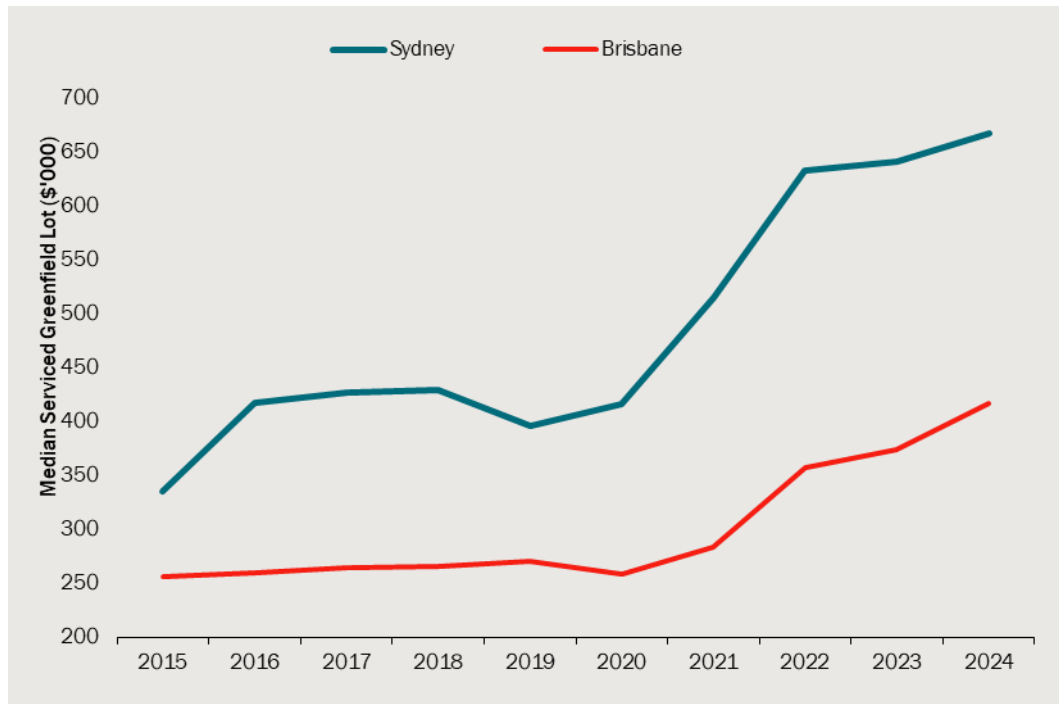
¹⁵ Proptrack (2025), *Home Price Index*, available at: <https://www.proptack.com.au/home-price-index/>

¹⁶ Estimated as the 75th percentile of townhouse sales in selected character suburbs, data from Domain.com.au. Refer to the appendix for details

¹⁷ For example, the median house price in Ascot is \$2.5 million, and \$2m in Bulimba

A typical 421sqm greenfield lot in Brisbane sells for \$417 000.¹⁸ This reflects several years of extremely strong growth, with prices rising by more than 60% since 2020 following five years of little growth prior to the pandemic (chart 4.8). Unlike apartments, greenfield lots have become relatively cheaper compared to other capital cities, with a typical lot in Brisbane falling from 76% of the price of one in Sydney in 2015 to 62% in 2024.

4.8 Median Serviced Greenfield Lot Price, Sydney and Brisbane



Data source: UDIA State of the Land.

Subtracting the costs associated with developing the lot gives a residual land value of \$160 900. We estimate the opportunity cost of land, which we assume to be agriculture, at \$33 192, drawing on detailed analysis of land value data from the Queensland Valuation and Sales (QVAS) service.

This gives a zoning premium of \$127 709, the largest of the three development typologies.

Unreasonable Planning Delays

Lengthy and uncertain planning processes add substantial costs to the development process. Delays associated with navigating the planning process add time to the development process, requiring developers to pay more in interest and delaying payment upon completion.

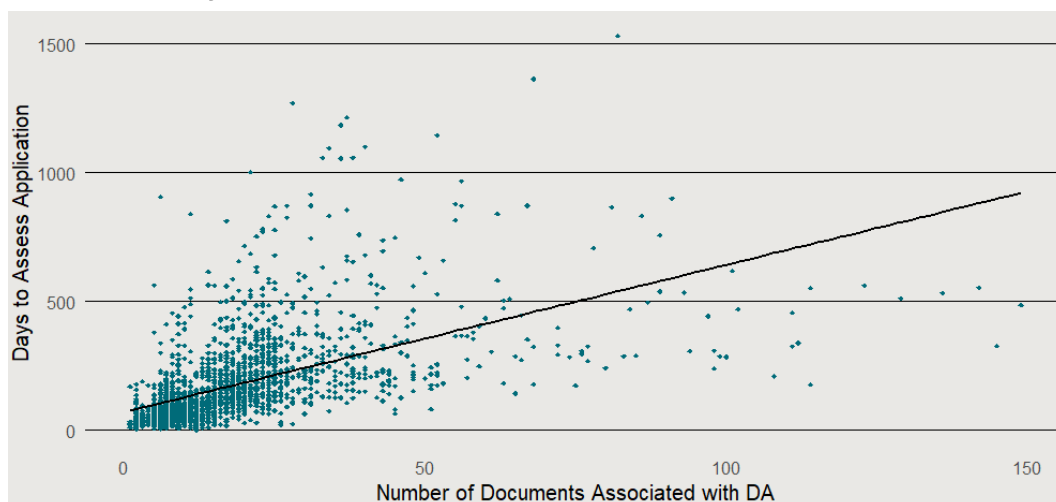
¹⁸ UDIA (2025), *State of the Land 2025*, available at: <https://udia.com.au/wp-content/uploads/2025/03/State-Of-The-Land-Report-2025-Final-Report.pdf>

Stakeholders in the development industry reported significant challenges with navigating the planning and approvals process, with developers reporting months- and years-long delays resulting from delayed approvals, changing requirements and court appeals. In addition to planning assessment, infrastructure provision and connection was identified as significant sources of delays.

As discussed in chapter 2, in order to assess these costs, a judgement must be made about the overall length for each step in the process to occur, as well as how much of these periods are considered 'reasonable'. To inform this, examples of unreasonable delays in planning, infrastructure provision and collection processes were collected from industry participants. These examples suggested that in some cases, unreasonable planning delays can add 26 months or more than two years to development timeframes for greenfield development. For infill development, unreasonable delays were reported to be somewhat shorter, at 20 months on average.

Clearly, not all projects experience these delays in planning, infrastructure, and connection processes. To assess the frequency of these unreasonable delays, data on assessment timeframes was combined with information on the number of documents associated with each development application in Brisbane City Council. Although imperfect, this correlates well with assessment times- most applications requiring few documents are assessed quickly, and complex DAs are assessed slowly.

4.9 Complexity of applications and assessment times



Data source: Brisbane City Council, The CIE.

This analysis found that 17 per cent of projects took more than 50% longer to assess than would be expected given the complexity of the application- which we take as the prevalence of the unreasonable delays reported for greenfield developments.

This gives an average unreasonable delay of just under 4.5 months for greenfield developments. Reflecting that many of the delays reported by developers in a greenfield context are for enabling infrastructure which is less relevant to infill developments, we assume shorter unreasonable delays of just under 2.5 months for apartments and townhouses.

Finally, reflecting industry feedback that constructing basement carparking adds 5 months to a typical work program for an apartment building, this can be considered as an unreasonable delay where parking minimums apply. As shown later in this chapter, parking minimums substantially increase the level of parking provision.

These timeframes are summarised in table 4.10 below.

4.10 Assumed Development Timeframes

Stage of Development	Category	Greenfield House	Character Zone Townhouse	Inner City Apartment
		Months	Months	Months
Planning and infrastructure	Necessary	7	7	7
	Unreasonable	4.5	2.5	2.5
Site preparation	Necessary	4	4	4
Construction	Necessary	4.2	4.7	17.9
	Unreasonable, where minimum parking requirements apply			5
Total Time		16.6	18.2	36.4

Source: ABS, QPC & CIE Consultations. Note: Totals may not add exactly due to rounding

Applying our assumed holding costs to these delay periods gives an estimate of the cost of unreasonable planning delays, shown below.

4.11 Additional cost per dwelling of unreasonable delays

Housing Typology	Cost of One Month Delay
Greenfield House	7 609
Character Zone Townhouse	11 166
Inner City Apartment	3 403

Source: The CIE.

Additional Margin

A complex and opaque planning, infrastructure and approvals process directly increases costs but also increases the risks associated with undertaking a development project.

These risks include:

- Uncertainty about whether, and how long a project will take to be approved
- Uncertainty about appeals and legal challenges to an approval
- Uncertainty about conditions that may be placed on a project
- Uncertainty about the ability and timing of agencies to build or connect to enabling infrastructure

In order to bear these additional risks, developers require an additional return. If projects could be made less risky, developers may be willing to proceed at a lower return.

Estimating this premium precisely is challenging, but previous research in Australia has

used values ranging from 1 per cent to 4 per cent additional return.¹⁹ It is highly likely that this premium varies across different jurisdictions and kinds of projects. Reflecting this uncertainty, this cost has been assessed using a 1 and 4 per cent additional risk premium. Table 4.12 reports the estimated costs reflecting additional margins.

4.12 Cost of higher development margins from planning system risk

Housing Typology	Low (1 per cent premium)	High (4 per cent premium)
	\$	\$
Greenfield House	\$3 236	12 944
Character Zone Townhouse	\$4 878	19 512
Inner City Apartment	\$1 304	5 216

Source: The CIE.

Parking Minimums

Parking minimums are planning controls which require a development to include a specified number of parking spaces. Although these controls are intended to ensure that sufficient parking is provided for the residents and visitors, if set too high, they force buyers of new apartments to pay for spaces they do not use or value, adding to the cost of delivering new housing and impacting development feasibility.

In most locations outside of the CBD and inner city, Brisbane City Council requires a minimum of 1 parking space to be provided for each 1-bedroom unit and 2 spaces for every 2- and 3-bed unit, as well as an additional 0.25 spaces/dwelling for visitor parking. In the 'city frame' and areas directly adjacent to some train and bus stations a minimum of 1.1 spaces for every 2-bed and 0.9 spaces per 1-bed is required.

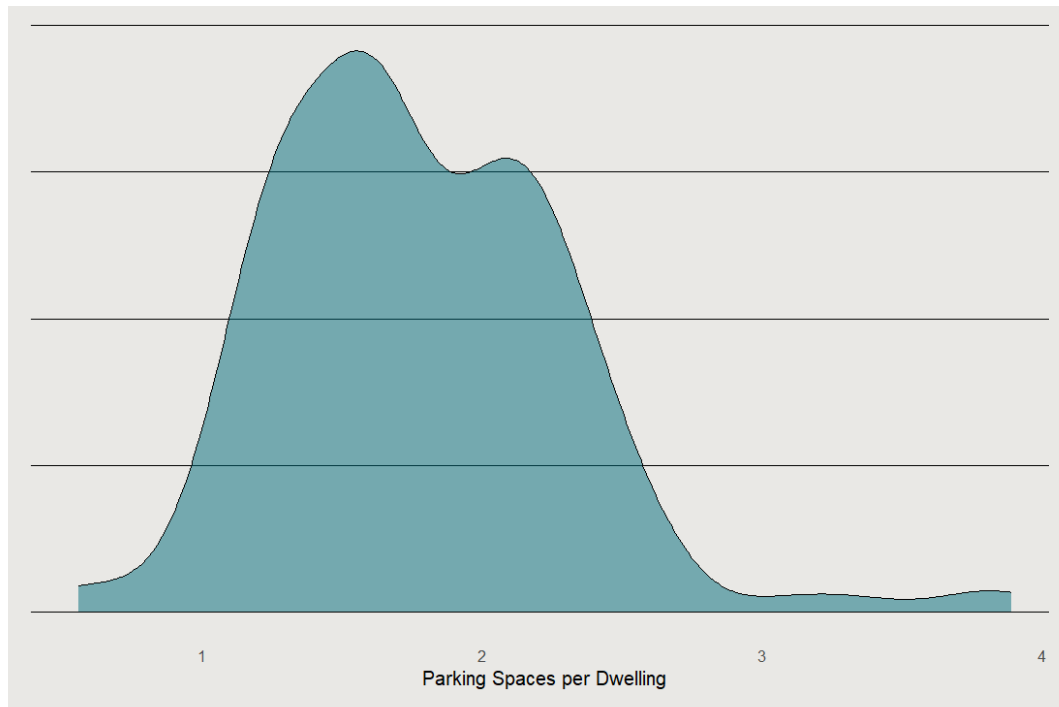
Parking spaces, especially when located underground, are expensive to build. Excavating a multi-storey basement is complex and introduces substantial risk and delays to a construction project. Industry stakeholders reported that the cost of providing a new parking space in Brisbane has increased rapidly in recent years, with the basement parking component of a typical apartment building adding around five months to construction timeframes compared to a building without basement parking and costing up to \$120,000 per space.

This is likely to be substantially higher than the value that many households place on a parking space. Tulip & Jenner (2020) find that an additional parking space adds 8.2% to the value of a dwelling. Applied to the typical price of newly-built apartments in Brisbane, this suggests that the marginal parking space is valued at approximately \$65 000- far lower than the cost of building it. This suggests that the marginal household would prefer to purchase, and developers would prefer to build, a cheaper apartment without parking.

¹⁹ The CIE (2025) assumes a 4 per cent higher developer's margin in Brisbane from risks associated with the planning system, while The CIE (2011) estimates 1-2 per cent in NSW.

To more precisely assess the extent to which parking minimums are binding in Brisbane, Large Language Models (LLMs) were used to extract information on parking provision from multiple dwelling development application documents scraped from the Brisbane City Council website. This found that a typical multiple dwelling development has between 1-2 parking spaces per dwelling, with a median of around 1.67 spaces per dwelling (chart 4.13).

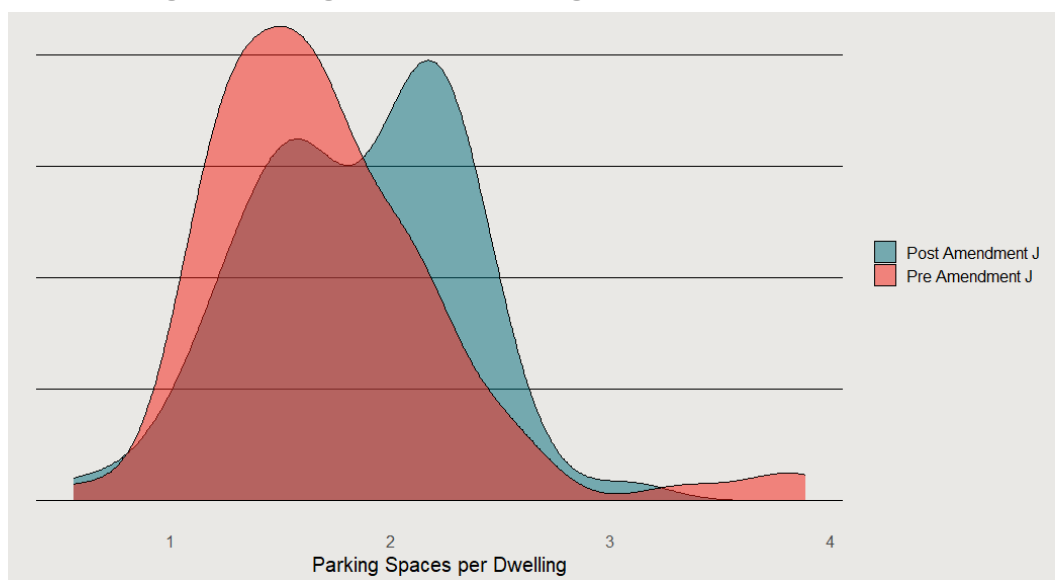
4.13 Parking per dwelling in new multiple dwelling developments, Brisbane



Data source: The CIE.

To assess how much parking minimums increase parking provision above the level demanded by the market, we examine parking provision before and after the 2019 ‘Amendment J’ changes to the Brisbane City Plan which increased parking minimums for multiple dwelling housing across a broad section of the city (chart 4.14). The changes, which applied across most of the city outside of the CBD, increased parking minimums to 2 spaces for every 2 and 3-bedroom unit, and 2.5 spaces for 4 bedroom units, as well as nearly doubling the required rate of visitor parking.

4.14 Parking per dwelling in multiple dwellings pre- and post-Amendment J

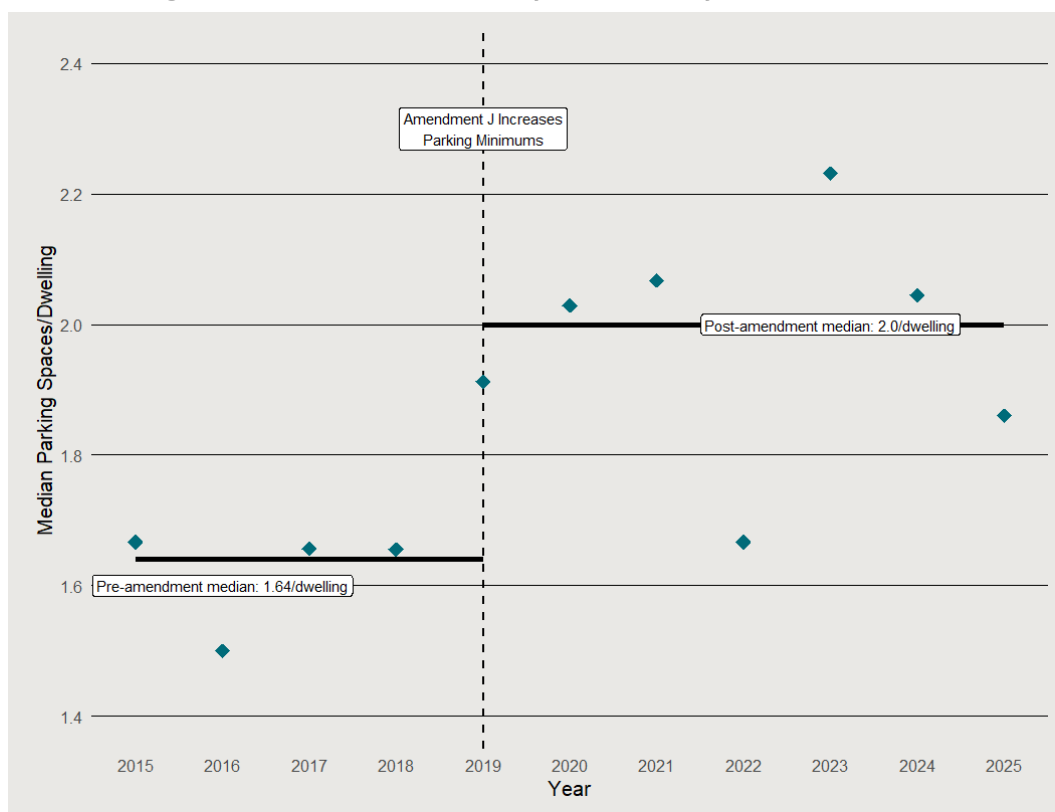


Data source: Brisbane City Council, The CIE.

Following the changes, parking provision in affected areas increased by 23%, from a median of 1.64 spaces per dwelling to 2 per dwelling (figure 4.15). This provides strong evidence that the currently imposed parking minimums are requiring developers to build more parking than customers are willing to pay for.

We take this percentage increase as an estimate of the ‘excess’ parking required because of parking minimums. This is slightly lower than other estimates of the excess parking prompted by minimums and can be interpreted as a conservative estimate. For example, Guo and Ren (2013) and Karlin-Resnick (2015) estimate reductions of around 40% from the removal of parking minimums in the UK and US respectively. As parking minimums were already imposed before amendment J, it can be considered a lower bound estimate, as in the absence of parking minimums entirely, even less parking may have been built pre-2019.

4.15 Parking provision in areas affected by Brisbane City Council Amendment J



Data source: The CIE, Brisbane City Council.

Applying this excess to the cost of providing the typical amount of parking spaces for infill typologies provides an estimate of the excess cost of parking minimums to consumers (table 4.16). For inner city apartments, we draw on industry consultation and assume a cost of \$90,000 per space for a basement carpark. This is a conservative estimate, with some stakeholders reporting costs up to \$120,000 per space. For townhouses, where parking is typically provided at-grade, we assume a cost of \$41,300 per space- equivalent to the opportunity cost of the 13sqm of land a standard-size parking space consumes. Parking minimums are substantially less likely to be binding and land less expensive in a greenfield context, and so we assume no cost for this typology.

It should be noted that this cost only applies where parking minimums are applied, which excludes the 'city core' area.

4.16 Excess cost of parking minimums

Typology	Cost of Parking Minimums
	\$/dwelling
Inner City Apartment	34 500
Character Zone Townhouse	15 800
Greenfield Serviced Lot	0

Source: The CIE.

5 *Building regulation in Queensland and its costs*

Summary

Building regulation in Queensland includes:

- Technical standards set out in:
 - the National Construction Code (NCC)²⁰ and
 - the Queensland Development Code (QDC).
- The compliance and enforcement framework (this includes occupational licensing requirements; however, these impacts have been included in labour regulation — see chapter 5a)
- Home warranty insurance requirements.

The impact of these regulations are embedded in construction costs. To the extent that they are quantifiable, high-level estimates of the contribution that these regulations make to construction costs are shown in table 5.1, with further details provided below.

5.1 High-level estimate of the contribution of building regulation to costs

	Greenfield house	Inner City Apartment	Character Zone Townhouse
	\$ per dwelling	\$ per dwelling	\$ per dwelling
Liveable housing standard	4 933	7 319	5 330
Energy efficiency	804	2 390	804
Certification costs	2 500	11 888	2 500
Home Warranty Insurance premium	5 309	4 777	5 051
Quantifiable contribution of building regulation	13 546	26 374	13 685

Source: CIE estimates.

Rationale for building regulation

In general, there is a sound in-principle case for regulating building work on the basis that market failures (particularly information asymmetries) weaken the incentive for builders and developers to build safe, high-quality buildings. This is because

In many markets, market forces are effective in ensuring that products meet a level of quality that consumers demand without the need for regulation. However, a key condition for markets to be effective at ensuring adequate levels of quality is for consumers to have access to information about product quality.

²⁰ The NCC also includes the Plumbing Code

Information asymmetry between builders, developers and the consumer is the key market failure creating the need for building regulation.²¹ Information asymmetries occur where buyers do not have sufficient information to assess the quality or other attributes of a good or service. This applies both before (i.e. when engaging a builder) and for some time after (i.e. before a latent defect emerges) the building has been completed or purchased. Goods and services with this characteristic are referred to as a ‘credence’ goods and services. There is a strong case for regulation in these markets.

Overview of regulatory framework for buildings

Building regulation refers to regulations relating to the building industry (and practitioners) and the actual building process. In Australia, building regulation is primarily the responsibility of state and territory governments, although all levels of government are involved in building regulation.

Building regulation incorporates:

- the minimum technical standards with which new buildings must comply
- regulatory measures and processes to ensure that building work meets the minimum requirements.

These regulations are briefly discussed below, with further details in Appendix B.

Technical standards

Building technical standards that apply in Queensland are specified in:

- the National Construction Code (NCC), and
- the Queensland Development Code (QDC)

The NCC is produced and maintained by the Australian Building Codes Board and sets standards for most aspects of construction, including weatherproofing, plumbing, fire safety and energy efficiency.²² It is notionally nationally consistent, however there are variations between states and for areas with different climate and natural disaster risks.

The QDC covers Queensland-specific matters that are outside the scope of, and in addition to, the NCC. The QDC includes mandatory standards, as well as non-mandatory standards that local governments can adopt in their local planning schemes and modify to suit local circumstances.²³

²¹ Productivity Commission 2004, *Reform of building regulation*, p. XXII

²² Productivity Commission, *Housing construction productivity: Can we fix it?*, Research paper, February 2025, p. 34.

²³ Business Queensland website, <https://www.business.qld.gov.au/industries/building-property-development/building-construction/laws-codes-standards/queensland-development-code/background>, accessed 8 August 2025.

The compliance and enforcement framework refers to the systems in place to ensure buildings comply with the relevant technical standards. Chart 5.2 summarises the key elements of the compliance and enforcement framework with a summary of key Queensland building legislation summarised below.

The diagram illustrates the building process across three phases: Design Phase, Construction Phase, and Operation Phase. The Regulator at the bottom regulates occupations and products, which then flows into the Building certifier. The Building certifier certifies compliance with the Developer/owner and regulates occupations and products. The Developer/owner hires professionals in the Design Phase and hires Building products in the Construction Phase. The Building certifier also certifies compliance with the Developer/owner. The Regulator regulates some occupations and regulates occupations and products. Dashed arrows indicate approvals from the Developer/owner to the Building certifier and from the Building certifier to the Operation Phase.

```

graph TD
    Regulator[Regulator] -- "Regulates" --> BC[Building certifier]
    BC -- "Regulates occupations and products" --> OP[Operation Phase]
    BC -- "Certifies compliance" --> DO[Developer/owner]
    DO -- "Hires" --> DP[Design Phase]
    DO -- "Hires" --> CP[Construction Phase]
    DP --> CP
    CP --> OP
    DO -.-> BC
    BC -.-> OP
    
```

Data source: The CIE.

- the Building Act 1975
- the Queensland Building and Construction Commission Act 1991.

The Queensland Building and Construction Commission Act 1991 (QBCC Act) establishes the Queensland Building and Construction Commission (QBCC) and the legal framework for regulating the building and construction industry in Queensland.

The QBCC Act also regulates building products by establishing a primary duty for each person in the ‘chain of responsibility’ for any building product to ensure that the product is not a non-conforming building product for an intended use, as well as other duties.

Estimating the costs of building regulation in Queensland

The costs of building regulation are difficult to estimate for several reasons. Firstly, the costs of building regulation need to be assessed against a counterfactual where there is no regulation, which is unobservable. It seems likely that in the absence of regulation, costs would be somewhat lower, however, the costs associated with defects would also be much higher. On the other hand, the Productivity Commission argues that clear standards (such as the deemed-to-satisfy standards set out in the NCC) can reduce uncertainty and costs.²⁴

Further, the sheer volume of regulation makes estimating costs difficult. The full scope of building regulation in Queensland includes:

- The NCC, which runs to more than 2000 pages²⁵ and refers to numerous standards.
- The Queensland Development Code comprising 27 current mandatory documents plus 10 non-mandatory documents.
- Queensland's two main pieces of building legislation (the Building Act and the QBCC Act) together run to more than 850 pages.

Costs of inefficient technical standards

Recent changes to the NCC that affect construction costs for residential buildings that were not supported by a cost-benefit analysis (as identified by the Productivity Commission) include the following (both introduced in the 2022 update):²⁶

- Energy efficiency requirements for residential buildings — the Decision RIS found a net cost to society (BCR: 0.8), but found that this BCR was higher than other options tested and noted that factors outside of the BCR estimate should be weighed by decision-makers, who are ultimately best placed to weigh these factors.
- Liveable housing — the Decision RIS found that accessibility changes would be of net cost to society (BCR: 0.39) but left policy makers to weigh up these costs against the social justice benefits of greater accessibility.

The estimated impacts of these changes on construction costs in Brisbane are set out below. Note that these changes also have benefits (although the benefits were estimated to be lower than the costs).

Energy efficiency requirements

The estimated additional capital costs under the preferred option (as reported in the Decision RIS) were as follows (see table 5.3):

²⁴ Productivity Commission, *Housing construction productivity: Can we fix it?*, Research paper, February 2025, p. 49.

²⁵ Productivity Commission, *Housing construction productivity: Can we fix it?*, Research paper, February 2025, p. 5.

²⁶ Productivity Commission, *Housing construction productivity: Can we fix it?*, Research paper, February 2025, p. 51.

- The average additional cost for a Class 1 dwelling in Brisbane (i.e. a building in Climate Zone 2 in Queensland) was estimated at \$723 (in 2022 dollars) under Option A (the preferred option for Class 1 buildings). Inflating to 2024 dollar terms using the construction component of the Producer Price Index (PPI) published by the ABS, this equates to **\$804** per house.
- The average additional cost for a Class 2 dwelling in Brisbane was estimated at \$2148 (in 2022 dollars) under Option B (the preferred option for Class 2 buildings). Inflating to 2024 dollar terms using the construction component of the Producer Price Index (PPI) published by the ABS, this equates to **\$2 390** per apartment.

5.3 Estimated cost of NCC2022 energy efficiency changes

	Estimated increase in construction costs ^a	Inflated cost estimate
	\$ per dwelling (2022)	\$ per dwelling (2024)
Class 1	723	804
Class 2	2 148	2 390

^a ACIL Allen, *National Construction Code 2022: Decision Regulation Impact Statement for a proposal to increase residential building energy efficiency requirements*, Report to Australian Building Codes Board, 21 July 2022, pp. 170-173. ^b Inflated to 2024 using the Construction component of the Producer Price Index published by the ABS.

Source: ACIL Allen, ABS, The CIE.

Liveable housing standard

The incremental capital cost per dwelling of complying with the Liveable housing standard introduced in NCC2022 were estimated as follows (see table 5.4).

- The average additional cost for a separate house was estimated at \$3 874 (in 2020 dollars). Inflating to 2024 dollar terms using the construction component of the Producer Price Index (PPI) published by the ABS, this equates to \$4 933.
- The average additional cost for a townhouse was estimated at \$4 186 (in 2020 dollars). Inflating to 2024 dollar terms using the construction component of the Producer Price Index (PPI) published by the ABS, this equates to \$5 330.
- The average additional cost for an apartment was estimated at \$5 748 per dwelling (in 2020 dollars). Inflating to 2024 dollar terms using the construction component of the Producer Price Index (PPI) published by the ABS, this equates to \$7 319.

5.4 Estimated cost of complying with the Liveable housing standard

	Estimated cost ^a	Inflated cost ^b
	\$ per dwelling (2020)	\$ per dwelling (2024)
Greenfield house	3 874	4 933
Character Zone Townhouse	4 186	5 330
Inner City Apartment	5 748	7 319

^a CIE, Proposal to include minimum accessibility standards for housing in the National Construction Code: Decision Regulation Impact Statement, Prepared for the Australian Building Codes Board, February 2021, p. 150. ^b Inflated to 2024 dollar terms using the construction outputs component of the Producer Price Index (PPI) published by the ABS.

Source: The CIE, Proposal to include minimum accessibility standards for housing in the National Construction Code: Decision Regulation Impact Statement, Prepared for the Australian Building Codes Board, February 2021, p. 150.

Other estimates of the cost of NCC2022 changes

The estimates of the cost of the 2022 changes to the NCC (i.e. the liveable housing and the new residential energy efficiency requirements) estimated above were developed as part of the regulatory impact assessment process. Recent estimates for Master Builders suggest that the cost of these change could be significantly higher. In particular:²⁷

- the additional cost for a single storey dwelling (slab on the ground) was estimated between around 11 000 to \$22 500
- the additional cost for a single storey dwelling (slab on the ground) was estimated between around 40 500 to \$41 500
- the additional cost for a double storey dwelling (slab on the ground) was estimated between around 40 500 to \$44 500.

Cost of the compliance and enforcement framework

A key aim of the compliance and enforcement framework is to ensure compliance with the technical standards. From that perspective, the technical standards and the compliance and enforcement framework work together to ensure buildings are of an acceptable standard and it is difficult to separately identify the costs of the compliance and enforcement framework.

That said, it is possible to identify some specific aspects of the compliance and enforcement framework that contribute to higher construction costs.

Certification costs

One way that the compliance and enforcement framework directly contributes to additional constructions costs for residential buildings is through the costs associated with building certification.

Buildings can be certified by either a council or private certifier. Building certification costs tend to vary depending on complexity. For a greenfield house, building certification costs the building certification fees charged by BCC for new single and double storey houses are shown in table 5.5, along with indicative costs of a private certifier.

5.5 Certification costs – greenfield house

	Brisbane City Council ^a	Private certifier estimate ^b
	\$ per dwelling	\$ per dwelling
New single storey house	3 924	1 500-2 500
New double storey house	4 523	2 000-3 000

^a Brisbane City Council, Schedule of Fees and Charges: 2025-26, p. 204. ^b See for example: Rainbow Engineering website, <https://rainboweng.com.au/private-certifier-cost-in-qlld/>, accessed 7 August 2025.

Source: Brisbane City Council, Rainbow Engineering.

²⁷ Mitchell Brandtman, *NCC 2022 Cost Review*, Prepared for Master Builders.

Brisbane City Council does not appear to offer certification services for multi-dwelling developments, meaning that these developments must be privately certified. Although certification costs for houses tend to be around 1 per cent of construction costs or less, they tend to be higher for more complex projects, including multi-residential developments (particularly taller apartment buildings).

- Assuming certification costs of around 2.5 per cent of the value of construction implies costs of \$11 888 for a typical inner city apartment.

Although the certifier's role is a regulatory function and can therefore be attributed to 'regulation', it is likely that some developers (or builders) would choose to engage a building certifier, even if it were not required by regulation.

Building product regulation

Until recently, Queensland was the only Australian jurisdiction to impose specific obligations on building product suppliers. Queensland introduced these requirements in 2017. The contribution that the 'chain of responsibility' requirements make to building costs are likely to be relatively modest.

Although there is no mandatory certification scheme for building products (unlike some other products, such as plumbing products, electrical appliances and gas appliances), the NCC requires 'evidence of suitability' for all products and references standards some of which include building product compliance matters. This means that product testing should have already been undertaken for most products. The 'chain of responsibility' requirements essentially require that this product information is passed down the supply chain (along with various other duties).

Home warranty insurance

Home warranty insurance is mandatory for residential construction work valued at over \$3300. Home warranty insurance covers the home owner for losses in particular circumstances, including where:²⁸

- the contractor does not, or can not, finish the work they were contracted to do
- the contractor does not fix defects
- the building suffers from subsidence or settlement.

The home warranty payable on each of the archetypes is shown in table 5.6. This insurance premium is a component of construction costs.

²⁸ QBCC website, <https://www.qbcc.qld.gov.au/home-owner-hub/queensland-home-warranty-scheme/what-home-warranty-insurance>, accessed 29 August 2025.

5.6 Home warranty insurance premium

Home warranty insurance premium	
	\$
Greenfield house	5 309
Inner city apartment	4 777
Character zone townhouse	5 051

Source: QBCC website, <https://www.qbcc.qld.gov.au/sites/default/files/documents/hwi-premium-table-2701-new-home-construction.pdf>, accessed 29 August 2025.

6 *Construction labour regulation in Queensland and its costs*

Summary

Various labour regulations apply to the residential building industry in Queensland, including:

- Occupational licensing requirements
- Occupational health and safety requirements
- Various levies, including:
 - the building and construction industry training levy
 - the long service leave levy
 - the work health and safety levy.

As with building regulation, the impact of these regulations on development costs are embedded within ‘construction costs’. High-level estimates of the contribution these regulations make to the cost of construction are summarised in table 6.1, with further details provided below.

6.1 High-level estimate of the contribution of labour regulation to costs

	Greenfield house	Inner city apartment	Character zone townhouse
	\$ per dwelling	\$ per dwelling	\$ per dwelling
Occupational licensing	4 019	4 455	4 527
Occupational health and safety	5 723	5 326	5 527
Levies	2 938	2 734	2 838
Quantifiable contribution of labour regulation	12 680	12 515	12 892

Source: CIE estimates. Low range of OH&S costs shown.

Occupational licensing

Occupational licensing requirements are a key feature of the residential building regulatory environment in Queensland. Occupational licensing requirements are likely to contribute to the cost of constructing new dwellings in the following ways:

- Occupational licensing requirements impose direct costs on licensees, including additional administrative costs and licensees, which are likely to be passed through into higher construction costs.

- There is evidence to suggest that labour productivity growth is lower in occupations/industries with more stringent entry requirements (such as occupational licensing requirements). Lower productivity growth would also contribute to higher construction costs.

High-level estimates of the contribution occupational licensing requirements make to construction costs are summarised in table 6.2 (see below for details).

6.2 Estimated contribution of occupational licensing requirements to construction costs

	Greenfield house	Inner city apartment	Character zone townhouse
	\$ per dwelling	\$ per dwelling	\$ per dwelling
Direct costs	1 975	2 553	2 553
Impact of lower labour productivity	2 044	1 902	1 974
Total	4 019	4 455	4 527

Source: CIE estimates.

Direct costs from occupational licensing

Key direct costs incurred by licensees include:

- the administrative costs associated with licence applications and renewals
- licence fees (licence fees partly fund QBCC's operating costs)
- costs associated with complying with minimum financial requirements.

Direct cost of occupational licensing requirements

These costs are estimated at around **\$137.49 million** per year (see table 6.3). The basis for this estimate is as follows:

- Administrative costs are estimated at around **\$2.99 million**. This is a high-level estimate based on the following:
 - According to QBCC's 2023-24 Annual Report there were **118 762** licensees under various building-related legislation, including both individual and company licensees.²⁹
 - Based on reasonable assumptions, the number of applications/renewals per year could be around 47 505. The assumptions are as follows:
 - ... We assume 10 per cent are new applicants, implying 11 876 new applications.
 - ... The renewal period can vary (licensees can choose one up to five years). Assuming an average renewal period of 3 years, implies around 35 629 renewals per year on average.
 - The average administration costs is assumed to be around \$63 per application/renewals based on:
 - ... An indicative estimate of around 1 hour per application/renewal.

²⁹ QBCC, *Annual Report 2023-2024*, p. 30.

... An average cost of around \$63 per hour. This is based on the average hourly cash earnings of ‘Technicians and trade workers’ from the ABS Employee Earnings and Hours publication (\$42 per hour), with a 50 per cent loading for on-costs and overheads.

- According to QBCC’s 2023-24 Annual Report, licence fee revenue was **\$50.34 million** in 2023-24.³⁰
- The minimum financial requirements for building-related occupational licences is a unique feature of Queensland’s licensing regime.
 - Ernst and Young (2022) have previously estimated that the cost of the current minimum financial requirements is around \$78.34 million, including **\$77.26 million** incurred by licensees, including business compliance costs and costs associated with holding capital.³¹
 - Inflating to 2024 dollar terms using the national CPI implies an additional cost of **\$84.16 million**.

6.3 Estimated direct annual licence-related costs

	Estimated annual cost
	\$ million
Administrative costs	2.99
Licence fees	50.34
Minimum financial requirements	84.16
Total	137.49

Source: CIE estimates.

Average costs per dwelling

We estimate that the contribution of these licensing costs to total construction costs could be around: **\$1 975** for a new house; and **\$2 553** for a new ‘other residential’ dwelling (table 6.4). This is based on the following:

- The licensing costs estimated above could relate to both residential and commercial building work. We therefore allocate these costs to different types of building activity based on the relevant share of the value of building work done in Queensland (as reported by the ABS in *Building Activity, Australia*)³² averaged over the 3-year period from 2022 to 2024.

³⁰ QBCC, *Annual Report 2023-2024*, p. 72.

³¹ Ernst and Young, *Assessing the effectiveness of Queensland’s minimum financial requirements for building practitioners*, Final report, Prepared for Master Builders Queensland, April 2022, p. 17.

³² ABS website, Building Activity Australia, <https://www.abs.gov.au/statistics/industry/building-and-construction/building-activity-australia/latest-release>, accessed 6 August 2025.

- We then divide the share of total licensing costs by the average number of new dwellings completed per year in Queensland (as reported by the ABS in *Building Activity, Australia*).³³
- These estimates also assume that the costs incurred by licensees are passed through into construction costs.

6.4 Estimated licensing costs per dwelling

	New houses	New other residential
Share of value of work done (%) ^a	34%	19%
Share of total licensing costs (\$ million) ^b	46.10	26.49
Number of new dwellings (No.) ^a	23 344	10 377
Average cost per dwelling (\$)	1 975	2 553

^a ABS website, Building Activity Australia, <https://www.abs.gov.au/statistics/industry/building-and-construction/building-activity-australia/latest-release>, accessed 6 August 2025. ^b This represents the allocation of the estimated \$53.3 million of total building-related occupational licensing costs to residential buildings based on the share of the value of total building work done.

Source: ABS website, Building Activity Australia, <https://www.abs.gov.au/statistics/industry/building-and-construction/building-activity-australia/latest-release>, accessed 6 August 2025; CIE estimates.

Productivity impacts

Another cost of occupational licensing requirements relates to the indirect impacts of restricting market entry and competition.

- The OECD has developed a measure of the stringency of occupational entry regulations (OER) and found evidence (based on firm-level data from EU countries across 15 service industries that did not include construction) that more stringent OER restrictions:³⁴
 - are associated with lower labour productivity as a result of lower competitive pressures and restricting firms' access to skilled professionals (this effect was found to outweigh the potentially positive impact of having a higher proportion of highly skilled professionals in the market)
 - hinder the reallocation of skilled labour from lower to higher productivity firms.
- Replicating the same approach with Australian data, a recent RBA paper found that more stringent OERs (such as occupational licensing) are associated with:³⁵
 - less business entry and exit, which potentially has implications for competition and consumer prices

³³ ABS website, Building Activity Australia, <https://www.abs.gov.au/statistics/industry/building-and-construction/building-activity-australia/latest-release>, accessed 6 August 2025.

³⁴ See: Bambalaite, I. Nicoletti, G. and von Rueden, C. 2020, Occupational entry regulations and their effects on productivity in services: Firm-level evidence, OECD Economics Department Working Papers No. 1605.

³⁵ Bowman, J. Hambur, J. and Markovski, N. 2024, *Examining the Macroeconomic Costs of Occupational Entry Regulations*, Reserve Bank of Australia, Research Discussion Paper RDP 2024-06, p. 29.

- slower flows of labour from low to high productivity firms and therefore lower productivity growth
- possibly skills shortages.

As a high-level indicator of the potential impacts of occupational licensing requirements on residential building costs in Queensland, we estimate that licensing requirements for building-related occupations could increase residential building costs by around **0.4 per cent** as follows:

- The papers cited above suggest that building-related occupational licensing requirements that apply in Queensland could reduce labour productivity by around **2.0 per cent**:
 - According to the RBA paper, the average OER stringency score across a number of building and construction industry occupations for Queensland was around **1.25**.³⁶ This is likely to understate the true restrictiveness of Queensland's occupational licensing regime as the minimum financial requirements are not included in the OER stringency measure.
 - Bambalaite et. al. (2020) estimated that each 1 point reduction in the OER stringency score resulted in a **1.6 percentage point** increase in productivity growth.
- We estimate that labour costs are around **21.6 per cent** of the value of residential building work.
 - According to input-output table published by the ABS, 'compensation of employees' and 'gross mixed income' make up around 13.7 per cent of the value of the output of the residential building industry.
 - In addition, some licensed building-related occupations would work in the 'construction services' industry, which is an input into residential building. This is equivalent to an additional 7.9 per cent of the value of residential building outputs:
 - ... 'Construction services' industry inputs are around 33 per cent of the value of the output of the residential building industry
 - ... Compensation of employees and gross mixed income is around 24 per cent of the construction services industry.

However, the paper notes that these results do not necessarily suggest that occupational entry regulations should be less stringent.³⁷ These potential costs would need to be weighed against findings from the Building Confidence Report that a lack of competence of some building practitioners are contributing to the high costs of building defects.

³⁶ Bowman, J. Hambur, J. and Markovski, N. 2024, *Examining the Macroeconomic Costs of Occupational Entry Regulations*, Reserve Bank of Australia, Research Discussion Paper RDP 2024-06, p. 19.

³⁷ Bowman, J. Hambur, J. and Markovski, N. 2024, *Examining the Macroeconomic Costs of Occupational Entry Regulations*, Reserve Bank of Australia, Research Discussion Paper RDP 2024-06, p. 4.

Occupational health and safety regulation

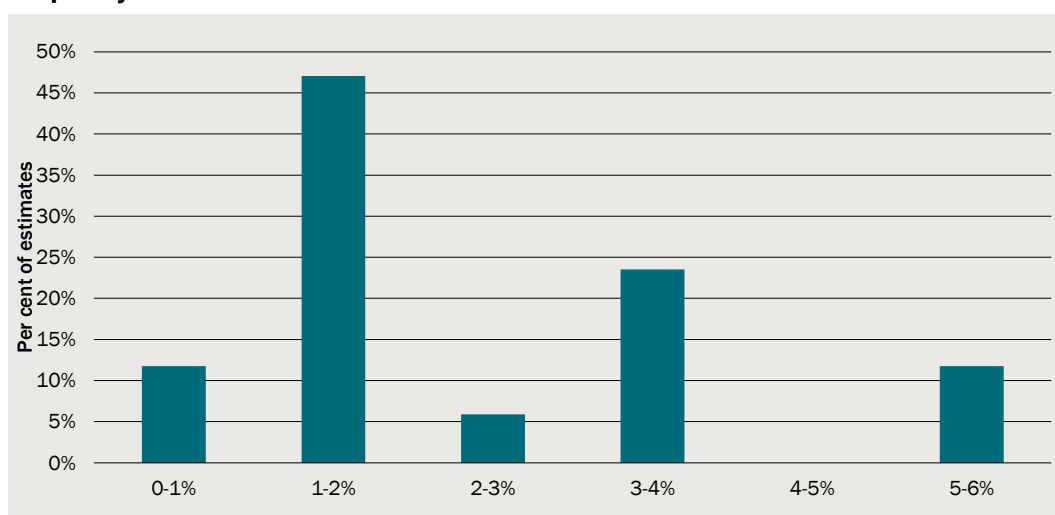
We have not identified any estimates of the total cost of complying with occupational health and safety (OH&S) requirements in the building industry in Queensland or Australia more generally.

A number of international studies have estimated the costs of been conducted overseas about OH&S costs as a share of total project costs. Mamman et. al. (2025) report estimates from 17 such studies (the countries covered by these studies are: South Africa, Malaysia, Spain, Turkey, Nigeria, Korea and Indonesia).

The distribution of the estimates (based on the mid-point where a range was given) across the 17 studies is shown in chart 6.5.

- The estimates ranged between around 1 per cent and 5.5 per cent
- The average across the 17 studies was around **2.4 per cent**.

6.5 Occupational health and safety costs as a share of total project costs – frequency distribution



Note: Based on the midpoint of the range reported for each study.

Data source: CIE based on Mamman, J.E. Oke, A.A. Mohammed, D.Y. 2025, Modelling the Cost of Health and Safety for Building Construction Projects, *International Journal of Research and Scientific Innovation*, Volume XII, Issue 1, pp. 947-948.

As these estimates draw on international studies, there is significant uncertainty as to which estimate is most appropriate in a Queensland context. As a result, we apply a range of estimates, corresponding to the 25th, 50th and 75th percentiles of estimates from this study- corresponding to 1.1, 1.9 and 3.5 per cent of construction costs. These are shown for each building type below.

6.6 Estimated OH&S costs per dwelling

Dwelling Type	Low	Medium	High
	\$/dwelling	\$/dwelling	\$/dwelling
Greenfield House	5 723	9 811	17 976
Inner City Apartment	5 326	9 130	16 729
Character Zone Townhouse	5 527	9 476	17 362

Source: The CIE based on estimates from Maman et al (2025). Low refers to 25th percentile cost estimate, medium refers to the median and high refers to the 75th percentile.

Important caveats around these estimates include the following:

- In principle, these costs reflect the cost of OH&S measures, rather than the cost of complying with OH&S regulation *per se*. As building companies would have in place OH&S measures even without OH&S regulation, not all of these costs can be attributed to regulation.
- These estimates are also based on international literature, mostly in countries that are not particularly similar to Australia. These estimates therefore do not reflect the specific characteristics of the regulatory environment in Queensland. There is significant variation in the stringency of OH&S requirements across jurisdictions, so these estimates may not be reflective of the costs incurred in Queensland.

For these reasons, the low-range estimates are applied for headline figures, to use a conservative estimate.

Levies

There are several levies that apply to building and construction work in Queensland valued at \$150 000 or more (excluding GST). These levies include:

- the building and construction industry training levy (0.1 per cent of the value of construction)
- the long service leave levy (0.35 per cent of the value of construction)
- the work health and safety levy (0.125 per cent of the value of construction).

These levies would be payable on all of the development archetypes and therefore contribute to construction costs (table 6.7).

6.7 Contribution of levies to building costs

	Levy amount	Greenfield house	Inner City apartment	Character zone townhouse
	Per cent	\$ per dwelling	\$ per dwelling	\$ per dwelling
Building and construction industry training levy	0.100%	511	476	494
Long service leave levy	0.350%	1 788	1 664	1 727
Work health and safety levy	0.125%	639	594	617
Total levies	0.575%	2 938	2 734	2 838

Source: The CIE

A Development Costing and Zoning Premium Methodology Details

Starting point: final sales price

Inner City Apartment and Greenfield Houses

UDIA (2025) publish median prices for new apartments and new greenfield lots in the *State of the Land* publication.³⁸ In Brisbane, the median new apartment sold for \$792 000 in 2024, which we take as our final transfer price.

The median new lot in a Brisbane greenfield estate sold for \$417 000. For calculating the zoning premium for greenfield houses, prices of developable lots (as opposed to finished houses) are all that is necessary, as the zoning premium is effectively the value (above opportunity cost) associated with permission to build the house, and is fully reflected in the lot's sales price. This also allows for a more accurate estimation of the zoning premium as there is no need to adjust for different sizes and types of houses being built.

We present results with construction costs for a typical house included for comparison with other typologies and to demonstrate the impact of building and other regulations, however these do not impact the calculation of a greenfield zoning premium, and are added to the cost of the developable lot.

Character Zone Townhouse

Sales of townhouses in suburbs which are significantly covered by character zones were taken from real estate listings website Domain.com.au. The following suburbs were taken as representative of character zones across Brisbane:

- Ascot
- Clayfield
- Coorparoo
- Grange
- Norman Park
- Paddington

³⁸ UDIA, 2025, *State of the Land 2025*, available at: <https://udia.com.au/wp-content/uploads/2025/03/State-Of-The-Land-Report-2025-Final-Report.pdf>

These suburbs each contain significant share of character zones and are considered to be typical of inner-ring suburbs. Reflecting that new townhouses are likely to be sold at an above-average price, the 75th percentile of these sales was taken as a typical price for a new townhouse in these areas- equal to \$1 267 500.

Land

The first step in the development process is the purchase of land which is zoned for the intended development type. Subtracting the other costs (detailed below) from the final sales price gives an estimate of the ‘residual land value’, which is the component of the final price which can be attributed to the land. Table A.1 shows estimated residual land values and the opportunity costs of land for each type of development.

A.1 Components of land costs in Brisbane, by development type

	Greenfield Lot	Character zone townhouse	Inner City apartment
	\$/dwelling	\$/dwelling	\$/dwelling
Residual land value	160 900	469 870	127 348
Opportunity cost of land	33 192	379 919	60 545
Estimated Zoning Premium	127 709	89 951	66 802

Source: The CIE

Once the residual land value has been estimated, the zoning premium can be calculated as the difference between the residual land value and the opportunity cost of land. For greenfield lots, we assume the alternative use of land is agriculture, and for infill development, we assume that the alternative use is detached housing. Each use is discussed in turn.

Greenfield lot

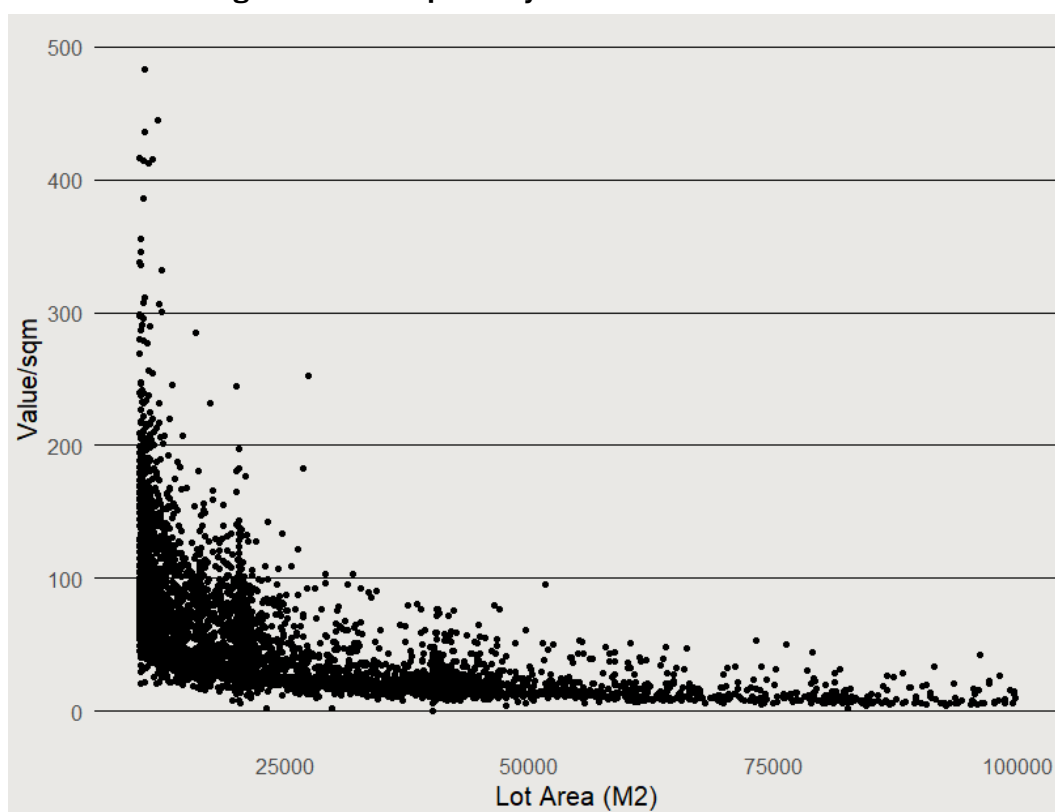
We assume that the opportunity cost of land in a greenfield context is agriculture. For this, we rely on valuation data from the Queensland Valuation and Sales (QVAS) service, which provides property-level land valuations and information for each lot in Queensland. This data contains detailed information on current land use (such as the specific form of agriculture it is used for, and the number of dwellings on the lot), as well as the address and size of each lot.

Reflecting that most greenfield growth occurs outside of Brisbane City Council, we consider sites located in a broader set of South-East Queensland councils: Ipswich, Logan and Moreton Bay in addition to Brisbane. We use the detailed land use information in this dataset to identify agricultural sites, and include residential sites of more than 1 hectare, as this includes many smaller farms and sites that may be suitable for subdivision and development in the future.

On average, the land value of these sites is \$56.3/sqm. We escalate this by 40 per cent to reflect the value of improvements and existing capital on the site, giving an opportunity cost of land of **\$78.8/sqm**. This is slightly lower than the estimate in the CIE (2025), however is likely to be a substantial improvement, as this draws on significantly more detailed data and information not available for that report. At the assumed lot size, this gives an opportunity cost of land for a greenfield lot of **\$33 192**.

This estimate of the opportunity cost of agricultural land is likely to lead to a conservative estimate of the zoning premium. Many sites that go into our estimate are ‘hobby farms’ or other relatively small lots. As per-sqm prices for agricultural land tend to decline with size (figure A.1), this means that the opportunity cost may be lower for larger sites. Closer inspection of the site valuation data suggests that lots of around average price tend to be between 3-5ha, which aligns with our assumed development size of 100 lots of around 400sqm.

A.1 Greenfield agricultural land prices by size



Data source: QVAS

Inner City Apartment

We assume the alternative use of the land is low density, detached houses. We draw on estimates from Jenner and Tulip (2020) of the cost of acquiring detached houses in

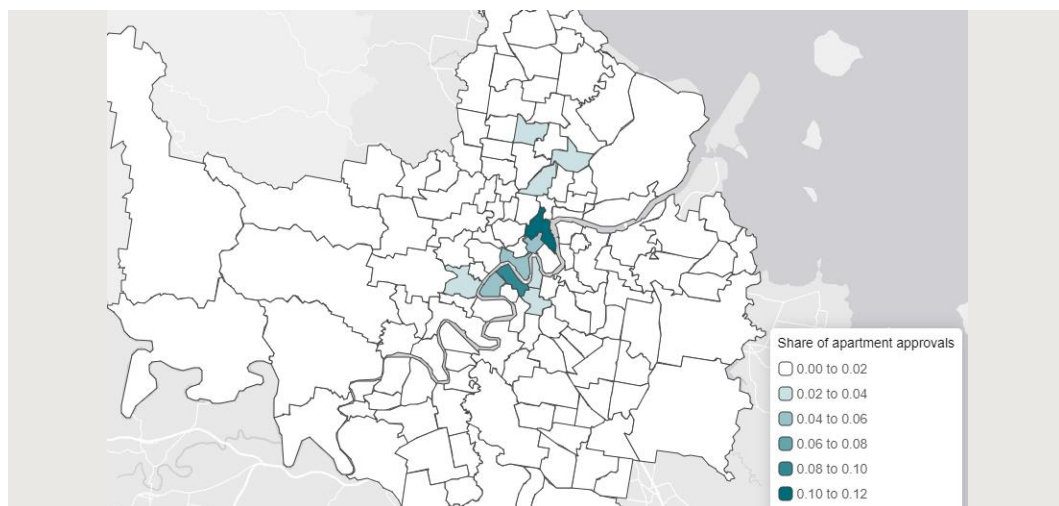
Brisbane.³⁹ This found that land for detached housing cost \$1 763/sqm on average, weighted by apartment development locations. We escalate this forward to 2024 using the Proptrack Home Price Index (HPI)⁴⁰ for detached houses in Brisbane. This suggests that detached house prices in Brisbane have increased by 81 per cent since 2018. We apply this increase to estimate the opportunity cost of land for apartments in 2024 at **\$3 187/sqm**. This is substantially higher than the city-wide average, at almost \$2 million for a 600sqm block, but reflects that apartments are primarily built in inner-city, more desirable locations.

To convert this to a per-dwelling cost, we draw on estimates from Jenner & Tulip (2020) that the average new apartment development in Brisbane requires 19sqm of land per dwelling. This is consistent with a moderately high-rise building of around 10 storeys.⁴¹ This gives an opportunity cost of land for an inner city apartment of **\$60 545**.

Character zone townhouse

To estimate the opportunity cost of land for townhouses, we adjust the estimated land costs above to reflect typical costs in character zones. This adjustment is necessary as the opportunity cost of land estimated for apartments is for land very close to the city centre (as this is where apartments are generally built), while character zones are common in inner- and middle-ring suburbs where land values are likely to be somewhat lower. The distribution of character zones and apartments are shown below.

A.1 Share of apartment approvals, by SA2



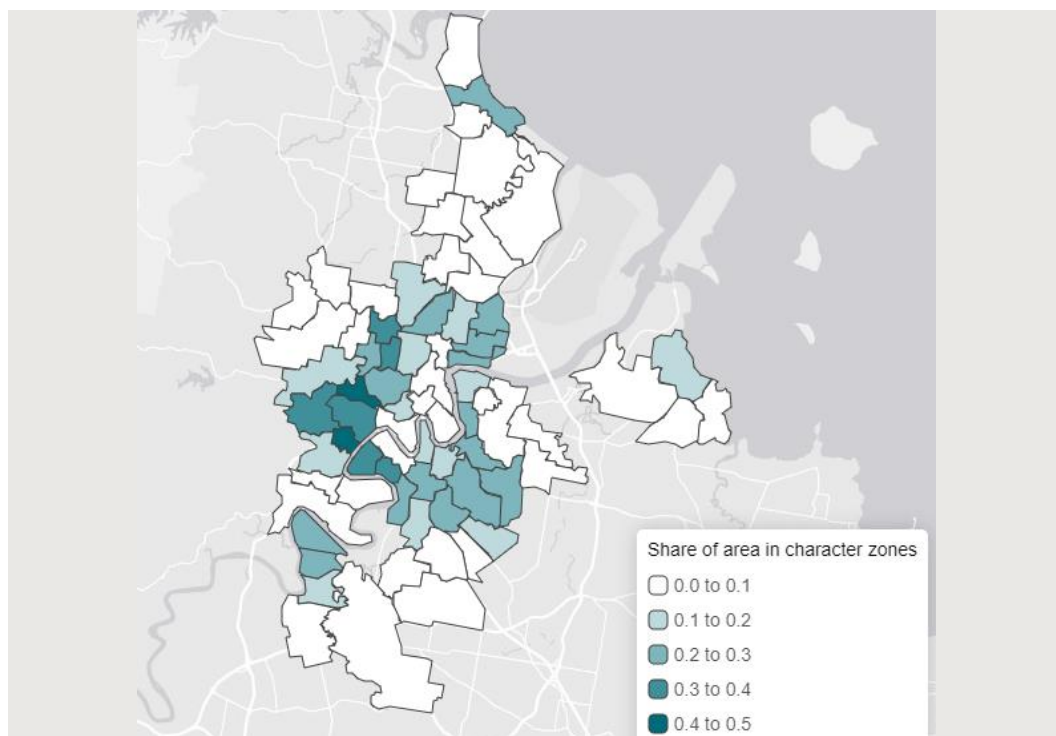
³⁹ Jenner, K, and Tulip, P, 2020, *The Apartment Shortage*, RDP 2020-04, available at: <https://www.rba.gov.au/publications/rdp/2020/pdf/rdp2020-04.pdf>

⁴⁰ Proptrack, 2025, *PropTrack Home Price Index*, July 2025, available at: <https://www.proptack.com.au/home-price-index/>

⁴¹ The CIE, 2024, *Cost and Feasibility Estimates for supplying new residential dwellings in New South Wales*, August 2024, available at: https://www.productivity.nsw.gov.au/sites/default/files/2024-11/2024114_CIE-report-Cost-and-feasibility-estimates-for-supplying-residential-dwellings.pdf.pdf

Data source: ABS, The CIE

A.2 Character zones in Brisbane City Council, by SA2



Note: SA2s not shown do not contain character zones

Data source: The CIE, Brisbane City Council

To make this adjustment, we combine ABS building approval data for apartments from 2014-2018 (the same sample period as Jenner & Tulip) and zoning data from Brisbane City Council with valuation data from the Queensland Valuation and Sales System (QVAS). This allows for an estimate of the difference between property values when weighted by apartment completions and when weighted by character zones.

The results of this adjustment are shown below, with character zone land found to be approximately 20% less expensive than land in inner city apartment locations. We assume that townhouses are constructed on a 150 square metre lot, such that the opportunity cost of land for each townhouse is approximately \$380 000.

A.3 Land Acquisition Costs, Character Zones

Estimate	Unit	Value
Cost of acquiring inner city apartment land	\$/sqm	3 187
Ratio of character zone values to apartment-weighted values	Ratio	0.795
Cost of acquiring character zone land	\$/sqm	2 533

Source: The CIE

Planning, consultants and site preparation

Consultant fees

Consultant fees are fees paid for environmental, planning and engineering services as part of the development, such as the costs of preparing a development application, designing a building and laying out a subdivision. We use estimates of consultant costs from The CIE (2025) for Brisbane, which were developed through consultation with industry groups.⁴²

We assume that per-dwelling consultant fees for townhouses are the same as inner city apartments, reflecting similar construction costs. These costs are shown below.

A.1 Consultant costs, by development type

Development Typology	Consultant Fees
	\$/dwelling
Greenfield Lot	6 893
Character Zone Townhouse	23 597
Inner City Apartment	23 597

Source: The CIE

Development Application fees

Developers must pay an application fee when applying for development approval. We apply estimates of this cost from The CIE (2025), taken from Brisbane City Council.⁴³ As noted in this report, Brisbane's application fees are substantially higher than other areas around Australia, but still represent a very small share of costs. These costs are shown below.

A.1 Development application fees, by development type

Development Typology	Application Fee
	\$/dwelling
Greenfield Lot	278
Character Zone Townhouse	252
Inner City Apartment	252

Source: The CIE, Brisbane City Council

⁴² The CIE, 2025, *Taxation of the housing sector*, available at: <https://hia.com.au/our-industry/advocacy/taxations-major-impact-on-housing?srsId=AfmBOopeblSS0VHkATeQAmYEn4yOWpDX9zRQfHLBSEJurhtKX2L8XnZM>

⁴³ The CIE, 2025, *Taxation of the housing sector*, available at: <https://hia.com.au/our-industry/advocacy/taxations-major-impact-on-housing?srsId=AfmBOopeblSS0VHkATeQAmYEn4yOWpDX9zRQfHLBSEJurhtKX2L8XnZM>

Site Preparation Costs

We use estimates of greenfield site preparation costs from The CIE (2025), drawing on estimates developed through consultation with industry in 2011, projected forward with the average of growth in the PPI for road & bridge construction and PPI for housing construction. Site preparation costs are included in construction cost estimates for townhouses and apartments, so are not separately counted here.

A.1 Site preparation costs

Development Type	Site Preparation Costs
	\$/Dwelling
Greenfield Lot	73 803

Source: The CIE

Taxes and Infrastructure Charges

Stamp duty on land acquisition

For each type of development, the developer pays stamp duty on the residual land value of the pre-development site. Following The CIE (2025), we assume that a greenfield lot is delivered in a subdivision of 100 lots, an apartment is delivered in a development of 50 units and a townhouse delivered in a development of 10.⁴⁴ We calculate stamp duty on the cost of raw land and apportion it to each dwelling evenly. Stamp duty costs are shown in table A.1 below.

A.1 Stamp duty costs on land acquisition

Dwelling Type	Stamp duty on raw land	Stamp duty per dwelling
	\$	\$/dwelling
Greenfield	905 701	9 057
Character townhouse	250 700	25 070
Inner City apartment	346 650	6 933

Source: The CIE, Queensland Revenue Office

Council rates and land tax

Developers are liable for land tax and council rates while they hold raw land. We assume that before approval, the income from the raw land (such as agricultural or residential

⁴⁴ The CIE, 2025, *Taxation of the housing sector*, available at: <https://hia.com.au/our-industry/advocacy/taxations-major-impact-on-housing?srsId=AfmBOopeblSS0VHkATeQAmYEn4yOWpDX9zRQfHLBSEJurhtKX2L8XnZM>

rent) is sufficient to cover land tax and council rates. Once approval is granted, this income is assumed to cease and the cost of council rates and land tax begins.

Council rates are levied on the unimproved value of the land, which we assume to be the residual land value, and charged at a 'rate in the dollar'. For greenfield, we assume the rate is charged is for agricultural use, and for both infill typologies, we assume it is the rate for residential owner-occupied land. We apply Brisbane City Council rates for these land uses, and apply this to the timing assumptions detailed in table 4.10. These charges are shown in table A.1.

A.1 Council rates per dwelling

Development Type	Council Rate	Charge
	\$ per \$ of land value	\$/dwelling
Greenfield Lot	0.002607	140
Character Zone Townhouse	0.002277	356
Inner City Apartment	0.002277	97

Source: Brisbane City Council, The CIE

Land tax is applied at the current Queensland rates for companies and trusts, shown below, and charged for the length of the development period.

A.2 Queensland land tax rates

Threshold	Marginal Rate
Value of land	c/\$ of value
Less than \$350 000	0
\$350k-\$2.25 million	1.7
\$2.25-\$5 million	1.5
\$5-10 million	2.25
More than \$10 million	2.75

Source: Queensland Revenue Office

The cost of land tax per dwelling is shown below.

A.3 Cost of land tax, by development type

Development type	Cost of Land Tax
	\$/dwelling
Greenfield	1 183
Character zone townhouse	1 958
Inner City Apartment	576

Source: The CIE, Queensland Revenue Office

Infrastructure Charges

Infrastructure charges or developer contributions are paid by a developer to contribute to the cost of connection and upgrades to services.

For greenfield areas, we draw on contribution rates in Development Charges and Offset Plans (DCOPs), which are contribution plans set by Economic Development Queensland (EDQ). Following The CIE (2025), we use the average of the charges for the Fitzgibbon and Greater Flagstone priority delivery areas (PDAs), shown below.

A.14 Greenfield Infrastructure Charges

PDA	Charge
	\$/Dwelling
Fitzgibbon	31 936
Greater Flagstone	51 172
Average	41 554

Source: Fitzgibbon https://www.edq.qld.gov.au/__data/assets/pdf_file/0028/94519/Updated-Fitzgibbon-DCOP-EDQ-Template.pdf
 Greater Flagstone https://www.edq.qld.gov.au/__data/assets/pdf_file/0020/94520/Updated-Greater-Flagstone-DCOP-EDQ-Template.pdf

For inner city apartments, we apply an average of the rates from the Bowen Hills and Woolloongabba PDAs- two infill precincts in Inner Brisbane. We assume that the 3-bedroom rate is charged and exclude the Value Uplift Charge.

A.2 Inner City Apartment Infrastructure Charges

PDA	Charge
	\$/Dwelling
Woolloongabba	36 052
Bowen Hills	31 936
Average	33 994

Source: Woolloongabba https://www.edq.qld.gov.au/__data/assets/pdf_file/0022/103675/Woolloongabba-PDA-Development-Charges-and-Offset-Plan-August-2025.pdf Bowen Hills https://www.edq.qld.gov.au/__data/assets/pdf_file/0018/101781/Bowen-Hills-DCOP-July-2025.pdf

For character zone townhouses, we draw on Brisbane City Council charges. We assume the three or more bedroom charge applies.

A.3 Character zone townhouse infrastructure charge

Type of development	Subtype	Charge per lot
		\$/lot
Dwelling house, dual occupancy or multiple dwelling	1 or 2 bedroom dwelling	12 167.49
	3 or more bedroom dwelling	17 034.48

Source: Brisbane City Council (charges are summarised at <https://www.brisbane.qld.gov.au/building-and-planning/fees-and-charges/infrastructure-charges>, and originate from *Brisbane Infrastructure Charges Resolution (No. 13) 2024* available at: <https://www.brisbane.qld.gov.au/content/dam/brisbanecitycouncil/corpwebsite/building-and-planning/documents/brisbane-infrastructure-charges-resolution-No-13-2024.pdf.coredownload.pdf>), and the CIE.

Water charge

The water charge is the developer's water service charges during development. We apply estimates from The CIE (2025) developed from consultation with the development industry. These estimates are shown below. As these costs are very small, we assume that this charge is the same for townhouses as apartment development.

A.1 Water charges during development, by typology

Development Type	Water Charge
	\$/Dwelling
Greenfield House	2 110
Character Zone Townhouse	481
Inner City Apartment	481

Source: The CIE

Finance, Marketing and Sales

Finance

Developers fund the purchase of raw land and development with debt. There are two finance charges we consider.

- Firstly, interest accrues on the raw land purchase cost while a developer awaits planning and other approvals. The principle for this interest calculation includes the purchase price of raw land, stamp duty on raw land, consultant and application fees. The time for this charge is the time taken for approval to be granted and the land development period.
- Secondly, interest accrues during the development itself. The principle for this is all remaining development costs, including construction costs, taxes during development, site preparation, connection fees, sales and marketing costs. The time period for this is the land development period.

The time frames assumed for this calculation are shown in table 4.10.

We assume an interest rate of 10.1 per cent for the holding period. This is consistent with the interest rate assumed in The CIE (2025) and The CIE (2024). This rate combines:

- The average interest rate on medium business variable rate loans, based on the average rate for new loans funded in each year.⁴⁵
- A premium of 3.8 per cent which reflects the higher rates for developer finance. This was chosen based on consultation with development finance professionals.

Finance charges are shown below.

A.18 Finance charges, by type

Development Type	Charge (fair)	Charge (unreasonable)
	\$/dwelling	\$/dwelling
Greenfield Lot	15 356	7 609
Character Zone Townhouse	31 674	11 166
Inner City Apartment	10 835	3 403

Source: The CIE

Marketing and Sales

Drawing on The CIE (2025), we assume sales and marketing costs are 1 per cent and 1.5 per cent of the final sales price, respectively. These assumptions were developed in consultation with industry, and are shown below.

A.1 Marketing and Sales Costs, by typology

Development Type	Sales and Marketing Costs
	\$/Dwelling
Greenfield House	11 570
Character Zone Townhouse	31 688
Inner City Apartment	19 800

Source: The CIE

Development Margin

Following Tulip & Jenner (2020), we assume a developer's profit margin of 17 per cent. This applies to land development costs net of GST. We assume a lower margin of 5 per cent on construction costs, reflecting that riskiness in land development that drives its relatively high rate of profitability is not present in construction. This is consistent with the approach taken in The CIE (2025).

⁴⁵ Data about this rate is available from the Reserve Bank of Australia in the Business lending rates – F7 table, available at:
<https://www.rba.gov.au/statistics/tables/xls/f07hist.xlsx?v=2024-07-23-23-26-06>.

Construction Costs

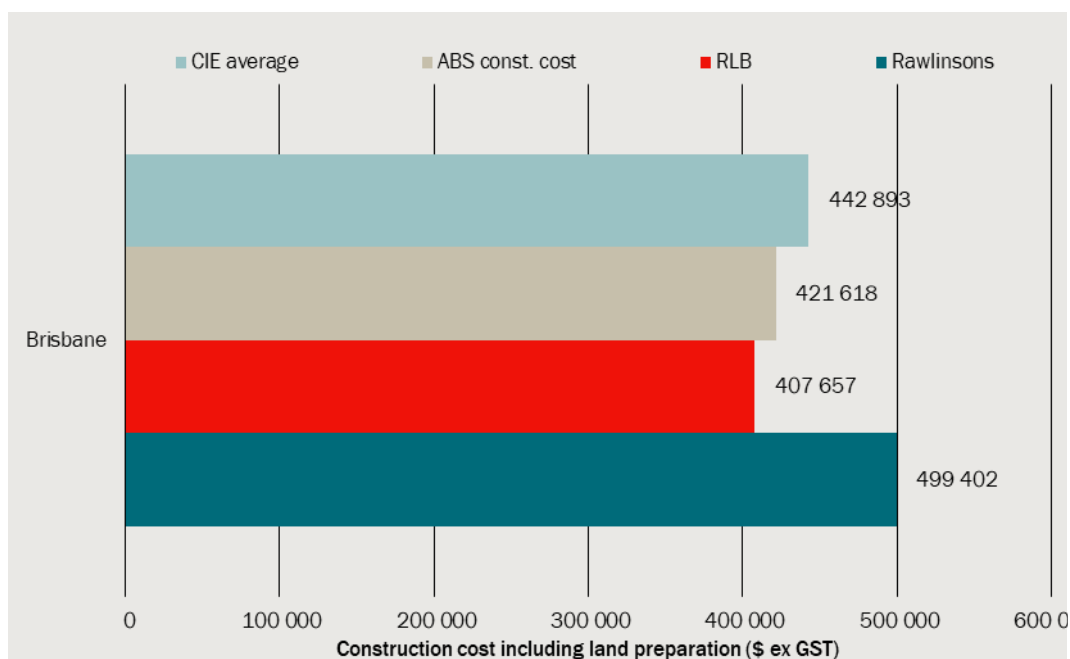
We consider three sources of cost data for construction costs:

- Rawlinson's Construction Cost Guide 2023⁴⁶
- Riders Digest 2025 published by Rider Levitt Bucknall⁴⁷
- ABS *Building Activity* estimates of average construction costs for 2023-24.

Where relevant, we project forward costs to present values at the Producer Price Index for the residential construction sector.⁴⁸ All sources exclude GST and include builder's margins.

We assume an apartment size of 85sqm and take an average across all three cost estimates, shown below. Estimates from Rawlinsons are notably higher than other sources.

A.1 Apartment Hard Construction Costs



Data source: ABS, Rawlinsons, RLB, The CIE

⁴⁶ Estimates are for a multi-storey apartment of high standard finish. Average of the low- and high-end cost have been used.

⁴⁷ Estimate available at: <https://www.rlb.com/oceania/insight/australia-riders-digest-2025/> Average of low- and high-end costs have been used.

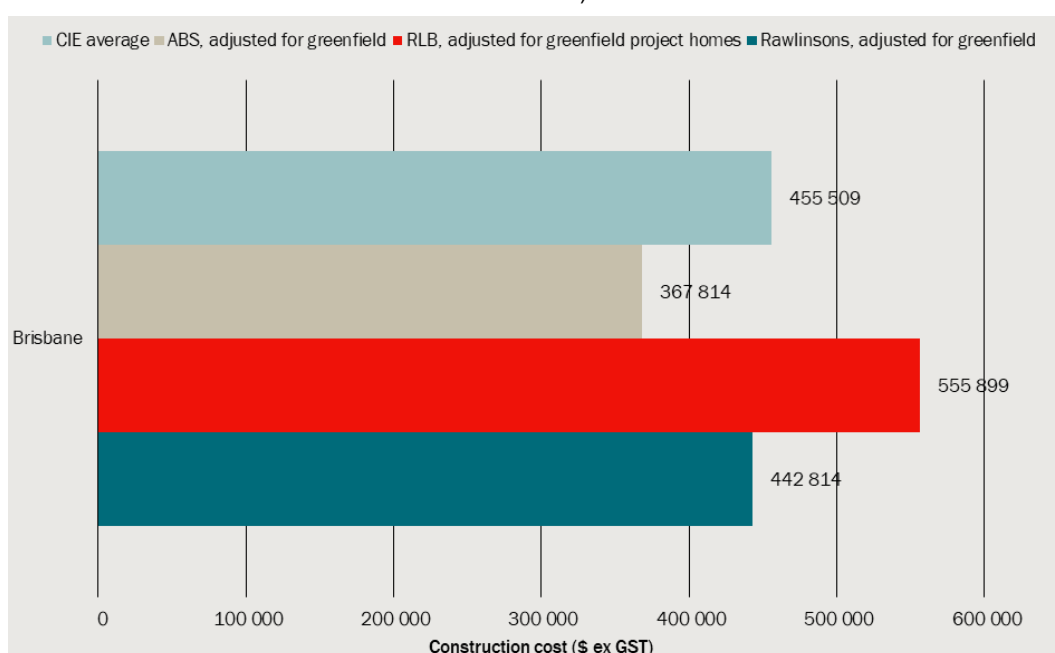
⁴⁸ Australian Bureau of Statistics, 2025, Producer Price Indexes, Australia, available at: <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/producer-price-indexes-australia>

We assume a detached house size of 235sqm, equal to the average new house size in Queensland in 2024 and as with apartments take an average across all three sources, with two further adjustments, as in The CIE (2025).⁴⁹

- We adjust construction costs downwards by 11.5 per cent to reflect lower construction costs in greenfield areas.⁵⁰
- We adjust RLB estimates, which are for a custom-designed home, downwards by 30 per cent to reflect a cheaper project home which is more common in greenfield locations.⁵¹

These cost estimates are shown below.

A.21 Detached house hard construction costs, Brisbane



Data source: ABS, RLB, Rawlinsons, The CIE

For townhouses, we take the midpoint of RLB estimates, and assume a size of 120sqm. This gives an estimate of hard construction costs of **\$473 880**.

⁴⁹ Australian Bureau of Statistics, 2025, *Building Activity*, available at: <https://www.abs.gov.au/statistics/industry/building-and-construction/building-activity-australia/latest-release>

⁵⁰ This reflects an average lower construction cost for greenfield precincts in Sydney, derived from ABS Building Activity data at an LGA level. As LGAs in Queensland are substantially larger than in NSW, similar analysis cannot cleanly identify a similar 'greenfield discount', however the factors contributing to lower construction costs in greenfield settings apply equally to Queensland.

⁵¹ This reflects the average cost difference between project-built and custom homes from BMT Quantity Surveyors, available at: <https://www.bmtqs.com.au/construction-cost-table>

Builder's finance

As in The CIE (2025), we assume builders fund 50 per cent of construction costs with debt, and that they have access to a draw down facility which reduces the interest bill by half. We assume an interest rate of 10.1 per cent, consistent with developers' interest rates assumed elsewhere. These costs are substantially higher for apartments, reflecting the longer work programs for this typology.

A.1 Builder's finance costs, by development type

	Greenfield House	Character Zone Townhouse	Inner City Apartment
	\$/Dwelling	\$/Dwelling	\$/Dwelling
Finance Costs	7 286	7 539	23 465

Source: The CIE

Other costs

We assume builders incur 1.5 and 1 per cent of costs for sales and marketing, respectively, and that GST is charged on all components. We also assume development management costs for developers of 3 per cent. These assumptions are consistent with The CIE (2025).

B Additional Details on Building Regulation

Detailed Rationale for Building Regulations

Information asymmetry

A report by the University of NSW (UNSW) City Futures Research Centre identified the extreme scarcity of building quality information available to buyers of new and existing apartments as a key problem with how the apartment market currently operates that is central to the apartment defect issue.⁵² In particular:

- buyers have little access to the information they need to make considered decisions about what to buy, especially when buying off-the-plan
- buyers must rely on word-of-mouth advice in the short time they have to make up their minds before settlement, and inevitably, many have little real idea what they are buying into
- even for buyers of existing apartments, information in strata inspection reports and contract documents is compromised by the lack of systematic information available about many buildings.

The UNSW report argued that these deficiencies in the availability of information create a risk that the market devolves into a ‘market for lemons’, where:⁵³

- consumers are not willing to pay for quality as they lack confidence that will get a high quality (i.e. NCC compliant) product
- responsible developers (that seek to produce high quality and NCC-compliant dwellings) find it increasingly difficult to compete.

Similar issues also arise in other types of buildings — particularly houses — where consumers (households) are unable to assess the quality of a builder or building work either before or after the building work has been completed.

Lack of accountability

In addition to the information asymmetries relating to compliance with the NCC and the presence of defects, there is a lack of accountability across the supply chain.

⁵² Crommelin, L. Thompson, S. Easthope, H. Loosemore, M. Yang, H. Buckle, C. and Randloph, B. *Cracks in the Compact City: Tackling defects in multi-unit strata housing*, Final Project Report, UNSW City Futures Research Centre, October 2021, pp. 6-7.

⁵³ Crommelin, L. Thompson, S. Easthope, H. Loosemore, M. Yang, H. Buckle, C. and Randloph, B. *Cracks in the Compact City: Tackling defects in multi-unit strata housing*, Final Project Report, UNSW City Futures Research Centre, October 2021, p. 73.

The construction process is complex involving many parties, including:

- Developers
- Architects and building designers
- Engineers
- Builders, including various sub-contractors
- Building surveyors.

This means that when defects do occur, it can be difficult to identify the party at fault. Furthermore, resolving disputes through the court system can be costly, can take considerable time (see below) and cause significant distress among homeowners.

There is also evidence that in many cases, owners end up bearing the financial cost of rectifying defects.

- A (2009) UNSW survey of strata owners (albeit in NSW) found that in only **30 per cent** of cases, the cost of rectifying defects is borne by the builder or developer (with the owners taking the builder or developer to court in a further 24 per cent of cases).⁵⁴
- The OBC and SCA survey found that only 9 per cent of the buildings where costs were confirmed have recovered any of the costs.⁵⁵

For many Australian households, their home is their main asset. Significant rectification costs can therefore put significant strain on their financial situation. Many owners also bear non-financial costs associated with:

- spending time getting defects rectified
- the stress and anxiety associated with building defects, impacting on employment, relationships, mental health and wellbeing.

The vulnerability of owners in apartment buildings to non-financial impacts is exacerbated because there are multiple owners who must reach agreement about what to do. The mix of owner-occupiers and investors can bring different perspectives based on financial resources, knowledge and experience. Decision making takes longer and relationships between owners can break down, also causing stress and anxiety.

Special purpose vehicles and phoenixing

Another factor that can reduce the developer's exposure to liability for defective building work is the use by some developers of special purpose vehicles (SPVs) for large building projects (such as apartment buildings) and illegal 'phoenixing'.

This model involves establishing a separate company to undertake large building projects (such as apartment buildings), which in some cases may be a joint venture between

⁵⁴ Easthope H., Randolph B. and Judd S. 2009, Managing Major Repairs in Residential Strata Developments in NSW, A study by the City Futures Research Centre at UNSW provided with the assistance of the NSW Office of Fair Trading, July 2009.

⁵⁵ OBC (Office of the Building Commissioner) and SCA (NSW) (Strata Community Association (NSW) 2023, *2023 Strata Defects Survey Report*, November 2023, p.63.

multiple parties. In some cases, the company is then wound down at the completion of the project to avoid responsibility for rectifying latent defects.⁵⁶

Components of the Queensland Development Code

B.1 Queensland Development Code — current documents relevant to residential development

Document	Date
Mandatory parts	
Part 1.0 Siting and amenity — detached housing and duplexes	
MP1.1: Design and siting for single detached housing on lots under 450m ²	11 March 2010
MP1.2: Design and siting for single detached housing on lots 450m ² and over	11 March 2010
MP1.3: Design and siting standards for duplex housing	11 March 2010
MP 1.4: Building over or near relevant infrastructure	13 November 2014
Part 2.0 Fire safety	
MP 2.5: Use of external cladding	8 December 2020
Part 3.0: Special buildings	
MP 3.4: Swimming pool barriers	18 July 2012
MP 3.5: Construction of buildings in flood hazard areas	12 December 2013
Part 4.0: Building sustainability	
MP 4.1: Sustainable buildings	19 September 2023
MP 4.2: Rainwater tanks and other supplementary water supply	15 January 2013
MP 4.4: Buildings in transport noise corridor	17 August 2015
MP 4.5: Liveable dwellings and grading to floor wastes	24 January 2025
Part 5.0: General health, safety and amenity	
MP 5.7: Residential services building standard	16 November 2007
Part 6.0: Maintenance of buildings	
MP 6.1: Commissioning and maintenance of fire safety installations	6 May 2014
Non-mandatory parts	
NMP 1.1: Driveways	1 January 2008
NMP 1.3: Entertainment precincts	1 January 2008

⁵⁶ HIA, Housing Australians, Developer Regulation, Submission to the Environment, Planning and Sustainable Development Directorate, Response to Discussion Paper — December 2022, 6 March 2023, pp. 4-5.

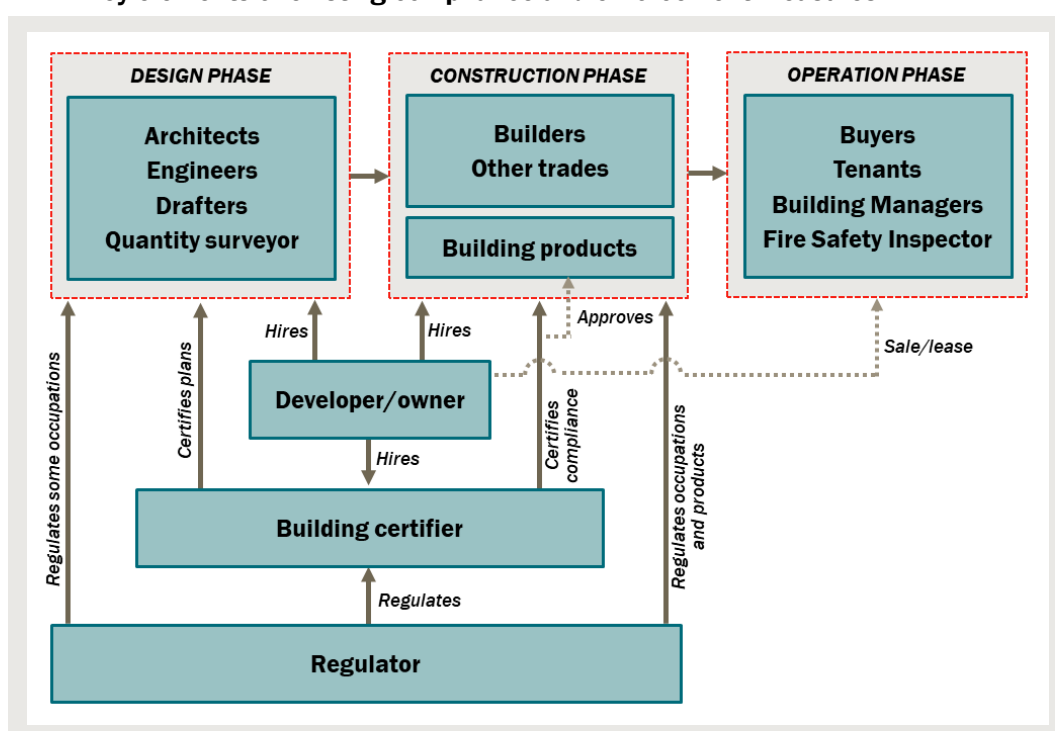
Document	Date
NMP 1.6 Removing houses and structures	1 January 2008
NMP 1.7: Retaining walls and excavation and filling	1 January 2008
NMP 1.8: Stormwater and drainage	1 January 2008
NMP 1.9: Swimming pool and spa equipment	1 January 2008

Source: Business Queensland website, <https://www.business.qld.gov.au/industries/building-property-development/building-construction/laws-codes-standards/queensland-development-code#mandatory-parts>, accessed 8 August 2025.

Compliance and enforcement framework

The compliance and enforcement framework refers to the regulatory systems in place to ensure buildings comply with the relevant technical standards and other measures to ensure accountability for defective building work and protect the interests of consumers. Chart 5.2 summarises the key elements of the compliance and enforcement framework with a summary of key Queensland building legislation summarised below.

B.1 Key elements of existing compliance and enforcement measures



Note: Although occupational licensing requirements are part of the building regulatory framework, the impacts have been included in the 'labour regulation' chapter (see chapter 6).

Data source: The CIE.

In Queensland, relevant legislation includes:

- the Building Act 1975
- the Queensland Building and Construction Commission Act 1991.

The Building Act 1975

The **Building Act 1975** sets out the legal framework for building and construction in Queensland. Key components of the Building Act are as follows:

- **Building work and approvals** — the Building Act:
 - defines what constitutes building work
 - gives legal effect to the Building Code of Australia (BCA) and the QDC
 - establishes when building work is assessable or accepted development under the Planning Act
 - sets out the process for building development applications and the role of assessment managers.
- **Building certifiers** — the Building Act:
 - outlines the qualifications, functions, and responsibilities of private and public certifiers
 - regulates building certifiers and building certifying functions.
- **Fire Safety** — the Building Act specifies fire safety requirements for certain buildings.
- **Pool safety** — the Building Act:
 - introduces requirements for pool safety standards, pool fencing requirements, inspections, and certification
 - mandates registration of regulated pools
 - regulates pool safety inspectors.
- **Sustainable buildings** — the Building Act encourages environmentally sustainable practices in building design and construction.
- **Enforcement and compliance** — the Building Act:
 - provides powers for investigation, enforcement, and penalties for non-compliance.
 - allows for stop work notices, rectification orders, and prosecutions.

The Queensland Building and Construction Commission Act 1991

The **Queensland Building and Construction Commission Act 1991 (QBCC Act)** establishes the legal framework for regulating the building and construction industry in Queensland. The key components include the following:

- The objects of the QBCC Act include to:
 - to regulate the building industry
 - ... to ensure the maintenance of proper standards in the industry; and
 - ... to achieve a reasonable balance between the interests of building contractors and consumers; and
 - to provide remedies for defective building work; and
 - to provide support, education and advice for those who undertake building work and consumers; and
 - to regulate domestic building contracts to achieve a reasonable balance between the interests of building contractors and building owners; and
 - to regulate building products to ensure

- ... the safety of consumers and the public generally; and
 - ... persons involved in the production, supply or installation of building products are held responsible for the safety of the products and their use; and
- to provide for the proper, efficient and effective management of the commission in the performance of its functions.
- The QBCC Act establishes the Queensland Building and Construction Commission (QBCC) and sets out its key responsibilities including:
 - **Licensing** builders, contractors, and certifiers.
 - **Monitoring compliance** with building standards and laws.
 - **Administering statutory insurance** for residential construction.
 - **Investigating complaints** and enforcing disciplinary actions.
 - **Educating** industry participants and consumers.
- The QBCC Act sets out **licensing requirements** for various building practitioners, including specifying:
 - who must be licensed
 - categories of licences
 - minimum financial requirements for licensees.
 - grounds for suspension or cancellation of licences.
- The QBCC Act regulates domestic **building contracts**.
- The QBCC Act establishes the **statutory insurance scheme**, which provides protection to homeowners for:
 - non-completion of work
 - defective work
 - subsidence issues.
- The QBCC Act regulates **building products** by establishing a primary duty for each person in the ‘chain of responsibility’ for any building product to ensure that the product is not a non-conforming building product for an intended use, as well as other duties.
- The QBCC establishes an enforcement regime, including:
 - establishing powers to:
 - ... investigate breaches, and
 - ... order remedial actions for defective building work and other enforcement powers, such as
 - establishing processes for disciplinary actions against
- The QBCC establishes dispute resolution processes.

Recent developments in building regulation

Key developments in relation to building regulation over the past decade or so include the following:

- There has been a national shift towards tightening aspects of the compliance and enforcement framework to address the high cost of building defects.
- More recently, the lack of productivity growth in the building industry has been a key focus.

Background

Through the 2010s, weaknesses in building regulatory systems became increasingly apparent both within Australia and internationally.

- The use of non-compliant highly combustible polyethylene cladding on a significant number of high-rise buildings (including commercial and apartment buildings) raised concerns over the safety of building products used in the Australian construction industry. The use of combustible cladding has resulted in high rectification costs and/or exposed building users to safety risks. The use of unsafe products has come to light following incidents, such as:
 - a fire in the Lacrosse building in Melbourne’s Docklands in 2014, in which over 400 occupants were evacuated
 - the Grenfell Tower fire in London in 2017, in which 72 residents lost their lives.
- Major structural defects emerged in a number of apartment buildings in Sydney, including the Opal Tower (2018) and Mascot Tower (2019), resulting in the evacuation of residents and substantial rectification costs.
- Several major reviews in various states, including the Review of the Building Act 1975 and certification in Queensland (referred to as the Wallace Review), highlighted weaknesses in building regulation.
- In response to community and industry concerns about the prevalence of defects and some of the events identified above, the Building Ministers Forum commissioned Professor Peter Shergold AC and Ms Bronwyn Weir to examine compliance and enforcement problems in Australia’s building and construction systems. The resulting Building Confidence Report (BCR) was released in February 2018. The 24 recommendations are summarised in Appendix A.

Building defects can impose large costs on the community

As part of a high-level assessment of the BCR recommendations, CIE previously estimated that the annual cost of defects in residential buildings in Queensland is around \$412 million (in 2020 dollar terms). Inflating that estimate to 2024 dollar terms using the building output Producer Price Index (PPI) for Queensland (on the basis that most of the cost of defects are rectification costs), implies a cost of around \$560 million per year (table B.1).

B.1 Estimated annual cost of defects — Queensland

	CIE (2021) estimate	2024 dollars
	\$ million	\$ million
Detached houses	114	155
Townhouses	34	46
Apartments	264	359
Total	412	560

Source: The CIE.

Weaknesses in pre-existing regulatory arrangements

The BCR highlighted weaknesses in pre-existing regulatory arrangements across all states and territories that are failing to prevent non-compliance with the NCC in many cases. The BCR implies that a lack of compliance with the NCC has multiple causes, including:

- a lack of competence of some building practitioners
- a lack of effective compliance and enforcement systems
- a lack of integrity of some private building surveyors
- a lack of rigorous approval processes (primarily for Performance Solutions)
- a lack of effective regulation of building products.⁵⁷

In general, previous CIE analysis has suggested that all of these underlying causes were seen as making some contribution to defect problems, highlighting the importance of a holistic approach to reform envisaged in the BCR.

National-level developments

Following the release of the BCR, Building Ministers agreed to a national approach to the implementation of the recommendations, while also recognising that adoption of the framework and ultimate implementation of the BCR recommendations would remain the responsibility of the state and territory governments.⁵⁸

⁵⁷ Problems with the NCC itself were beyond the scope of the BCR.

⁵⁸ Building Ministers' Forum: Communique' July 2019.

References

- ABS, 2024, Building Activity, available at <https://www.abs.gov.au/statistics/industry/building-and-construction/building-activity-australia/jun-2024>
- ACIL Allen, National Construction Code 2022: Decision Regulation Impact Statement for a proposal to increase residential building energy efficiency requirements, Report to Australian Building Codes Board, 21 July 2022, pp. 170-173.
- Bambalaite, I. Nicoletti, G. and von Rueden, C. 2020, Occupational entry regulations and their effects on productivity in services: Firm-level evidence, OECD Economics Department Working Papers No. 1605.
- Bowman, J. Hambur, J. and Markovski, N. 2024, Examining the Macroeconomic Costs of Occupational Entry Regulations, Reserve Bank of Australia, Research Discussion Paper RDP 2024-06, p. 29.
- Brisbane City Council, Brisbane City Plan 2014, Flood overlay code. Available at: https://docs.brisbane.qld.gov.au/City%20Plan/v02_00_20160219/TEXT/Part%208%20-%20Overlays/FloodOC.docx
- Brisbane City Council, Low Density Residential Zone Code, available at: https://docs.brisbane.qld.gov.au/City%20Plan/v19_00_20200501/TEXT/Part%206%20-%20Zones/LowDensityResZC.docx
- Business Queensland website, <https://www.business.qld.gov.au/industries/building-property-development/building-construction/laws-codes-standards/queensland-development-code/background>, accessed 8 August 2025.
- CEDA, 2025, Size Matters: Why Construction Productivity is so Weak. Available at: <https://www.ceda.com.au/researchandpolicies/research/workforce-skills/size-matters-why-construction-productivity-is-so-weak>
- Crommelin, L. Thompson, S. Easthope, H. Loosemore, M. Yang, H. Buckle, C. and Randloph, B. Cracks in the Compact City: Tackling defects in multi unit strata housing, Final Project Report, UNSW City Futures Research Centre, October 2021, pp. 6 7.
- Easthope H., Randolph B. and Judd S. 2009, Managing Major Repairs in Residential Strata Developments in NSW, A study by the City Futures Research Centre at UNSW provided with the assistance of the NSW Office of Fair Trading, July 2009.

- Ernst and Young, Assessing the effectiveness of Queensland's minimum financial requirements for building practitioners, Final report, Prepared for Master Builders Queensland, April 2022, p. 17.
- HIA, Housing Australians, Developer Regulation, Submission to the Environment, Planning and Sustainable Development Directorate, Response to Discussion Paper — December 2022, 6 March 2023, pp. 4 5.
- Jenner, K & Tulip, P, 2020, The Apartment Shortage, RBA RDP 2020-04. Available at: <https://www.rba.gov.au/publications/rdp/2020/pdf/rdp2020-04.pdf>
- Mamman, J.E. Oke, A.A. Mohammed, D.Y. 2025, Modelling the Cost of Health and Safety for Building Construction Projects, International Journal of Research and Scientific Innovation, Volume XII, Issue 1, pp. 947-948
- Mitchell Brandtman, NCC 2022 Cost Review, Prepared for Master Builders.
- OBC (Office of the Building Commissioner) and SCA (NSW) (Strata Community Association (NSW) 2023, 2023 Strata Defects Survey Report, November 2023, p.63.
- Productivity Commission, 2025, Housing construction productivity: Can we fix it? Available at: <https://www.pc.gov.au/research/completed/housing-construction>
- Property Council of Australia, 2024, Release the pressure. Available at: <https://www.propertycouncil.com.au/submissions/release-the-pressure-alleviating-taxes-and-charges-to-build-new-homes>
- Proptrack, 2025, Home Price Index, available at: <https://www.proptack.com.au/home-price-index/>
- QBCC website, <https://www.qbcc.qld.gov.au/sites/default/files/documents/hwi-premium-table-2701-new-home-construction.pdf>
- QBCC 2024, *Annual Report 2023-2024*, available at: <https://www.qbcc.qld.gov.au/about-us/our-corporate-publications/annual-report>
- Queensland Government, 2024, Development Assessment Rules, available at: https://www.planning.qld.gov.au/__data/assets/pdf_file/0015/102255/da-rules-version-3.pdf
- SQM Research, 2025, Weekly Rents, Brisbane. Available at: <https://sqmresearch.com.au/weekly-rents.php?region=qld-Brisbane&type=c&t=1>
- The CIE, 2024, *Cost and feasibility estimates for supplying new residential dwellings in New South Wales*, prepared for NSW Treasury, available at: https://www.productivity.nsw.gov.au/sites/default/files/2024-11/2024114_CIE-report-Cost-and-feasibility-estimates-for-supplying-residential-dwellings.pdf.pdf
- The CIE, 2025, *Taxation of the housing sector*, prepared for HIA, Available at: <https://hia.com.au/our-industry/advocacy/taxations-major-impact-on-housing?srsId=AfmBOopeblSS0VHkATeQAmYEn4yOWpDX9zRQfHLBSEJurhtKX2L8XnZM>

- The CIE, Proposal to include minimum accessibility standards for housing in the National Construction Code: Decision Regulation Impact Statement, Prepared for the Australian Building Codes Board, February 2021.
- UDIA, 2025, State of the Land 2025, available at: <https://udia.com.au/wp-content/uploads/2025/03/State-Of-The-Land-Report-2025-Final-Report.pdf>



THE CENTRE FOR INTERNATIONAL ECONOMICS
www.TheCIE.com.au