

Land Supply and Development Monitoring (LSDM) Report 2021

SEQ Growth Monitoring Program (GMP)

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Message from the Housing Supply Expert Panel

Welcome to the fourth edition of the Land Supply and Development Monitoring (LSDM) Report. This time last year significant hesitation was present across the sector in trying to understand the full impacts of the COVID-19 pandemic. Twelve months later we see ourselves again in unprecedented times, but for very different reasons. The current demand surge, not just in the South East Queensland market, but across the nation in general, has resulted in substantial price increases from both a rental and purchasing perspective. This is seriously affecting affordability.

There are many factors behind this affordability squeeze, some of which are well beyond the control of the Queensland State Government and local governments in the region. Nevertheless, those aspects of the housing market which are within the purview of the State and local governments, including maintaining an ample supply of development ready land, must work as efficiently as possible. Sufficiency in the area of land zoned for housing development is only part of the story. Zoned land must be readily serviceable with the infrastructure that communities need. Zoned and serviceable land must be available in commercially viable parcels, and the holders of this land must be motivated to sell their properties to bona fide developers.

The results for this year continue to present a consistent trend over time and again show specific markers of ongoing contraction of supply in certain geographies. Generally speaking there is sufficient land zoned for housing development across SEQ as a whole, based on the benchmarks set out in the regional growth management strategy (*ShapingSEQ 2017*). But a 'gulf' remains planning supply and ability to bring land to the market in a responsive way. This continues to be one of the main barriers to housing market efficiency and should be a key area of focus for governments. The results also demonstrate that even with certain actions (e.g. Growth Areas Team, Caboolture West, infrastructure funding) being taken to address the demand/supply equation, the impact is minimal at this point in time and considerable effort is needed by both the State and local governments to have an impact. There is no silver bullet and intervention is required to balance the supply and demand equation otherwise a housing crisis is looming on the horizon.

The Panel acknowledges the commitment by both levels of government to the program but is concerned that only a few local governments were able to provide updated planned dwelling supply data this year. Although many local governments have significant focus on strategic planning now, the integrity of the program is critically important to its success, and efforts should be made at both local and state to support the ability for data to be provided. As we head towards the next regional plan review, the role of the LSDM as an evidence base in supporting this project, is essential. The current peer review of the LSDM is welcomed by the Panel and the early insights and recommendations from this review are supported, particularly around the tension between stakeholders, the need for quality assurance and revised governance arrangements.

The Market Factors report reinforces some of the key pressure points in the market, particularly around dwelling vacancy at 1.16% and housing price movement of 14.63%.

Housing affordability is at crisis point across the region and the recent Queensland Housing Investment Growth Initiative (QHIGI) program announcement of \$2.9 billion across three initiatives is to be commended. The already large shortfall of social and affordable housing in the region will worsen if current conditions prevail. Additionally, with borders opening and with the Olympics on

the horizon, the importance of setting the policy levers correctly to balance housing affordability and the lifestyle that drives people to live in SEQ while supporting growth is essential. The Olympics gives us the opportunity to shift the dial and housing should be at the forefront of the discussion

It is important to acknowledge the ongoing support of the Department to the program and commitment to working with all stakeholders. The Panel looks forward to a busy and interesting 2022.

On behalf of the Panel I commend this fourth edition to you.

Regards

Julie Saunders

Chair on behalf of the Housing Supply Expert Panel

Background

The Growth Monitoring Program (GMP) is a key implementation action of *ShapingSEQ* 2017 and includes three core deliverables, including the preparation of an annual LSDM Report, the annual updating of the Measures that Matter (MtM) dashboard and the continuation of the Housing Supply Expert Panel (HSEP), all of which were established in 2018.

The LSDM Report compiles a wide range of data from local governments, utility providers, the Australian Bureau of Statistics (ABS) and Queensland Treasury to annually monitor land supply and development activity across the SEQ region. The primary objective of the LSDM Report is to continue to work progressively towards a shared understanding for land supply and development activity data in SEQ and to better inform infrastructure planning and land supply planning and policy as part of the GMP. The long-term benefits of improved planning and policy are:

- being able to afford somewhere to live
- having access to employment and other services
- continuing to enjoy the unique SEQ lifestyle.

Prior to the commencement of the GMP, limited state land supply monitoring was available. Since the establishment of the GMP, including its governance framework, the GMP has remained focused on annual reporting, engaged and informed stakeholders, ongoing collaboration, and continual improvement, in accordance with the GMP Road Map. Beyond the GMP, stakeholders across the SEQ region are continually improving data, methods, and monitoring, particularly leveraging off the best practice research of the LSDM reports and advancing work on growth management strategies or similar projects.

The Program Delivery section of the LSDM report acknowledges the Limitations to be considered as part of the preparation of the annual LSDM report. Further, in 2021 it is important to acknowledge the current peer review of the LSDM, its methodology and data inputs. The LSDM Peer Review is expected to determine short-, medium- and long-term recommendations for action.

The 2021 LSDM Report is the fourth annual report of the GMP. The 2021 LSDM Report reflects ongoing program improvements designed to:

- update existing data
- enhance data accuracy
- action best practice research
- inform better decision making
- continue to collaborate with stakeholders
- produce more refined reporting.

Summary of 2021 LSDM Report results

The following provides a summary of the results contained in the 2021 LSDM report related to *ShapingSEQ* 2017 benchmarks, baselines and preferred futures.

It should be noted that with these results it is acknowledged that due to a combination of government stimulus, low interest rates, issues in lot production and increased net internal migration, South East Queensland's (SEQ) land supply may be impacted by a resultant bring forward in demand. The GMP will continue to monitor these trends, and their impact on land supply and development activity.

Overall, the SEQ region (as at 30 June 2021) has:

- maintained more than the minimum 15 years of planned dwelling supply – with some areas around 15 years
- more than four years of approved supply, however some markets remain below four years
- cumulative dwelling approvals (from 1 July 2016 to 30 June 2021) in line with average dwelling supply benchmarks, for both consolidation and expansion
- its median lot sizes remaining similar to 2020
- houses being a large proportion of all housing type approvals, however the proportion of high-rise slightly increased in 2020/21 while the middle was slightly decreased (21% down to 20%)
- its sales and median prices generally increased
- maintained more than 15 years of planned industrial employment supply.

The table below provides a further summary at the SEQ and each SEQ local government area levels. Further detailed information on individual local government results and work undertaken by local governments in relation additional land supply and planning advancements are available under the local governments sections of the report.

Preferred Future	Residential						Industrial		
	Planned dwelling supply (years of supply)			Approved supply (years of supply)		Dwelling growth (%)		Planned industrial employment supply (years of supply)	
	Minimum 15 Years			Minimum 4 Years		Varies (see below)		Minimum 15 years	
Metric									
Area	Consolidation (capacity)	Expansion (capacity)	Expansion (realistic availability)	Uncompleted lot approvals	Uncompleted multiple dwelling approvals	Consolidation cumulative proportions 2016/21 (DSB)	Expansion cumulative proportions 2016/21 (DSB)	Capacity	Realistic availability
Brisbane	15	25	24	3.0	9.0	90% (96%)	10% (4%)	24	23
Gold Coast	25	24	16	2.1	11.7	63% (77%)	37% (23%)	42	38
Ipswich	28	37	21	6.8	18.3	17% (25%)	83% (75%)	672	316
Lockyer Valley	N/A	42	17	18.7	0.0	N/A	100% (100%)	36	28
Logan	74	61	34	4.6	11.3	35% (26%)	65% (74%)	244	219
Moreton Bay	34	38	16	3.7	4.5	54% (53%)	46% (47%)	64	49
Noosa	41	27	24	0.6	4.8	52% (63%)	48% (37%)	91	91
Redland	56	33	25	4.6	9.7	54% (72%)	46% (28%)	2	2
Scenic Rim	N/A	27	13	13.6	0.0	N/A	100% (100%)	118	118
Somerset	N/A	32	19	50.5	0.0	N/A	100% (100%)	97	97
Sunshine Coast	14	22	17	3.2	5.9	56% (58%)	44% (42%)	24	24
Toowoomba (urban extent)	53	47	33	6.2	7.9	31% (20%)	69% (80%)	438	235
SEQ	25	38	22	4.4	9.1	59% (60%)	41% (40%)	92	63

Considering the impacts of COVID-19

COVID-19 continues to have impacts across the globe and many aspects of our daily lives in South East Queensland (SEQ). In this context, there is a continuing need to understand the ongoing impacts on housing and development demand.

Forecasting the magnitude and length of the economic impacts of the COVID-19 pandemic continues to be difficult. The Growth Monitoring Program (GMP), and the annual Land Supply and Development Monitoring (LSDM) reporting has, in 2021, continued to collect and analyse data as information became available to further explore and understand the impacts of the COVID-19 pandemic.

The 2021 Market Factors Report has captured activity for the 2020/21 period and indicated that the anticipated slowdown, as reported in the 2020 LSDM Report, in the SEQ residential market appears to have been short lived. This was largely due to the significant injection of government stimulus, along with further reductions in interest rates, which have generated unexpected levels of confidence and provided incentive to purchase housing.

As a result, the majority of the core market factors (see [Market factors](#)) experienced strong movements that favour the development of housing and take up of residential land and faster than expected recovery in the labour market, and consequently economic growth. Further, there were increases in dwelling activity, housing finance, house prices and rents, with vacancy levels tightening across SEQ.

Based on Australian Bureau of Statistics (ABS) population estimates, due to COVID-19, Queensland experienced its lowest population growth in over a decade in 2020-21 –around 0.89 per cent. This was largely due to negative net overseas migration.

However, the Federal Government's Population Statement (Centre for Population December 2021) anticipates Queensland will experience the largest share of net internal migration gains over the next 10 years (to 2031-32), peaking in 2021-22 (40,800) and being the largest component of growth until 2022-23, but then averaging about 19,700 per year over the 2023-32 period. Net overseas migration to Queensland is projected to become positive again in 2022-23 and from 2024-25 to 2031-32 is expected to be the largest component of growth, averaging 28,500 per year.

The 2021 Market Factors Report notes that the changes in Queensland's population components represent a structural shift in population growth which, at present, appear to be placing different pressures on housing supply (e.g. weakening demand for high-rise living as a result of the loss of overseas migration and increasing demand for houses as a result of increased interstate migration, primarily younger families). This is based on the housing preferences of overseas migrants and students who are generally centred around the CBD, and precincts close to the CBD, where high density housing options are common, and to a lesser extent, middle ring suburbs close to educational precincts or transport hubs (CoreLogic, Sept 2020).

Forecasting the impacts of the COVID-19 pandemic, including changing housing preferences will continue to be a challenge as responses evolve, such as the COVID-19 vaccine rollout and as borders open to both interstate and overseas migrants.

The department will continue to monitor the ongoing impacts of COVID-19, including whether there is a potential change in dwelling demand and housing preference compared to pre-COVID trends and forecasts. This includes investigating any new information on population and dwelling projections from relevant sources such as the National Housing Finance and Investment Corporation's 2021 State of Nation's Housing Report and Queensland Treasury's population projections, when available.

LSDM Peer Review

Approach

The GMP has continued to produce and release an annual Land Supply and Development Monitoring (LSDM) Report, providing an increasingly valuable evidence base to better inform decisions on infrastructure and land use planning in SEQ.

While the LSDM Report is generally supported, some stakeholders have expressed concerns about data accuracy of the LSDM reporting. For example, suggesting that the reported land supply may be significantly overstated. On 3 March 2021, the Deputy Premier committed to undertaking a peer review of the LSDM data and methods (the LSDM Peer Review) to ensure we are using the best available data, with all relevant stakeholders helping to develop the scope of the review.

The purpose of the LSDM Peer Review is to identify improvements that can be implemented in the delivery of the LSDM Report with a focus on better fulfilling its key purposes. These purposes are focused on informing land use and infrastructure decision making to support the adequate supply of land and track land supply and development relative to the dwelling and employment policy objectives of *ShapingSEQ* 2017.

Expert Independent Review Panel

KPMG were appointed to undertake the LSDM Peer Review. As part of the review, KPMG put forward an expert independent review panel (the peer review panel) that is leading the review.

The peer review panel is trans-disciplinary, including a range of expertise, knowledge and perspectives as follows.

- Paul Low (Panel Chair) – skills in Queensland planning system, economic analysis, land supply and development data
- Vanessa Bennett – Planning: skills in land supply and development, Queensland planning system
- Lisa Jenkinson – Data visualisation: skills in data visualisations, data modelling and analysis
- Michael Malakellis – Property economics: skills in economic modelling, property development, Queensland planning system
- Paul Morris – Real Estate: skills in land supply and development, Queensland planning system, property development

KPMG undertook focused stakeholder engagement in September and October 2021 with representatives from local government, state government, industry peak bodies and the SEQ Housing Supply Expert Panel (HSEP). This engagement was essential to assist KPMG in building a suite of observations for the LSDM Report that could lead to recommendations.

Expert Panel Interim Observations

KMPG has prepared an 'Expert Panel Interim Observations' report (the Interim Report) for the LSDM Peer Review. The Interim Report shared the progress of the LSDM Peer Review and identified observations and potential 'early actions' for consideration in future LSDM reporting.

The observations reinforce that stakeholders universally acknowledged the value of a State-led monitoring function for land supply. Stakeholders acknowledged the work the department has done to date to build relationships with key stakeholders and are keen to continue to work with the department to improve accurate and timely assessment of the status of the land supply pipeline relative to current and anticipated demand.

There are several specific 'early actions' that have been identified by the peer review panel in the Interim Report which are summarised below.

- Reshape the **governance arrangements** for the HSEP to provide for direct and regular reporting on the implications of the annual LSDM Report results.
- Provide **additional clarity on the actions undertaken** by the department to advance best practice research and policy work undertaken in response to stakeholder feedback.
- Work with stakeholders **to further develop the measures** for employment land supply and planned realistic supply to deliver a higher level of understanding across stakeholders and users of the LSDM report.
- Develop a **clear visualisation of the development pipeline** to better align how the region's land supply regime is performing and identify potential barriers to supply.
- Develop a **data governance structure** that builds on work done to date and provides for agreed guiding principles, data specifications and documentation of privacy and security arrangements with respect to data.
- Establish a process to deliver ongoing insight and validation of the LSDM Report post its annual release to **inform policy work and regional planning activities**.

Next Steps

The Interim Report sets a direction toward the Findings Report. The Findings Report is anticipated to provide clear and implementable recommendations for improvement of the LSDM reporting in the short-, medium-, and long-term supported by a clear rationale.

The department will consider the recommendations of the 'Findings Report' and these will be further discussed with key stakeholders and progressed in 2022 and in future LSDM reporting.

Reflected in this LSDM Report are next steps for best practice research and program delivery, including engagement with stakeholders about land supply data inputs and measures, which are consistent with some of the early actions. These next steps are subject to further development and prioritisation in the context of recommendations of the Findings Report. As part of the GMP's aim for continual improvement and advancement of the monitoring of land supply and development activity across the region, ongoing improvements undertaken as part of this LSDM Report are outlined in the Key reporting changes from 2020 to 2021 section.

Growth Areas Team

Housing supply is a complex issue requiring strong partnerships with local government, industry, infrastructure providers and state agencies to ensure diverse and affordable housing is available for those who wish to live in Queensland.

The Commonwealth Government's HomeBuilder stimulus program, combined with low interest rates and strong net interstate migration, have created increased demand for housing in South East Queensland (SEQ), in particular detached housing product.

Whilst the 2020 LSDM report showed there was more than 15 years of planned dwelling supply and four years of approved land supply across the region, there were some individual local government areas recording less than four years of approved supply. This trend has continued to be reflected in the reporting for this 2021 LSDM Report.

In response to these challenges, a Growth Areas Team (GAT) was announced by the Deputy Premier and Minister for State Development, Infrastructure, Local Government and Planning in March 2021.

GAT draws on *ShapingSEQ 2017* and the LSDM Report as an evidence base to accelerate actions around land supply in key growth areas across SEQ. To date, GAT has focused its efforts around Caboolture West to unlock growth and accelerate land supply in SEQ.

GAT has a remit to partner with key stakeholders to progress projects which facilitate the delivery of land and affordable and diverse housing supply. GAT is progressing projects across four work streams including:

- Unlock approvals in target areas
- Acceleration of known growth areas
- Planning for new growth areas
- Systemic changes to the state's planning framework.

Since its announcement, the GAT and partnering government agencies have accelerated land supply and development through:

- establishing an initial pilot project at Caboolture West Neighbourhood Development Plan 1 (NDP1) to support 3000 new homes
- injecting \$10.5 million into the pilot project through the Building Acceleration Funding. This has been matched by similar funding by Unity Water to support the delivery of water and sewer infrastructure
- working with Moreton Bay Regional Council (MBRC) to fast track a planning scheme amendment for the pilot project. Since July 2021, Council resolved to adopt both an amendment to the MBRC Planning Scheme for NDP1 of the Caboolture West Local Plan as well as a new Planning Scheme Policy – Caboolture West Local Plan – NDP1. Both amendments commenced concurrently on 26 October 2021
- facilitating work between the Department of Transport and Main Roads and Moreton Bay Regional Council to streamline transport planning assumptions and network modelling

- extending its focus to accelerate land use planning and infrastructure planning for the greater Caboolture West area to ensure a well-planned and serviced, orderly rollout of about 27,000 new homes
- supporting up to 5000 dwellings in the Shoreline master planned community located in Southern Redland Bay, through negotiations with state infrastructure providers to unlock the first stages of development, investing \$15 million in loan funding from the Building Acceleration Fund to co-fund a waste water treatment plant, and the making of a Ministerial Infrastructure Designation for the plant.

Further, other government initiatives achieved since November 2020 which support delivery of land and housing supply across SEQ include:

- Caloundra South Priority Development Area (PDA)– 3091 residential lots development approval
- Ripley Valley PDA – 5600 lots supported with \$5.91 million from Catalyst Infrastructure Fund for critical road infrastructure
- Bahr’s Scrub – 1700 lots supported with \$15 million from Building Acceleration Fund to improve access and transport efficiency
- Greater Flagstone PDA – 27,000 lots supported with \$31 million from Catalyst Infrastructure Fund for critical road infrastructure
- Yarrabilba PDA – 2000 lots supported with \$15 million from Building Acceleration Fund for a primary school site and road infrastructure.

Key reporting changes from 2020 to 2021

The department has continued to work to improve land supply and development activity monitoring and reporting since the release of the first Land Supply and Development Monitoring (LSDM) Report in 2018, with the support of key stakeholders. These improvements have resulted in updated, new and amended data in the 2021 version of the LSDM Report as outlined in the table below.

For more detail about the Growth Monitoring Program’s subprograms which led to a number of these improvements, see [Program Delivery](#).

<p>Updated data to 2021</p>	<ul style="list-style-type: none"> • Reporting of Planned dwelling supply (dwellings) from 2021, rather than 2016. • Updated planning assumptions datasets for Logan, Moreton Bay, Noosa and Toowoomba to inform Planned dwelling supply and Planned industrial employment supply. • Updated Planned industrial land supply and take-up section with two years of data to 2021. • Updated building approval data in Planned dwelling supply, Dwelling growth and Changes in housing type sections. • Updated lot registration and median lot size data in Changes in dwelling density section. • Updated sales volume and price data in Sales and price section, including median and upper and lower quartile sales price for all categories. • Updated uncompleted lots, lot creation, years of approved supply and operational works approvals in the Approved supply section. • Updated assessment of the realistic take-up of major residential growth areas to inform the realistic availability of planned dwelling supply in expansion areas. • Updated assessment of the realistic availability of industrial growth areas to accommodate industrial employment to inform the realistic availability of planned industrial employment supply. • To inform the realistic availability of planned dwelling supply in expansion areas, updated Current Intent to Service mapping to identify residential land that is currently committed to be serviced based on: <ul style="list-style-type: none"> ○ residential development approvals ○ residential preliminary approvals ○ priority infrastructure areas ○ existing and future water and sewer connection areas ○ infrastructure agreements ○ priority development areas • Updated SEQ and local government mapping.
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<p>New/additional data and Best practice research in 2021</p>	<ul style="list-style-type: none"> • Improved understanding of the impacts of the dynamic nature of land supply and development activity across SEQ, through continued reporting on key metrics including: <ul style="list-style-type: none"> ○ Market Factors Report update ○ HomeBuilder application data ○ Updated short-term LSDM metrics for SEQ and local governments (dwelling growth, lot registrations, housing type, uncompleted lots, operational works approvals and sales and price). • Finer grained reporting in the Changes in housing type section, by reporting on the proportion of dwelling approvals by type for consolidation and expansion areas. • Annual update to the Market Factors Report to discuss ongoing COVID-19 and related economic impacts and what these may mean for residential development in SEQ. • Consultation with key stakeholders, including local government, utility providers and industry, on development of a Financial Feasibility Model to further Best Practice Research into reporting on realistic availability in consolidation areas. • Collaborating with academia on new approaches to further understand the Ability to Service in consolidation areas through Best Practice Research. • Providing the detailed analysis and recommendations from Best Practice Research into Measuring Development for stakeholder review, including: <ul style="list-style-type: none"> ○ Proposed approaches to measuring visitor dwellings and relocatable home parks for property-based measurements of dwellings; and ○ Proposed non-residential use categories and their relationship to employment by type and floor space usage.
<p>Ongoing development</p>	<ul style="list-style-type: none"> • Responding to short-, medium- and long-term recommendations from the LSDM Peer Review Findings Report, which is under development by the peer review panel • Further Best Practice Research (see respective sections), including: <ul style="list-style-type: none"> ○ Regional Planning Model, formerly the Small Area Growth Assumptions ○ Data sharing. • Investigate, discuss and provide next steps on how to better monitor and report on off-the-plan sales and their potential impact on land supply monitoring and measurement.

ShapingSEQ 2017 policy objectives – land supply

Planned dwelling and employment supply

The South East Queensland (SEQ) Regional Plan, *ShapingSEQ 2017*, was released in 2017 following extensive consultation with government agencies and the community. The plan establishes a desired growth allocation pattern to accommodate expected dwelling and employment growth in SEQ to 2041, through dwelling supply benchmarks and employment planning baselines for each local government area.

ShapingSEQ 2017 sets an objective for planning instruments to accommodate the 2041 dwelling supply benchmarks and employment planning baselines. *ShapingSEQ 2017* also establishes an objective that there will always be at least 15 years' supply of land that is appropriately zoned and able to be serviced. The 2041 benchmarks and baselines are static supply objectives, while the 15-year policy objective is a rolling assessment of supply each year which considers recent growth, remaining supply, and the expected rate at which supply will be consumed. *ShapingSEQ 2017* also establishes that supply will be measured based on its realistic availability for development, not only its ultimate long-term capacity for development.

To measure whether these policy objectives are being met, the Land Supply and Development Monitoring (LSDM) Report provides an estimate of the capacity, take-up and the realistic availability of planned dwelling supply and the capacity and realistic availability of planned industrial employment supply for each local government area, and an estimate of the number of years it will take for growth to consume each estimate of supply. The LSDM Report compares these estimates to the 2041 benchmark or employment planning baseline and the 15 years of zoned and able to be serviced supply objective in the Planned dwelling supply and Planned industrial employment supply sections for SEQ and each local government area.

The LSDM Report's estimate of supply will serve to inform evidence-based decision making in accordance with the land supply framework identified in *ShapingSEQ 2017* (p.47). The Growth Monitoring Program (GMP) is continuing to build a stronger evidence base, demonstrating continuous improvement and refinement in annual reporting; laying the foundation to inform future policy development and support the next regional plan review, anticipated to occur between 2022 and 2024. Further, recommendations from the forthcoming LSDM Peer Review Findings Report will assist to further refine the data and methods used in the reporting, continuing the aim to provide a shared understanding of land supply and development activity for SEQ.

The integrated relationship between regional and local land supply monitoring will be reinforced, with a number of local governments advancing work on growth management strategies or similar projects such as the review of Local Government Infrastructure Plans and progressing policies and strategies for housing supply and diversity. The GMP will play an important role in the development of these strategies, as a best practice monitoring program providing a consistent regional methodology. Further information on the data and policy improvement commitments of local governments is available in the Ongoing land supply improvement section of [Program Delivery](#).

Short term supply

ShapingSEQ 2017 focuses on long-term supply, providing a 25-year plan with identified benchmarks, baselines and years of supply objectives for planned supply, monitored through annual LSDM reporting. However, it also has short-term land supply objectives. These are identified through the preferred future for a minimum of four years approved supply across SEQ.

This region-wide measure provides an indication of the level of approvals available to support the pipeline of construction in the region and each local government area and is informed by previous regional and national-level research. Although there is more than four years of approved supply across SEQ as a whole, there are some local government areas that fall below four years of supply.

The Queensland Government is progressing a number of responses to contribute to activating short-term land supply in SEQ through a program of specialised activities that respond to the challenges of growth, infrastructure delivery, housing supply and affordability, including:

- The Growth Areas Team
- Community Planning Education Project
- *ShapingSEQ 2017* implementation (including the GMP) and future review of *ShapingSEQ 2017*
- Actions of the Housing and Homelessness Action Plan 2021 – 2025 that relate to the Department of State Development, Infrastructure, Local Government and Planning
- Provision of loan funding through the Building Acceleration Fund.

This program of activities will support the provision of adequate land supply in SEQ, and across Queensland, and seek to avoid placing upward pressure on prices. However, there are factors besides land supply that can impact on housing affordability over time. Other factors can include rapid changes in demand in some areas, housing finance availability and interest rates, incentives provided by the taxation system for housing as an investment, infrastructure delivery challenges, other housing investment subsidies, and exchange rates and the level of foreign investment.

Housing diversity

ShapingSEQ 2017 encourages the diversity of housing across SEQ. Whilst the 2021 LSDM Report shows that there is a level of housing diversity across the region, in order to continue to meet *ShapingSEQ 2017*'s housing diversity objectives, each local government needs to ensure they have appropriate strategies, planning scheme policies and objectives in place to ensure that ongoing diversity is provided for.

South East Queensland (SEQ)

Summary

ShapingSEQ 2017 establishes that SEQ's expected population growth will require about 794,000 additional dwellings between 2016 and 2041, through its dwelling supply benchmarks, and the creation of about 1 million more jobs.

The capacity and realistic availability of planned dwelling supply in SEQ consolidation and expansion areas provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017*.

There are about 4.4 years of supply of uncompleted lot approvals in SEQ, which is slightly above the minimum four years of supply sought by *ShapingSEQ 2017*. There are 9.1 years of supply of material change of use approvals for multiple dwellings in the SEQ consolidation area, which is above the minimum four years of supply sought by *ShapingSEQ 2017*.

Dwelling approvals in SEQ increased by 32 per cent when compared to the total dwelling approvals recorded in 2019/20, influenced by the HomeBuilder stimulus and low interest rate environment. The increase in activity has resulted in cumulative dwelling approvals in both the consolidation and expansion areas of SEQ continuing to align with *ShapingSEQ 2017's* average annual benchmarks.

When compared to the 2016 Census, housing in SEQ is becoming more diverse and dwelling density is increasing in accordance with SEQ's preferred future. While housing diversity and density is increasing, the proportion of house approvals has increased steadily on an annual basis since 2015/16. Further, middle and high-rise dwelling approvals have decreased in percentage share since 2016/17. It will be important to monitor this closely in future years as any decrease in middle dwelling types may have an impact on delivery and promotion of housing choice and diversity and 'missing middle' forms of housing, as sought by *ShapingSEQ 2017*.

The trend in residential median sales prices across SEQ has seen a consistent increase over the period from 2011/12 to 2019/20 in all residential categories. This has continued in 2020/21 except for vacant land sales, which showed a slight decrease in the expansion (per lot and per square metre) and consolidation areas (per lot). This has occurred due to the decrease in the proportion of the total SEQ vacant land sales in areas such as Brisbane and Gold Coast and an increase in areas such as Logan and Redland. The number of sales across SEQ have also significantly increased across all categories in 2020/21.

The capacity and realistic availability of planned industrial employment supply in SEQ provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017*. The estimated take-up of developed industrial land between 2011 and 2021 in SEQ was about 2409 hectares, with about 8268 hectares of planned industrial land existing as at 2021.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ 2017*, [click here](#).
- a map of the urban footprint defined by *ShapingSEQ 2017*, [click here](#).

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data, where available at the time of reporting, to 30 June 2021 and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of COVID-19 and government stimulus and investment. These impacts may vary across the region, recognising that the economy and housing markets operate differently in different areas of SEQ. Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – SEQ

Planned dwelling supply – SEQ

The region has more than *ShapingSEQ 2017*'s required minimum of 15 years of long-term dwelling supply in the pipeline.

The capacity and realistic availability of planned dwelling supply in the SEQ consolidation and expansion areas provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017*.

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. The realistic availability figures provide land supply scenarios that consider whether capacity is realistically available by 2041.

The realistic availability scenarios consider factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

The realistic availability scenario for the expansion area uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

In the SEQ consolidation area, the capacity of planned dwelling supply, from 2021 onwards, is about 473,900 dwellings, which exceeds the consolidation 2041 dwelling supply benchmarks (from 2021 onwards) of about 365,400 dwellings. However, the realistic availability of this supply may be lower, with an indicative range of:

- about 286,400 dwellings (around 15 years of supply) if 50 per cent of the capacity, that is not yet built or approved, is not available for development by 2041¹

¹ Scenario A: Assumes that 50 per cent of the capacity, that is not yet built or approved, is not available for development by 2041.
Scenario B: Assumes that 25 per cent of the capacity, that is not yet built or approved, is not available for development by 2041.

- about 380,200 dwellings (around 20 years of supply) if 25 per cent of the capacity, that is not yet built or approved, is not available for development by 2041.

Major sources of consolidation planned dwelling supply in SEQ include the following local government areas:

- Brisbane
- Gold Coast
- Moreton Bay.

In the SEQ expansion area, the capacity of planned dwelling supply (from 2021 onwards) is about 484,300 dwellings, while the realistic availability is about 278,300 dwellings. These figures exceed the 2041 expansion dwelling supply benchmark (from 2021 onwards) of about 252,800 dwellings.

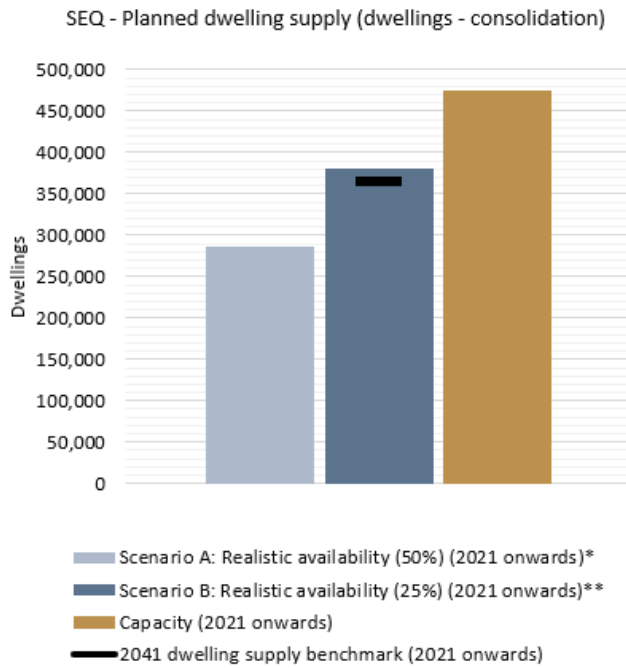
Major sources of expansion planned dwelling supply in SEQ include the following local government areas:

- Ipswich
- Logan
- Moreton Bay.

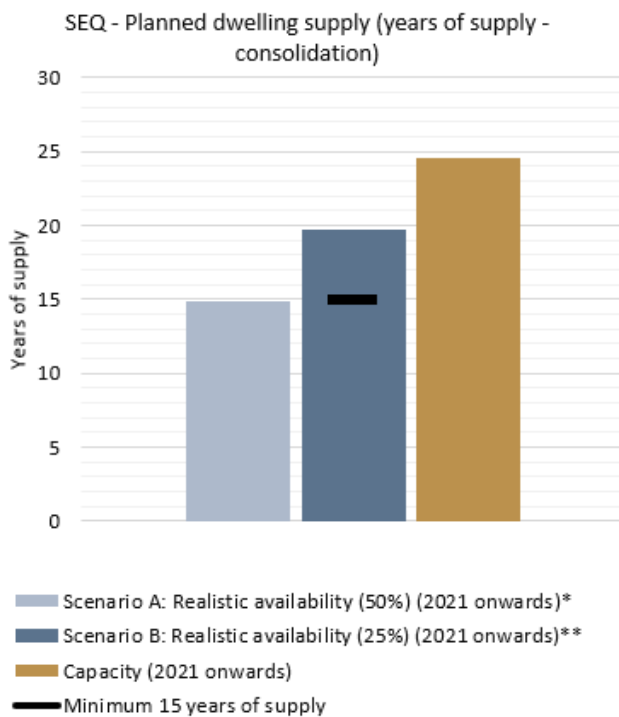
Years of supply is calculated using the average annual benchmark, which is the average annual dwelling demand expected by *ShapingSEQ 2017* for the 2016-2031 period. As indicated in the Dwelling growth section, dwelling growth for SEQ since 2016 aligns closely to the cumulative average annual benchmarks for both consolidation and expansion areas. The short-term take-up of planned dwelling supply across SEQ as a whole is therefore consistent with the average annual benchmarks and years of supply calculation.

The amount of planned dwelling supply, the comparisons to the 2041 dwelling supply benchmarks (from 2021 onwards), the years of supply and short-term take-up vary across local government areas, as does the status of infrastructure projects that would support realisation of the supply. Further detail is provided in each local government section.

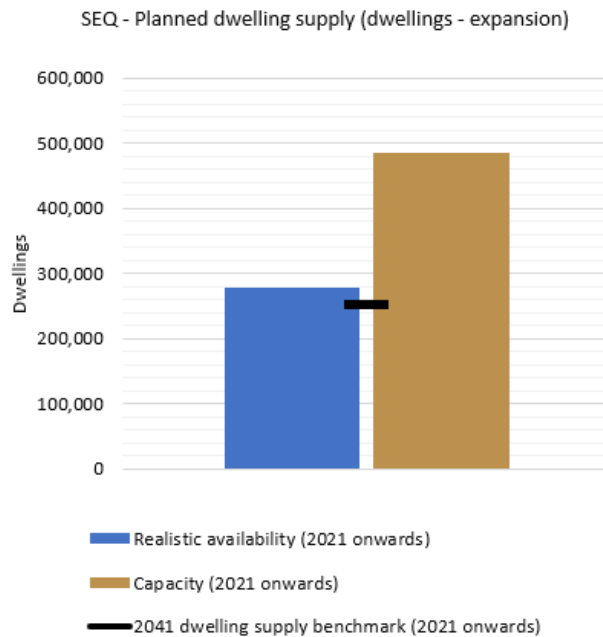
For more detail about the calculation of planned dwelling supply and the years of supply, see the [Technical notes](#).



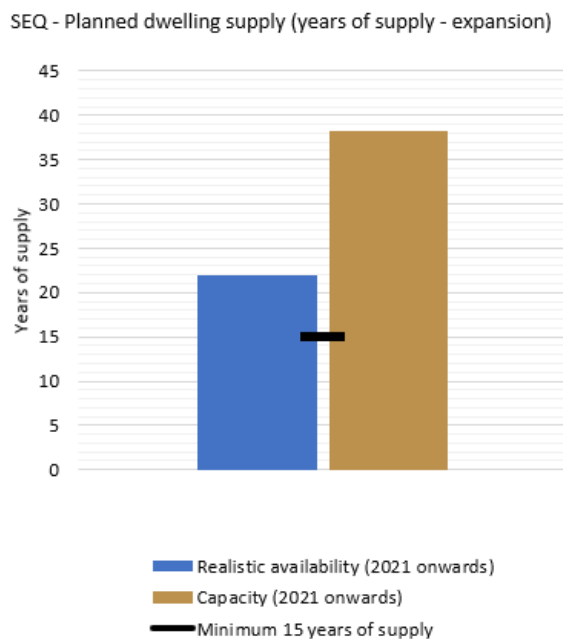
This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against the 2041 dwelling supply benchmark (from 2021 onwards) within the consolidation area. This accounts for the 2016/21 constructed dwellings estimate of 109,490. To view fact sheets on the concept of realistic availability, [click here](#). To view a fact sheet explaining the calculation of remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017's minimum 15 years of supply policy objective in consolidation areas.



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against the 2041 dwelling supply benchmark (from 2021 onwards) within the expansion area. This accounts for the 2016/21 constructed dwellings estimate of 66,046. To view fact sheets on the concept of realistic availability, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017's minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by *the department* using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent and up-to-date over time, improving the comparability and currency of supply estimates. These improvements can be reflected in future publications of the Land Supply and Development Monitoring (LSDM) Report. Updated planning assumptions provided by Logan City Council, Moreton Bay Regional Council, Toowoomba Regional Council and Unitywater (for Noosa Shire Council) in 2021 have supported the estimates of planned dwelling supply in the 2021 LSDM Report. For further information, refer to the [Technical notes](#).

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ 2017's* dwelling supply. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region's planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state level constraints, e.g. see 'Impact of new constraints on land supply' in [Program Delivery](#) which estimates a potential loss of up to 4.5 per cent of the capacity of the planned dwelling supply in expansion areas across SEQ overall since the adoption of *ShapingSEQ 2017* (August 2017)
- recent amendments to the relevant planning schemes and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

Approved supply – SEQ

There are about 4.4 years of uncompleted lot approvals (overall) and about 9.1 years of multiple dwelling approvals (consolidation).

Approved supply is measured by analysing uncompleted lot approvals and uncompleted multiple dwelling approvals across the region.

There are about 4.4 years of supply of uncompleted lot approvals across the SEQ consolidation and expansion areas overall. This is marginally higher than the minimum four years of supply sought by *ShapingSEQ 2017*, with the total number of uncompleted lot approvals being 60,967. The number of uncompleted lots that had operational works approvals was 27,334 or about 44.8 per cent. This represents the number of lots which are readily available for construction in the short-term.

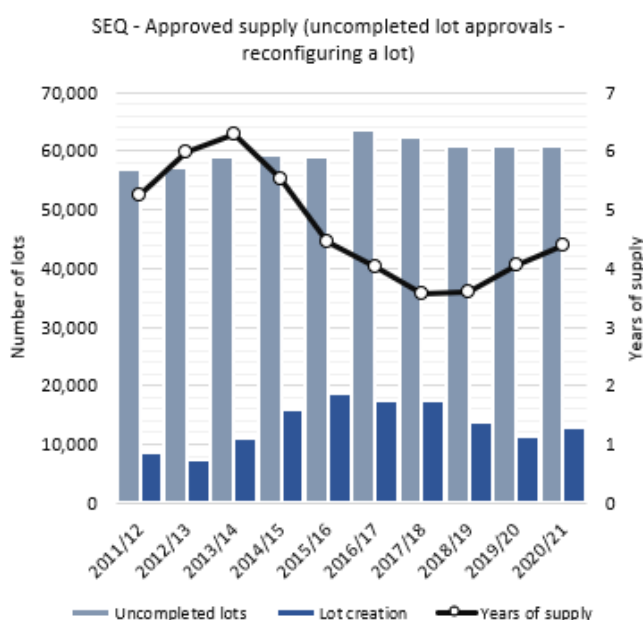
The very high rate of lot creation from 2015/16 to 2017/18 increased the average annual demand figure used in calculating years of supply and contributed to slightly lower years of supply figures for 2017/19. However, a decreasing rate of lot creation to 2019/20 contributed to a slight increase in the years of supply figure for 2019/20, with a slight increase again this year following an increase in uncompleted lot approvals.

The HomeBuilder stimulus and low interest rate environment has contributed to an increased number of new lots in late 2020 and early 2021. For further information see Market Factors.

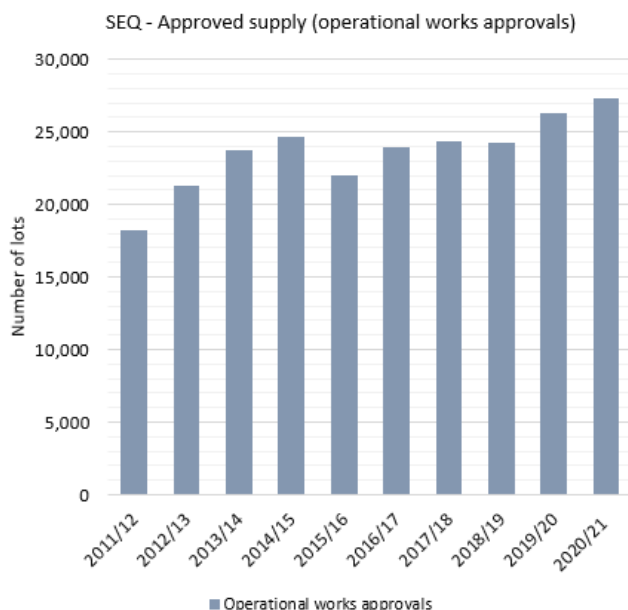
The Growth Areas Team (GAT) was established in March 2021 to address emerging land supply challenges in relevant local government areas. To date, the GAT has identified two priority growth areas at Caboolture West and Southern Redland Bay. This along with state government funding of more than \$92 million for catalytic infrastructure will support the development of around 44,300 lots in key growth areas in Ipswich, Logan, Moreton Bay and Redland, that form part of the current Planned dwelling supply. For further information see Growth Areas Team.

There are about 9.1 years of supply of uncompleted multiple dwellings approvals in the SEQ consolidation area. This exceeds the minimum four years of supply sought by *ShapingSEQ 2017*. The number of uncompleted multiple dwelling approvals fell slightly from June 2018 to June 2021, but the years of supply has increased because of the fall in attached dwelling building approvals, decreasing the assumed level of demand in the years of supply calculation. A similar trend can be observed in many local government areas.

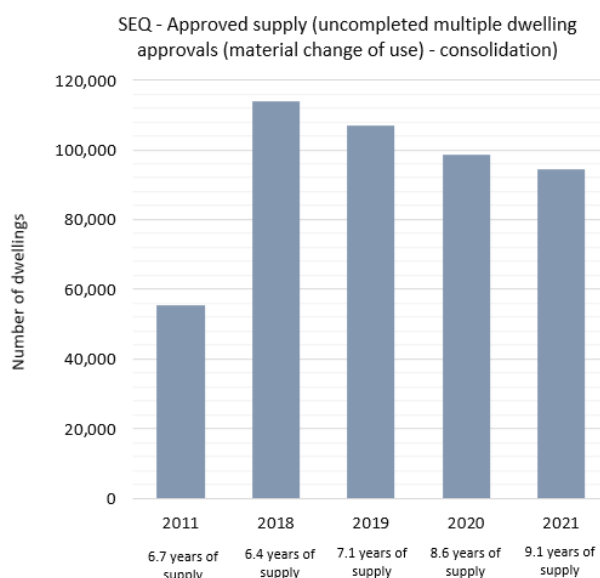
For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical notes](#).



This graph shows the number of lots that have a development permit but have not yet been certified (uncompleted lots) as at 30 June each year and the number of lots that have been created in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.



This graph shows the number of multiple dwellings that have a material change of use development permit but have not yet been constructed (uncompleted multiple dwellings) in the consolidation area as at 30 June for all reported years.

Note: The years of supply for uncompleted multiple dwelling approvals is determined by dividing the total number of uncompleted multiple dwellings by the average annual attached dwelling building approvals of the previous four years. The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – SEQ

SEQ is in line with *ShapingSEQ 2017* benchmarks for dwelling growth, on average.

On average, dwelling approvals (used to measure dwelling growth) in the SEQ consolidation and expansion areas have remained in line with the average annual benchmarks since 2016/17.

In 2020/21, 34,473 dwelling approvals were recorded for SEQ at a rate of 2873 dwellings per month. This represents a 32 per cent increase when compared to the total dwelling approvals recorded in 2019/20. When compared to long-term averages, the total dwelling approvals in 2020/21 is also slightly above the total five-year average of 32,977 and total ten-year average of 31,727 additional dwellings.

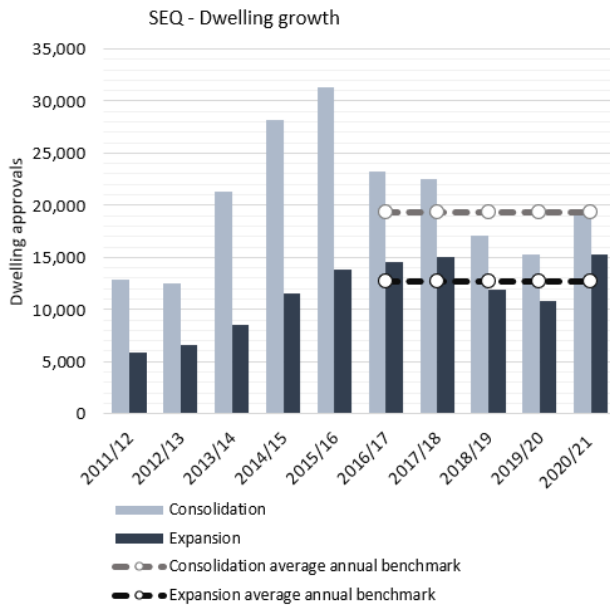
The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see [Market Factors](#).

Within the SEQ consolidation area, there were 19,243 dwelling approvals in 2020/21, which was 90 less than the consolidation average annual benchmark of 19,333 additional dwellings. In the SEQ expansion area, there were 15,230 dwelling approvals which was 2584 more than the expansion average annual benchmark of 12,646 additional dwellings and slightly above than the previous highest level of growth in 2017/18.

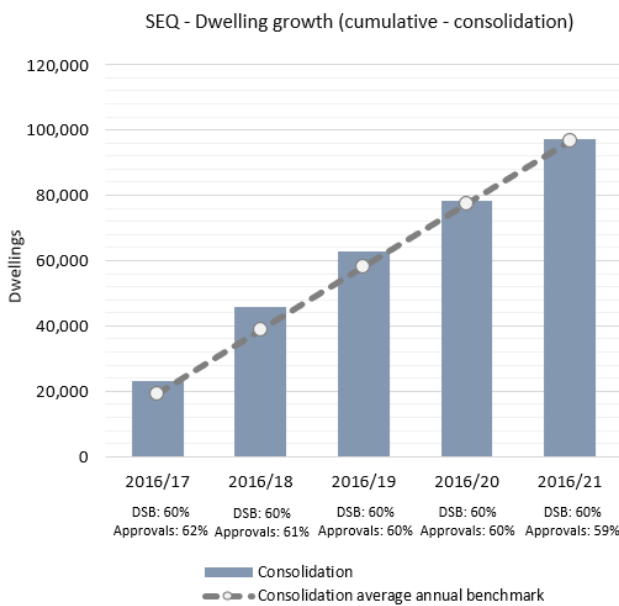
Approximately 59 per cent of dwelling approvals were in the SEQ consolidation area for 2016/17 to 2020/21, which is slightly below its expected share of 60 per cent dwelling growth to 2031 identified in *ShapingSEQ* 2017. Approximately 41 per cent of dwelling approvals over the same period were in the expansion area, which is slightly above its expected share of 40 per cent identified in *ShapingSEQ* 2017.

Based on the above, SEQ is considered on track to be able to accommodate the 2041 dwelling supply benchmarks. The slight drop in the proportion of dwelling approvals from SEQ's consolidation area to SEQ's expansion area reflects the market conditions influenced by HomeBuilder and the demand for houses. This will continue to be monitored to understand whether this is an ongoing trend or a reflection of the market at a point in time.

For more information about improvements to the measurement of dwellings and net growth over time, see [Program Delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).

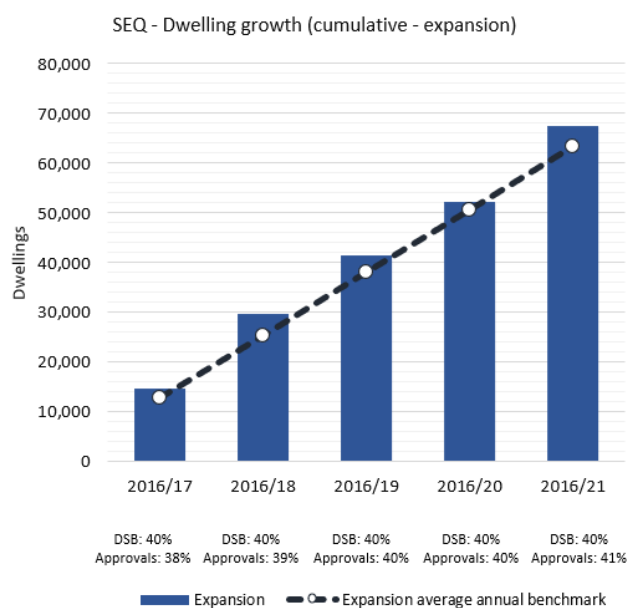


This graph shows annual dwelling approvals compared against *ShapingSEQ 2017's* average annual benchmarks.



This graph shows the cumulative dwelling growth in the consolidation area against *ShapingSEQ 2017's* consolidation average annual benchmark.

Note: DSB = Dwelling Supply Benchmark



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ* 2017's expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the most recent 2018 Queensland Government dwelling projections for SEQ. This adjustment has resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has been retained in the 2021 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

Changes in dwelling density – SEQ

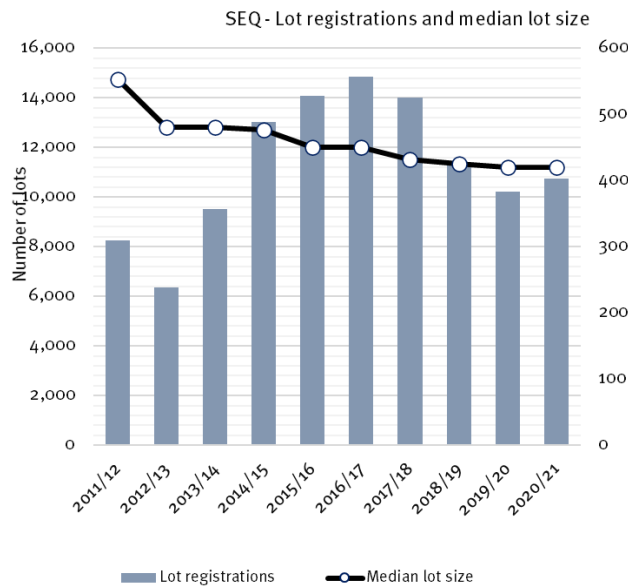
Dwelling density in the region is increasing.

Overall dwelling density (measured through median lot sizes and mean population-weighted dwelling density) is increasing across SEQ in accordance with SEQ's preferred future for higher dwelling densities and smaller lots.

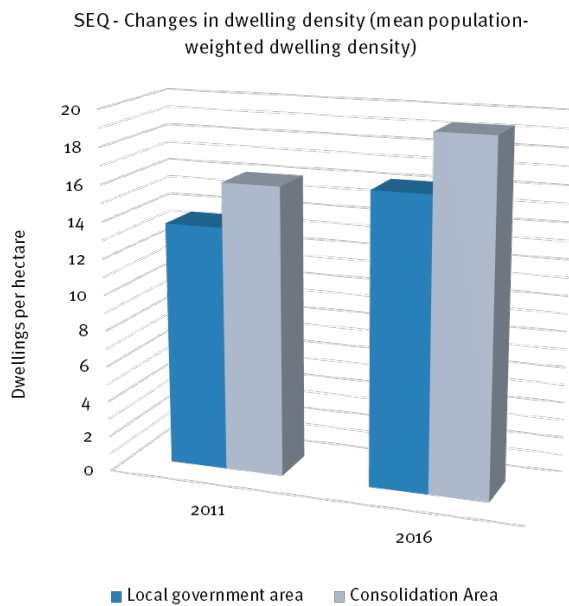
Mean population-weighted dwelling density increased across SEQ between 2011 and 2016, from 13.6 to 16.2 dwellings per hectare. This represents the average dwelling density at which the population of SEQ lives and is comparable to the net residential density as used by *ShapingSEQ* 2017. In the consolidation area, mean population-weighted dwelling density increased from 16.1 to 19.4 dwellings per hectare.

Between 2011/12 and 2020/21, the median size of new lots in SEQ decreased from 553m² to 420m². This was supported by an upward trend in the volume of lot registrations to 2016/17, followed by a decline since. However, lot registrations increased slightly in 2020/21 to 10,761. This trend is generally consistent across most local governments in SEQ, with reducing median lot size indicative of higher dwelling densities in subdivisions over time.

For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – SEQ

Diversity of housing approvals across the region is increasing housing choice when compared to existing housing stock from the 2016 Census, however the proportion of houses has increased since 2015/16.

When compared to existing dwelling stock at the 2016 Census, dwelling approvals from 2016/21 in SEQ indicate an increase in housing diversity. This is consistent with SEQ's preferred future to provide a greater diversity of housing across the region. However, the data also shows houses remain the predominant housing type and the proportion of approvals for houses has increased since 2015/16. For further information on the most recent trend to houses see Market Factors.

Houses in SEQ comprised about 60 per cent (98,317 dwellings) of new dwelling approvals between 2016/17 and 2020/21, which was less than dwelling stock as at the 2016 Census (72 per cent). Between 2016/17 and 2020/21 houses comprised 42 per cent of new dwelling approvals in the consolidation area, compared to 85 per cent of new dwelling approvals in the expansion area for the same period.

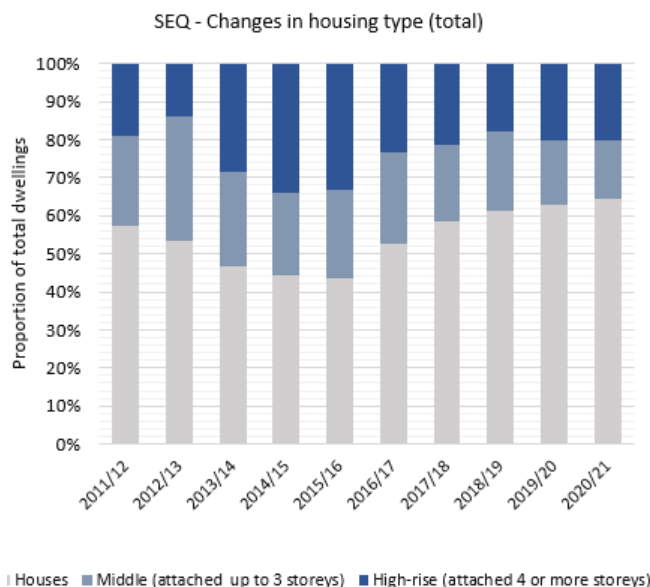
Whilst comprising about 40 per cent of all approvals from 2016/17 to 2020/21, middle and high-rise dwelling types have declined in percentage share of approvals since 2016/17. Any continued decrease in the proportion of middle dwelling type approvals may have an impact on the delivery and promotion of 'missing middle' forms of housing, consistent with the outcomes sought in *ShapingSEQ 2017*.

The proportion of dwelling approvals for middle (20 per cent or 32,507 dwellings) between 2016/17 and 2020/21 is lower than the existing dwelling stock at the 2016 Census (22 per cent). The predominant middle housing type approved since 2016/17 across the region is semi-detached, row or terrace houses and townhouses that are two or more storeys (about 67 per cent or 21,722 dwellings). About 70 per cent (22,660 dwellings) of all middle dwelling approvals for the period between 2016/17 and 2020/21 were located within the consolidation area, with about 30 per cent (9847 dwellings) located within the expansion area.

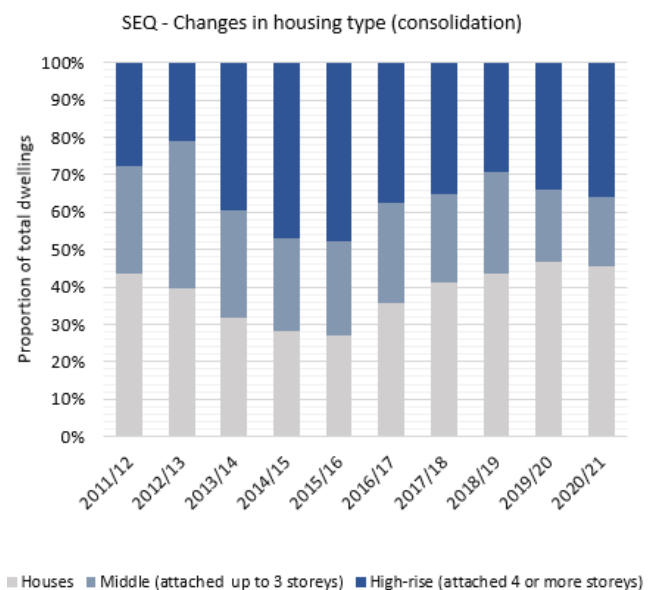
The proportion of dwelling approvals for high-rise (about 21 per cent or 34,059 dwellings) between 2016/17 and 2020/21 exceeded existing dwelling stock at the 2016 Census (6 per cent). Between 2016/17 and 2020/21 high-rise comprised 35 per cent of all new dwelling approvals in the consolidation area, compared to one per cent in the expansion area for the same period.

From 2016/17 to 2020/21, 61 per cent of approvals of high-rise approvals were nine or more storeys (20,864 dwellings).

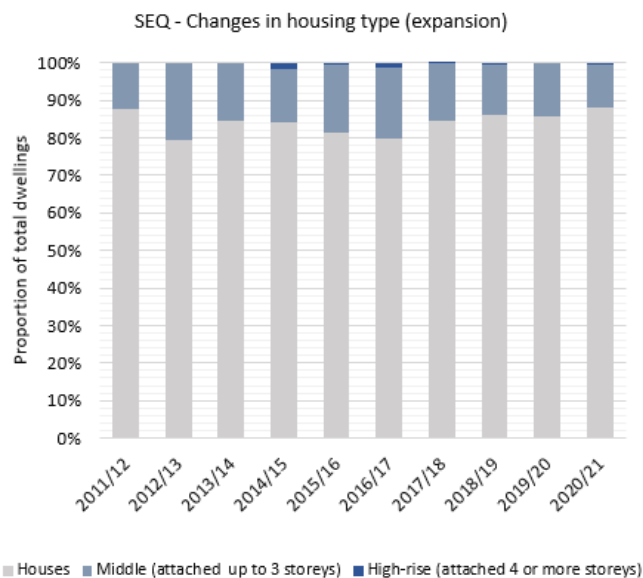
For more detail about dwelling approvals, see the [Technical notes](#).



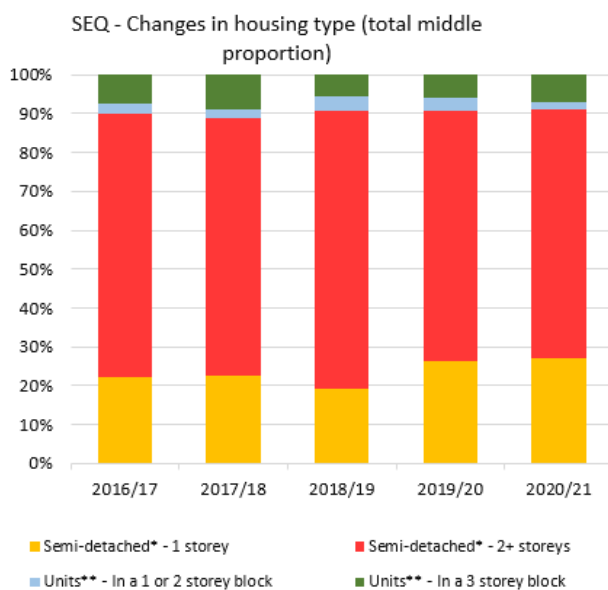
This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of dwelling approvals in the consolidation area that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of dwelling approvals in the expansion area that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of ‘missing middle’ in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the

ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – SEQ

The residential median sales prices across SEQ have generally increased each year since 2011/12.

Residential sales numbers across SEQ have increased significantly since a decline in 2018/19.

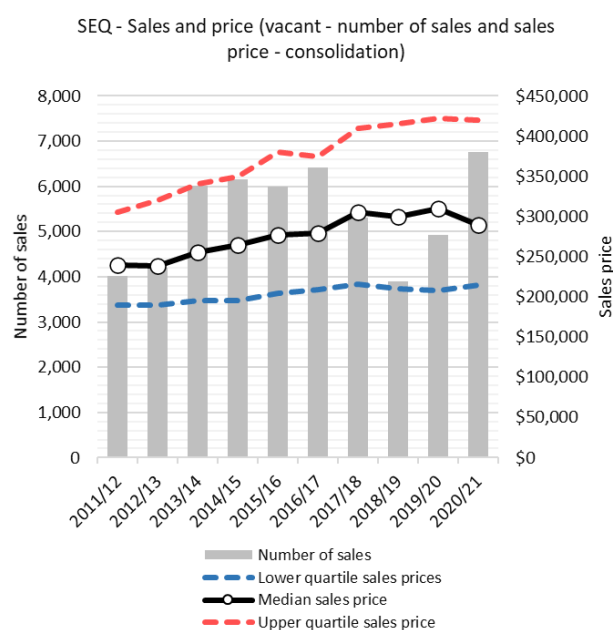
The trend in median sales prices across SEQ has seen a consistent increase over the period 2011/12 to 2019/20 in all residential categories. The median sales price for all residential categories increased in 2020/21, except for vacant land sales, which showed a slight decrease in the consolidation (per lot) and expansion areas (per lot and per square metre). This has occurred due to the decrease in the proportion of the total SEQ vacant land sales in areas such as Brisbane and the Gold Coast and an increase in the areas such as Logan and Redland.

Residential sales numbers in all categories across SEQ increased from 2011/12, with peaks across categories in 2015/16 and 2016/17. Residential sales numbers in all categories then fell each year until 2018/19 and have shown a consistent increase since then. All categories have shown a significant increase in sales numbers in 2020/21.

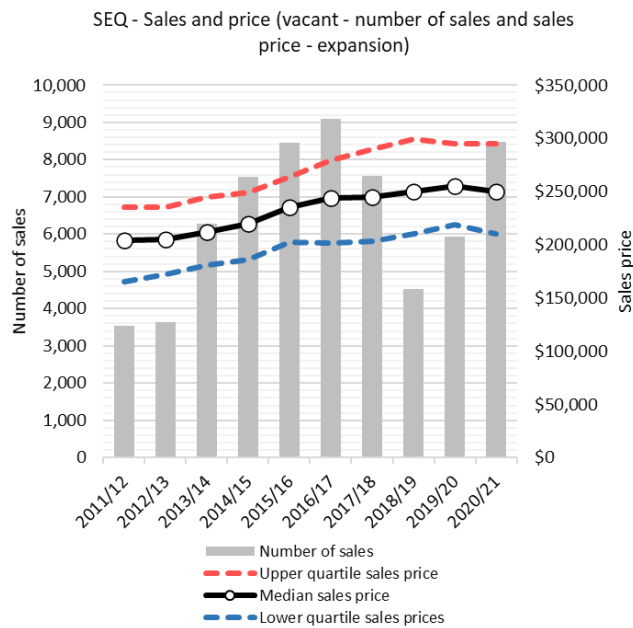
Lower quartile sales prices have generally grown at a slower or similar rate to the median sales price for all residential categories between 2011/12 and 2019/20. In 2020/21 lower quartile prices have remained steady or increased slightly in most residential categories across SEQ.

Across SEQ, median sales price is higher across all categories in the consolidation area compared to the expansion area. However, there is variation where some local government areas depart from this general trend. For example, the major expansion growth areas of Ipswich, Logan, Moreton Bay and Redland commonly have greater median sales prices in the expansion area than in their consolidation areas for most residential categories.

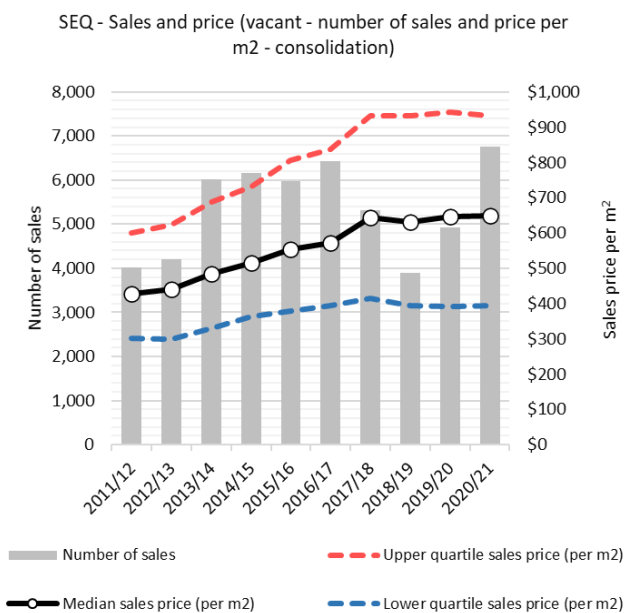
For more detail about the median sales price and number of sales, see the [Technical notes](#).



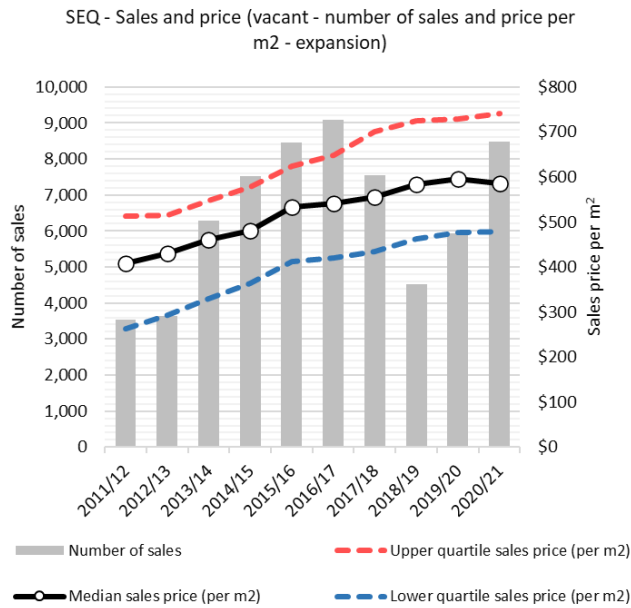
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the consolidation area.



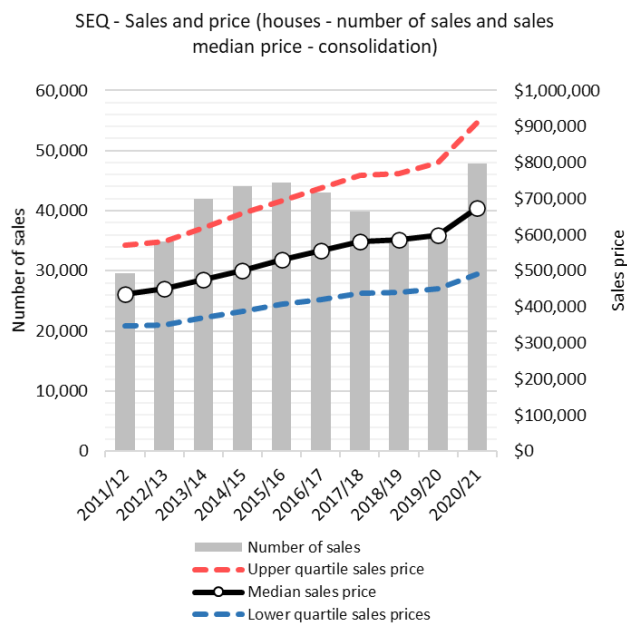
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the consolidation area.



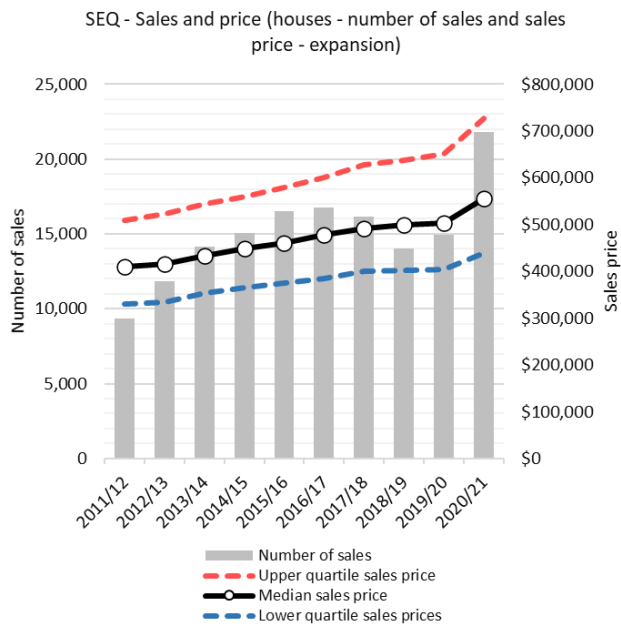
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the consolidation area.



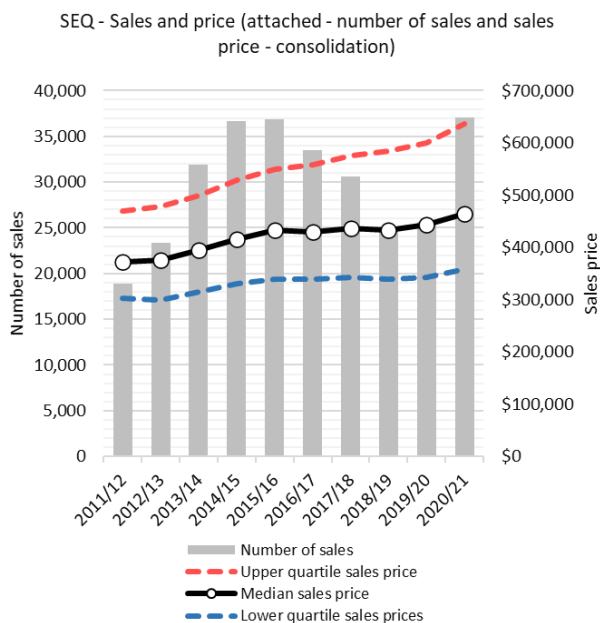
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



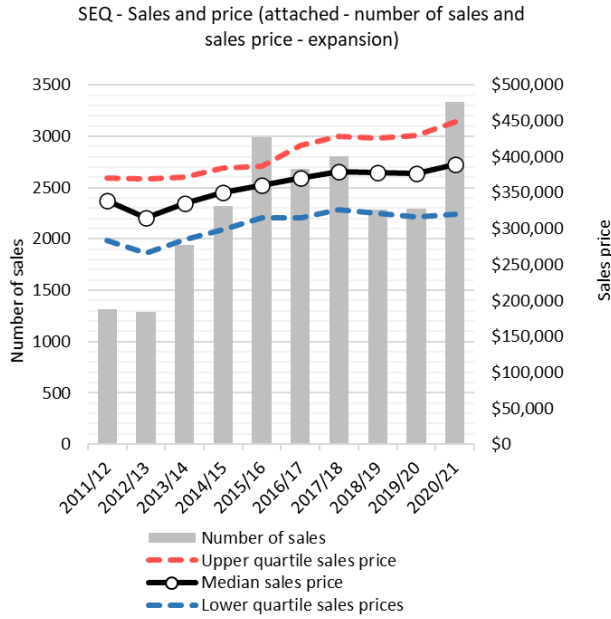
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the consolidation area.



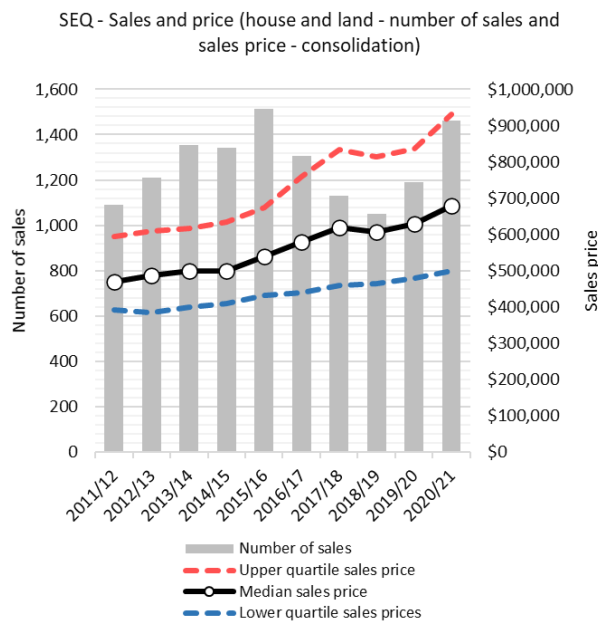
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



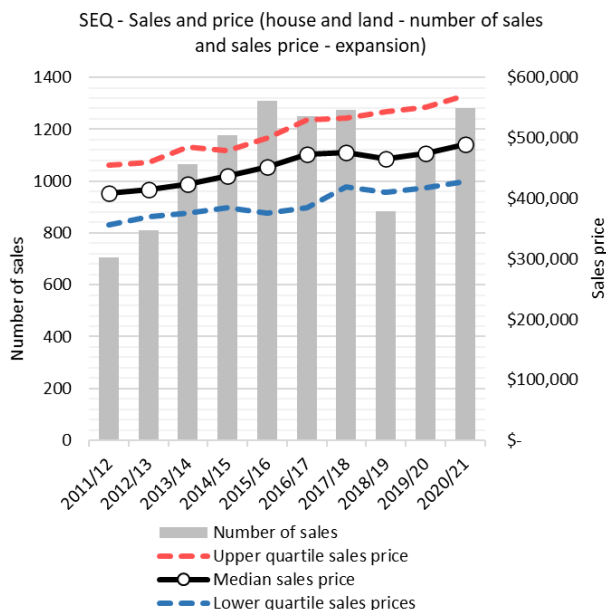
This graph shows the number of sales and the lower, median and upper quartile sales price for attached dwellings in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for house-land packages in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

Industrial – SEQ

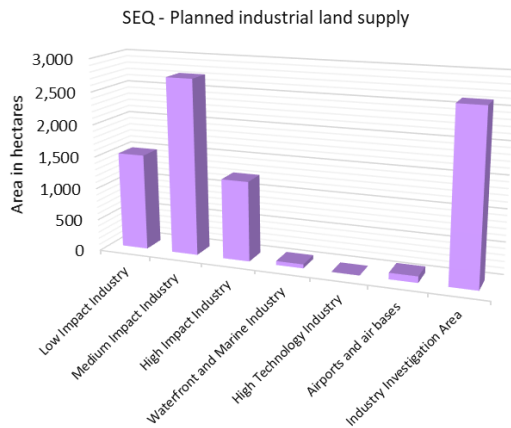
Planned industrial land supply/take-up – SEQ

The region has about 8268ha of vacant land planned for industrial purposes.

The estimated take-up of developed industrial land between 2011 and 2021 in SEQ was 2409 hectares, with about 147 hectares taken-up in 2020/21. The greatest take-up occurred on land zoned medium impact industry, followed by high and low impact industry. The four areas of greatest industrial land take-up were Toowoomba, Brisbane, Gold Coast and Ipswich.

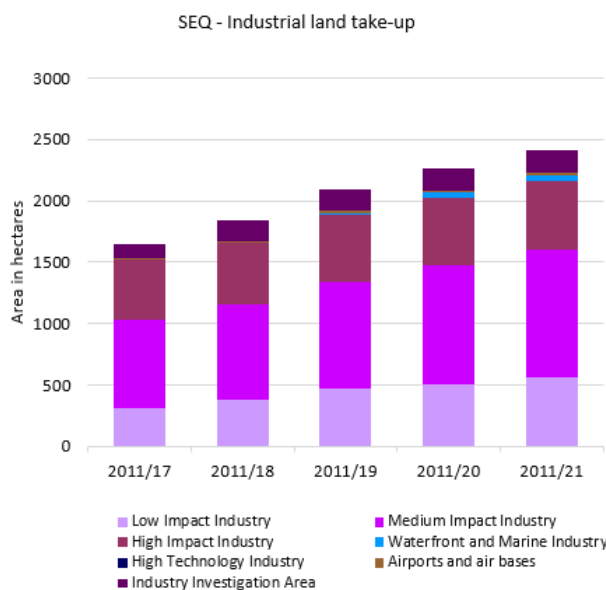
There were about 8268 hectares of planned industrial land in SEQ as at 2021, including serviced and un-serviced land. This planned industrial land comprised land across all types, including land intended for low, medium (the largest category) and high impact industry, waterfront and marine industry, high technology industry and airports and airbases. It also included a substantial amount (approximately 2627 hectares) of industry investigation areas.

For more detail about planned industrial land supply and take-up, see the [Technical notes](#).



8268ha of developable land

This graph shows the number of hectares of planned industrial land supply as at 2021 by industrial land category.



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of Planned industrial land supply. Further, Planned

industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

The department has continued to build on work undertaken through [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. This higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – SEQ

The region has more than *ShapingSEQ 2017*'s required minimum of 15 years of industrial employment supply in the pipeline.

The capacity and realistic availability of planned industrial employment supply in SEQ provide more than the minimum 15 years of supply of land sought by *ShapingSEQ 2017* (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for SEQ is equivalent to about 90,400 jobs on the graph.

The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. The realistic availability figure provides a supply scenario that assumes some of the capacity is not realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

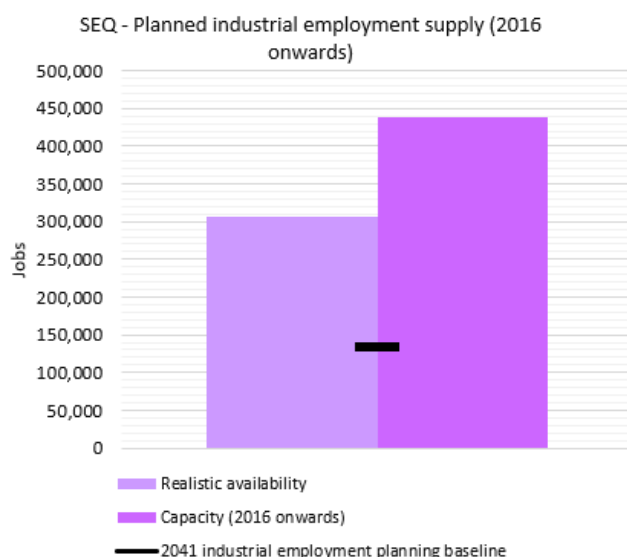
The realistic availability scenario is informed by updated developable area data (to 2021), as reported in Planned industrial land supply and take-up, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

The capacity of planned industrial employment supply in SEQ (from 2016 onwards) is about 439,000 employees, while the realistic availability of this supply is about 306,700 employees. These figures are markedly above the 2041 industrial employment planning baseline of about 134,000 employees. However, some excess of planned industrial employment supply may be appropriate to facilitate strategic economic development opportunities when they arise.

The main local government areas contributing to industrial employment supply in SEQ are Ipswich, Brisbane, Toowoomba (urban extent) and Logan.

The planned industrial employment supply and 2041 industrial employment planning baselines vary across local government areas, as does the status of infrastructure projects that would support realisation of the supply. Further detail is provided in each local government section.

For more detail about the calculation of planned industrial employment supply, see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, from 2016 onwards, that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017's 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program Delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

For this report updated planning assumptions provided by Logan City Council, Moreton Bay Regional Council, Toowoomba and Unitywater (for Noosa Shire Council) have supported the estimates of planned industrial employment supply, resulting in an overall increase in estimated supply from 2016 onwards.

Future [Best practice research](#) could consider the scope to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the present year. Current years of supply figures (from 2021 onwards) are indicative estimates, effectively assuming the same average annual rate of take-up of employment supply from 2016 to 2021 as the average annual *ShapingSEQ* 2017 employment planning baseline growth from 2016 to 2031.

Brisbane

Summary

ShapingSEQ 2017 establishes that Brisbane's expected population growth will require an additional 188,200 dwellings between 2016 and 2041, through its dwelling supply benchmarks.

The capacity and realistic availability of planned dwelling supply in the Brisbane consolidation and expansion areas provide the minimum 15 years of supply sought by *ShapingSEQ 2017*. However, the capacity of planned dwelling supply in the Brisbane consolidation area is less than the 2041 dwelling supply benchmark.

There are about three years of supply of uncompleted lot approvals in Brisbane, which is less than the minimum four years of supply sought by *ShapingSEQ 2017*. However, Brisbane has continued to provide on average around three years of supply each year since 2011/12. The total number of uncompleted lot approvals has declined from the 10-year peak of 2018/19. The Growth Areas Team was established in early 2021 to assist in addressing land supply challenges across SEQ including Brisbane. This includes a remit to work collaboratively with local governments, utility providers and the development industry to better match the demands for land and affordable and diverse housing with supply.

In contrast, there are about nine years of supply of uncompleted multiple dwelling approvals in the Brisbane consolidation area, which exceeds the minimum four years of supply sought by *ShapingSEQ 2017*.

Dwelling approvals in Brisbane increased by 34 per cent when compared to the total dwelling growth recorded in 2019/20, largely influenced by the HomeBuilder government stimulus and low interest rate environment. Despite the downward trend in the yearly data from 2015/16 to 2019/20, the cumulative dwelling growth exceeds the average annual benchmark in both the consolidation and expansion areas for 2016/21. Brisbane therefore remains on track to accommodate the 2041 dwelling supply benchmarks.

When compared to existing dwelling stock at the 2016 Census, housing in Brisbane for the period between 2016/17 to 2020/21 has become increasingly diverse with the proportion of dwelling approvals for houses decreasing and proportion of high-rises increasing. The proportion of middle has however remained the same. Dwelling density in Brisbane has continued to increase with median lot sizes continuing to decrease in accordance with SEQ's preferred future.

Brisbane City Council is continuing work on its housing strategy to support development of more diverse housing. The housing strategy will provide the opportunity for Council to consider how to achieve the right mix of housing types to meet the lifecycle need of residents as the city's population grows and household types change.

There are more than 15 years of planned industrial employment supply in Brisbane, however the capacity and realistic availability of planned industrial employment supply fall slightly below the 2041 employment planning baseline sought by *ShapingSEQ 2017*. The realisation of this planned industrial employment supply would be supported by the development of the Melbourne to Brisbane Inland Rail and improved connections to the Port of Brisbane. The estimated take-up of

developed industrial land between 2011 and 2021 in Brisbane was about 586 hectares, with about 510 hectares of planned industrial land existing as at 2021.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ* 2017, [click here](#).
- a map of the urban footprint defined by *ShapingSEQ* 2017, [click here](#).

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data to 30 June 2021, where available at the time of reporting, and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of COVID-19 and government stimulus and investment. These impacts may vary across the region, recognising that the economy and housing markets operate differently in different areas of SEQ. Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – Brisbane

Planned dwelling supply – Brisbane

The capacity and realistic availability of planned dwelling supply in the Brisbane consolidation and expansion areas provide the minimum 15 years of supply sought by *ShapingSEQ* 2017.

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. It is calculated from the Brisbane Urban Growth model as supplied by Brisbane City Council to reflect LGIP v1 (February 2016). The realistic availability figure provides a land supply scenario prepared for this report that considers whether capacity is realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

The realistic availability scenario uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

In the Brisbane consolidation area, the capacity of planned dwelling supply, from 2021 onwards, is about 110,500 dwellings. This represents 15 years of supply and is about 14,000 dwellings less than the consolidation 2041 dwelling supply benchmark (from 2021 onwards) of about 124,100 dwellings.

In the Brisbane expansion area, the capacity and realistic availability of planned dwelling supply (from 2021 onwards) are about 8800 and 8300 dwellings respectively. These figures are slightly more than the expansion 2041 dwelling supply benchmark (from 2021 onwards) of about 7500 dwellings.

Realisation of the planned dwelling supply in the Brisbane consolidation area is expected to be supported by the provision of key regional transport infrastructure including Brisbane Metro and Cross River Rail as well as transport infrastructure identified in *ShapingSEQ 2017* and the State Infrastructure Plan, including busway extensions and other high-frequency public transport connections. As well as Brisbane Metro and Cross River Rail, other projects currently being delivered include the state government's \$30 million Eastern Transitway (Stage 1) (bus priority lane extensions of the Eastern Busway from Coorparoo to Carindale) and the Northern Transitway (including a dedicated bus lane from Kedron to Chermside).

Brisbane City Council has commenced research to support development of a housing strategy. The housing strategy will seek to ensure that there is the right mix of housing types to meet the lifecycle needs of residents as the city's population grows and household types change.

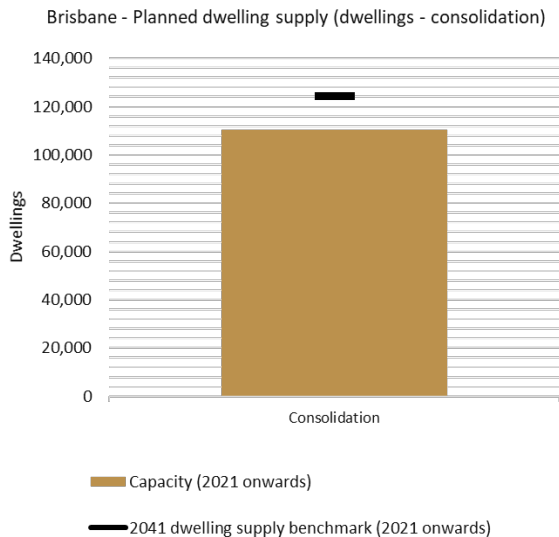
Brisbane City Council has also nominated future growth nodes in the strategic framework of Brisbane City Plan 2014 as areas to investigate potentially higher dwelling densities. Neighbourhood planning and any resulting planning scheme amendments in these areas could support the increase of planned dwelling supply over time.

Recently adopted and currently proposed amendments may also have some effect on overall dwelling yield.

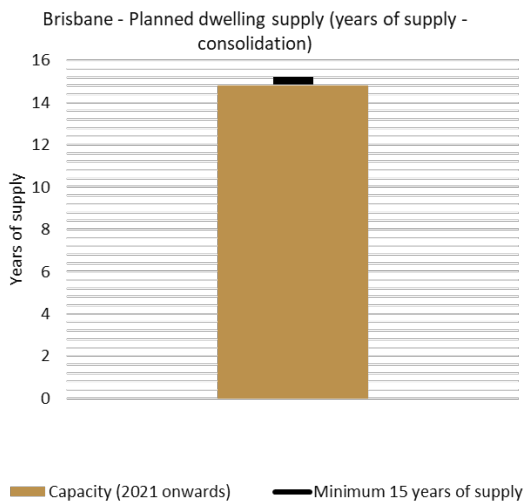
Where planning or development scheme amendments are reflected in updated data sources, their effect on planned dwelling supply will be included in future years of LSDM reporting.

As indicated in Dwelling growth, on average the take-up of planned dwelling supply since 2016 is similar to the average annual benchmark used to calculate years of planned dwelling supply in the consolidation area, but average take-up since 2016 is faster than the average annual benchmark for expansion areas. Given the limited expansion supply planned for Brisbane, it is to be expected that take-up in the early years from 2016 will be faster than in later years.

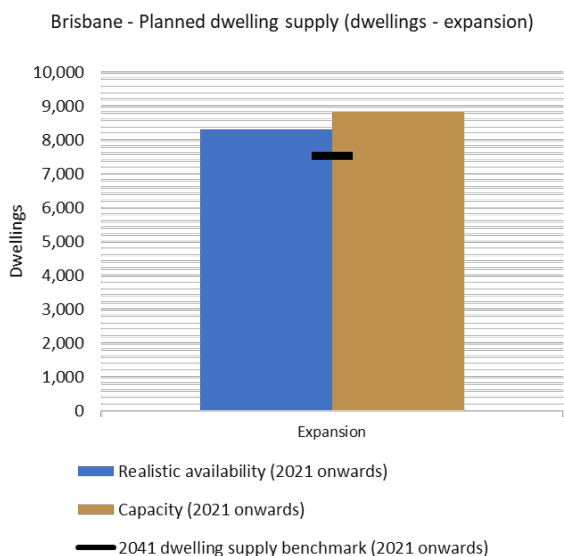
For more detail about the calculation of planned dwelling supply, including years of supply, and a list of planning and development scheme amendments recently adopted or in process that may affect planned dwelling supply for Brisbane, see the [Technical notes](#).



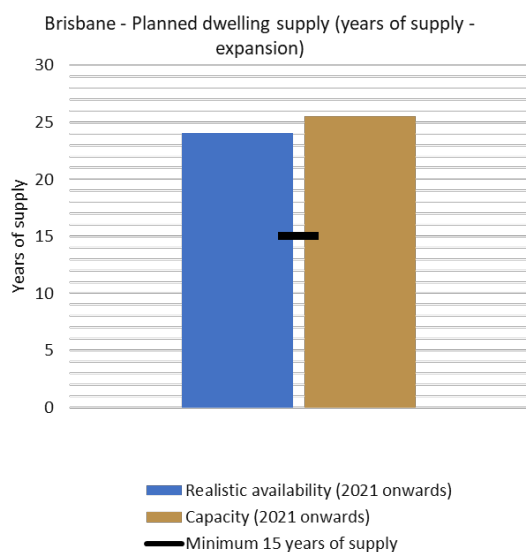
This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the consolidation area. This accounts for the 2016/21 constructed dwellings estimate of 52,709. To view a fact sheet explaining the calculation of remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s minimum 15 years of supply policy objective in consolidation areas.



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the expansion area. This accounts for the 2016/21 constructed dwellings estimate of 3884. To view fact sheets on the concept of realistic availability, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent and up-to-date over time, improving the comparability and currency of supply estimates. These improvements can be reflected in future publications of the Land Supply and Development Monitoring (LSDM) Report.

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ 2017*'s dwelling supply benchmarks. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region's planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state and local constraints
- recent amendments to the planning scheme and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

Approved supply – Brisbane

Approved supply is measured by analysing uncompleted lot approvals and uncompleted multiple dwelling approvals across Brisbane.

There are about three years of supply of uncompleted lot approvals in the Brisbane consolidation and expansion areas overall, which is less than the minimum four years of supply sought by *ShapingSEQ 2017*. Brisbane has continued to provide on average around three years of supply each year since 2011/12. There was a total of 5861 uncompleted lot approvals as at 2020/21, a decline from the 10-year peak of 6530 in 2018/19.

Of these uncompleted lots, 1853 or 31.6 per cent had operational works approvals. This represents the number of lots which are readily available for construction in the short-term.

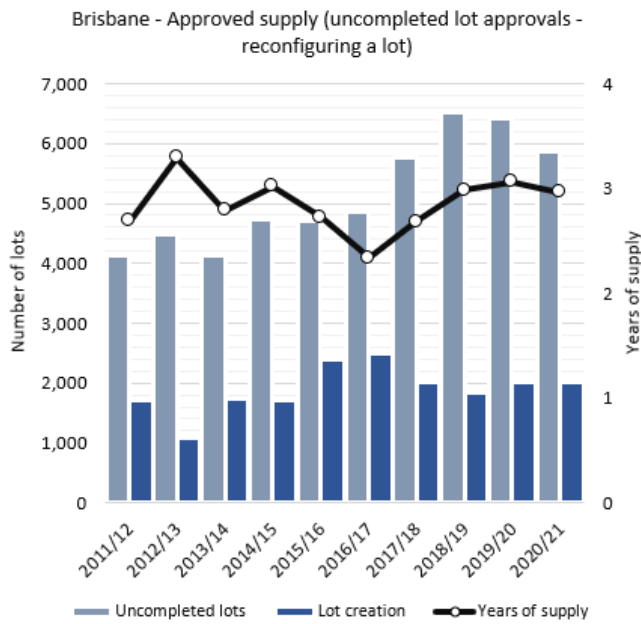
A lower rate of lot creation from 2017/18 to 2019/20 contributed to an increase in the years of supply figure to 2019/20. However, the increase in the rate of lot creation and a decrease in the number of uncompleted lot approvals in 2020/21 has resulted in a decrease in the years of supply figure.

The Growth Areas Team was established in early 2021 to assist in addressing land supply challenges across SEQ including Brisbane. This includes a remit to work collaboratively with local governments, utility providers and the development industry to better match the demands for land and affordable and diverse housing with supply. For further information see Growth Areas Team.

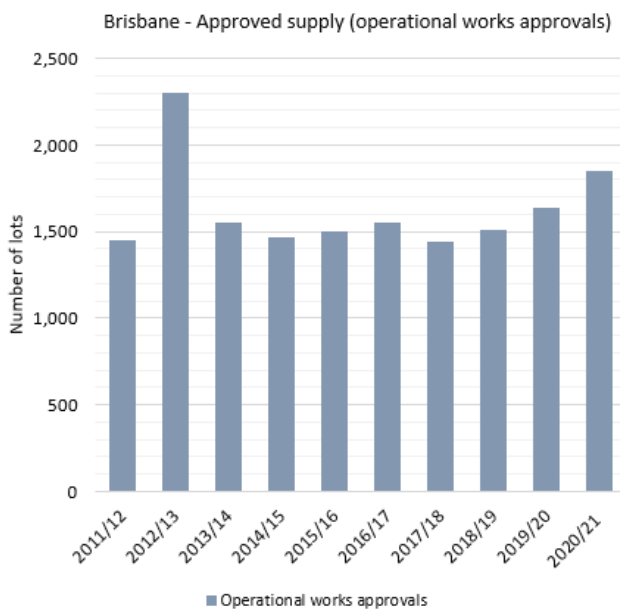
There are about nine years of supply of uncompleted multiple dwelling approvals in the Brisbane consolidation area. This is more than the minimum four years of supply sought by *ShapingSEQ 2017*.

The number of uncompleted multiple dwelling approvals fell slightly from June 2018 to June 2021, but the years of supply has increased because of the fall in the rate of attached dwelling approvals, decreasing the assumed level of demand in the years of supply calculation.

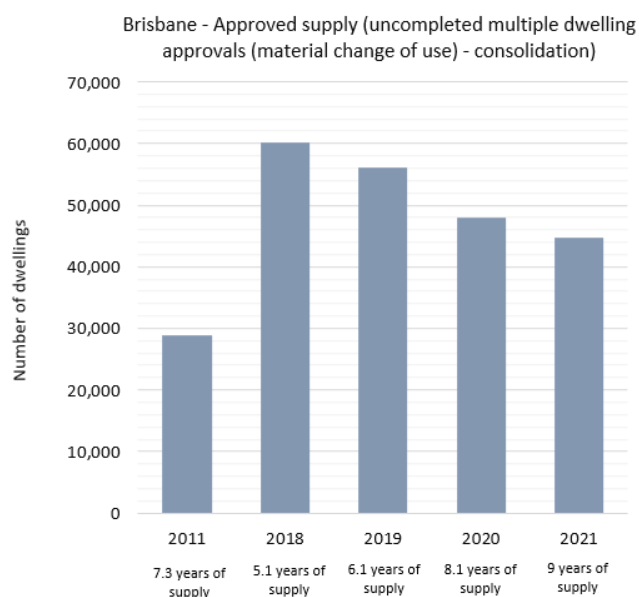
For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical notes](#).



This graph shows the number of lots that have a development permit but have not yet been certified (uncompleted lots) as at 30 June each year as well as the number of lots that have been created in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.



This graph shows the number of multiple dwellings that have a material change of use development permit but have not yet been constructed (uncompleted multiple dwellings) in the consolidation area as at 30 June for all reported years.

Note: The years of supply for uncompleted multiple dwelling approvals is determined by dividing the total number of uncompleted multiple dwellings by the average annual attached dwelling building approvals of the previous four years. The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – Brisbane

In 2020/21, 8775 dwelling approvals were recorded for Brisbane at a rate of 731 dwellings per month. This represents a 34 per cent increase when compared to the total dwelling approvals recorded in 2019/20. The total dwelling approvals in 2020/21 is however lower than the five-year average of 9214 and ten-year average of 10,999 dwelling approvals.

The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see Market Factors.

Within the Brisbane consolidation area, there were 7677 dwelling approvals in 2020/21, up from its lowest level in a decade in 2019/20 and exceeding the consolidation average annual benchmark of 7463 by 214 dwelling approvals.

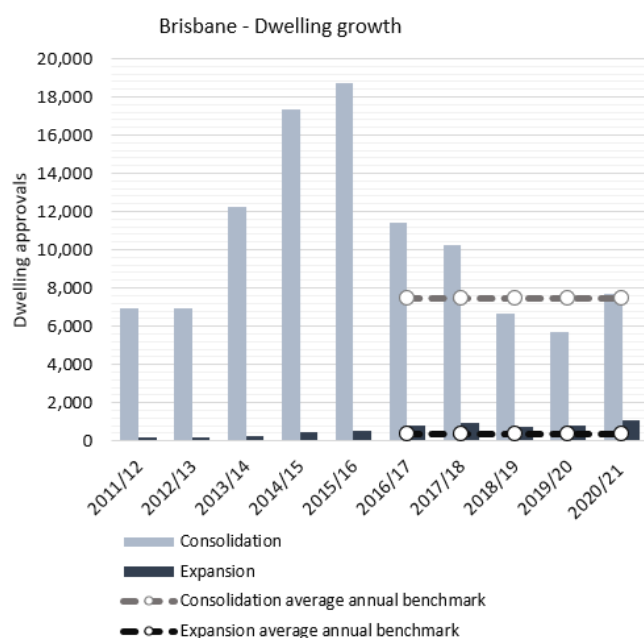
Over the same period, there were 1098 dwelling approvals in Brisbane’s expansion area, which was 752 dwellings more than the expansion average annual benchmark of 346 additional dwellings. This was the highest level of dwelling growth in the expansion area in the last decade and has also resulted in the continuation of dwelling approvals consistently exceeding the expansion average annual benchmark since this was set under *ShapingSEQ* 2017.

Approximately ten per cent of dwelling approvals were in the Brisbane expansion area for 2016/17 to 2020/21, more than its expected share of four per cent. Approvals in the consolidation area (about 90 per cent) over the same period were less than its expected share of 96 per cent.

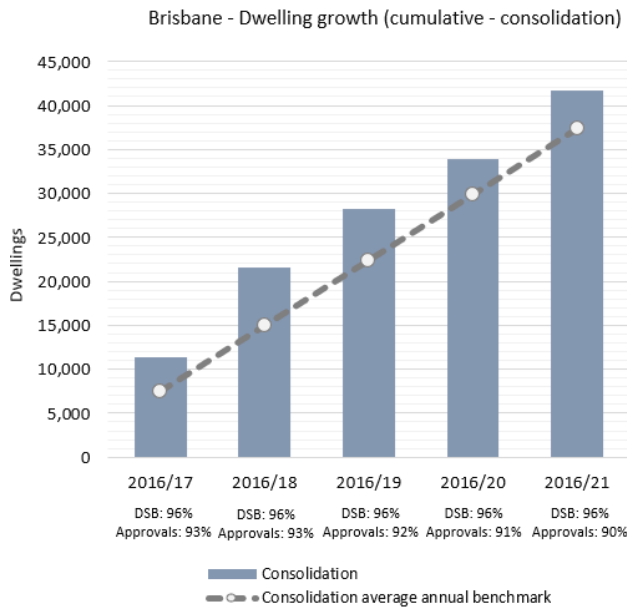
Whilst there has been a decrease in the proportion of dwelling approvals in the consolidation area in recent years, it is still expected to proportionately increase as expansion land supply diminishes and consolidation capacity increases through amended planning and development schemes. This could be supported by the provision of key regional transport infrastructure.

Brisbane remains on track to accommodate the 2041 dwelling supply benchmarks given that the actual number of dwelling approvals for 2016/17 to 2020/21, in the consolidation and expansion areas are tracking above the average annual benchmarks.

For more information about improvements to the measurement of dwellings and net growth over time, see [Program delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).

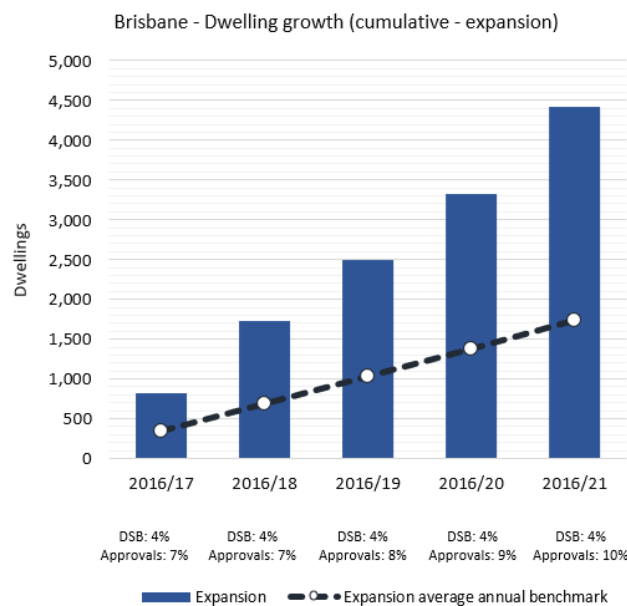


This graph shows annual dwelling approvals compared against *ShapingSEQ* 2017’s average annual benchmarks.



This graph shows the cumulative dwelling growth in the consolidation area against *ShapingSEQ* 2017’s consolidation average annual benchmark.

Note: DSB = Dwelling Supply Benchmark



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ* 2017’s expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the 2018 Queensland Government dwelling projections for SEQ. This adjustment resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has been retained in the 2021 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

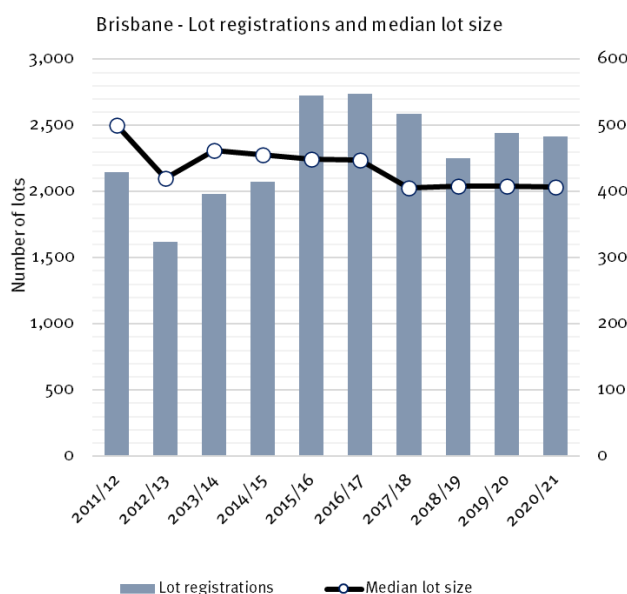
Changes in dwelling density – Brisbane

Overall dwelling density (measured through median lot sizes and mean population-weighted dwelling density) has been increasing in Brisbane in accordance with SEQ's preferred future for higher dwelling densities and smaller lots.

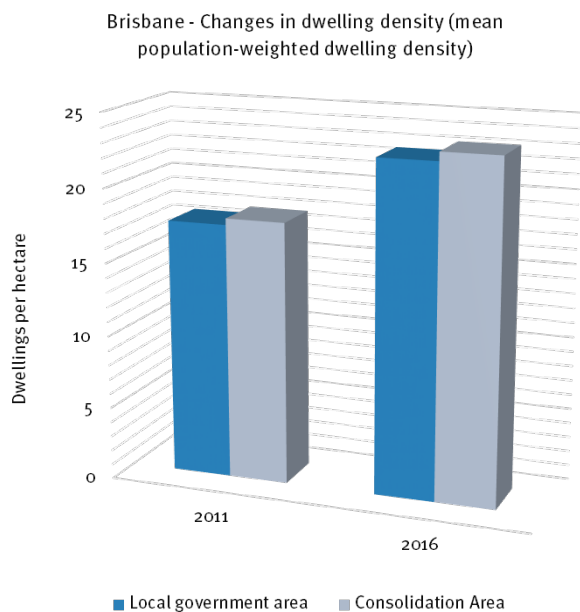
Mean population-weighted dwelling density increased in Brisbane overall between 2011 and 2016, from 17.5 dwellings per hectare to 22.6 dwellings per hectare. This represents the average dwelling density at which the population of Brisbane lives and is comparable to the net residential density as used by *ShapingSEQ 2017*. In the consolidation area, mean population-weighted dwelling density increased from 17.9 to 23.2 dwellings per hectare.

The median lot size for 2020/21 (407m²) has reduced slightly from 2019/20 (408m²). Overall, since 2011/12, the median size of new lots in Brisbane has decreased from 500m² to 407m². This was associated with a general trend to higher lot registrations up to 2016/17, with lot registrations relatively similar since this peak. This measure is also indicative of increased dwelling densities in new urban subdivisions in Brisbane.

Changes to Brisbane's planning scheme and Priority Development Area development schemes over time have contributed to increased planned dwelling densities and encouraged smaller lots. For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – Brisbane

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals indicate an increase in housing diversity in Brisbane, consistent with SEQ's preferred future. Dwelling approvals for 2020/21 indicate a decrease in the proportion of house and middle approvals in Brisbane and an increase in the proportion of high-rise dwelling approvals.

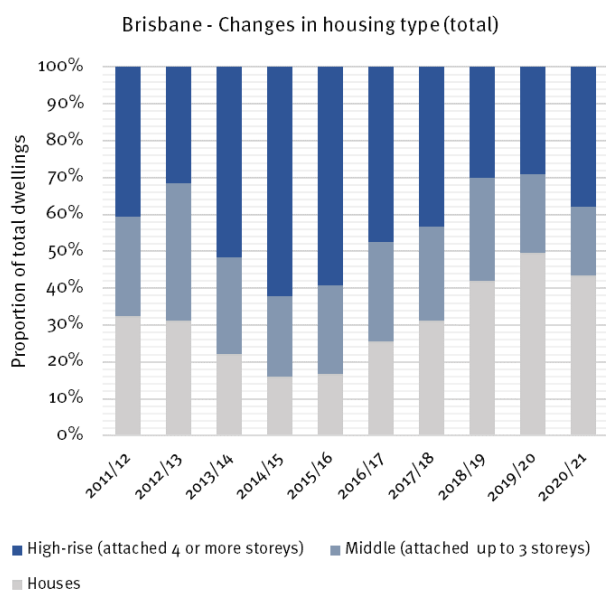
Houses in Brisbane comprised about 36 per cent (16,761 dwellings) of all new dwelling approvals for 2016/17 to 2020/21, which was less than the proportion of existing dwelling stock as at the 2016 Census (66 per cent). However, houses remain the predominant housing type and the proportion of house approvals has increased each year since 2015/16, although decreased slightly in 2020/21. Between 2016/17 and 2020/21 houses comprised 31 per cent of new dwelling approvals in the consolidation area, compared to 86 per cent of new dwelling approvals in the expansion area for the same period.

Between 2016/17 and 2020/21 the proportion of dwelling approvals for middle (25 per cent or 11,266 dwellings) were the same as their share of dwelling stock (25 per cent) as at the 2016 Census. The predominant middle housing type approved in Brisbane since 2016/17 is semi-detached, row or terrace houses and townhouses of two or more storeys (about 77 per cent or 8625 dwellings). About 95 per cent (10,720 dwellings) of middle dwelling approvals for the period between 2016/17 and 2020/21 were located within the consolidation area and about five per cent (546 dwellings) were in the expansion area for the same period.

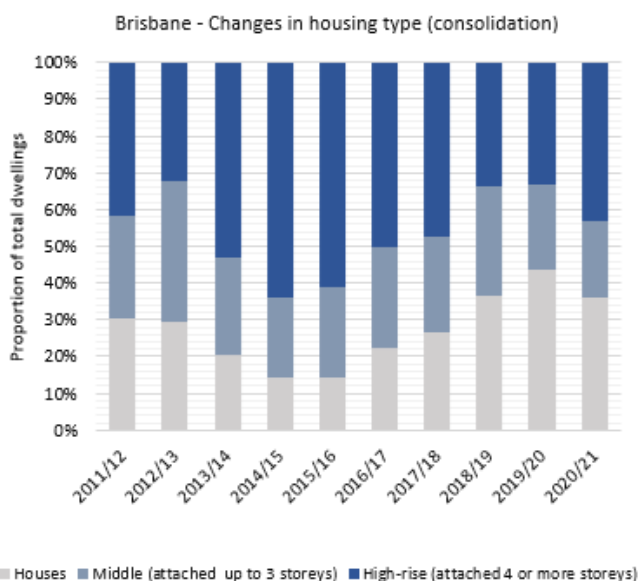
Between 2016/17 and 2020/21 the proportion of dwelling approvals for high-rise (about 39 per cent or 18,044 dwellings) exceeded existing dwelling stock (9 per cent) as at the 2016 Census. For the same period, high-rise comprised 43 per cent of all new dwelling approvals in the consolidation area, compared to about two per cent of all new dwelling approvals in the expansion area for the same period.

From 2016/17 to 2020/21 about 64 per cent (or 11,631 dwellings) of high-rise approvals were nine or more storeys.

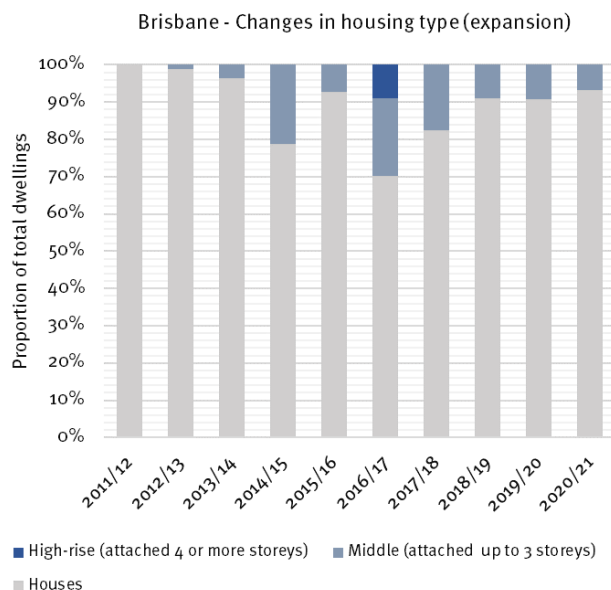
For more detail about dwelling approvals, see the [Technical notes](#).



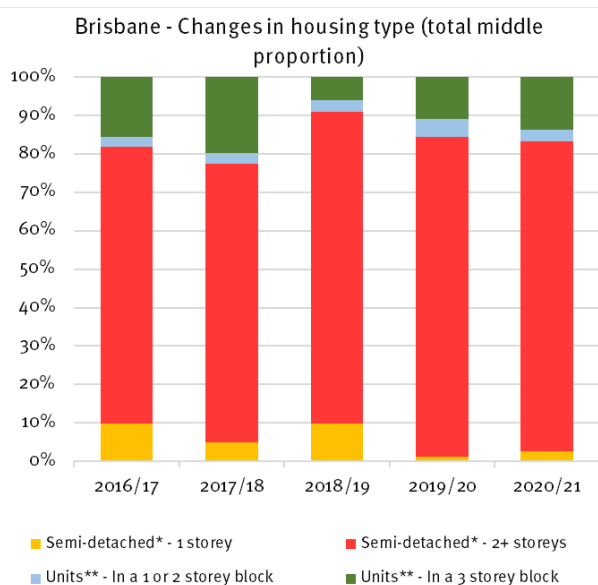
This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the consolidation area.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the expansion area.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of ‘missing middle’ in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the

ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – Brisbane

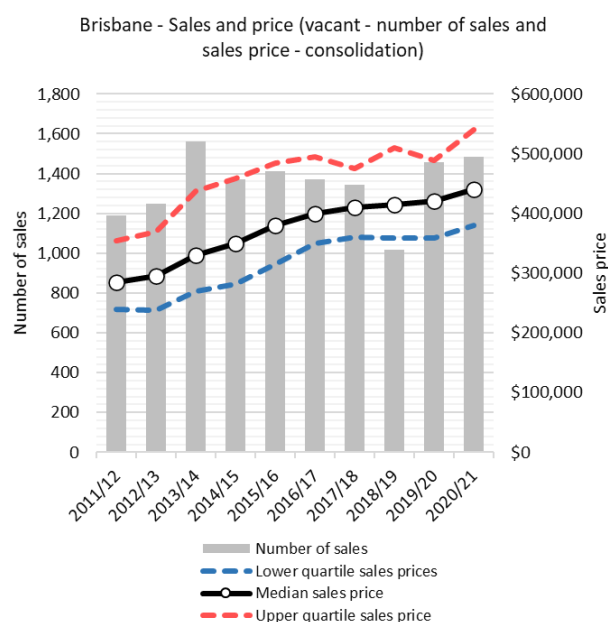
The number of sales has increased each year from 2018/19 to 2020/21 for all categories in Brisbane except house and land packages in the expansion area.

The median sales price in all categories except attached dwellings have shown continued growth over the period 2011/12 to 2020/21 in Brisbane’s consolidation area, and generally for houses and attached dwellings in the expansion area. Median sales prices for vacant land sales (per lot and per square metre) and house and land packages in the expansion area have declined in recent years.

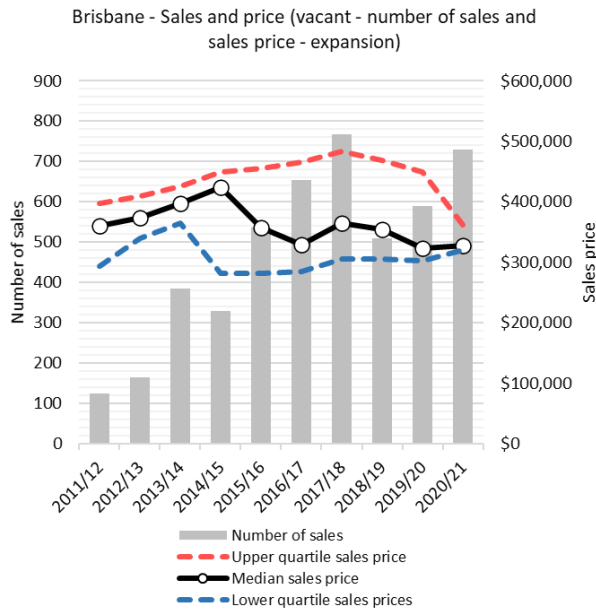
The median sales price for all residential categories in 2020/21 is higher in Brisbane than for SEQ, except for attached dwellings in the consolidation area. The rate of median price growth between 2011/12 and 2020/21 was also higher in Brisbane than for SEQ for vacant lots (per lot and per square metre) in the consolidation area, house and land packages in the consolidation and expansion areas, houses in the consolidation area, and attached dwellings in the expansion area.

In the Brisbane consolidation area, from 2011/12 to 2020/21, the greatest growth in median sales price was for houses (57.4 per cent) and house and land packages (57.4 per cent) followed by vacant lots (54.4 per cent per lot and 67.7 per cent per square metre).

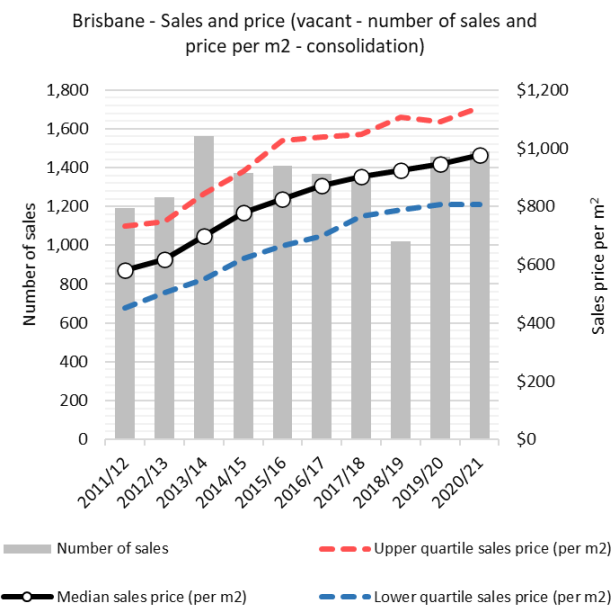
The rate of median price growth was higher in the Brisbane consolidation area than the expansion area for all categories except attached dwellings. For more detail about the median sales price and number of sales, see the [Technical notes](#).



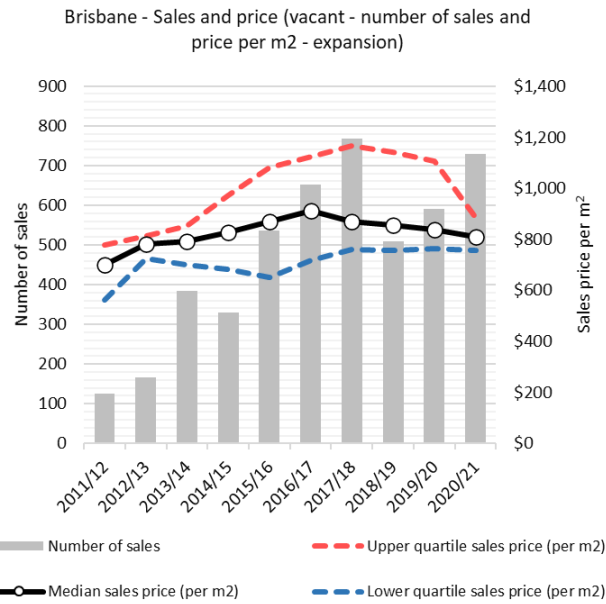
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the consolidation area.



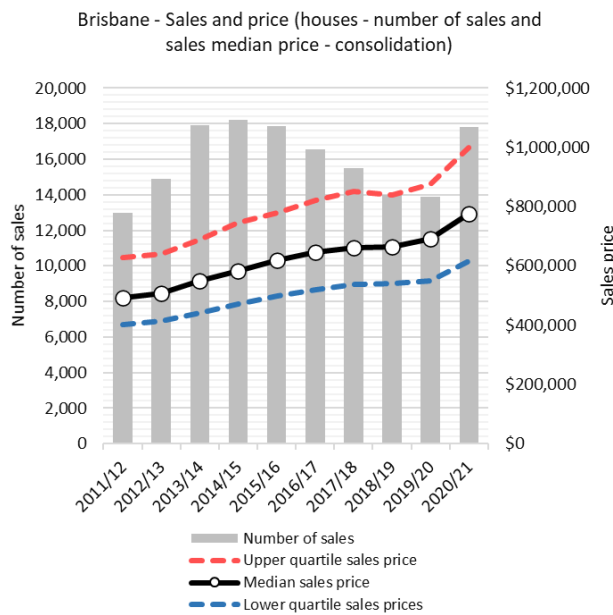
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the expansion area.



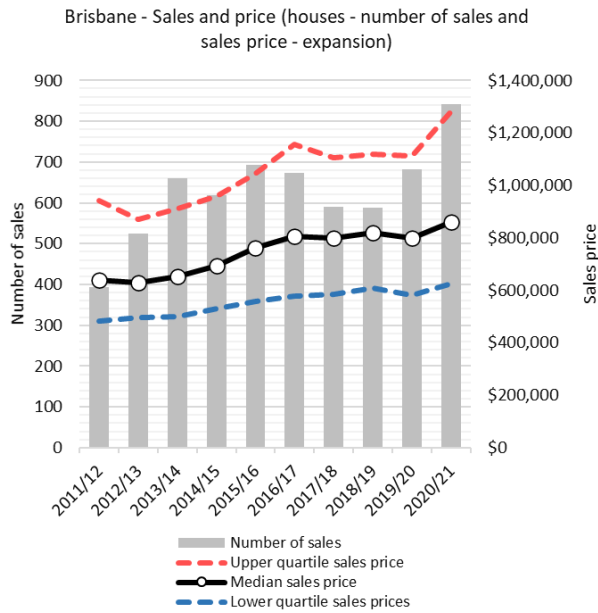
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the consolidation area.



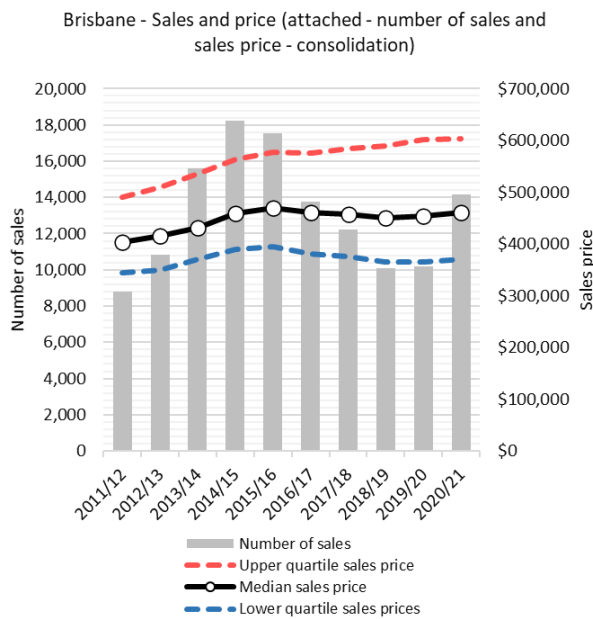
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



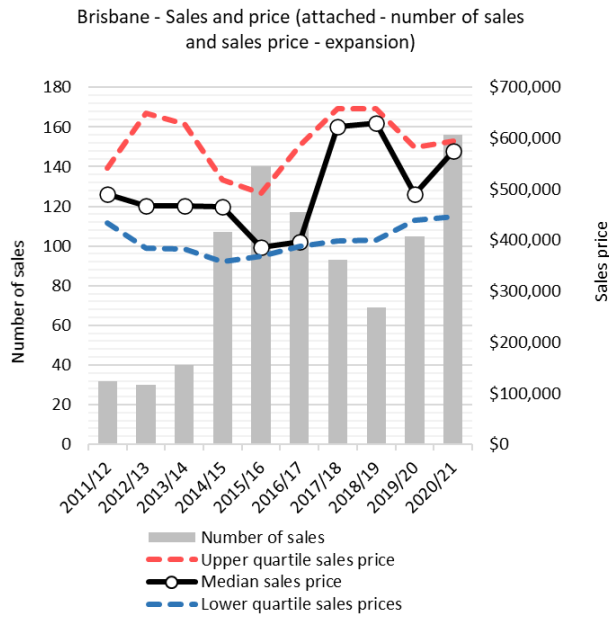
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the consolidation area.



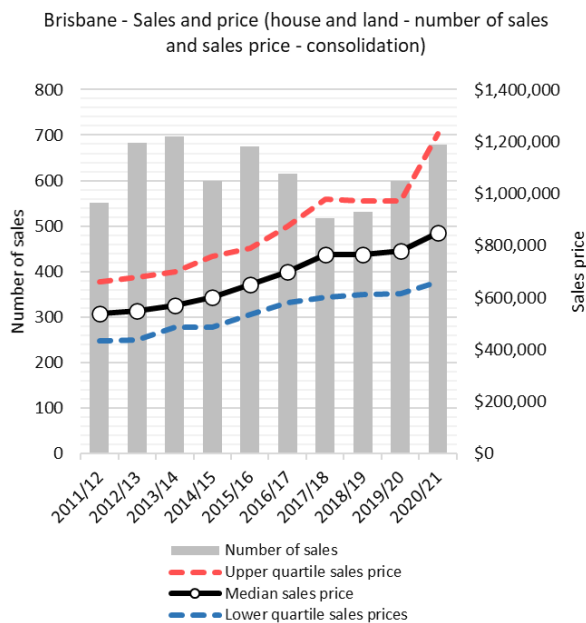
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



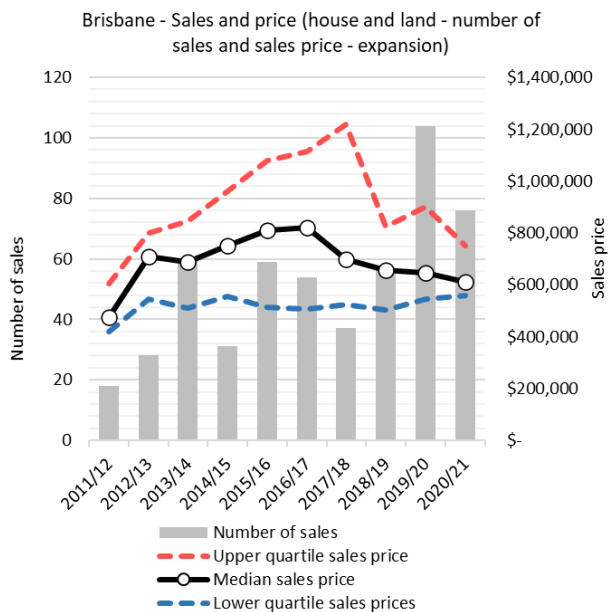
This graph shows the number of sales and the lower, median and upper quartile sales price for attached dwellings in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for house-land packages in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

Industrial – Brisbane

Planned industrial land supply/take-up – Brisbane

The estimated take-up of developed industrial land between 2011 and 2021 in Brisbane was 586 hectares, with 42 hectares taken-up in 2020/21. The majority of this take-up was on land intended for medium impact industry, followed by low impact industry, industry investigation and then high impact industry.

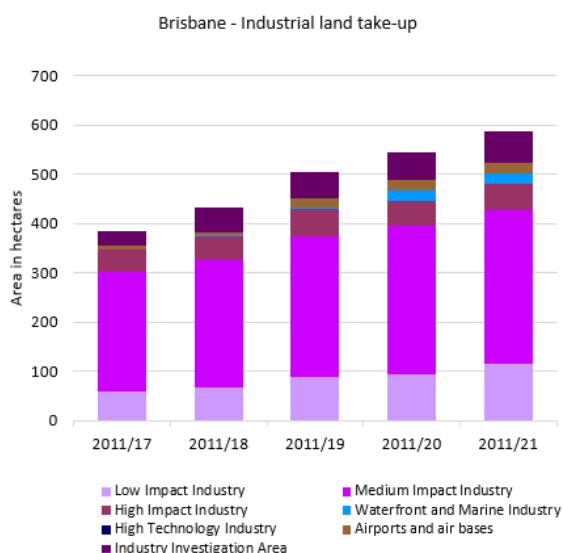
There were about 511 hectares of planned industrial land in Brisbane as at 2021, including serviced and un-serviced land. This planned industrial land comprised land intended for high, medium and low impact industry as well as other land categories, including about 100 hectares each of airports and airbases and industry investigation area.

For more detail about Planned industrial land supply and take-up, see the [Technical notes](#).



511ha of developable land

This graph shows the number of hectares of planned industrial land supply as at 2021 by industrial land category.



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of planned industrial land supply. Further, Planned

industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

The department has continued to build on work undertaken through [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. This higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – Brisbane

The capacity and realistic availability of planned industrial employment supply in Brisbane provide the minimum 15 years of supply of land sought by *ShapingSEQ 2017* (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for Brisbane is equivalent to about 50,500 jobs on the graph.

The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. It is calculated from the Non-Residential dataset supplied by Brisbane City Council to reflect LGIP v1 (February 2016). The realistic availability figure provides a supply scenario that assumes some of the capacity is not realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

The realistic availability scenario is informed by updated developable area data (to 2021), as reported in the Planned industrial land supply and take-up section of this report, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

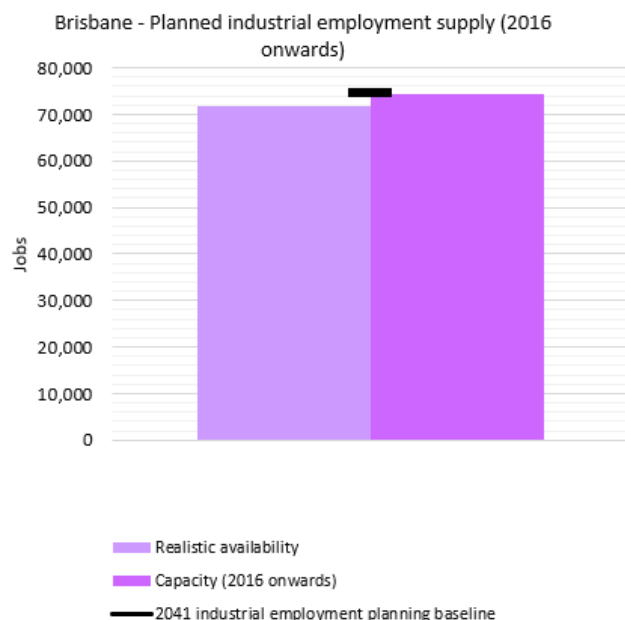
The capacity of planned industrial employment supply in Brisbane (from 2016 onwards) is about 74,500 employees, while the realistic availability of this supply is about 71,700 employees. Both figures are very slightly below the 2041 industrial employment planning baseline of about 74,700 employees. The capacity figure is about 24 years of supply and the realistic availability figure represents about 23 years of supply (from 2021 onwards).

The realisation of this planned industrial employment supply in Brisbane would be supported by the development of the Melbourne to Brisbane Inland Rail and improved connections to the Port of Brisbane.

There are planning and development scheme amendments, either recently adopted or in process, that may affect planned industrial employment supply in Brisbane. Our Productive City: Brisbane's

Industrial Future released by Brisbane City Council for consultation in mid-2021 informs the nature of industrial land development and employment in Brisbane over time. Where amendments proceed, and data sources are updated, their effect on industrial employment supply will be included in future years of LSDM reporting.

For more detail about the calculation of planned industrial employment supply, and identification of relevant planning and development scheme amendments, see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017's* 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program Delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

Future [Best practice research](#) could consider the availability of data to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the present year. Current years of supply figures (from 2021 onwards) are indicative estimates, effectively assuming the same average annual rate of take-up of employment supply from 2016 to

2021 as the average annual *ShapingSEQ* 2017 employment planning baseline growth from 2016 to 2031.

Gold Coast

Summary

ShapingSEQ 2017 establishes that Gold Coast's expected population growth will require an additional 158,900 dwellings between 2016 and 2041, through its dwelling supply benchmarks.

The capacity and realistic availability of planned dwelling supply in the Gold Coast consolidation and expansion areas provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017*.

There are 2.1 years of supply of uncompleted lot approvals on the Gold Coast, which is below the minimum four years of supply sought by *ShapingSEQ 2017*. The total number of uncompleted lot approvals has been declining since 2011/12. As the supply of expansion land diminishes, it is expected that the supply of uncompleted lot approvals and lot creation would reduce to lower levels. The Growth Areas Team was established in early 2021 to assist in addressing land supply challenges across SEQ including the Gold Coast. This includes a remit to work collaboratively with local governments, utility providers and the development industry to better match the demands for land and affordable and diverse housing with supply. For further information see Growth Areas Team.

In contrast, there are about 11.7 years of supply of uncompleted multiple dwelling approvals in the Gold Coast consolidation area.

Dwelling growth in Gold Coast increased by 16 per cent when compared to the total dwelling approvals recorded in 2019/20. Annual dwelling approvals have continued to remain above the benchmark in the expansion area, however dwelling approvals in the consolidation area remain below the consolidation average annual benchmark. Growth in the consolidation area should proportionately increase as expansion land supply diminishes and consolidation capacity increases through amended planning and development schemes. This could be supported by the provision of key regional transport infrastructure, such as the current Stage 3 extension of the Gold Coast Light Rail from Broadbeach to Burleigh Heads (6.7 km) and future Stage 4 extension from Burleigh to Coolangatta (13 km).

Recent dwelling approvals on the Gold Coast indicate a lower proportion of house approvals and a higher proportion of high-rise approvals, relative to existing dwelling stock, consistent with SEQ's preferred future. Of middle dwelling approvals since 2016/17, the predominant middle housing type on the Gold Coast is semi-detached, row or terrace housing and townhouses of two or more storeys. Dwelling density on the Gold Coast has increased in accordance with SEQ's preferred future.

The capacity and realistic availability of planned industrial employment supply on the Gold Coast exceed the 15 years of supply sought by *ShapingSEQ 2017* and exceed the 2041 industrial employment planning baseline. The estimated take-up of developed industrial land between 2011 and 2021 on the Gold Coast was about 303 hectares, with about 426 hectares of planned industrial land existing as at 2021.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ 2017*, [click here](#).

- a map of the urban footprint defined by *ShapingSEQ* 2017, [click here](#).

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data to 30 June 2021, where available at the time of reporting, and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of COVID-19 and government stimulus and investment. These impacts may vary across the region, recognising that the economy and housing markets operate differently in different areas of SEQ. Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – Gold Coast

Planned dwelling supply – Gold Coast

The capacity and realistic availability of planned dwelling supply in the Gold Coast consolidation and expansion areas provide more than the minimum 15 years of supply sought by *ShapingSEQ* 2017.

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. It is calculated from the LGIP Extrinsic Material Report (Planning Assumptions) (June 2017) prepared by City of Gold Coast Council. The realistic availability figure provides a land supply scenario prepared for this report that considers whether capacity is realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

The realistic availability scenario uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

In the Gold Coast consolidation area, the capacity of planned dwelling supply, from 2021 onwards, is about 122,800 dwellings. This represents 25 years of supply and about 14,000 more than the consolidation 2041 dwelling supply benchmark (from 2021 onwards) of about 108,800 dwellings.

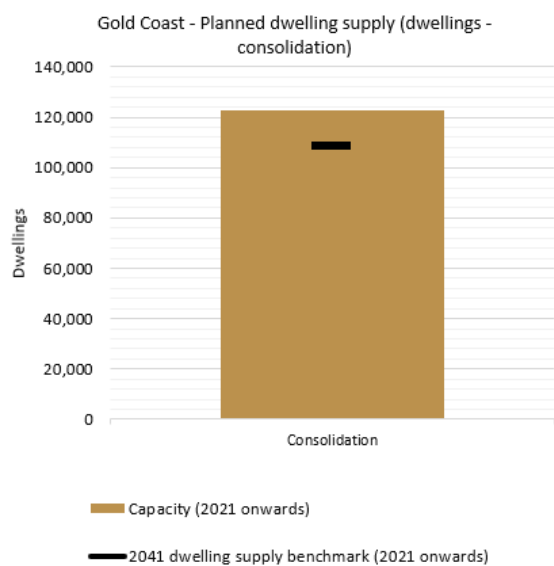
In the Gold Coast expansion area, the capacity and realistic availability of planned dwelling supply, from 2021 onwards, are about 35,100 and 23,900 dwellings respectively. The capacity and realistic availability of planned dwelling supply are above the expansion 2041 dwelling supply benchmark

(from 2021 onwards) of about 19,200 dwellings. It is noted that most of the remaining supply is for dwellings other than houses.

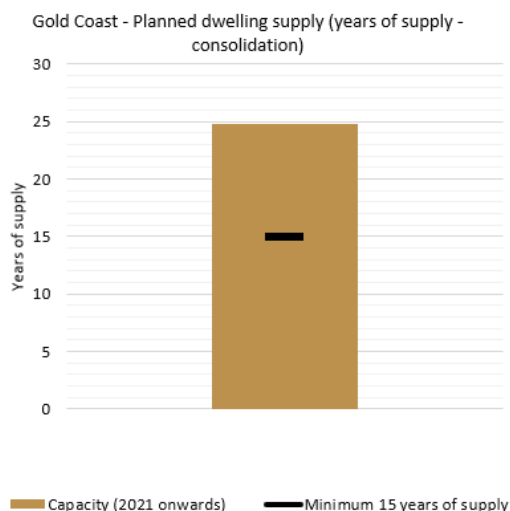
Realisation of planned dwelling supply in the Gold Coast consolidation area will require, in some locations, the redevelopment of existing attached dwellings, and would be supported by extension of high-frequency public transport connections, including light rail services from Broadbeach to Coolangatta, as identified in *ShapingSEQ* 2017 and the State Infrastructure Plan. Early works are underway for Stage 3 of the Gold Coast Light Rail from Broadbeach to Burleigh Heads and a preliminary business case is being prepared for Stage 4 to Coolangatta.

As indicated in Dwelling growth, on average the take-up of planned dwelling supply since 2016 is significantly slower than the average annual benchmark used to calculate years of supply in the consolidation area, but average take-up since 2016 is faster than the average annual benchmark for the expansion area. Given the limited expansion supply planned for Gold Coast, particularly that planned for houses, it is to be expected that take-up in the early years from 2016 will be faster than in later years.

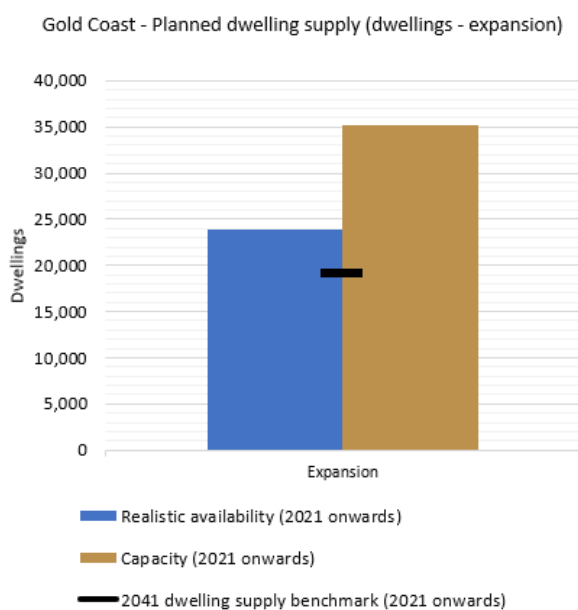
For more detail about the calculation of planned dwelling supply, including years of supply, and a list of planning and development scheme amendments recently adopted or in process for Gold Coast that may affect planned dwelling supply, see the [Technical notes](#).



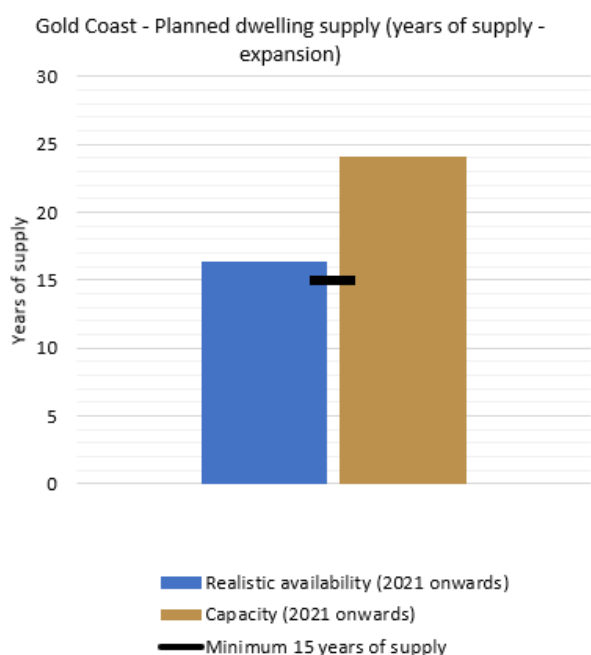
This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017's dwelling supply benchmark (from 2021 onwards) in the consolidation area. This accounts for the 2016/21 constructed dwellings estimate of 19,117. To view a fact sheet explaining the calculation of remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s minimum 15 years of supply policy objective in consolidation areas.



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the expansion area. This accounts for the 2016/21 constructed dwellings estimate of 11,788. To view fact sheets on the concept of realistic availability, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017*'s minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent and up-to-date over time, improving the comparability and currency of supply estimates. These improvements can be reflected in future publications of the Land Supply and Development Monitoring (LSDM) Report.

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ 2017*'s dwelling supply benchmarks. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region's planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state and local constraints
- recent amendments to the planning scheme and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

The City of Gold Coast in collaboration with the Griffith University Cities Research Institute (GU-CRI) has developed an urban growth model called Planning & Urban Growth (PUG). Once approved by council, the growth projections delivered by the PUG model will be used to inform a major amendment to the Local Government Infrastructure Plan (LGIP). The PUG is also jointly funded by

the Queensland Government Round 2 Innovation Funding program to assist City of Gold Coast to develop a more reliable and consistent urban modelling framework to inform future amendment to City Plan and LGIP.

Significant re-baselining of the existing land use database against the ABS 2016 Population Census data was completed by the project to ensure the model is as consistent with the Census as possible. The PUG model has also taken into consideration all development and building approvals up to a point in time (being February 2019) to ensure investments by the development industry sector are captured and accounted for in development projections. The City of Gold Coast with support of the GU-CRI has also recalibrated the realistic estimation of development yields at small area level across all land use designations and zonings on the Gold Coast in order to establish a more reliable and realistic ultimate development scenario. This is a clear shift in the consideration of development capacity from the conventional “ultimate capacity at 50 years horizon” nominal approach commonly adopted by various councils and utility providers.

The preliminary findings and assessment of the PUG model works have revealed that City of Gold Coast has more realistic ultimate development capacity post 2041 and 2066 horizons based on designations in the current City Plan. Once finalised, outputs from the PUG model are expected to inform future LSDM reports.

Approved supply – Gold Coast

Approved supply is measured by analysing uncompleted lot approvals and uncompleted multiple dwelling approvals across Gold Coast.

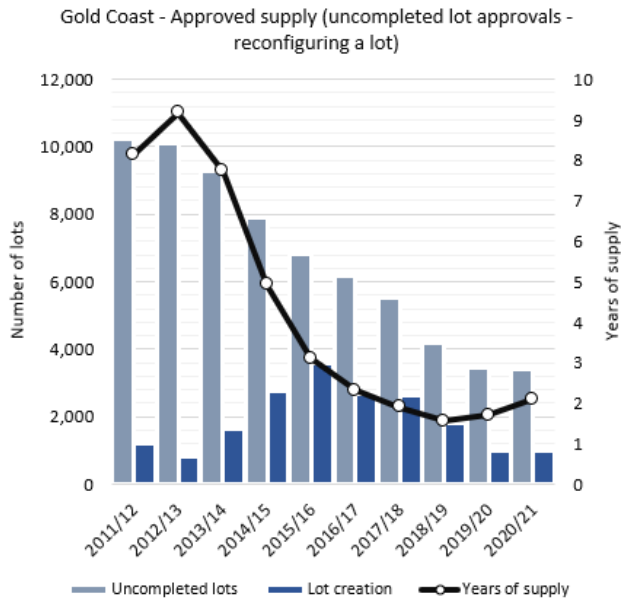
There are 2.1 years of supply of uncompleted lot approvals in the Gold Coast consolidation and expansion areas overall, less than the minimum four years of supply sought by *ShapingSEQ 2017*. The total number of uncompleted lot approvals has decreased slightly in 2020/21. Lot creation has generally declined over the past five years, with a slight decrease in the rate of lot creation in 2020/21. The total number of current uncompleted lot approvals was 3401 for 2020/21.

Of these uncompleted lots, about 32.5 per cent (1105) had operational works approvals. This represents the number of lots which are readily available for construction in the short term.

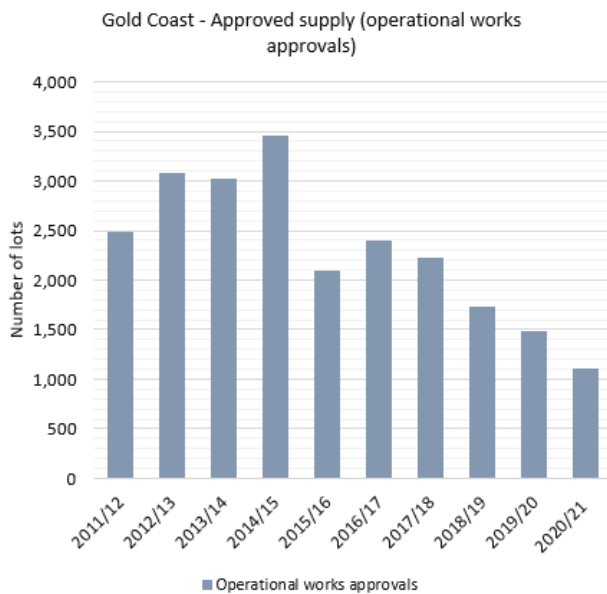
This decline in the supply of uncompleted lots is being monitored. The Growth Areas Team was established in March 2021 to assist in addressing land supply challenges across SEQ including Gold Coast. This includes a remit to work collaboratively with local governments, utility providers and the development industry to facilitate the delivery of land and affordable and diverse housing supply. For further information see Growth Areas Team.

In contrast, Gold Coast has about 11.7 years of supply of uncompleted multiple dwelling approvals in the consolidation area, well above the minimum four years of supply sought by *ShapingSEQ 2017*. The number of uncompleted multiple dwelling approvals has remained relatively consistent since 2018.

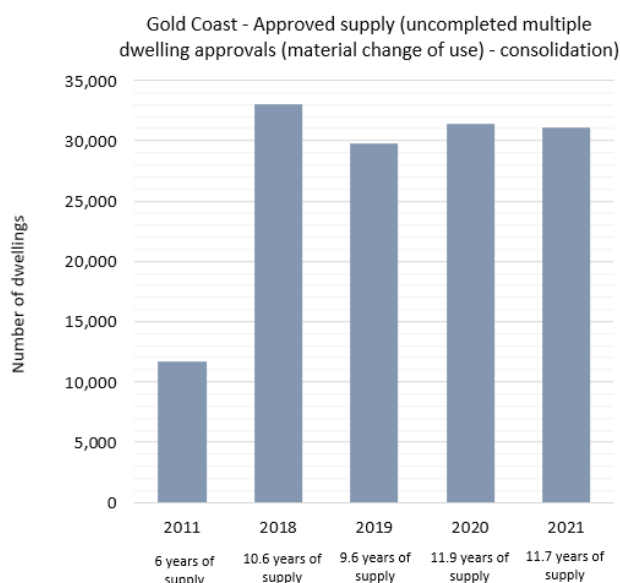
For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical notes](#).



This graph shows the number of lots that have a development permit, but have not yet been certified (uncompleted lots) as at 30 June each year as well as the number of lots that have been created (certified) in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.



This graph shows the number of multiple dwellings that have a material change of use development permit but have not yet been constructed (uncompleted multiple dwellings) in the consolidation area as at 30 June for all reported years.

Note: The years of supply for uncompleted multiple dwelling approvals is determined by dividing the total number of uncompleted multiple dwellings by the average annual attached dwelling building approvals of the previous four years. The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – Gold Coast

In 2020/21, 5209 dwelling approvals were recorded for Gold Coast at a rate of 434 dwellings per month. This represents a 16 per cent increase when compared to the total dwelling approvals recorded in 2019/20. When compared to long-term averages, the 2020/21 dwelling approvals is slightly below the five-year average of 5560 and slightly above the ten-year average of 5084 dwelling approvals.

The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see [Market Factors](#).

Within the Gold Coast consolidation area, there were 3699 dwelling approvals in 2020/21, which was 1244 fewer than the consolidation average annual benchmark of 4943 additional dwellings. This continues the trend of Gold Coast being below the consolidation average annual benchmark since they were set under *ShapingSEQ 2017*. This matter continues to be monitored and the department is working with City of Gold Coast to understand the trend and any measures that aim to address this

Over the same period, there were 1510 dwelling approvals in the Gold Coast expansion area, which was 55 dwellings more than the expansion average annual benchmark of 1455 additional dwellings. This has resulted in the continuation of the trend of dwelling approvals consistently exceeding the expansion average annual benchmark, although it is noted that there has been a general decline since its peak in 2016/17.

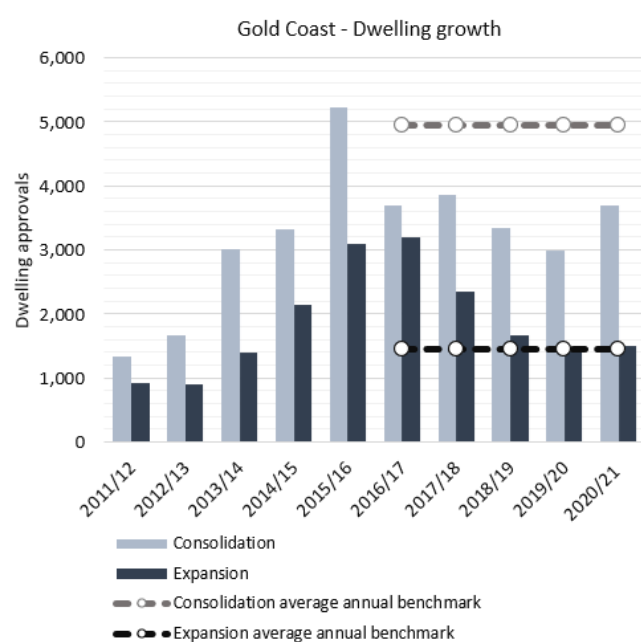
From 2016/17 to 2020/21 approximately 63 per cent of dwelling approvals were in the consolidation area which is less than its expected share of 77 per cent. Approximately 37 per cent of dwelling approvals were in the Gold Coast expansion area over the same period, which exceeded its expected share of dwelling growth to 2031 identified in *ShapingSEQ 2017* (23 per cent).

The data shows the gap between dwelling growth figures and the *ShapingSEQ 2017* benchmarks, which may lead to a challenge in addressing this shortfall into the future. However, growth in the consolidation area should proportionately increase as expansion land supply diminishes and consolidation capacity increases through amended planning and development schemes.

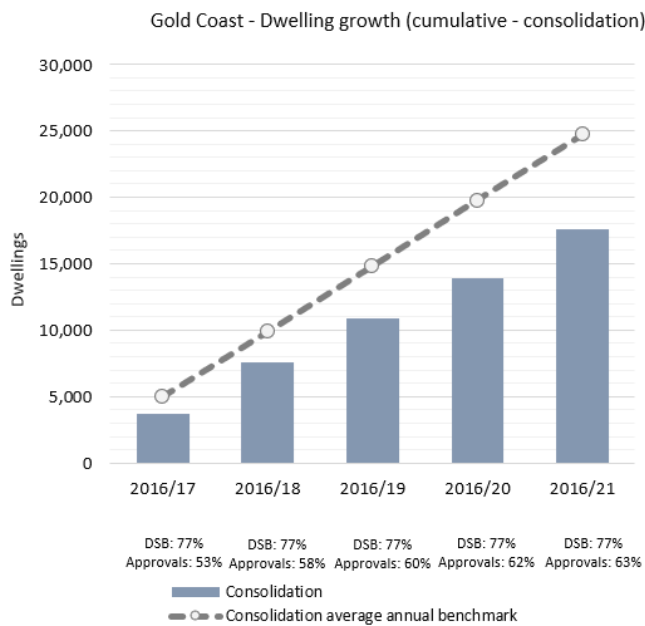
This could be supported by the provision of key regional transport infrastructure such as the current Stage 3 extension of the Gold Coast Light Rail from Broadbeach to Burleigh Heads (6.7 km) and future Stage 4 extension from Burleigh Heads to Coolangatta (13 km).

Further, the Growth Areas Team was established in early 2021 to assist in addressing land supply challenges across SEQ including Gold Coast. This includes a remit to work collaboratively with local governments, utility providers and the development industry to better match the demands for land and affordable and diverse housing with supply.

For more information about improvements to the measurement of net growth over time, see [Program Delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).

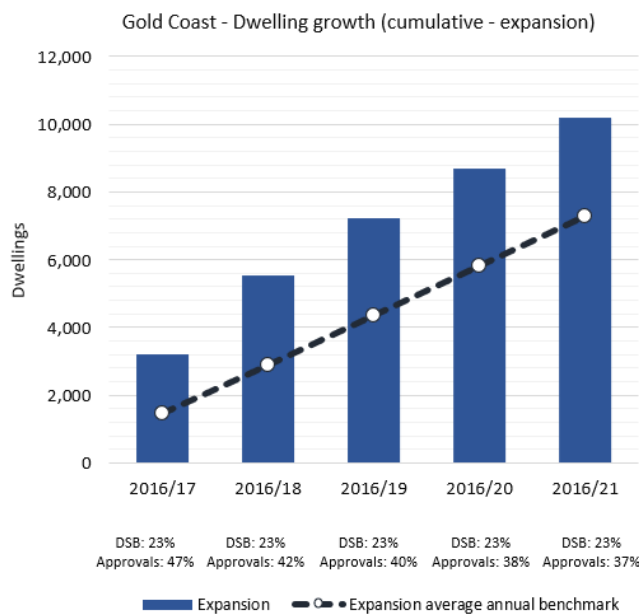


This graph shows annual dwelling approvals compared against *ShapingSEQ 2017*'s average annual benchmarks.



This graph shows the cumulative dwelling growth in the consolidation area against *ShapingSEQ* 2017’s consolidation average annual benchmark.

Note: DSB = Dwelling Supply Benchmark



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ* 2017’s expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the 2018 Queensland Government dwelling projections for SEQ. This adjustment resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has

been retained in the 2020 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

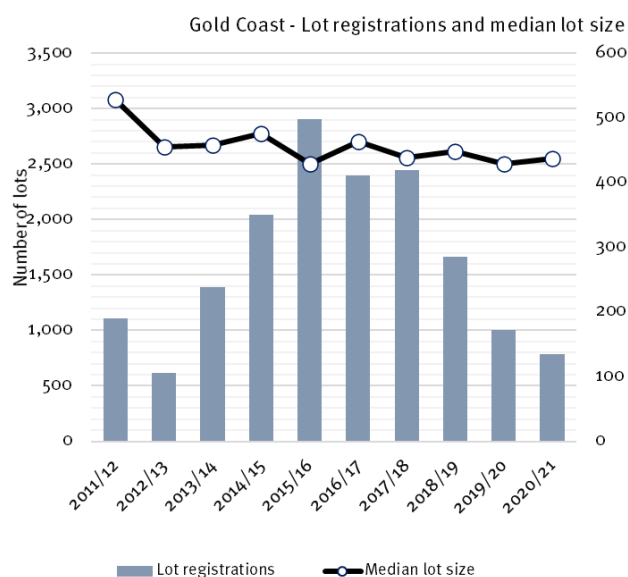
Changes in dwelling density – Gold Coast

Dwelling density (measured through median lot sizes and mean population-weighted dwelling density) is increasing on the Gold Coast in accordance with SEQ's preferred future for higher dwelling densities and smaller lots.

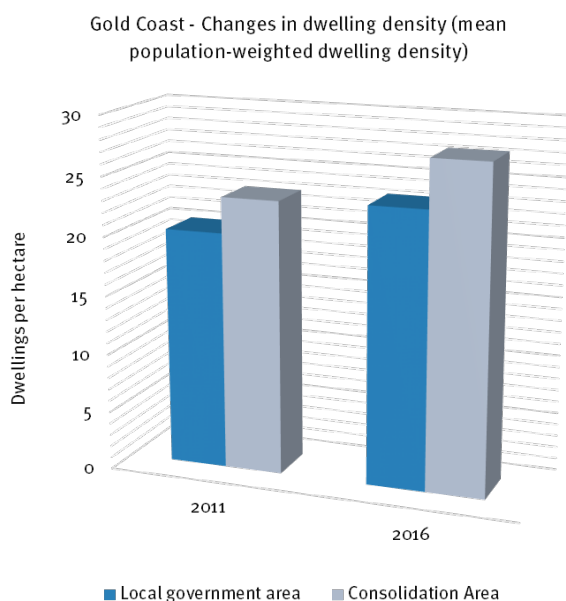
Mean population-weighted dwelling density increased on the Gold Coast overall between 2011 and 2016, from 20.2 to 23.4 dwellings per hectare. This represents the average dwelling density at which the population of Gold Coast lives and is comparable to the net residential density as used by *ShapingSEQ 2017*. In the consolidation area, mean population-weighted dwelling density increased from 23.2 to 27.5 dwellings per hectare.

From 2019/20 to 2020/21 the median size of new lots on the Gold Coast increased slightly from 429m² to 437m². However, since 2011/12 the overall the median size of new lots has decreased from 529m² to 437m² in 2020/21. This was associated with a general trend to higher lot registrations up to 2015/16 followed by a general decline since.

For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – Gold Coast

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals indicate a decrease in the proportion of houses and an increase in the proportion of high-rise on the Gold Coast. This is consistent with SEQ's preferred future to provide greater diversity of housing.

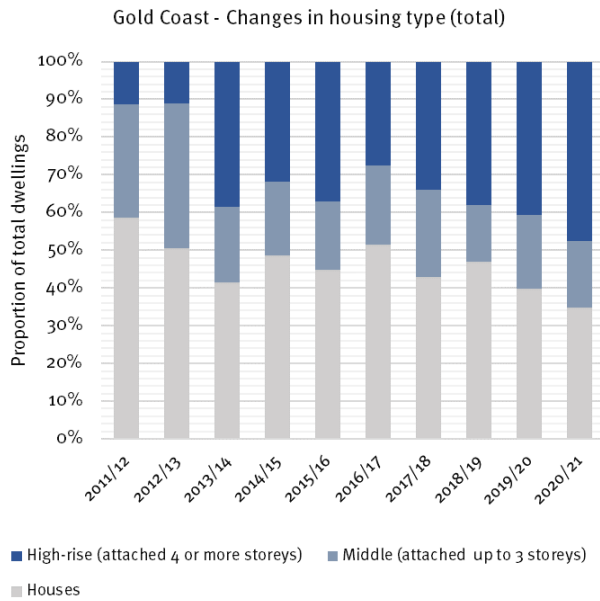
Forty-four per cent (12,176 dwellings) of new dwelling approvals on the Gold Coast from 2016/17 to 2020/21 were for houses, which was less than their proportion of the existing dwelling stock as at the 2016 Census (56 per cent). Between 2016/17 and 2020/21 houses comprised 23 per cent of new dwelling approvals in the consolidation area, compared to 79 per cent of new dwelling approvals in the expansion area for the same period.

Dwelling approvals for middle (20 per cent or 5422 dwellings) were proportionately less than the share of existing dwellings as at the 2016 Census (32 per cent). The predominant middle housing type dwellings approved since 2016/17 on the Gold Coast are semi-detached, row or terrace houses and townhouses of two or more storeys (about 77 per cent or 4146 dwellings). About 61 per cent (3322 dwellings) of middle dwelling approvals for the period between 2016/17 and 2020/21 were located within the consolidation area and about 39 per cent (2100 dwellings) were located within the expansion area for the same period.

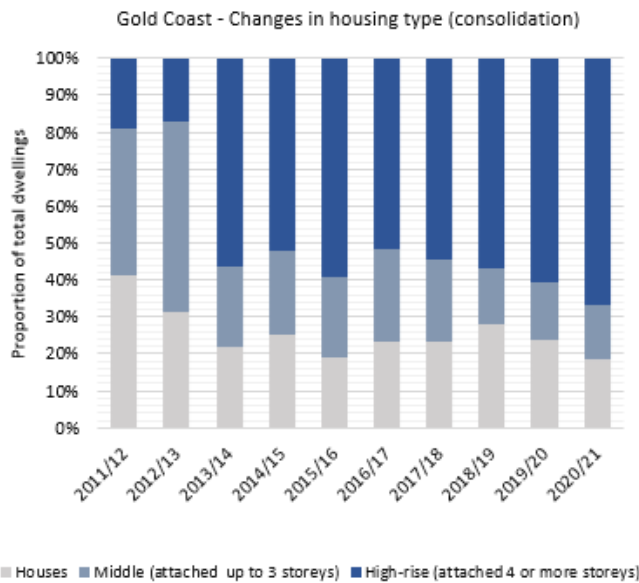
The proportion of dwelling approvals for high-rise (37 per cent or 10,200 dwellings) exceeded their proportion of the existing dwelling stock as at the 2016 Census (12 per cent). Between 2016/17 and 2020/21 high-rise comprised 58 per cent of new dwelling approvals in the consolidation area, whilst there were no new dwelling approvals for high-rise in the expansion area for the same period.

From 2016/17 to 2020/21 about 75 per cent (7674 dwellings) of high-rise approvals were nine or more storeys.

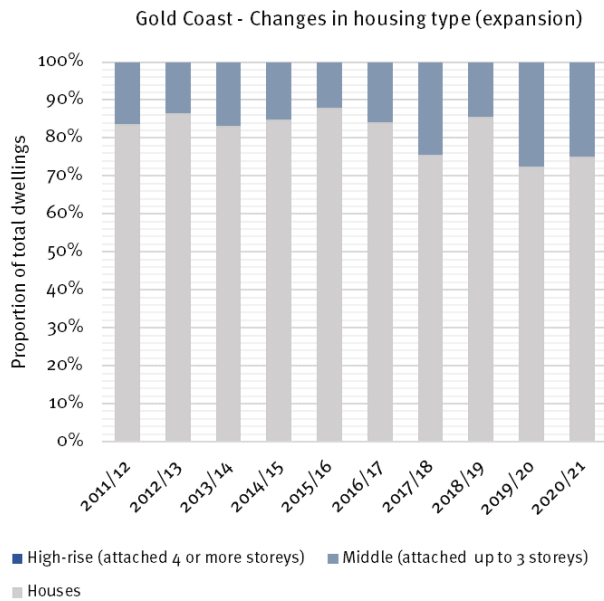
For more detail about dwelling approvals, see the [Technical notes](#).



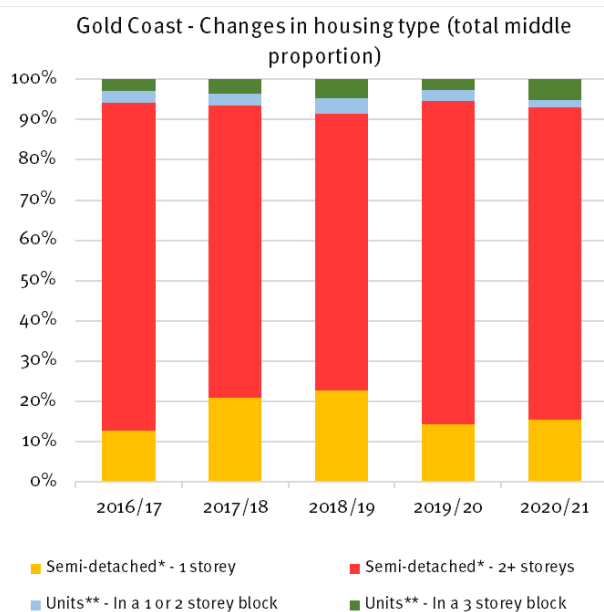
This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the consolidation area.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the expansion area.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of 'missing middle' in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes.

For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – Gold Coast

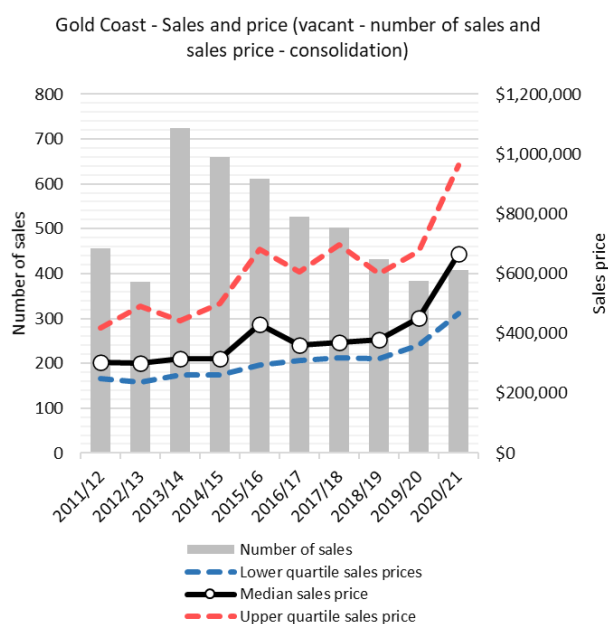
The number of sales has increased from 2018/19 to 2020/21 for all categories on the Gold Coast, except vacant lots in the expansion area, which have decreased.

The median sales price for all categories on the Gold Coast has increased over the period 2011/12 to 2020/21. However, over the period 2017/18 to 2020/21 sales prices for attached dwellings in the expansion area and house and land packages have shown little growth.

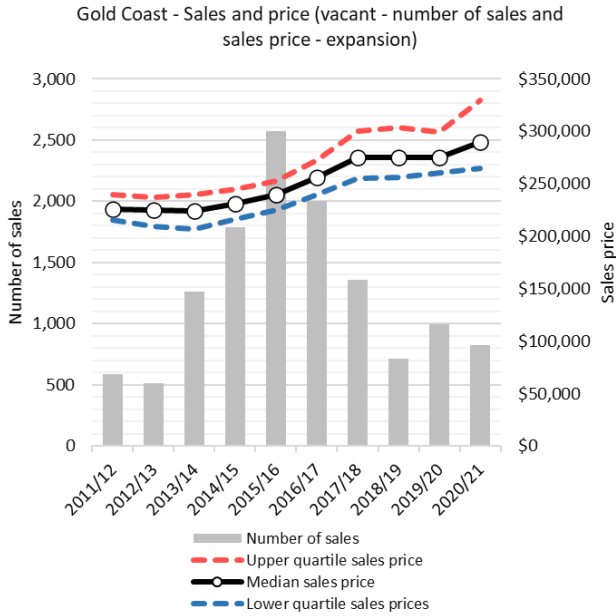
The median sales price for all categories in 2020/21 is higher on the Gold Coast than for SEQ overall. The rate of median price growth between 2011/12 and 2020/21 was also higher on the Gold Coast than SEQ for all categories.

Over the 2011/12 to 2020/21 period, the greatest growth in median sales price within Gold Coast was for vacant lots (120.2 per cent per lot and 127.8 per cent per square metre) in the consolidation area.

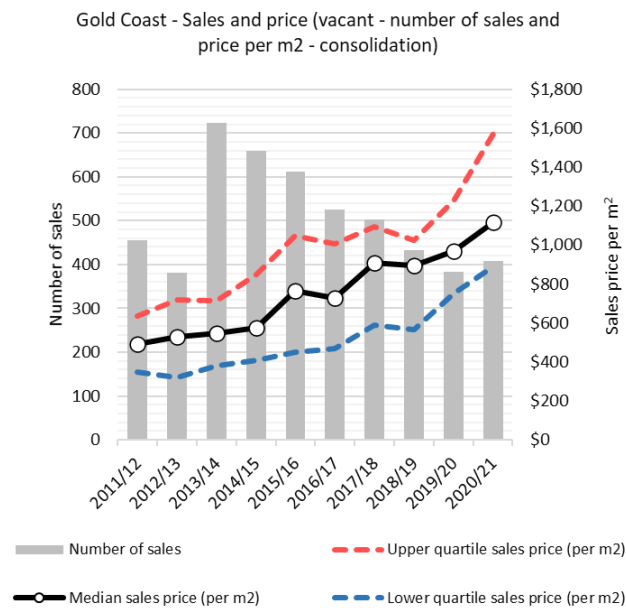
For more detail about the median sales price and number of sales, see the [Technical notes](#).



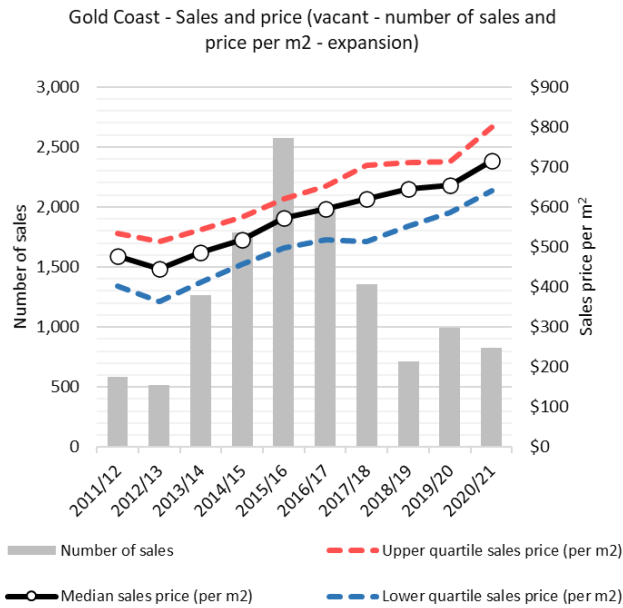
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the consolidation area.



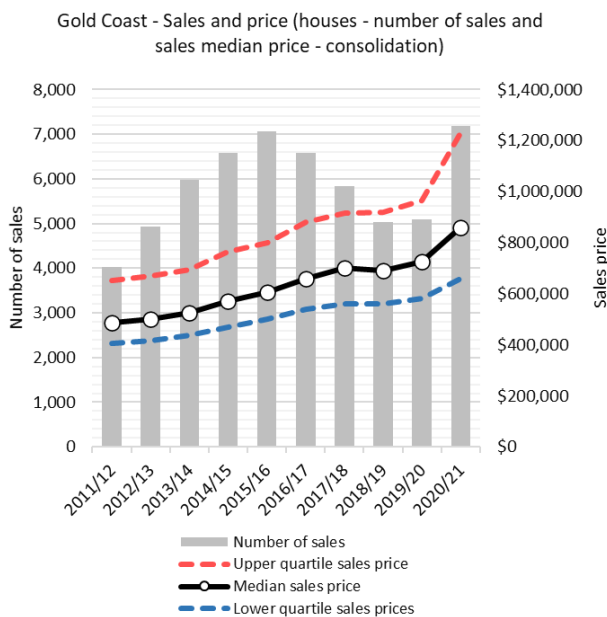
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the expansion area.



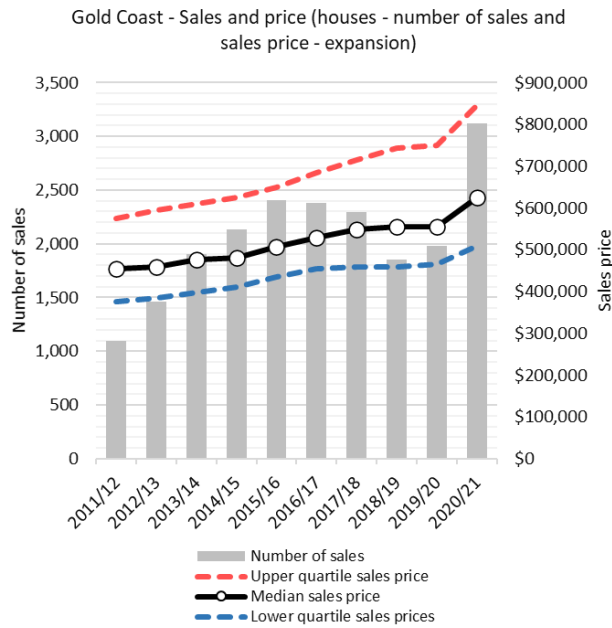
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the consolidation area.



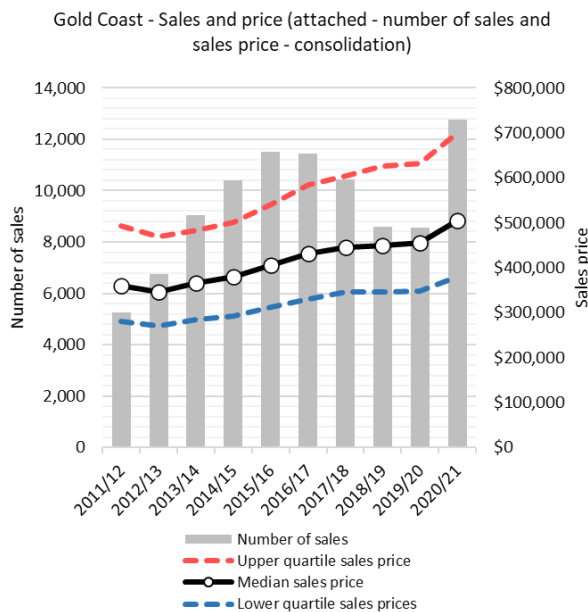
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



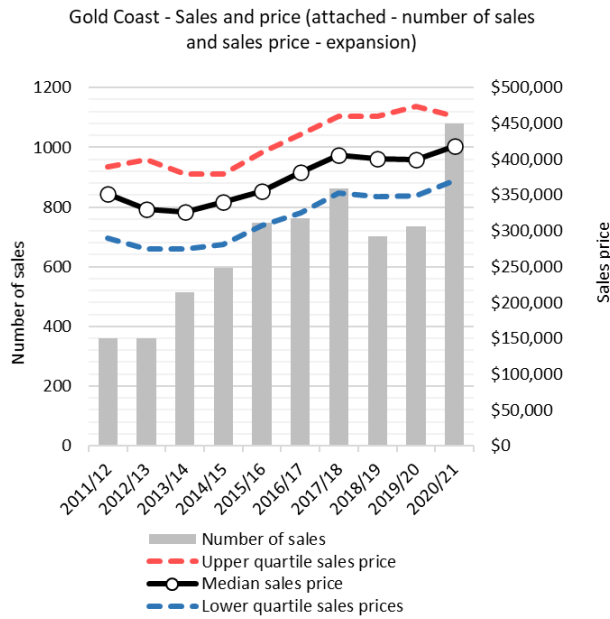
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the consolidation area.



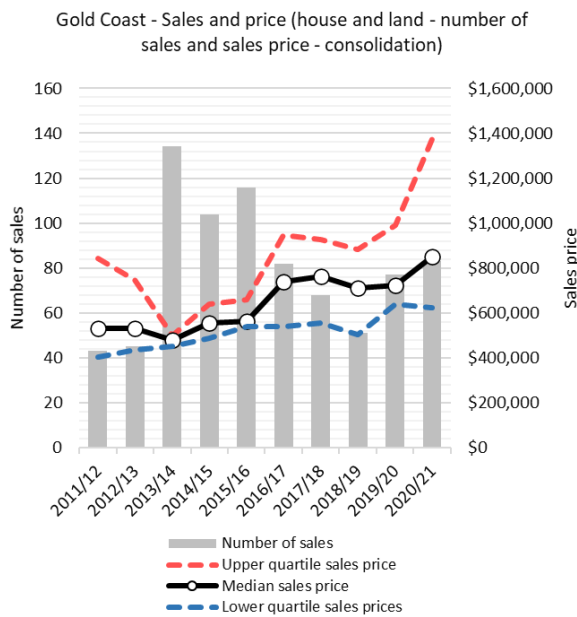
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



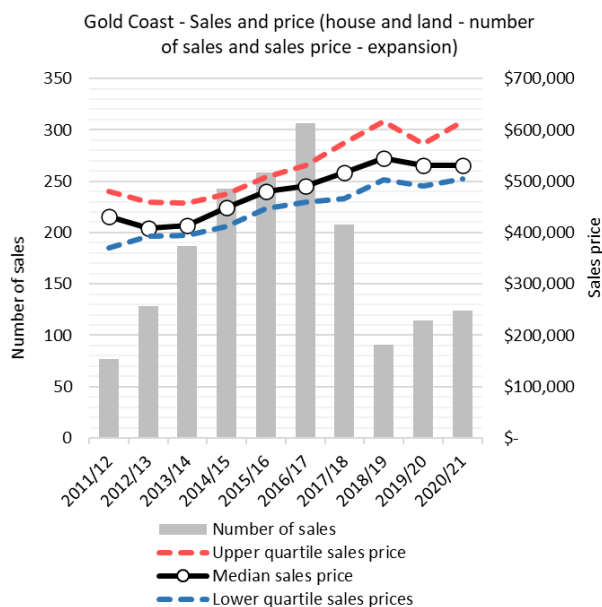
This graph shows the number of sales and the lower, median and upper quartile sales price for attached dwellings in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for house-land packages in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

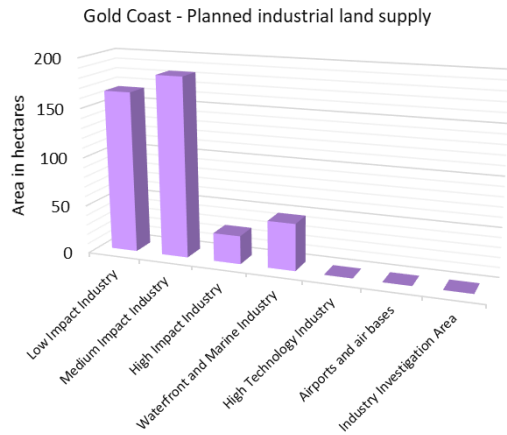
Industrial – Gold Coast

Planned industrial land supply/take-up – Gold Coast

About 303 hectares of developed industrial land was taken up on the Gold Coast between 2011 and 2021, with about 21 hectares taken-up in 2020/21. The take-up occurred mostly on land intended for low, medium, and high impact industry and then waterfront and marine industry.

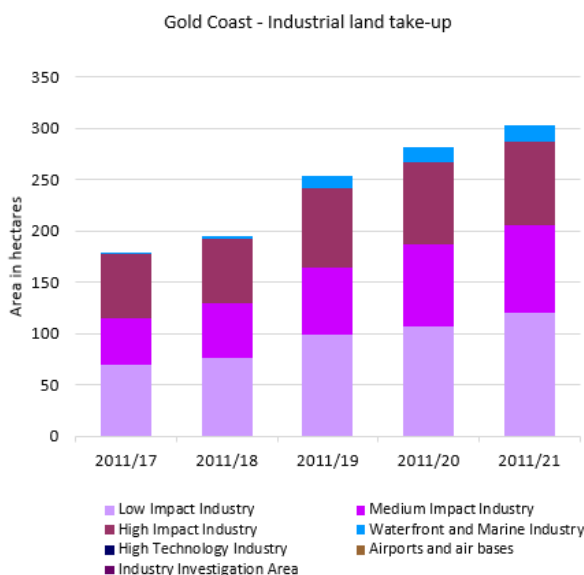
There were about 426 hectares of planned industrial land supply on the Gold Coast as at 2021, including serviced and un-serviced land. The majority of planned industrial land supply is intended for medium and low impact industry, followed by waterfront and marine industry and high impact industry.

For more detail about Planned industrial land supply and take-up, see the [Technical notes](#).



426ha of developable land

This graph shows the number of hectares of planned industrial land supply as at 2021 by industrial land category.



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of planned industrial land supply. Further, Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

The department has continued to build on work undertaken through [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. The higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – Gold Coast

The capacity and realistic availability of planned industrial employment supply on the Gold Coast provide the minimum 15 years of supply of land sought by *ShapingSEQ 2017* (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for Gold Coast is equivalent to about 11,900 jobs on the graph.

The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. It is calculated from the LGIP Extrinsic Material Report (Planning Assumptions) (June 2017) prepared by City of Gold Coast Council. The realistic availability figure provides a supply scenario prepared for this report that considers whether some of the capacity is not realistically available by 2041.

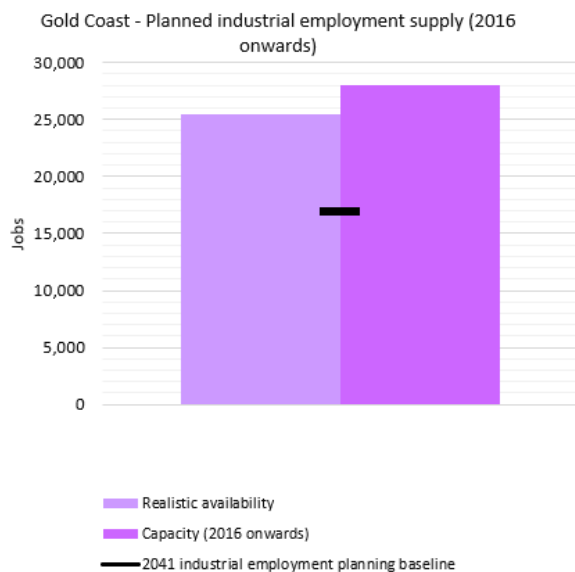
The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

The realistic availability scenario is informed by updated developable area data (to 2021), as reported in Planned industrial land supply and take-up, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

The capacity of planned industrial employment supply on the Gold Coast (from 2016 onwards) is about 28,000 employees, while the realistic availability of that supply is about 25,400 employees. The capacity figure represents about 42 years of supply (from 2021 onwards) and is above the 2041 industrial employment planning baseline of about 17,000 employees. The realistic availability figure represents about 38 years of supply (from 2021 onwards) and is also well above the 2041 industrial employment planning baseline.

The realisation of this planned industrial employment supply on the Gold Coast, in particular at Yatala-Stapylton, may be supported by improved connections to the Port of Brisbane.

For more detail about the calculation of planned industrial employment supply, and identification of planning scheme amendments that may affect supply, see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, from 2016 onwards, that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017*'s 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation, and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see Program Delivery) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

Future [Best practice research](#) could consider the availability of data to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the present year. Current years of supply figures (from 2021 onwards) are indicative estimates, effectively assuming the same average annual rate of take-up of employment supply from 2016 to 2021 as the average annual *ShapingSEQ 2017* employment planning baseline growth from 2016 to 2031.

The City of Gold Coast in collaboration with the Griffith University Cities Research Institute (GU-CRI) has developed an urban growth model called Planning & Urban Growth (PUG). Once approved by council, the growth projections delivered by the PUG model will be used to inform a major

amendment to the Local Government Infrastructure Plan (LGIP). The PUG is also jointly funded by the Queensland Government Round 2 Innovation Funding program to assist City of Gold Coast to develop a more reliable and consistent urban modelling framework to inform future amendments to City Plan and LGIP.

Significant re-baselining of the existing land use database against the ABS 2016 Population Census data was completed by the project to ensure the model is as consistent with the Census as possible. The PUG model has also taken into consideration all development and building approvals up to a point in time (being February 2019) to ensure investments by the development industry sector are captured and accounted for in development projections. The City of Gold Coast with support of the GU-CRI has also recalibrated the realistic estimation of development yields at a small area level across all land use designations and zonings on the Gold Coast in order to establish a more reliable and realistic ultimate development scenario. This is a clear shift in the consideration of development capacity from the conventional “ultimate capacity at 50 years horizon” nominal approach commonly adopted by various councils and utility providers.

The preliminary findings and assessment of the PUG model works have revealed that the City of Gold Coast has more realistic ultimate development capacity post 2041 and 2066 horizons based on designations in the current City Plan.

Once finalised, outputs from the PUG model are expected to inform future LSDM reports.

Ipswich

Summary

ShapingSEQ 2017 establishes that Ipswich's expected population growth will require an additional 111,700 dwellings between 2016 and 2041, through its dwelling supply benchmarks.

The capacity and realistic availability of planned dwelling supply in the Ipswich consolidation and expansion areas provide more than the minimum 15 years of supply sought by *ShapingSEQ* 2017.

There are about 6.8 years of supply of uncompleted lot approvals in Ipswich, which exceeds the minimum four years of supply sought by *ShapingSEQ* 2017. There are about 18 years of supply of uncompleted multiple dwelling approvals in the Ipswich consolidation area, which also exceeds the minimum four years of supply sought by *ShapingSEQ* 2017.

Annual dwelling approvals in Ipswich have increased by 31 per cent when compared to the total dwelling approvals recorded in 2019/20, largely influenced by the HomeBuilder government stimulus and low interest rate environment. Despite the increased activity, dwelling approvals in the Ipswich consolidation area have remained below the consolidation and expansion average annual benchmark. Increased dwelling growth may be supported over time by region shaping infrastructure such as the Ipswich to Springfield Public Transport Corridor and planning scheme changes to increase planned dwelling supply. High rates of expansion dwelling growth are still expected as urban development momentum continues in the major growth areas of Ripley Valley and Springfield.

Dwelling density is increasing, which is consistent with SEQ's preferred future. Recent dwelling approvals also indicate that housing in Ipswich is increasing in diversity, when compared to existing dwelling stock at the 2016 Census, with house approvals in Ipswich decreasing slightly in 2020/21 and the proportion of middle and high-rise approvals increasing.

Ipswich City Council is currently preparing a new planning scheme and Local Government Infrastructure Plan, including additional key informative studies which may affect and better inform planned dwelling supply in Ipswich.

The capacity and realistic availability of the planned industrial employment supply in Ipswich provide the minimum 15 years of supply sought by *ShapingSEQ* 2017 and substantially exceed the 2041 industrial employment planning baseline. The estimated take-up of developed industrial land between 2011 and 2021 in Ipswich was about 267 hectares, with about 3548 hectares of planned industrial land existing as at 2021. Council has also recently commissioned studies to inform the new Ipswich Planning Scheme, including an Industrial and Employment Land Needs Analysis and Centres Strategy Update. These studies will provide additional technical information and analysis of current trends and approaches to inform the new Ipswich Planning Scheme.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ* 2017, [click here](#).
- a map of the urban footprint defined by *ShapingSEQ* 2017, [click here](#).

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data to 30 June 2021, where available at the time of reporting, and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of COVID-19 and government stimulus and investment. These impacts may vary across the region, recognising that the economy and housing markets operate differently in different areas of SEQ. Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – Ipswich

Planned dwelling supply – Ipswich

The capacity and realistic availability of planned dwelling supply in the Ipswich consolidation and expansion areas provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017*.

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. It is calculated from the Ipswich LGIP residential figures as supplied by Ipswich City Council from the Ipswich Population Modeller in 2017. The realistic availability figure provides a land supply scenario prepared for this report that considers whether capacity is realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

The realistic availability scenario uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

In the Ipswich consolidation area, the capacity of planned dwelling supply, from 2021 onwards, is about 28,900 dwellings. This figure is above the consolidation 2041 dwelling supply benchmark (from 2021 onwards) of about 25,100.

In the Ipswich expansion area, the capacity of planned dwelling supply (from 2021 onwards) is about 112,400 dwellings and significantly above the expansion 2041 dwelling supply benchmark (from 2021 onwards) of about 71,800 dwellings. The realistic availability of this supply (from 2021 onwards) is about 63,900 dwellings, which equates to about 21 years of supply and is above

ShapingSEQ 2017’s 15 years of supply policy objective. It is noted that more than half of the planned dwelling supply in the Ipswich expansion area is expected to be dwellings other than houses.

Realisation of the planned dwelling supply in the expansion area needs to be supported by sub-regional sewerage and local road upgrades for the Ripley Valley Priority Development Area. To assist the state government has provided \$5.9 million in funding from the Catalyst Infrastructure Fund to support the development of 5600 lots.

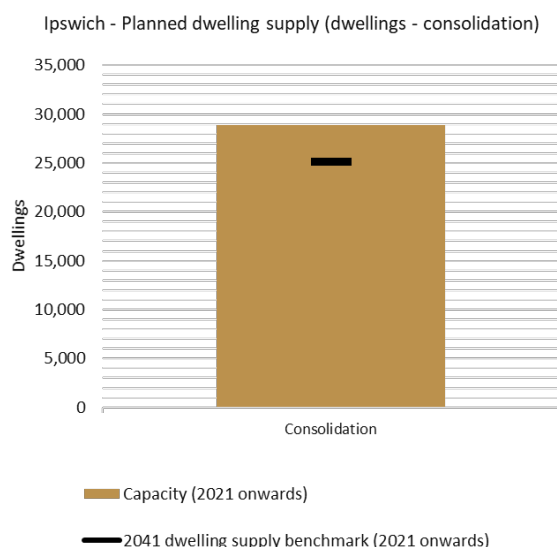
It would also be supported by region-shaping infrastructure identified in *ShapingSEQ* 2017 and the State Infrastructure Plan, including the Ipswich to Springfield Public Transport Corridor (I2S Corridor). In February 2021, the I2S was recognised by Infrastructure Australia as a nationally significant infrastructure project and included on the Infrastructure Priority List. The project is now progressing to the planning and feasibility stages including the development of innovative funding solutions.

Ipswich City Council is currently preparing a new planning scheme and Local Government Infrastructure Plan, including additional key informative studies, which may affect and better inform planned dwelling supply in Ipswich.

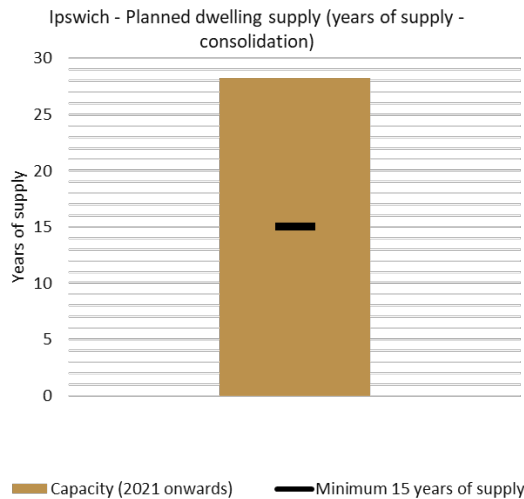
Where the scheme proceeds, and source data is updated, its effect on planned dwelling supply will be included in future years of LSDM reporting.

As indicated in Dwelling growth, on average the take-up of planned dwelling supply since 2016 is slower than the average annual benchmarks used to calculate years of supply in both the consolidation and expansion areas.

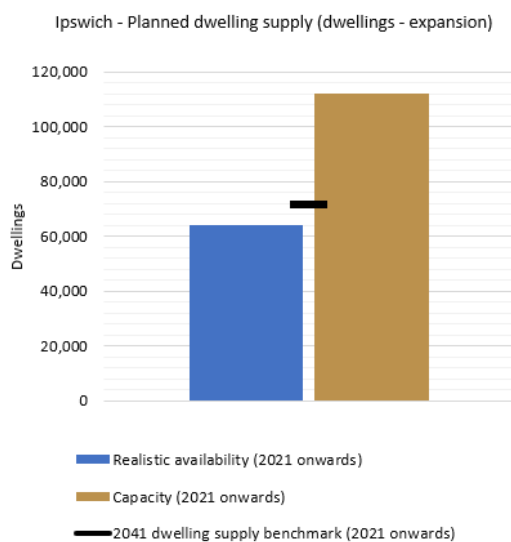
For more detail about the calculation of planned dwelling supply, including years of supply, see the [Technical notes](#).



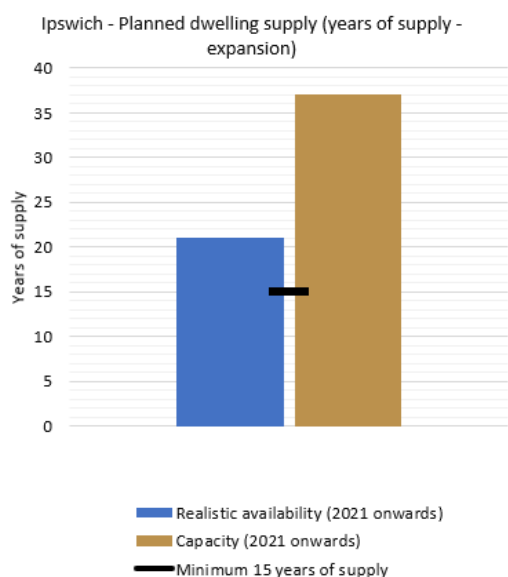
This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the consolidation area. This accounts for the 2016/21 constructed dwellings estimate of 2811. To view a fact sheet explaining the calculation of remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s minimum 15 years of supply policy objective in consolidation areas.



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the expansion area. This accounts for the 2016/21 constructed dwellings estimate of 12,027. To view fact sheets on the concept of realistic availability, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program Delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring (LSDM) Report.

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ* 2017’s dwelling supply benchmarks. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region’s planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state and local constraints
- recent amendments to the planning scheme and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

Approved supply – Ipswich

Approved supply is measured by analysing uncompleted lot approvals and uncompleted multiple dwelling approvals across Ipswich.

There are about 6.8 years of supply of uncompleted lot approvals in the Ipswich consolidation and expansion areas overall, which exceeds the minimum four years of supply sought by *ShapingSEQ* 2017. The total number of uncompleted lot approvals for 2020/21 was 12,867. The increase in the

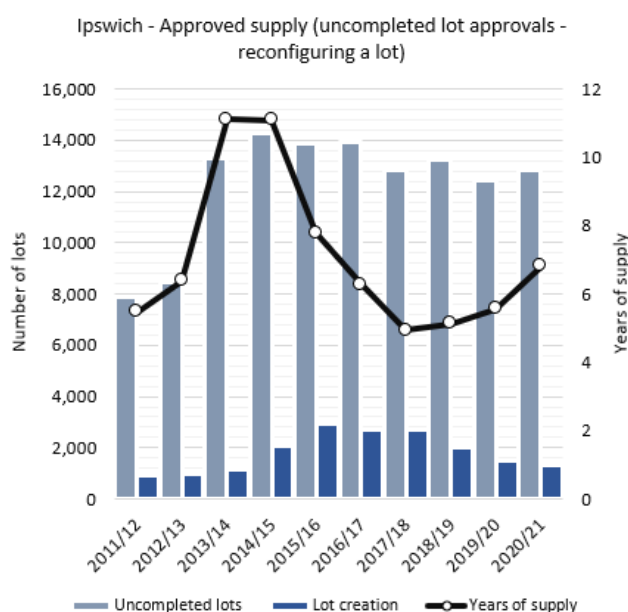
number of uncompleted lot approvals in 2020/21 along with the decreasing rate of lot creation have contributed to the increase in the years of supply.

Of these uncompleted lots, approximately 42.8 per cent (5501) had operational works approvals. This represents the number of lots which are readily available for construction in the short-term.

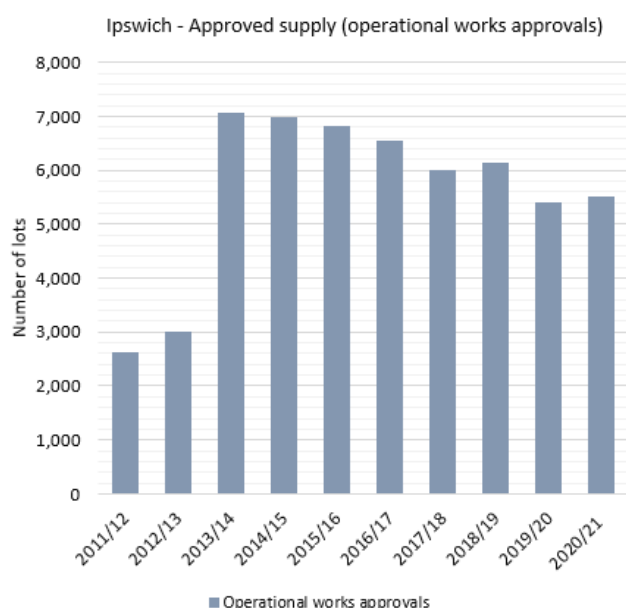
Ipswich also has about 18.3 years of supply of uncompleted multiple dwelling approvals in the consolidation area, well above the minimum four years of supply sought by *ShapingSEQ* 2017.

The number of uncompleted multiple dwelling approvals decreased slightly from June 2020 to June 2021, but the years of supply has increased because of the fall in the rate of attached dwelling building approvals, decreasing the assumed level of demand in the years of supply calculation.

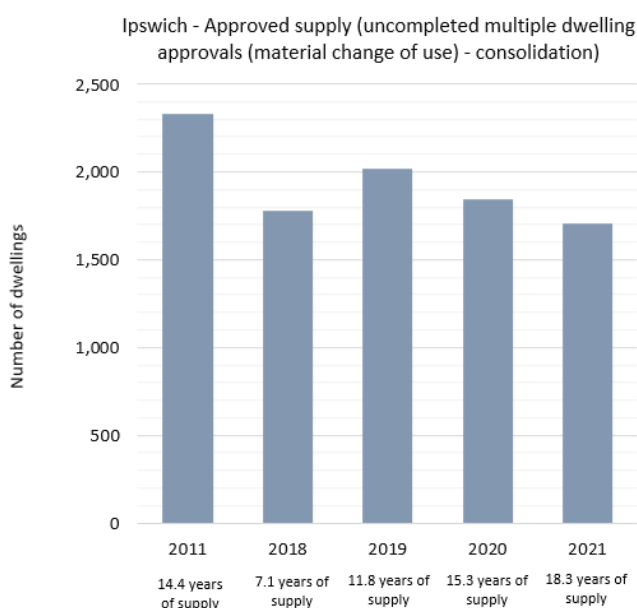
For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical notes](#).



This graph shows the number of lots that have a development permit but have not yet been certified (uncompleted lots) as at 30 June each year and the number of lots that have been created (certified) in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.



This graph shows the number of multiple dwellings that have a material change of use development permit but have not yet been constructed (uncompleted multiple dwellings) in the consolidation area as at 30 June for all reported years.

Note: The years of supply for uncompleted multiple dwelling approvals is determined by dividing the total number of uncompleted multiple dwellings by the average annual attached dwelling building approvals of the previous four years. The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – Ipswich

In 2020/21, 2838 dwelling approvals were recorded in Ipswich at a rate of 237 dwellings per month. This represents a 31 per cent increase when compared to the total dwelling approvals recorded in 2019/20. When compared to long-term averages, dwelling approvals in 2020/21 are slightly below the five-year average of 2955 and slightly above the ten-year average of 2485 dwelling approvals.

The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see [Market Factors](#).

Within the Ipswich consolidation area, there were 387 dwelling approvals in 2020/21, which was 637 dwellings less than the consolidation average annual benchmark of 1024 additional dwellings. This continues the trend of Ipswich being below the consolidation average annual benchmark since they were set under *ShapingSEQ* 2017. This matter continues to be monitored and the department will work with Ipswich City Council to understand the trend and any measures that may address it.

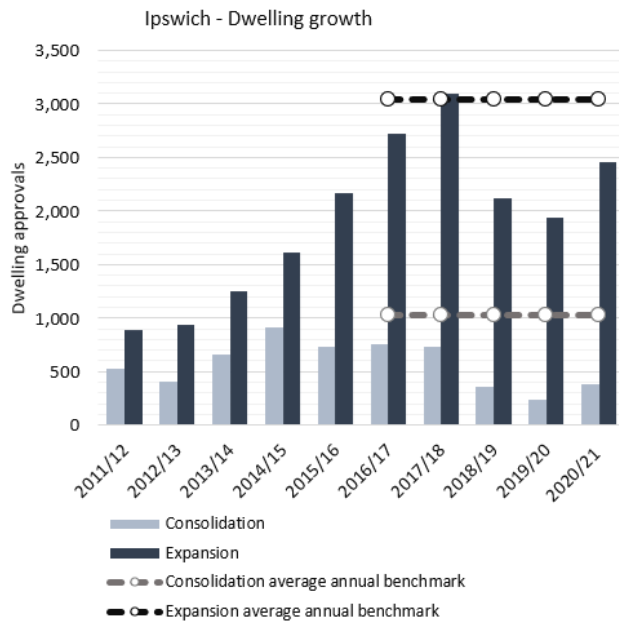
Over the same period, there were 2451 dwelling approvals in the Ipswich expansion area, which was 585 dwellings less than the expansion average annual benchmark of 3036 additional dwellings. In the Ipswich expansion area, dwelling approvals slightly exceeded the expansion average annual benchmark in 2017/18 following an upward trend, but declined below the benchmark for the period from 2018/19 to 2020/21.

Approximately 17 per cent of dwelling approvals from 2016/17 to 2020/21 were in Ipswich's consolidation area, which is less than its expected share of 25 per cent. Approximately 83 per cent of dwelling approvals were in Ipswich's expansion area over the same period, which is more than its expected share of dwelling growth to 2031 identified in *ShapingSEQ* 2017 (75 per cent).

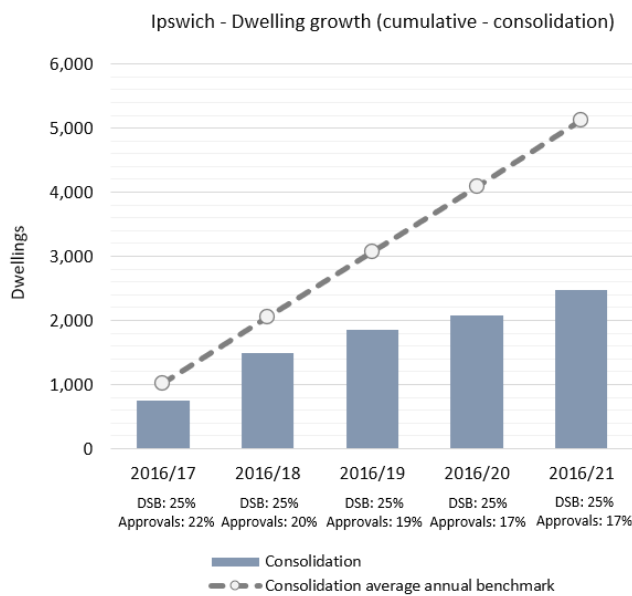
A higher share of expansion area dwelling growth is still expected as urban development momentum continues in the major growth areas of Ripley Valley and Springfield.

The Ipswich to Springfield Corridor (I2S Corridor) Strategic Assessment identifies the strategic importance and the opportunities the delivery of mass transit and public transport through the Ipswich region will provide. In February 2021, the I2S was recognised by Infrastructure Australia as a nationally significant infrastructure project and included on the Infrastructure Priority List. The project is now progressing to the planning and feasibility stages including the development of innovative funding solutions.

For more information about improvements to the measurement of net growth over time, see [Program Delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).

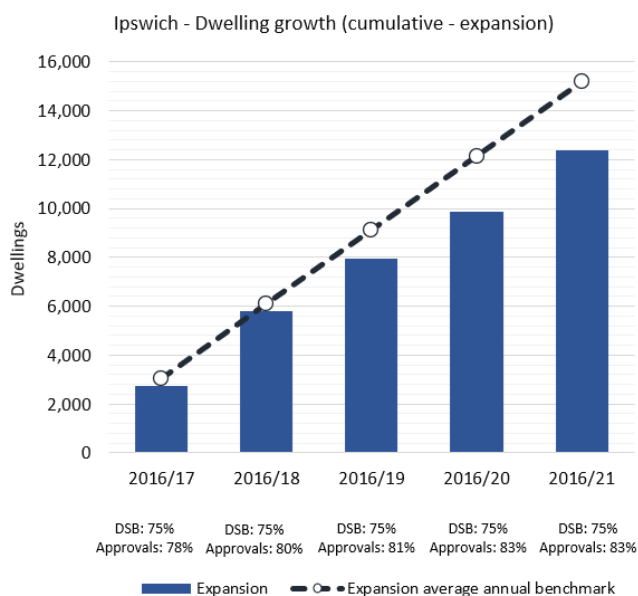


This graph shows annual dwelling approvals compared against *ShapingSEQ* 2017's average annual benchmarks.



This graph shows the cumulative dwelling growth in the consolidation area against *ShapingSEQ* 2017's consolidation average annual benchmark.

Note: DSB = Dwelling Supply Benchmark



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ* 2017’s expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the 2018 Queensland Government dwelling projections for SEQ. This adjustment resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has been retained in the 2021 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

Changes in dwelling density – Ipswich

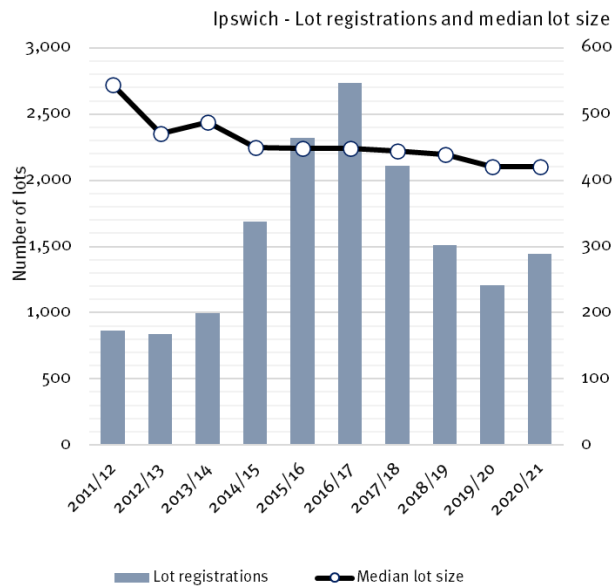
Overall dwelling density (measured through median lot sizes and mean population-weighted dwelling density) is increasing in Ipswich in accordance with SEQ’s preferred future for higher dwelling densities and smaller lots.

Mean population-weighted dwelling density increased in Ipswich between 2011 and 2016, from 8 to 8.7 dwellings per hectare. This represents the average dwelling density at which the population of Ipswich lives and is comparable to the net residential density as used by *ShapingSEQ* 2017. In the consolidation area, mean population-weighted dwelling density increased from 8.6 to 9.1 dwellings per hectare.

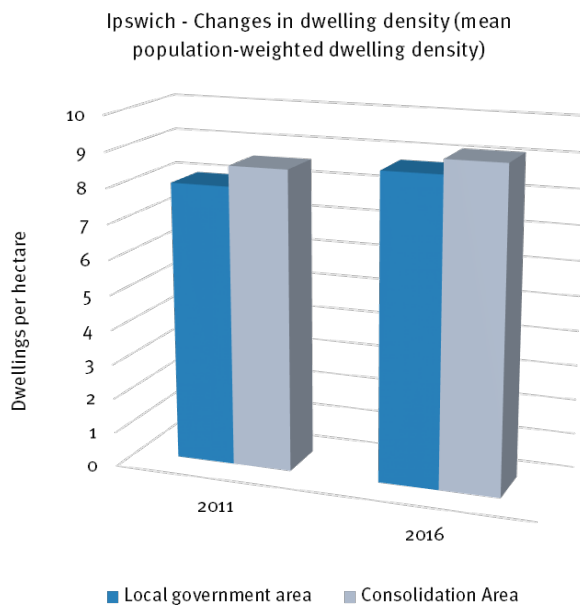
Since 2011/12, the overall median size of new lots in Ipswich has decreased from 544m² to 420m² in 2020/21. This was accompanied by a trend to higher lot registrations up to 2016/17 followed by a general decline since. This measure indicates increased dwelling densities in new urban subdivisions in Ipswich.

Ipswich City Council is currently preparing a new planning scheme which may support increased dwelling densities in suitable locations and smaller lots over time.

For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – Ipswich

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals indicate an increase in housing diversity in Ipswich. In 2020/21 the proportion of dwelling approvals for houses decreased in Ipswich, whilst the proportion of dwelling approvals for middle increased. This is consistent with SEQ's preferred future.

Ipswich City Council has begun the process of preparing a new planning scheme. As identified in the Statement of Proposals, including a draft Strategic Framework, the new Ipswich Planning Scheme will continue to encourage and support the delivery of a mix of housing types and forms across Ipswich.

Houses remain the predominant housing type in Ipswich. Eighty-seven per cent (12,821 dwellings) of all new dwelling approvals in Ipswich from 2016/17 to 2020/21 were for houses, which was slightly less than the existing dwelling stock as at the 2016 Census (89 per cent). Between 2016/17 and 2020/21 houses comprised 74 per cent of new dwelling approvals in the consolidation area and 89 per cent of new dwelling approvals in the expansion area for the same period.

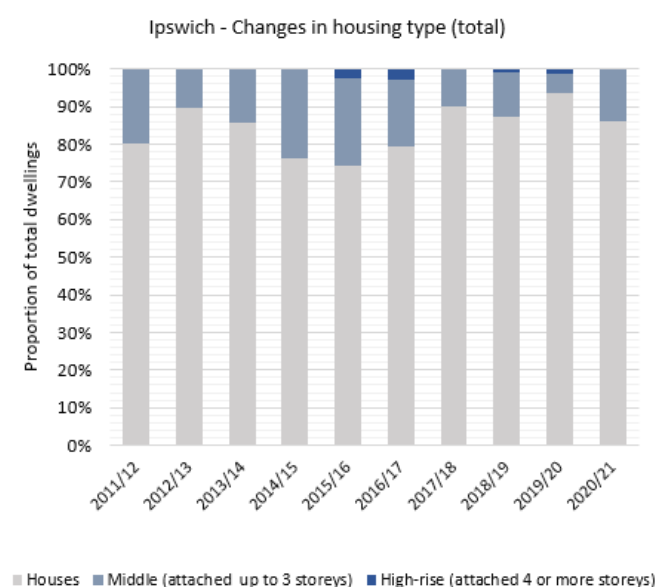
Dwelling approvals for middle (12.2 per cent or 1802 dwellings) were slightly higher than their share of the dwelling stock as at the 2016 Census (11 per cent). The predominant middle housing type dwellings approved since 2016/17 in Ipswich are semi-detached, row or terrace houses and townhouses of two or more storeys (about 64 per cent or 1154 dwellings).

About 33 per cent (590 dwellings) of middle dwelling approvals for the period between 2016/17 and 2020/21 were located within the consolidation area and about 67 per cent (1212 dwellings) were located within the expansion area for the same period.

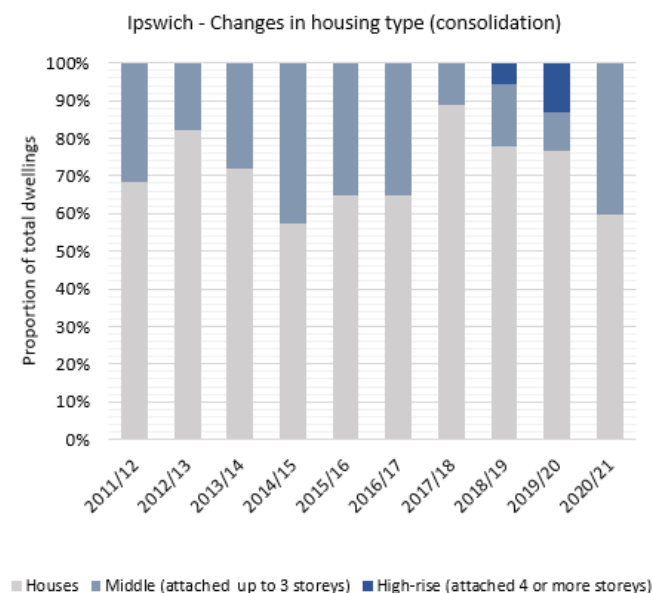
At the 2016 Census, high-rise comprised zero percent of existing dwelling stock. Between 2016/17 and 2020/21 one percent of new dwelling approvals in Ipswich were for high-rise of four to eight storeys. There were no approvals for high-rise of nine or more storeys in Ipswich for this period.

Further, the Ipswich to Springfield Public Transport Corridor (I2S Corridor) Strategic Assessment was completed in July 2020. The assessment has highlighted that the delivery of mass transit would reduce congestion and support significant population growth, efficient productivity and economic growth, key factors to improving housing diversity and delivery of middle and high-rise dwelling types.

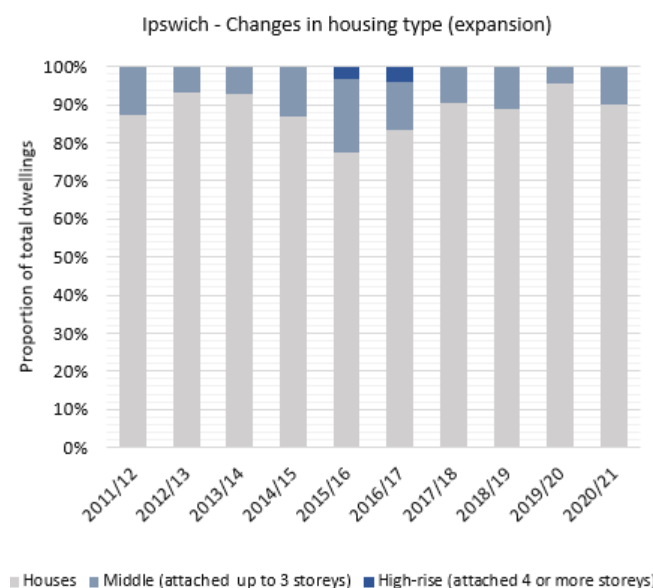
For more detail about dwelling approvals, see the [Technical notes](#).



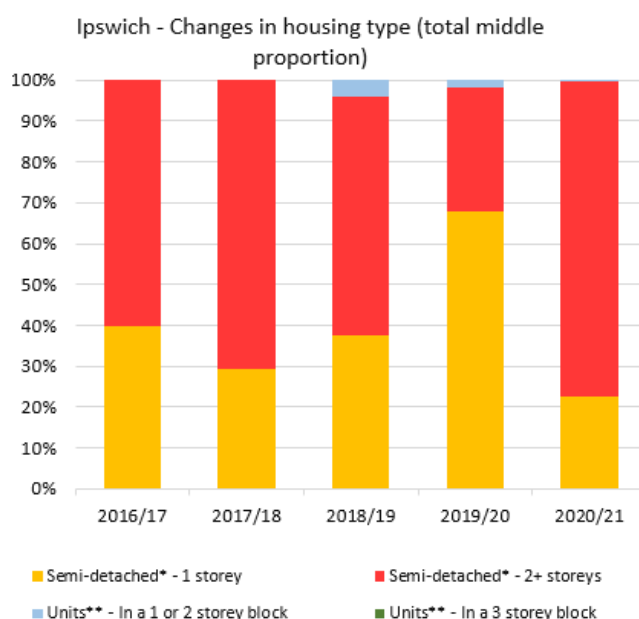
This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the consolidation area.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the expansion area.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of ‘missing middle’ in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – Ipswich

The number of sales has increased from 2018/19 to 2020/21 for all categories in Ipswich, except for a slight decrease for house and land packages in the consolidation area.

Median sales prices in most categories have increased for Ipswich over the period 2011/12 to 2020/21, with the exception of attached dwellings in the consolidation area which have varied in sales price but at 2020/21 are lower than in 2011/12.

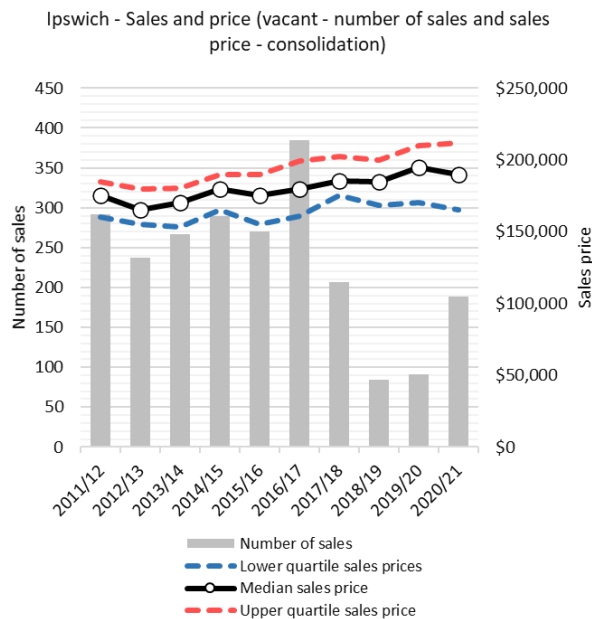
The median sales price for all categories is lower in Ipswich than for SEQ. The rate of median sales price growth between 2011/12 and 2020/21 was lower for Ipswich than SEQ for all categories except attached dwellings in the expansion area.

Over the 2011/12 to 2020/21 period, the greatest growth in median sales price within Ipswich was for vacant lots per square metre in the consolidation area (42.1 per cent).

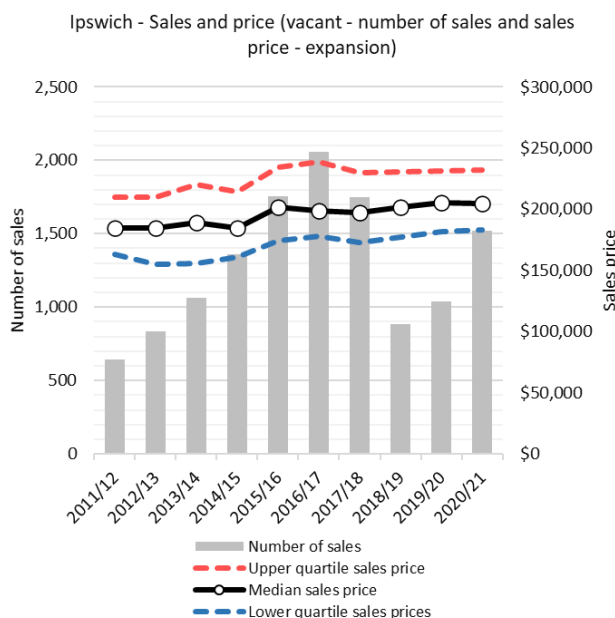
Median prices in Ipswich are higher for all categories in the expansion area than in the consolidation area. The rate of median price growth between 2011/12 and 2020/21 for all categories except

vacant lots per square metre is also higher in the expansion area than in the consolidation area within Ipswich.

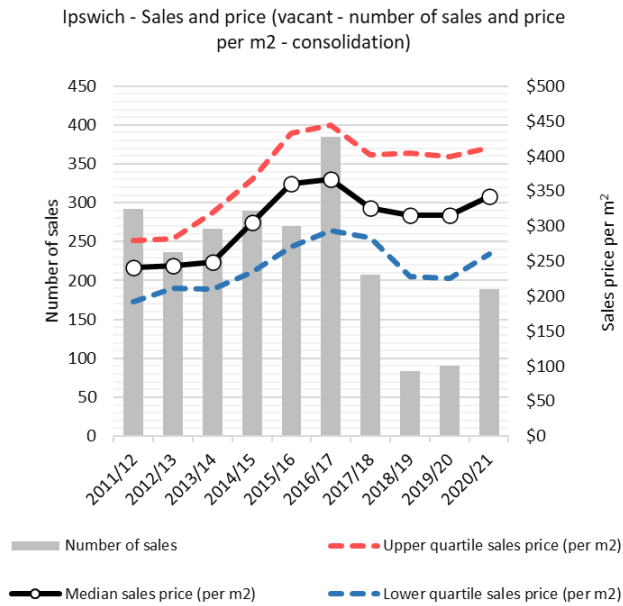
For more detail about the median sales price and number of sales, see the [Technical notes](#).



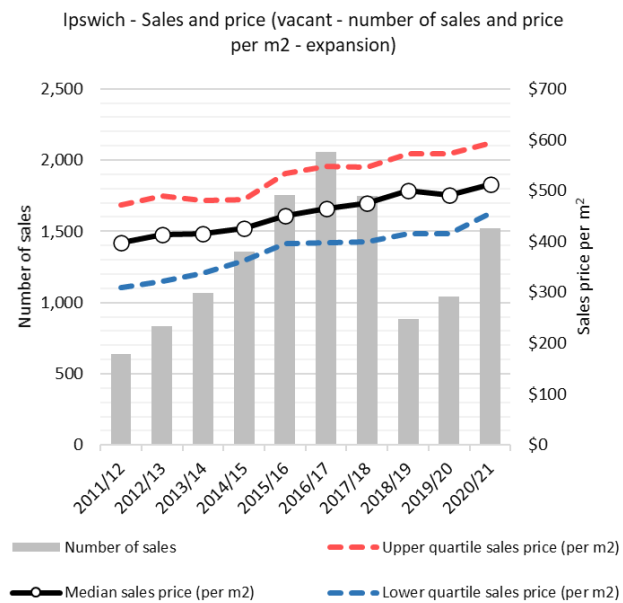
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the consolidation area.



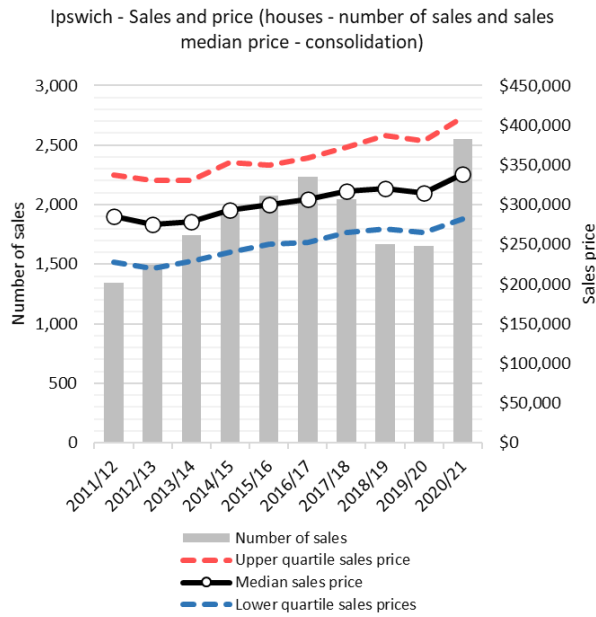
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the expansion area.



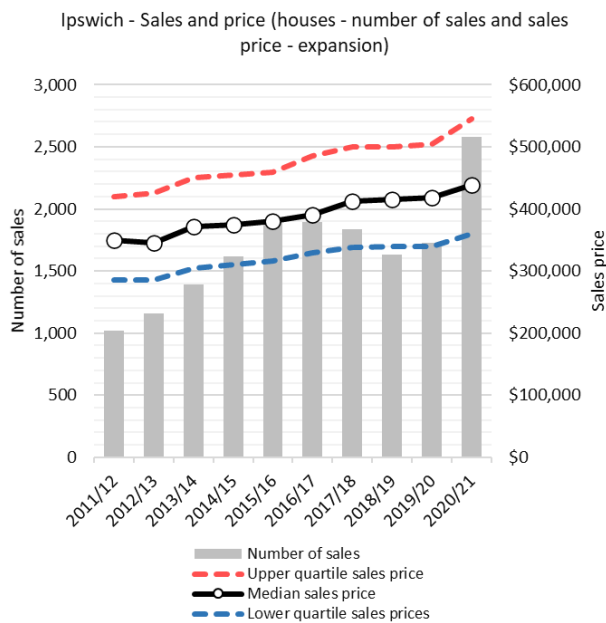
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the consolidation area.



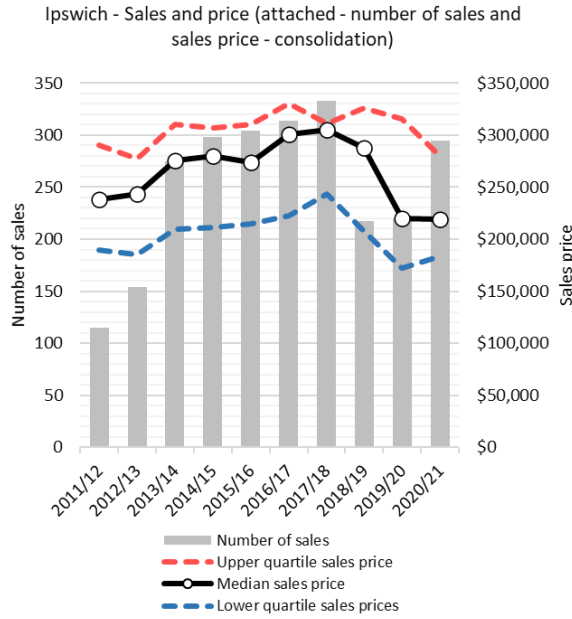
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



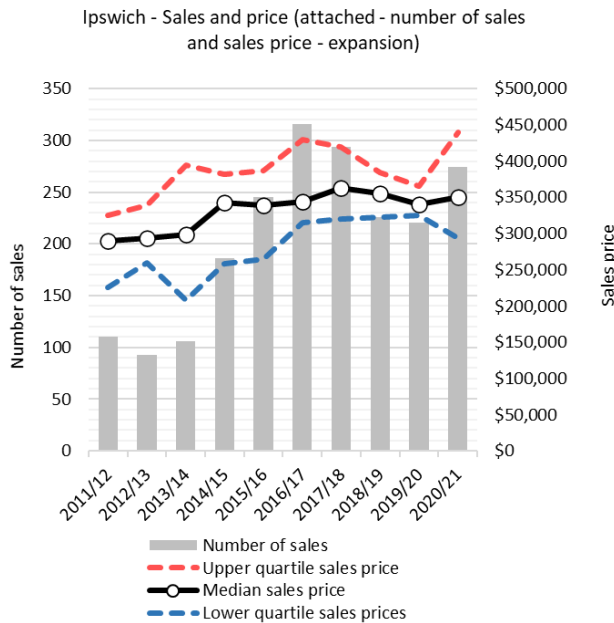
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the consolidation area.



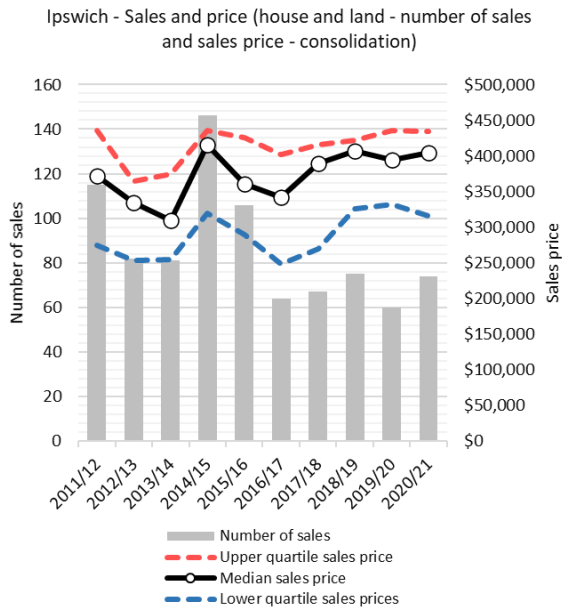
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



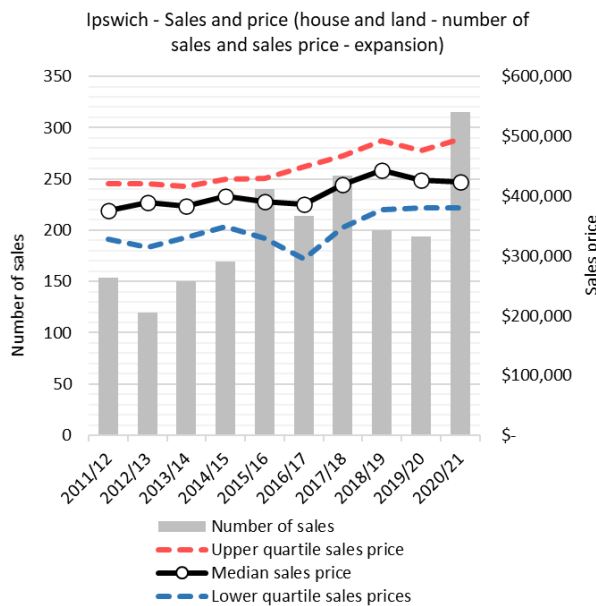
This graph shows the number of sales and the lower, median and upper quartile sales price for attached dwellings in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for house-land packages in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

Industrial – Ipswich

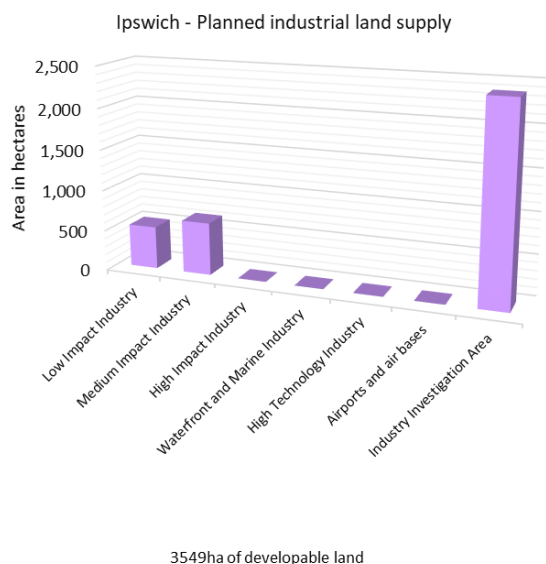
Planned industrial land supply/take-up – Ipswich

The estimated take-up of developed industrial land between 2011 and 2021 in Ipswich was 267 hectares, with about 14 hectares taken-up in 2020/21. The greatest of this take-up occurred on land intended for industry investigation, followed by low and medium impact industry.

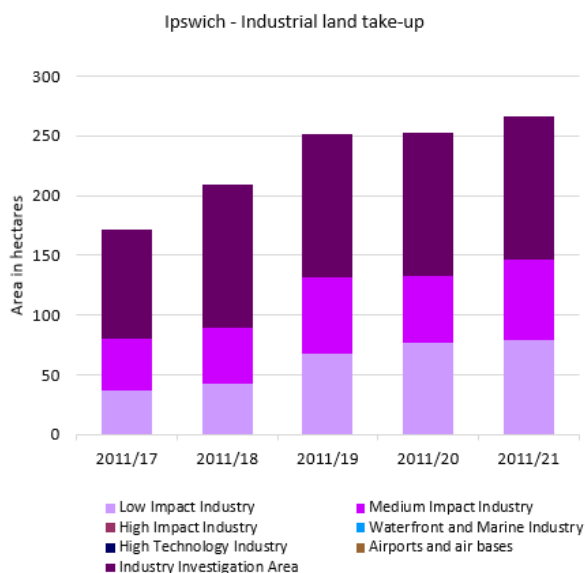
There were 3549 hectares of planned industrial land supply in Ipswich as at 2021, including serviced and un-serviced land. This planned industrial land supply comprised 2384 hectares for industry investigation areas as well as about 1164 hectares across low and medium impact industry.

Ipswich City Council’s Industrial Needs Analysis report is expected to provide improved technical information to support the new Ipswich Planning Scheme and future LSDM reporting.

For more detail about Planned industrial land and take-up, see the [Technical notes](#).



This graph shows the number of hectares of planned industrial land supply as at 2021 by industrial land category.



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of Planned industrial land supply. Further, Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

The department has continued to build on work undertaken through the [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. This higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – Ipswich

The capacity and realistic availability of planned industrial employment supply in Ipswich provide the minimum 15 years of supply of land sought by *ShapingSEQ* 2017 (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for Ipswich is equivalent to about 5100 jobs on the graph.

The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. It is calculated from the LGIP Non-Residential Industrial Interims as supplied by Ipswich City Council in 2017. The realistic availability figure provides a supply scenario prepared for this report that considers whether some of the capacity is not realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

The realistic availability scenario is informed by updated developable area data (to 2021), as reported in the Planned industrial land supply and take-up section of this report, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

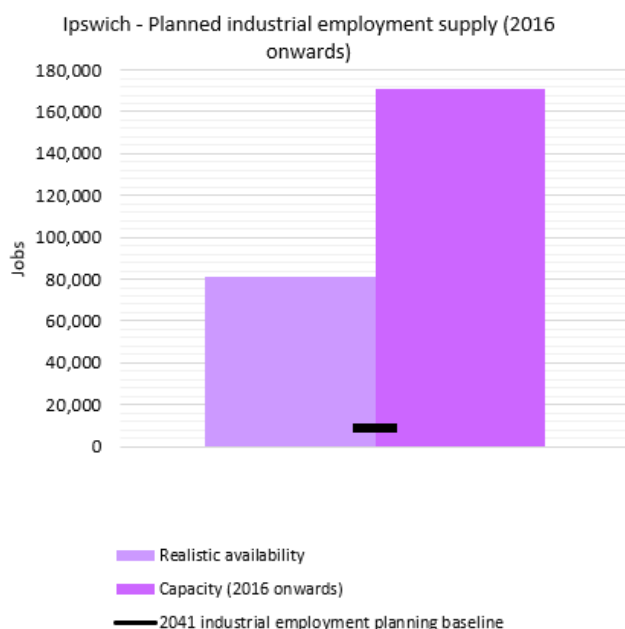
The capacity of planned industrial employment supply in Ipswich (from 2016 onwards) is about 171,200 employees, while the realistic availability of this supply is about 80,900 employees. Most of the capacity of this supply is at Ebenezer and Swanbank. These figures are considerably greater than

the 2041 industrial employment planning baseline of about 8700 employees. However, some excess of planned industrial employment supply may be appropriate to facilitate strategic economic development opportunities when they arise.

The realisation of this planned industrial employment supply would be supported by the development of the Melbourne to Brisbane Inland Rail and the associated long-term opportunities for a transport and logistics hub. In addition, a potential link to support freight movement between the Logan Motorway and Ebenezer may also support realisation of the planned industrial employment supply.

Ipswich City Council is currently preparing a new planning scheme which may affect planned industrial employment supply in Ipswich. Where the scheme proceeds, and source data is updated, its effect on planned industrial employment supply will be included in future years of LSDM reporting.

For more detail about the calculation of planned industrial employment supply see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, from 2016 onwards, that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to

a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

Future [Best practice research](#) could consider the availability of data to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the present year. Current years of supply figures (from 2021 onwards) are indicative estimates, effectively assuming the same average annual rate of take-up of employment supply from 2016 to 2021 as the average annual *ShapingSEQ* 2017 employment planning baseline growth from 2016 to 2031.

Lockyer Valley

Summary

ShapingSEQ 2017 establishes that Lockyer Valley's expected population growth will require an additional 9600 dwellings between 2016 and 2041, through its dwelling supply benchmarks.

The capacity and realistic availability of planned dwelling supply in the Lockyer Valley expansion area provides more than the minimum 15 years of supply sought by *ShapingSEQ* 2017.

The area currently has 19 years of supply of uncompleted lot approvals, which far exceeds the minimum four years of supply sought by *ShapingSEQ* 2017.

Dwelling approvals in Lockyer Valley increased by 103 per cent when compared to the total dwelling approvals recorded in 2019/20, largely influenced by the HomeBuilder government stimulus and low interest rate environment. Despite the increase in activity, dwelling approvals in the Lockyer Valley remain below the expansion average annual benchmark (there is no consolidation area in the Lockyer Valley). However, dwelling growth in the Lockyer Valley may increase as availability of and access to local employment opportunities and services increases. Further, Lockyer Valley is currently preparing the Lockyer Valley Planning Scheme which is intended to support future growth in the area.

Recent dwelling approvals continue the dominance of houses in the Lockyer Valley, and dwelling density has not changed significantly, contrary to SEQ's preferred future for increased dwelling densities and smaller lot sizes.

The capacity and realistic availability of planned industrial employment supply in the Lockyer Valley provide more than the minimum 15 years of supply sought by *ShapingSEQ* 2017. The estimated take-up of developed industrial land between 2011 and 2021 in Lockyer Valley was about four hectares, with about 107 hectares of planned industrial land existing as at 2021.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ* 2017, [click here](#).
- a map of the urban footprint defined by *ShapingSEQ* 2017, [click here](#).

Note: The local government areas of Lockyer Valley, Scenic Rim and Somerset do not have a consolidation area.

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data to 30 June 2021, where available at the time of reporting, and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of COVID-19 and government stimulus and investment. These impacts may vary across the region, recognising that the economy and housing markets operate differently in different areas of SEQ.

Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – Lockyer Valley

Planned dwelling supply – Lockyer Valley

The capacity and realistic availability of planned dwelling supply in Lockyer Valley, which is wholly within the expansion area, provide more than the minimum 15 years of supply sought by *ShapingSEQ* 2017.

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. It is calculated from the External Demand Model, as supplied by Lockyer Valley Regional Council in July 2018, which aligns to the LGIP as adopted June 2018. The realistic availability figure provides a land supply scenario prepared for this report that considers whether capacity is realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

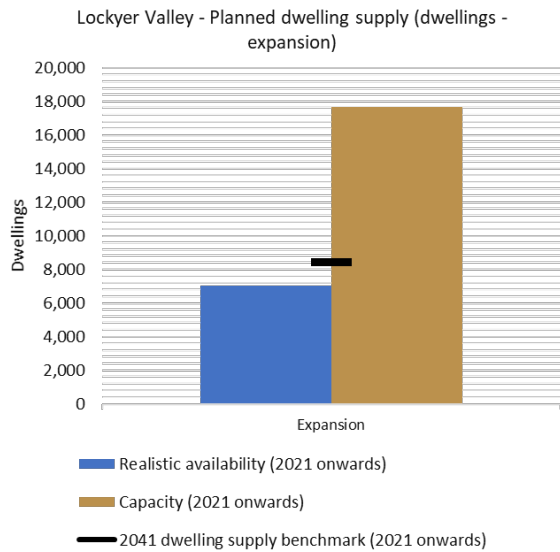
The realistic availability scenario uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

The capacity of planned dwelling supply in Lockyer Valley, from 2021 onwards, is about 17,700 dwellings, which is significantly above the expansion 2041 dwelling supply benchmark (from 2021 onwards) of about 8400 dwellings. The realistic availability of this supply (from 2021 onwards) is about 7000 dwellings, which equates to about 17 years of supply and is above *ShapingSEQ* 2017's 15 years of supply policy objective.

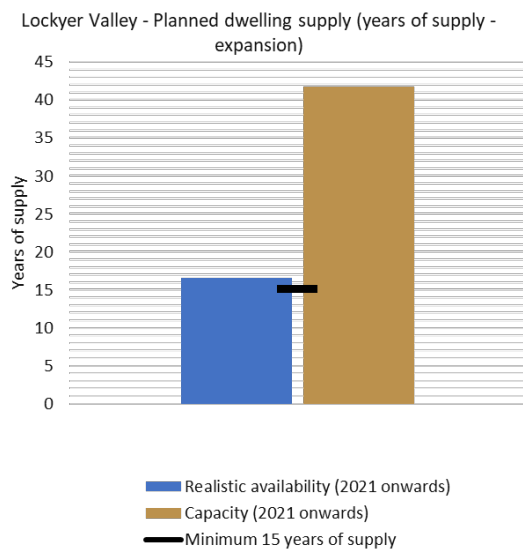
Lockyer Valley Regional Council is preparing a new planning scheme which may affect planned dwelling supply. Where the scheme proceeds, and source data is updated, its effect on planned dwelling supply will be included in future years of LSDM reporting.

As indicated in Dwelling growth, on average the take-up of planned dwelling supply since 2016 has been slower than the average annual benchmark used to calculate years of supply. The situation is similar in rural local government areas in SEQ, including Lockyer Valley, Scenic Rim and Somerset.

For more detail about the calculation of planned dwelling supply, including years of supply, see the [Technical notes](#).



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the expansion area. This accounts for the 2016/21 constructed dwellings estimate of 1212. To view fact sheets on the concept of realistic availability, [click here](#). To view a fact sheet explaining the calculation of the remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent and up-to-date over time, improving the comparability and currency of supply estimates. These

improvements can be reflected in future publications of the Land Supply and Development Monitoring (LSDM) Report.

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ 2017*'s dwelling supply benchmarks. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region's planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state and local constraints
- recent amendments to the planning scheme and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

Approved supply – Lockyer Valley

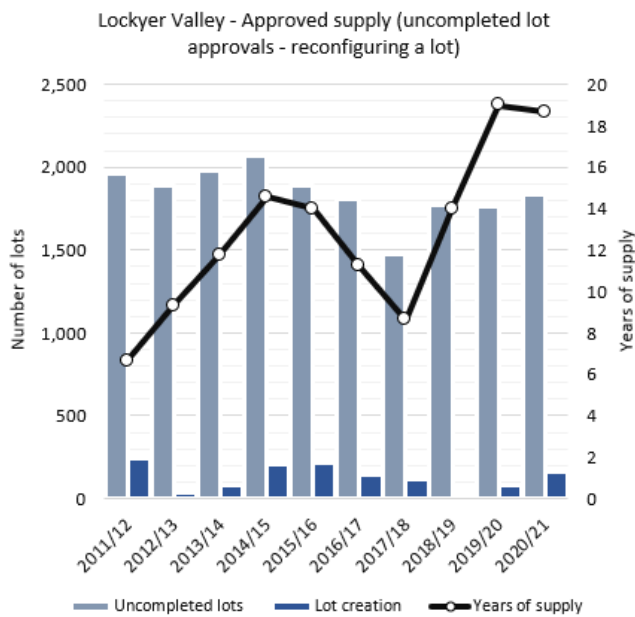
Approved supply is measured by analysing uncompleted lot approvals across Lockyer Valley.

Lockyer Valley has 18.7 years of supply of uncompleted lot approvals. This is well above the minimum four years of supply sought by *ShapingSEQ 2017*. The total number of current uncompleted lot approvals was 1838. Of these lots, approximately 22.2 per cent had operational works approvals. This represents the number of lots which are readily available for construction in the short-term.

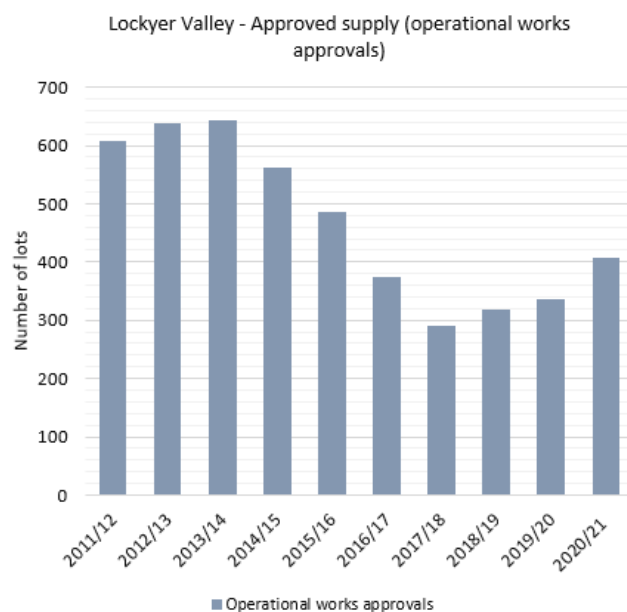
The total number of uncompleted lot approvals was similar in 2018/19, 2019/20 and 2020/21, but changes to the rate of lot creation have contributed to variation in the years of supply.

There are no uncompleted multiple dwelling approvals to report for Lockyer Valley because it has no consolidation area.

For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical Notes](#).



This graph shows the number of lots that have a development permit but have not yet been certified (uncompleted lots) as at 30 June each year, as well as the number of lots that have been created (certified) in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.

Note: The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – Lockyer Valley

The expansion area applies to the whole of the Lockyer Valley.

There were 345 dwelling approvals recorded in the Lockyer Valley expansion area in 2020/21 at a rate of 29 dwellings per month. This represents a 103 per cent increase when compared to the

dwelling approvals in 2019/20 and represents the highest level of dwelling growth in a decade. When compared to long-term averages, the 2020/21 dwelling approvals is also higher than the five and ten-year averages of 256 and 255 dwelling approvals, respectively.

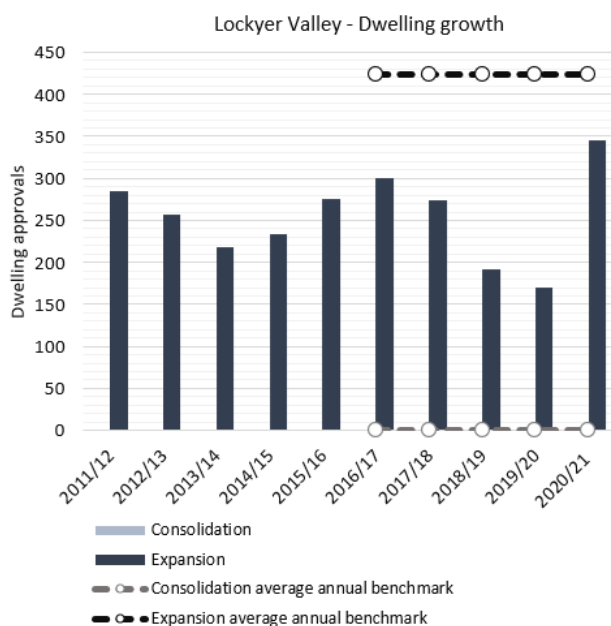
The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see [Market Factors](#).

Notwithstanding the increased activity, Lockyer Valley dwelling approvals in 2020/21 is 79 dwellings fewer than the expansion average annual benchmark of 424 additional dwellings.

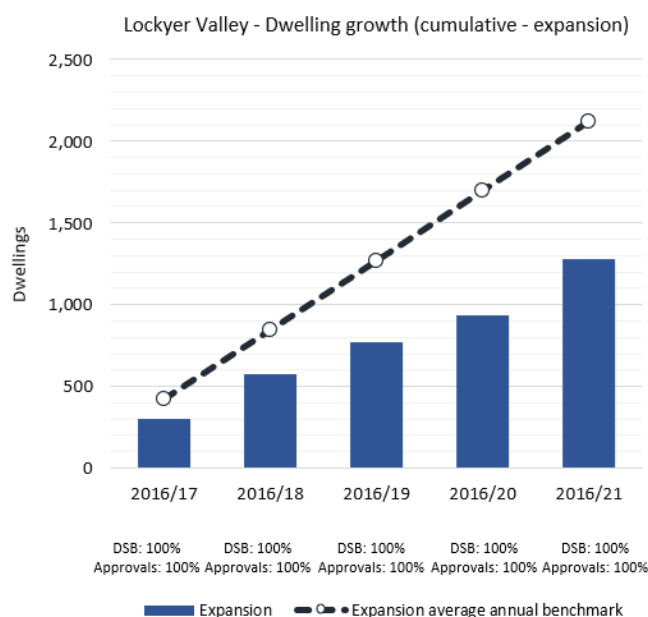
As a result, the cumulative growth for 2016/17 to 2020/21 continues to show a gap between dwelling growth figures and the *ShapingSEQ* 2017 benchmarks, which may lead to a challenge in addressing this shortfall into the future.

Lockyer Valley is currently preparing the Lockyer Valley Planning Scheme which will provide a single planning instrument for the whole of the Lockyer Valley and provide for future growth across the region.

For more information about improvements to the measurement of net growth over time, see [Program Delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).



This graph shows annual dwelling approvals compared against *ShapingSEQ* 2017’s average annual benchmark.



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ* 2017’s expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the 2018 Queensland Government dwelling projections for SEQ. This adjustment resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has been retained in the 2021 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

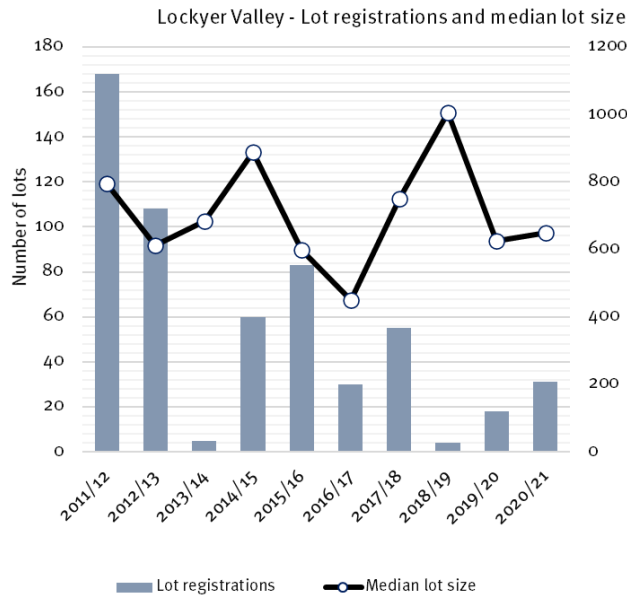
Changes in dwelling density – Lockyer Valley

Dwelling density (measured through median lot sizes and mean population-weighted dwelling density) has not changed significantly in Lockyer Valley in recent years and has not contributed to SEQ's preferred future for increased dwelling densities and smaller lot sizes.

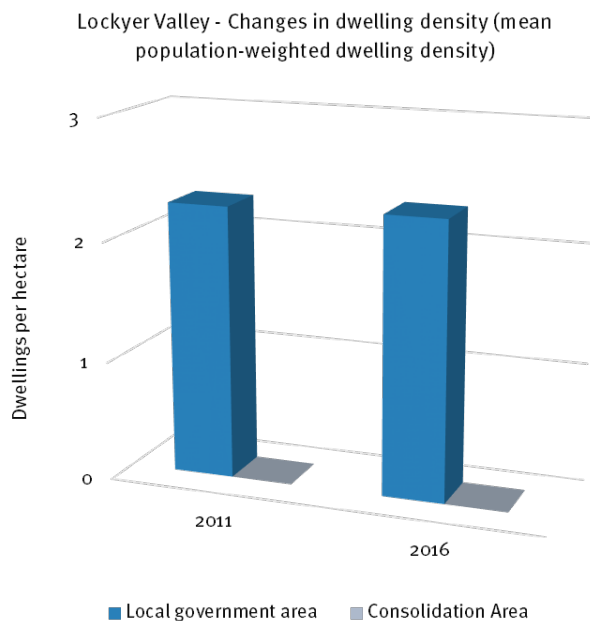
Mean population-weighted dwelling density in the Lockyer Valley remained static between 2011 and 2016, at 2.3 dwellings per hectare. This represents the average dwelling density at which the population of Lockyer Valley lives and is comparable to the net residential density used by *ShapingSEQ* 2017.

The median size of new lots in the Lockyer Valley fluctuated from 2011/12 to 2020/21. This fluctuation may be due to the small number of lot registrations each year. Median lot size is generally larger in rural council areas, relative to coastal and urban local governments in SEQ.

For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – Lockyer Valley

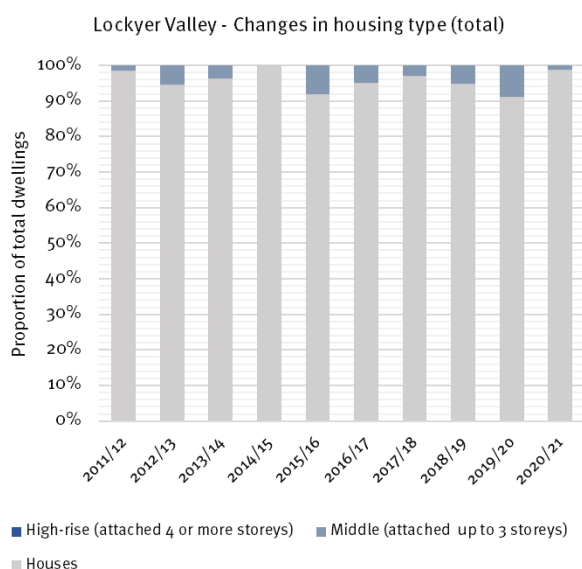
Housing in the Lockyer Valley is predominantly houses in urban and rural residential environments. Recent dwelling approvals indicate a continuation of this characteristic.

All dwelling approvals for the period between 2016/17 and 2020/21 were located within the expansion area as Lockyer Valley does not have a consolidation area.

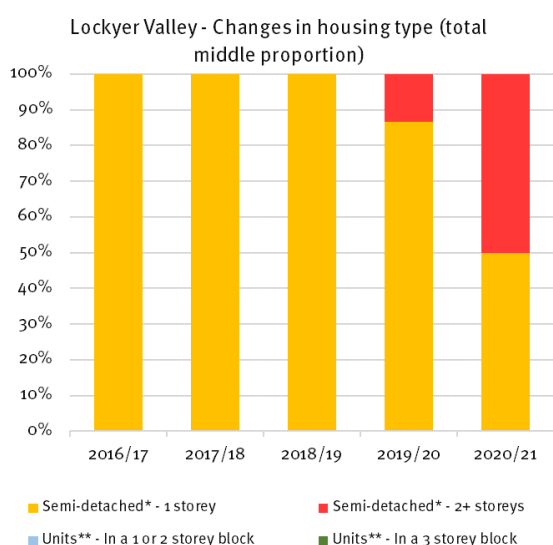
Ninety-six per cent (1230 dwellings) of all new dwelling approvals in Lockyer Valley from 2016/17 to 2020/21 were for houses, which is slightly higher than the proportion of existing dwelling stock as at the 2016 Census (95 per cent).

Dwelling approvals for middle were four per cent (52 dwellings) over the same period, which is slightly below the dwelling stock as at the 2016 Census (five per cent). The predominant middle housing type dwellings approved since 2016/17 in Lockyer Valley are semi-detached, row or terrace houses and townhouses of one storey, however in 2020/21 the proportion of two storey semi-detached, row or terrace houses and townhouses increased.

For more detail about dwelling approvals, see the [Technical notes](#).



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of ‘missing middle’ in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – Lockyer Valley

Sales prices and the number of sales have only been reported for the expansion area because no consolidation area is identified for Lockyer Valley. Sales prices have also only been reported for years with 10 or more sales.

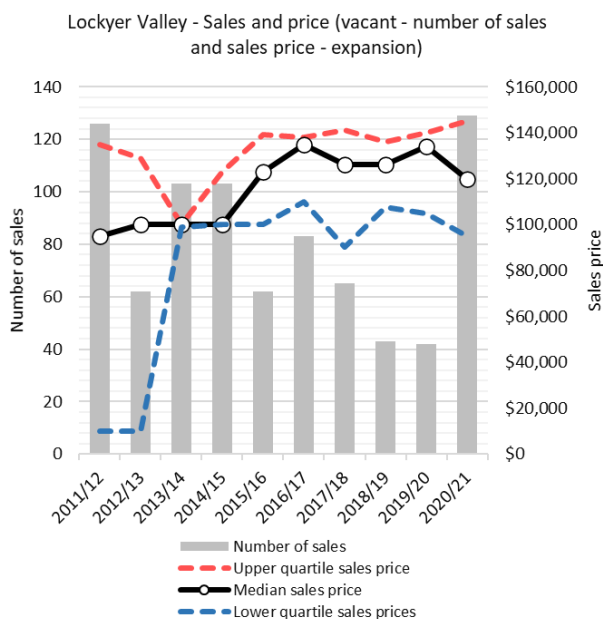
The number of sales has increased from 2018/19 to 2020/21 for all categories except for house and land packages. The number of sales for Lockyer Valley is low, except for houses. This is typical for rural local government areas in SEQ and contributes to more variation in median sales price from year to year.

Over the period 2011/12 to 2020/21 median sale prices for all categories have increased except for house and land packages where prices have fallen each year since 2017/18.

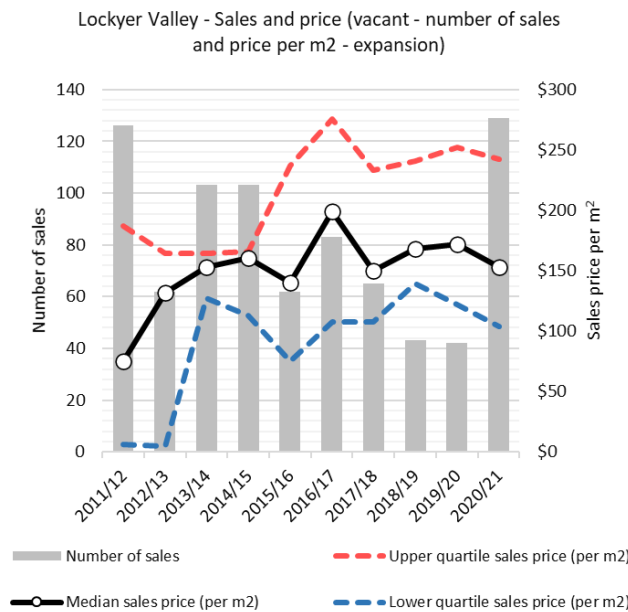
The median sales price for all categories is lower in Lockyer Valley than for SEQ overall.

The rate of growth in median sales price from 2011/12 to 2020/21 was lower than SEQ for all categories, except vacant lots (per lot and per square metre). Vacant lots are about half the median sales price of SEQ but experienced a higher rate of median price growth since 2011/12 (26.3 per cent per lot and 104 per cent per square metre).

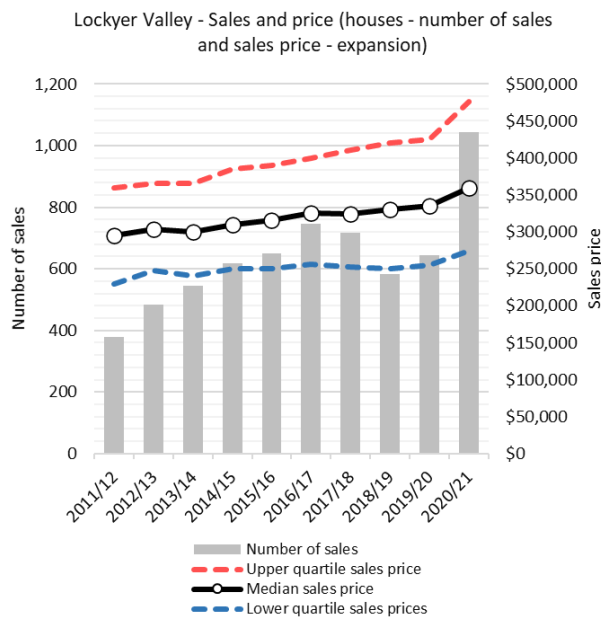
For more detail about the median sales price and number of sales, see the [Technical notes](#).



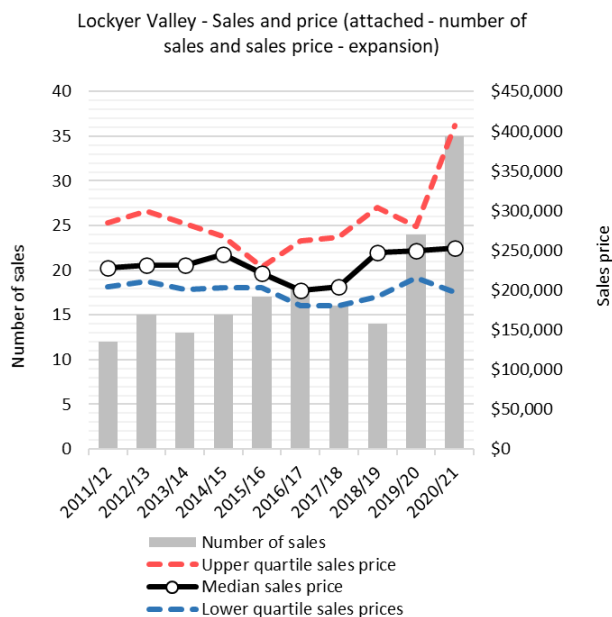
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the expansion area.



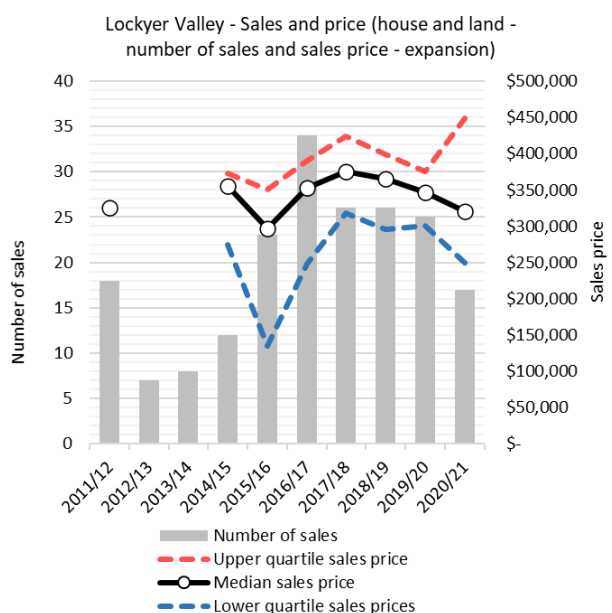
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

Note: Sales prices have not been reported for years with fewer than 10 sales. For more details, see the [Technical notes](#).

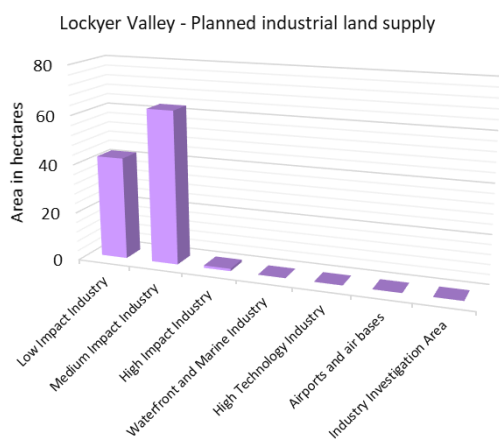
Industrial – Lockyer Valley

Planned industrial land supply/take-up – Lockyer Valley

The estimated take-up of developed industrial land between 2011 and 2021 in Lockyer Valley was about four hectares. The take-up occurred on land intended for medium and low impact industry.

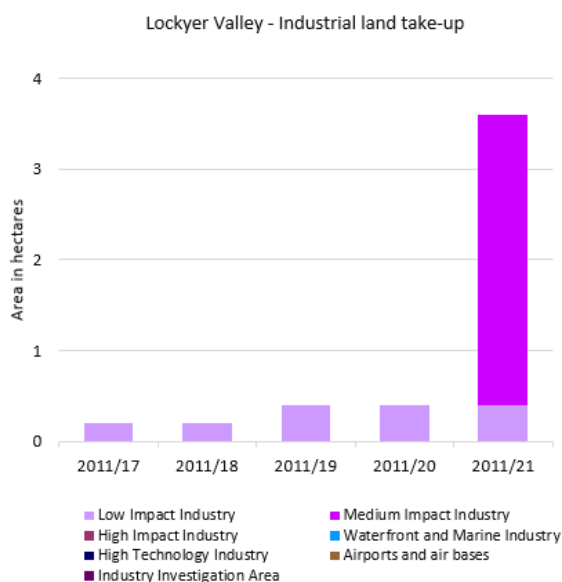
There were 106 hectares of planned industrial land supply in Lockyer Valley as at 2021, including serviced and un-serviced land. This planned industrial land supply comprised land intended for low and medium impact industry.

For more detail about planned industrial land and take-up, see the [Technical notes](#).



106ha of developable land

This graph shows the number of hectares of planned industrial land supply as at 2021 by industrial land category.



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a

lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of Planned industrial land supply. Further, Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

The department has continued to build on work undertaken through [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. This higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – Lockyer Valley

The capacity and realistic availability of planned industrial employment supply in Lockyer Valley provides the minimum 15 years of supply of land sought by *ShapingSEQ* 2017 (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for Lockyer Valley is equivalent to about 1100 jobs on the graph.

The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. It is calculated from the LGIP as adopted June 2018. The realistic availability figure provides a supply scenario prepared for this report that considers whether some of the capacity is not realistically available by 2041.

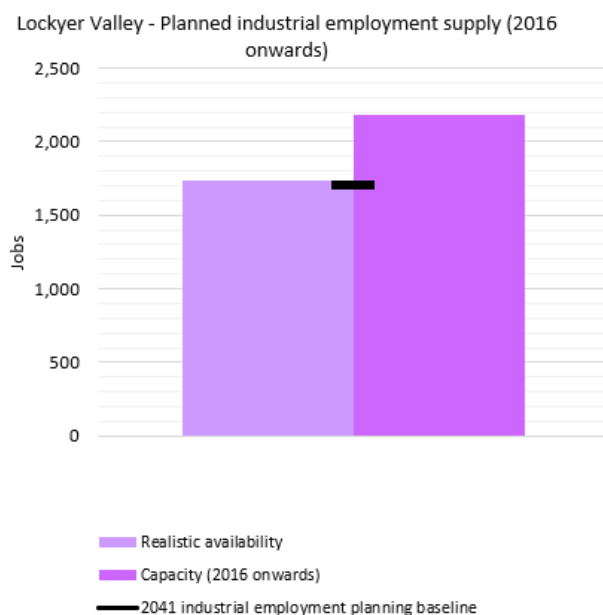
The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

The realistic availability scenario is informed by updated developable area data (to 2021), as reported in the Planned industrial land supply and take-up section of this report, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

The capacity of planned industrial employment supply in Lockyer Valley (from 2016 onwards) is about 2200 employees, which represents about 36 years of supply (from 2021 onwards) and is above the 2041 industrial employment planning baseline of about 1700 employees. The realistic availability of this supply is about 1700 employees, which represents about 28 years of supply (from 2021 onwards) and is slightly above the 2041 employment planning baseline.

Lockyer Valley Regional Council is preparing a new planning scheme which may affect planned industrial employment supply. Where the scheme proceeds, and source data is updated, its effect on planned industrial employment supply will be included in future years of LSDM reporting.

For more detail about the calculation of planned industrial employment supply, see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, from 2016 onwards, that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program Delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

Future [Best practice research](#) could consider the availability of data to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the present year. Current years of supply figures (from 2021 onwards) are indicative estimates, effectively assuming the same average annual rate of take-up of employment supply from 2016 to 2021 as the average annual *ShapingSEQ* 2017 employment planning baseline growth from 2016 to 2031.

Logan

Summary

ShapingSEQ 2017 establishes that Logan's expected population growth will require 89,900 additional dwellings between 2016 and 2041, through its dwelling supply benchmarks.

The capacity and realistic availability of planned dwelling supply in the Logan consolidation and expansion areas provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017*.

There are about 4.6 years of supply of uncompleted lot approvals and around 11.3 years of uncompleted multiple dwelling approvals in Logan, which are above the minimum four years of supply sought by *ShapingSEQ 2017*.

Dwelling approvals in Logan increased by 68 per cent when compared to the total dwelling approvals recorded in 2019/20, largely influenced by the HomeBuilder government stimulus and low interest rate environment. Dwelling approvals in the consolidation area have, on average, exceeded the consolidation average annual benchmark over the 2016/17 to 2020/21 period. Dwelling approvals in the Logan expansion area have been below the expansion area average annual benchmark since they were set under *ShapingSEQ 2017*, however the increase in activity in 2020/21 has narrowed the gap considerably. State government catalyst funding will further assist future dwelling growth in key growth areas in Greater Flagstone and Yarrabilba Priority Development Areas.

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals indicate an increase in housing diversity in Logan. The predominant middle housing type approved in Logan since 2016/17 is semi-detached, row or terrace houses and townhouses of two or more storeys. New housing contributing to housing diversity in Logan has predominately been a house with an auxiliary unit. Dwelling density has continued to increase in accordance with SEQ's preferred future.

The capacity and realistic availability of planned industrial employment supply in Logan provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017* and exceed the 2041 industrial employment planning baseline. The estimated take-up of developed industrial land between 2011 and 2021 in Logan was about 70 hectares, with about 233 hectares of planned industrial land existing as at 2021.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ 2017*, [click here](#).
- a map of the urban footprint defined by *ShapingSEQ 2017*, [click here](#).

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data to 30 June 2021, where available at the time of reporting, and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of

COVID-19 and government stimulus and investment. These impacts may vary across the region, recognising that the economy and housing markets operate differently in different areas of SEQ. Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – Logan

Planned dwelling supply – Logan

The capacity and realistic availability of planned dwelling supply in the Logan consolidation and expansion areas provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017*.

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. It is calculated from the Logan Growth Model, as supplied by Logan City Council in July 2021. The realistic availability figure provides a land supply scenario prepared for this report that considers whether capacity is realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

The realistic availability scenario uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

In the Logan consolidation area, the capacity of planned dwelling supply, from 2021 onwards, is about 59,900 dwellings, which is significantly greater than the consolidation 2041 dwelling supply benchmark (from 2021 onwards) of about 13,900 dwellings.

In the Logan expansion area, the capacity of planned dwelling supply (from 2021 onwards) is about 144,600 dwellings, which is also significantly greater than the expansion 2041 dwelling supply benchmark (from 2021 onwards) of about 61,200 dwellings. The realistic availability of this supply (from 2021 onwards) is about 79,500 dwellings which equates to around 34 years of supply and is above *ShapingSEQ 2017*'s 15 years of supply policy objective.

Much of the planned dwelling supply in the Logan expansion area is located within Park Ridge, Logan Reserve, Bahrs Scrub, Greenbank and Logan Village, as well as the Greater Flagstone and Yarrabilba Priority Development Areas (PDA). Realisation of the planned dwelling supply in the PDAs of Greater Flagstone and Yarrabilba is now supported by a sub-regional infrastructure agreement for sewerage provision and upgrades to local roads.

Planned dwelling supply also needs to be supported by upgrades to state roads and the Salisbury to Beaudesert rail corridor and would be supported by frequent public transport services as identified by *ShapingSEQ 2017*.

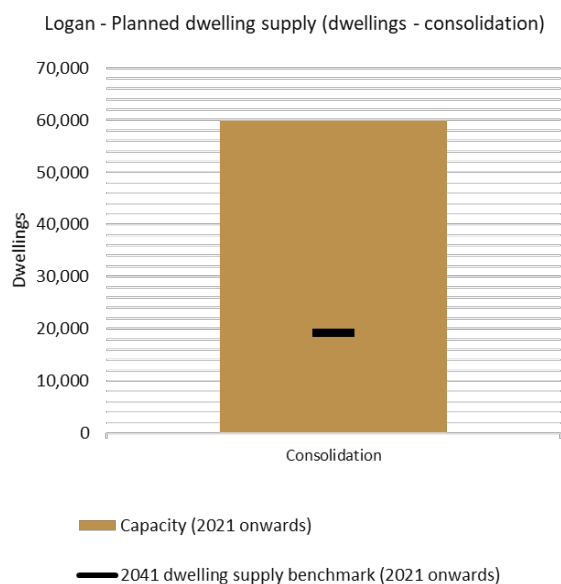
To support ongoing development in Logan funding has been provided by the state government through the:

- Catalyst Infrastructure Fund (\$31 million) for road infrastructure to support development of 27,000 lots in Greater Flagstone, and
- Building Acceleration Fund (\$15 million each) to support the development of 1,700 lots (through improved access and transport efficiency) at Bahrs Scrub and 20 b00 lots (through infrastructure for a primary school site and roads) at Yarrabilba.

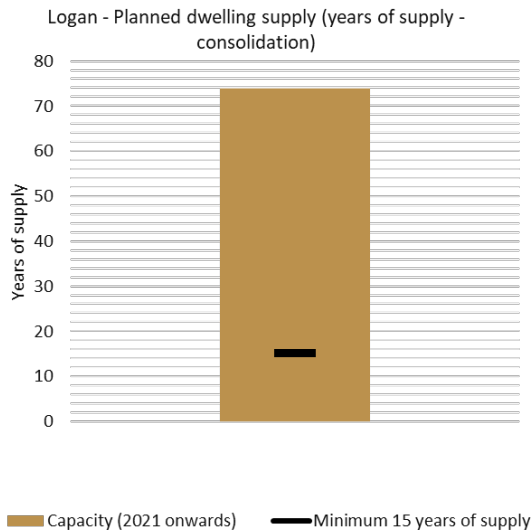
Logan City Council is commencing the preparation of a new planning scheme and other amendments are in process. Where planning scheme changes proceed, and source data is updated, the effect on planned dwelling supply will be included in future years of LSDM reporting.

As indicated in Dwelling growth, on average the take-up of planned dwelling supply since 2016 is faster than the average annual benchmark used to calculate years of supply in the consolidation area, but slower overall than the average annual benchmark for the expansion area. Given that, for example, the very large growth area of Greater Flagstone has been in its early stages, it is to be expected that take-up in the early years from 2016 will be slower than in later years in the expansion area.

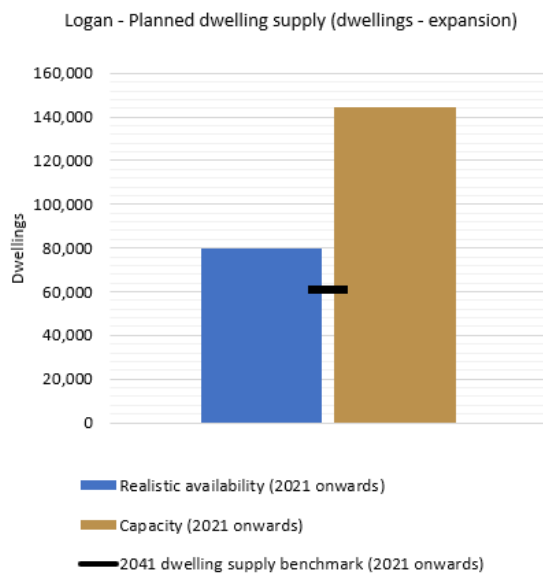
For more detail about the calculation of planned dwelling supply, including years of supply, and a list of planning scheme amendments in process for Logan, see the [Technical notes](#).



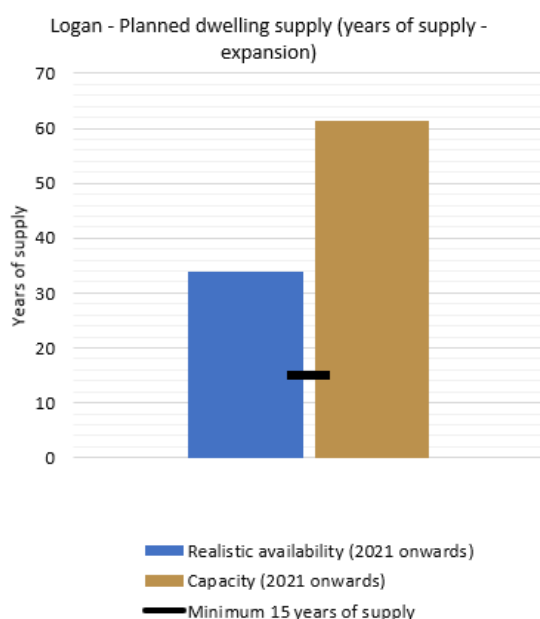
This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ 2017*'s dwelling supply benchmark (from 2021 onwards) in the consolidation area. This accounts for the 2016/21 constructed dwellings estimate of 5954. To view a fact sheet explaining the calculation of the remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s minimum 15 years of supply policy objective in consolidation areas.



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the expansion area. This accounts for the 2016/21 constructed dwellings estimate of 8809. To view fact sheets on the concept of realistic availability, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017*'s minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation, and the assumptions that underpin the source data are expected to improve and become more consistent and up-to-date over time, improving the comparability and currency of supply estimates. These improvements can be reflected in future publications of the Land Supply and Development Monitoring (LSDM) Report. Updated planning assumptions provided by Logan City Council in 2021 have supported the estimates of planned dwelling supply in the 2021 LSDM Report.

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ 2017*'s dwelling supply benchmarks. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region's planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state and local constraints
- recent amendments to the planning scheme and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

Approved supply – Logan

Approved supply is measured by analysing uncompleted lot approvals and uncompleted multiple dwelling approvals across Logan.

There are about 4.6 years of supply of uncompleted lot approvals in the Logan consolidation and expansion areas overall, which is above the minimum four years of supply sought by *ShapingSEQ* 2017. The total number of uncompleted lot approvals was 12,128, decreasing from the long-term historical high in 2019/20 by 907 lots.

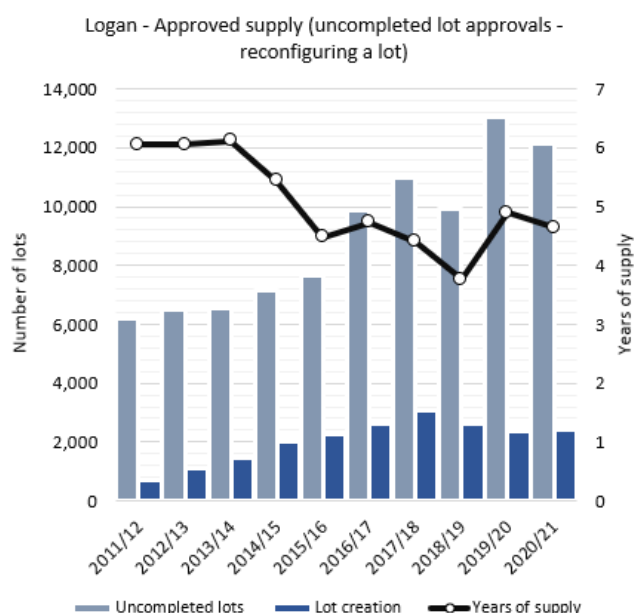
Of the uncompleted lots, approximately 69.7 per cent (8457) had operational works approvals. This represents the number of lots which are readily available for construction in the short-term.

The years of supply of lot approvals have consistently been above or about four years of supply since 2011/12. In 2020/21 there was a decrease in the years of supply, largely as a result of the decrease in the total uncompleted lot approvals.

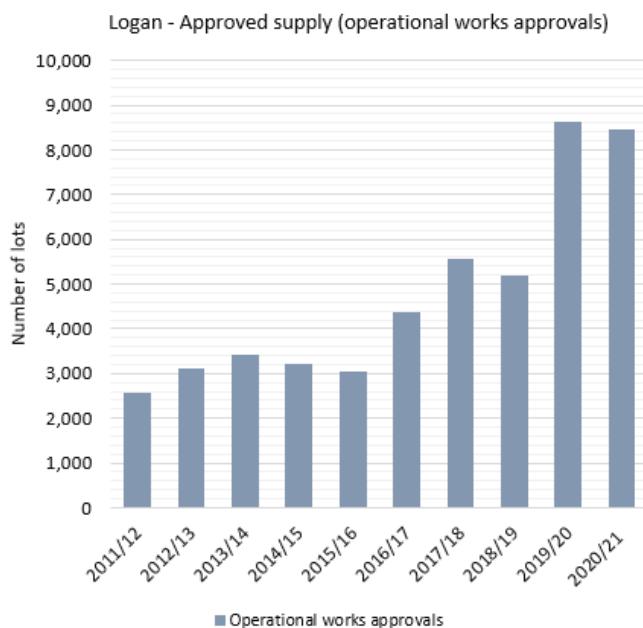
In 2021, the state government announced a total of \$61 million of funding from the Catalyst Infrastructure Fund and Building Acceleration Fund for catalyst infrastructure in Logan’s key growth areas including the Yarrabilba Priority Development Area (PDA), Greater Flagstone PDA and Bahrs Scrub. This is anticipated to support the development of around 30,700 new lots across these growth areas, that form part of the current Planned dwelling supply.

Logan has about 11.3 years of supply of uncompleted multiple dwelling approvals in the consolidation area, which is well above the minimum four years of supply sought by *ShapingSEQ* 2017. The supply of uncompleted multiple dwelling approvals fell slightly from June 2019 to June 2020 and has fallen again to June 2021.

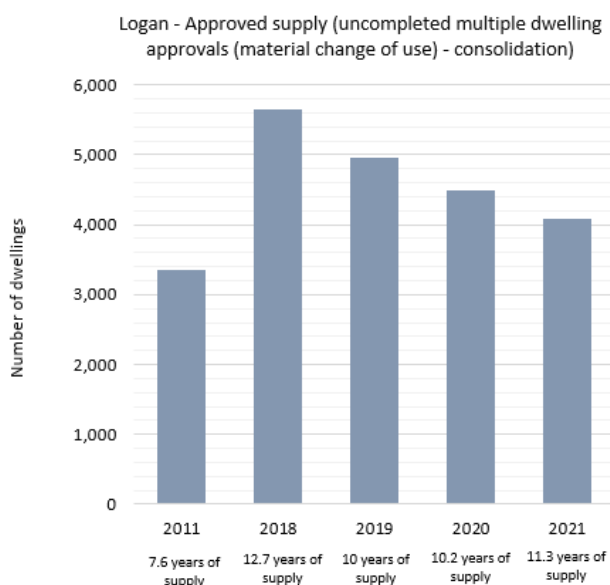
For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical notes](#).



This graph shows the number of lots that have a development permit but have not yet been certified (uncompleted lots) as at 30 June each year and the number of lots that have been created (certified) in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.



This graph shows the number of multiple dwellings that have a material change of use development permit but have not yet been constructed (uncompleted multiple dwellings) in the consolidation area as at 30 June for all reported years.

Note: The years of supply for uncompleted multiple dwelling approvals is determined by dividing the total number of uncompleted multiple dwellings by the average annual attached dwelling building approvals of the previous four years. The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – Logan

In 2020/21, 4647 dwelling approvals were recorded for Logan at a rate of 387 dwellings per month. This represents a 68 per cent increase when compared to the total dwelling approvals recorded in 2019/20. When compared to long-term averages, the 2020/21 dwelling approvals is above the five-year average of 3362 and significantly higher than the ten-year average of 2651 dwelling approvals.

The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see [Market Factors](#).

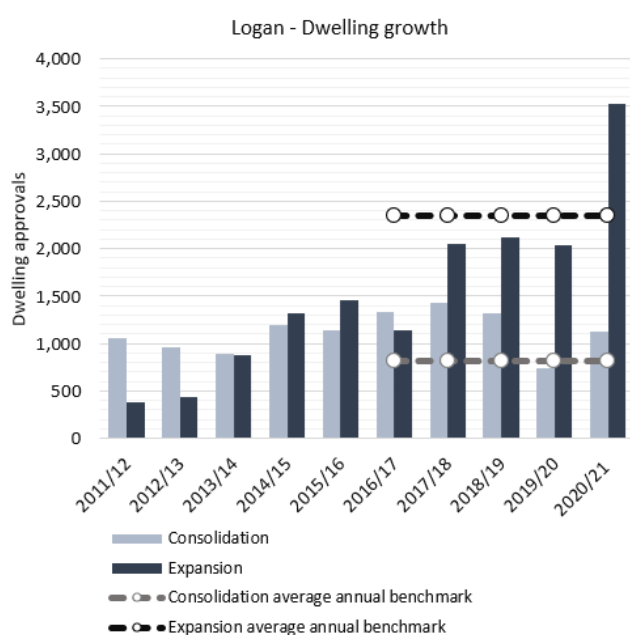
Within the Logan consolidation area, there were 1122 dwelling approvals in 2020/21, up from its lowest level in a decade and exceeding the consolidation average annual benchmark of 812 additional dwellings by 310 more dwelling approvals. This has resulted in Logan continuing to exceed the consolidation average annual benchmark, on average, over the 2016/17 to 2020/21 period.

Over the same period, there were 3525 dwelling approvals in the Logan expansion area in 2020/21, which was 1174 more than the expansion average annual benchmark of 2351 additional dwellings. The increase in activity in 2020/21 indicates an upward trend towards meeting the cumulative average annual expansion benchmark with the gap narrowing considerably.

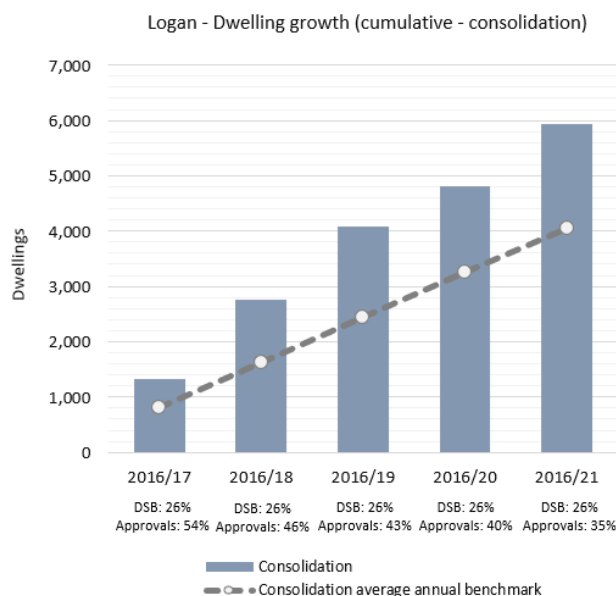
Approximately 35 per cent of dwelling approvals from 2016/17 to 2020/21 were in Logan’s consolidation area, which is more than its expected share of dwelling growth to 2031 identified in *ShapingSEQ 2017* (26 per cent). Approvals in the expansion area (about 65 percent) over the same period were less than its expected share of 74 per cent.

State government funding towards new infrastructure through the Building Acceleration Fund (BAF) will assist future dwelling growth in Logan’s expansion area, see Planned Dwelling Supply for further detail.

For more information about improvements to the measurement of net growth over time, see [Program Delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).

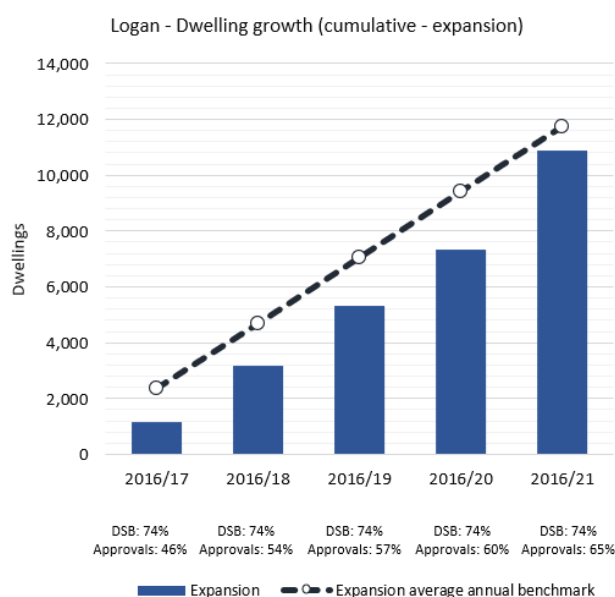


This graph shows annual dwelling approvals compared against *ShapingSEQ* 2017's average annual benchmarks.



This graph shows the cumulative dwelling growth in the consolidation area against *ShapingSEQ* 2017's consolidation average annual benchmark.

Note: DSB = Dwelling Supply Benchmark



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ* 2017's expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the 2018 Queensland Government dwelling projections for SEQ. This adjustment resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has

been retained in the 2021 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

Changes in dwelling density – Logan

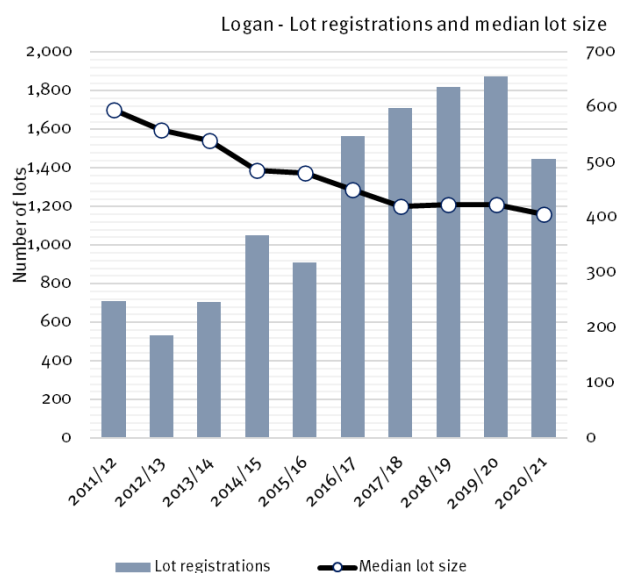
Dwelling density (measured through median lot sizes and mean population-weighted dwelling density) is increasing in Logan in accordance with SEQ's preferred future for higher dwelling densities and smaller lots.

Mean population-weighted dwelling density in Logan increased between 2011 and 2016, from 8.9 to 9.7 dwellings per hectare. This represents the average dwelling density at which the population of Logan lives and is comparable to the net residential density as used by *ShapingSEQ 2017*. In the consolidation area, mean population-weighted dwelling density increased from 10.8 to 11.7 dwellings per hectare.

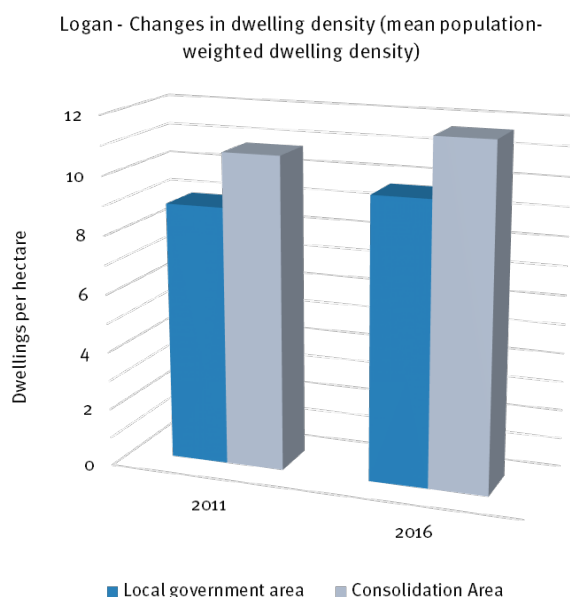
Since 2011/12 the overall median size of new lots in Logan has decreased from 595m² to 406m² in 2020/21. This was accompanied by a significant increase in lot registrations over the same period. Although lot registrations declined in 2020/21, the median lot size reduced from 424m² in 2019/20 to 406m². This measure is indicative of increased dwelling densities in new urban subdivisions in Logan.

The planning scheme and Priority Development Area development schemes in place across Logan have supported increased dwelling densities and smaller lots over time.

For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – Logan

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals indicate an increase in housing diversity in Logan, consistent with SEQ's preferred future. It is understood that new housing contributing to housing diversity in Logan has predominately been a house with an auxiliary unit.

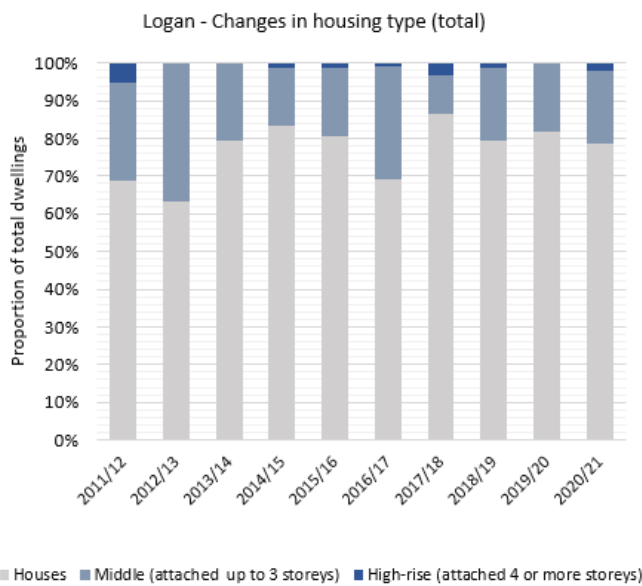
Eighty per cent (13,412 dwellings) of all new dwelling approvals in Logan from 2016/17 to 2020/21 were for houses, which was less than for the existing dwelling stock as at the 2016 Census (86 per cent). Between 2016/17 and 2020/21 houses comprised 65 per cent of new dwelling approvals in the consolidation area and 88 per cent of new dwelling approvals in the expansion area for the same period.

Dwelling approvals for middle (about 19 per cent or 3147 dwellings) were higher than their share of the dwelling stock as at the 2016 Census (middle 14 per cent). Between 2016/17 and 2020/21 middle comprised 31 per cent of new dwelling approvals in the consolidation area and 12 per cent of new dwelling approvals in the expansion area for the same period.

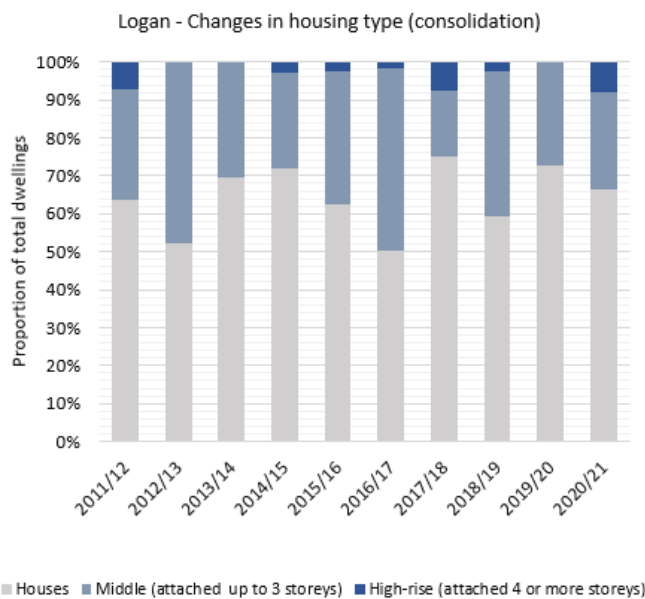
The predominant middle housing type dwellings approved since 2016/17 in Logan are semi-detached, row or terrace houses and townhouses of one storey (about 53 per cent or 1665 dwellings). Fifty-nine per cent (1861 dwellings) of middle dwelling approvals for the period between 2016/17 and 2020/21 were located within the consolidation area and 41 per cent (1286 dwellings) were located within the expansion area for the same period.

At the 2016 Census, high-rise comprised zero percent of existing dwelling stock. Between 2016/17 and 2020/21 about 2 percent of new dwelling approvals (252 dwellings) in Logan were for high-rise of four to eight storeys. There were no approvals for high-rise of nine or more storeys in Logan for this period.

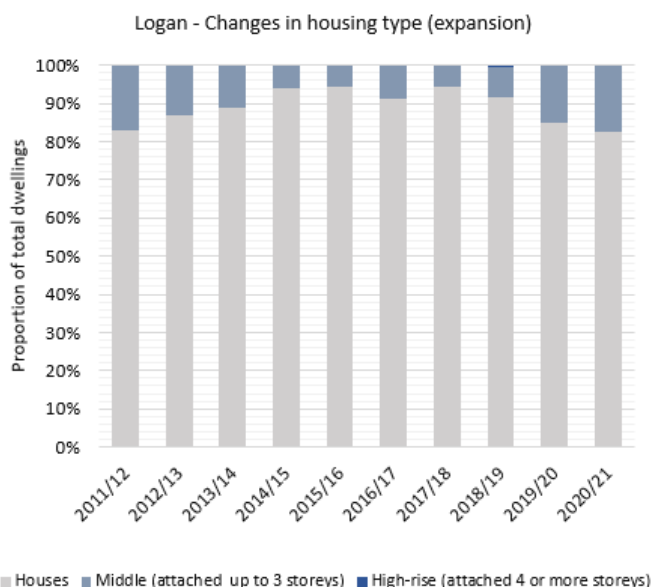
For more detail about dwelling approvals, see the [Technical notes](#).



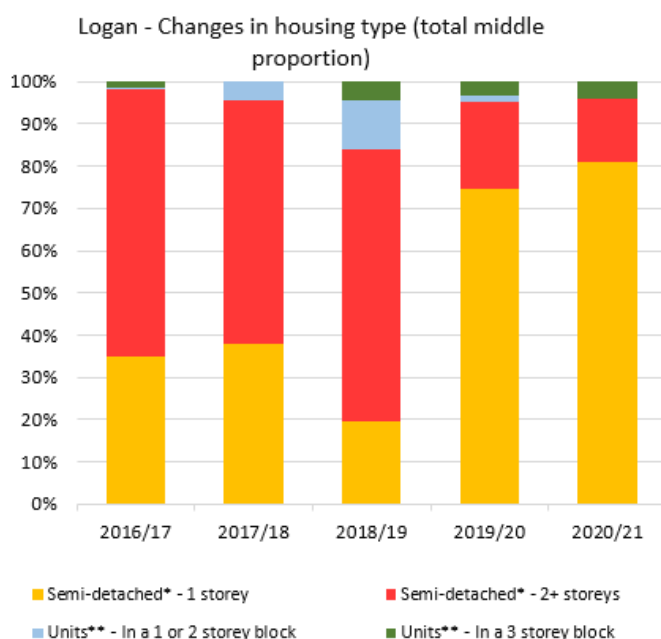
This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the consolidation area.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the expansion area.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of 'missing middle' in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the

ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – Logan

The number of sales has increased from 2018/19 to 2020/21 for all categories in Logan except for attached dwellings in the expansion area.

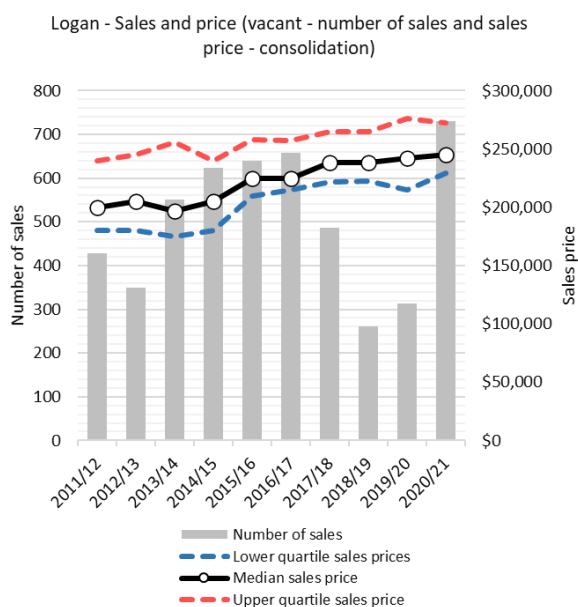
Median sales prices have increased for all categories from 2011/12 to 2020/21 except for attached dwellings in the consolidation area which have decreased significantly.

The median sales price for all categories is lower in Logan than for SEQ overall.

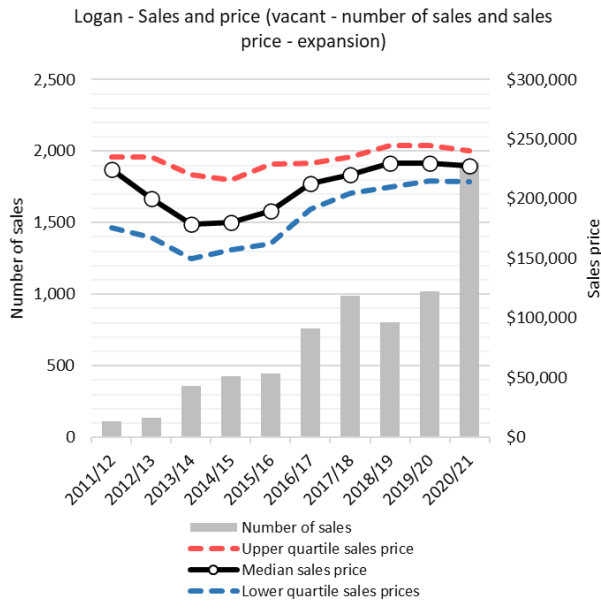
The rate of growth in median sales price from 2011/12 to 2020/21 was higher in Logan than in SEQ for vacant lots per square metre in the expansion area (51.1 per cent), vacant lots in the consolidation area (22.5 per cent) and attached dwellings in the expansion area (191.5 per cent).

Median sales price for houses and attached dwellings are higher in the Logan expansion area than in the consolidation area.

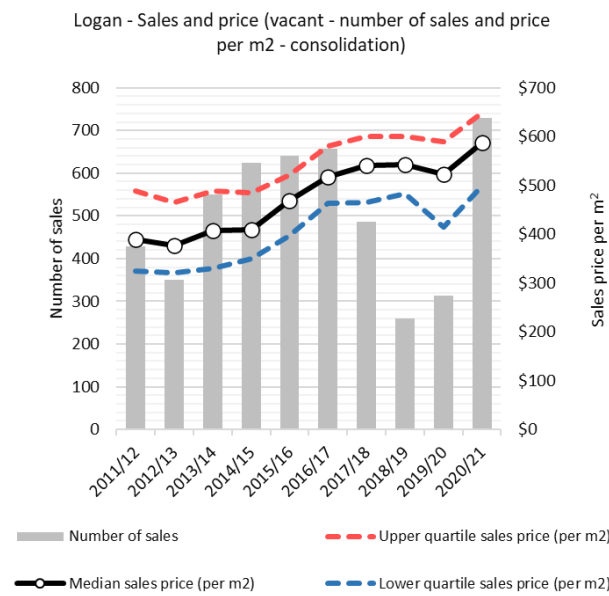
For more detail about the median sales price and number of sales, see the [Technical notes](#).



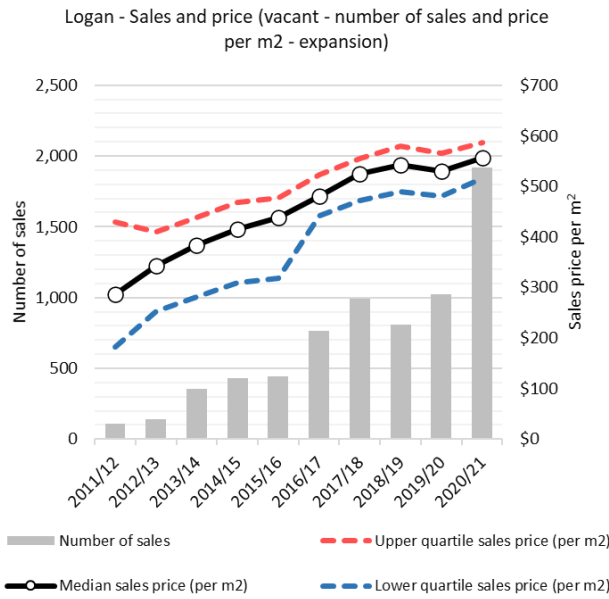
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the consolidation area.



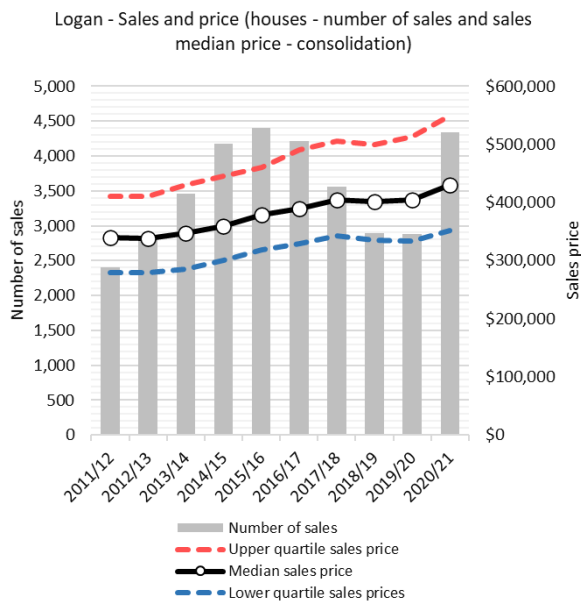
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the expansion area.



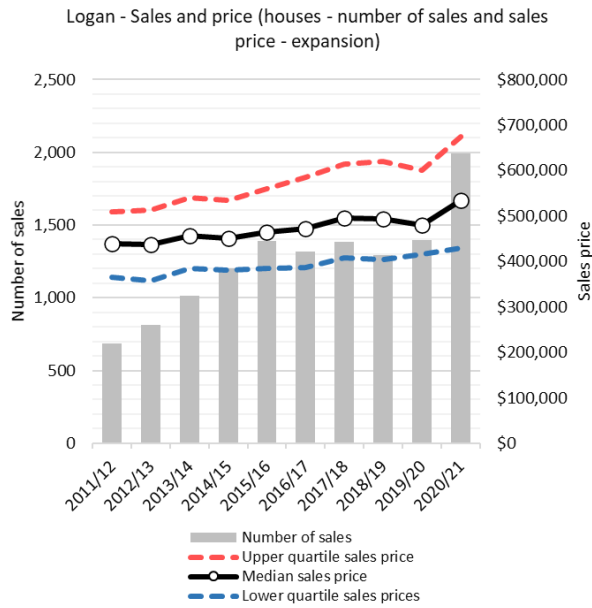
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the consolidation area.



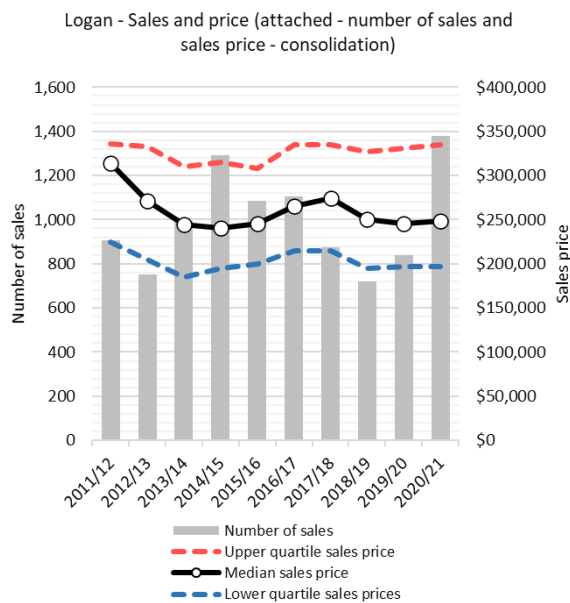
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



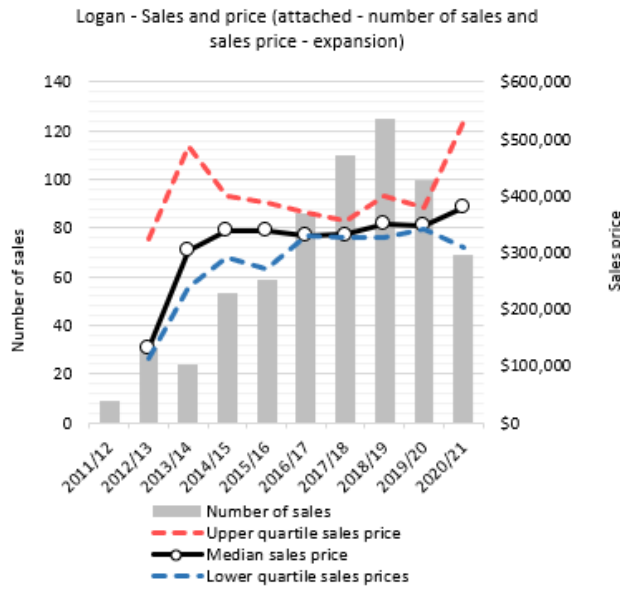
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the consolidation area.



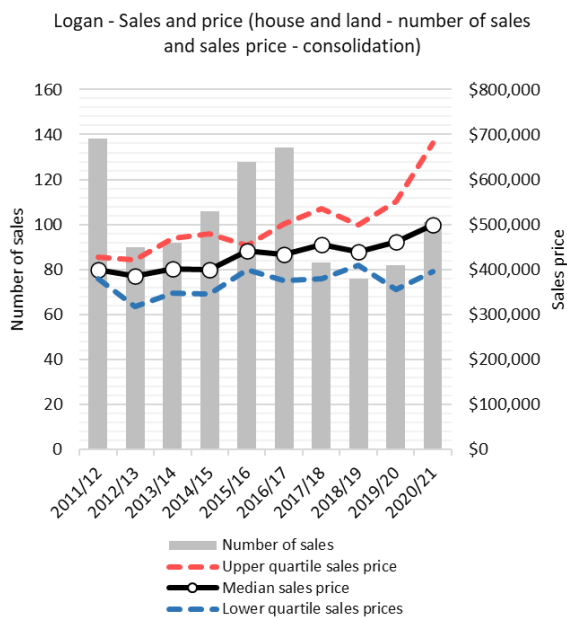
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



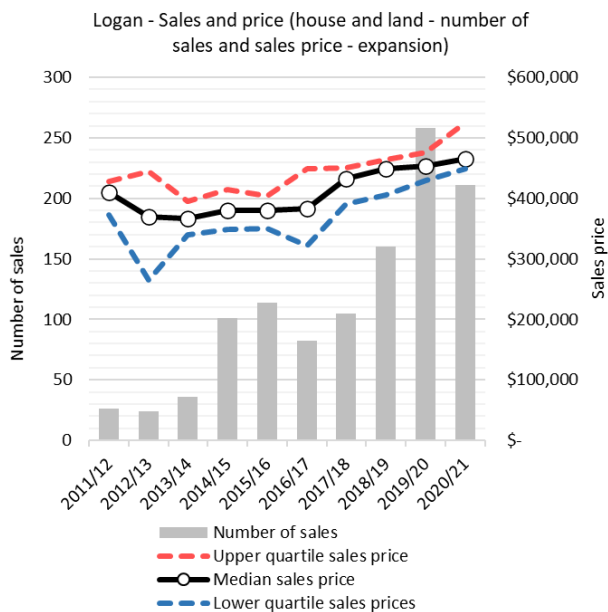
This graph shows the number of sales and the lower, median and upper quartile sales price for attached dwellings in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for house-land packages in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

Note: Sales prices have not been reported for years with fewer than 10 sales. For more details, see the [Technical notes](#).

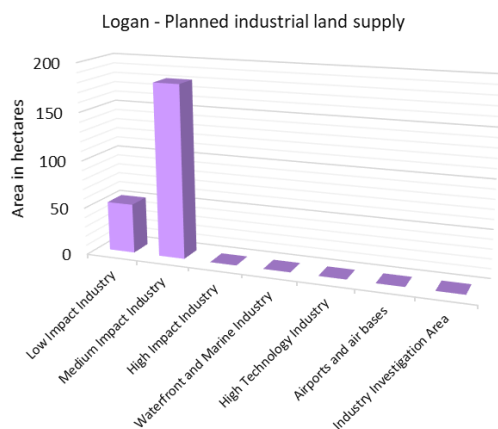
Industrial – Logan

Planned industrial land supply/take-up – Logan

The estimated take-up of developed industrial land between 2011 and 2021 in Logan was about 70 hectares, with about 12 hectares taken-up in 2020/21. This take-up occurred on land intended for low and medium impact industry.

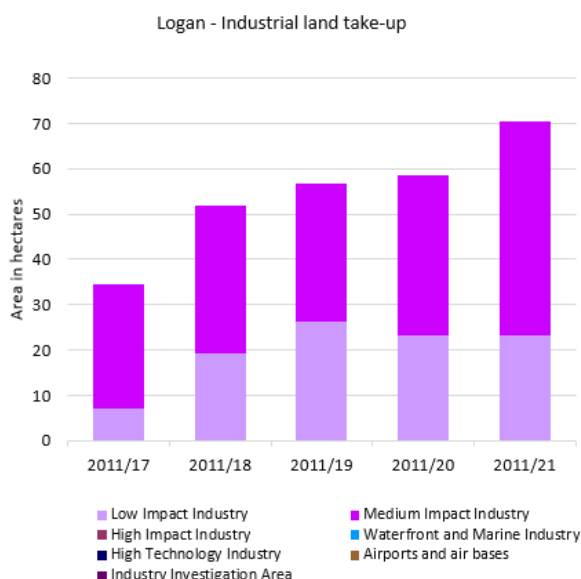
There were 233 hectares of planned industrial land supply in Logan as at 2021, including serviced and un-serviced land. This planned industrial land comprised land intended for low and medium impact industry.

For more detail about planned industrial land and take-up, see the [Technical notes](#).



233ha of developable land

This graph shows the number of hectares of planned industrial land supply as at 2021 by industrial land category.



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of planned industrial land supply. Further, Planned

industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

Although it allows for industrial uses, Logan's Mixed Use Zone has not been captured in the Planned industrial land supply/take-up measurement due to uncertainty about the scale and location of industrial uses in the Zone.

The department has continued to build on work undertaken through [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. This higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – Logan

The capacity and realistic availability of planned industrial employment supply in Logan provide the minimum 15 years of supply of land sought by *ShapingSEQ* 2017 (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for Logan is equivalent to about 6100 jobs on the graph.

The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. It is calculated from the Logan Growth Model, as supplied by Logan City Council in July 2021. The realistic availability figure provides a supply scenario prepared for this report that considers whether some of the capacity is not realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

The realistic availability scenario is informed by updated developable area data (to 2021), as reported in the Planned industrial land supply and take-up section of this report, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

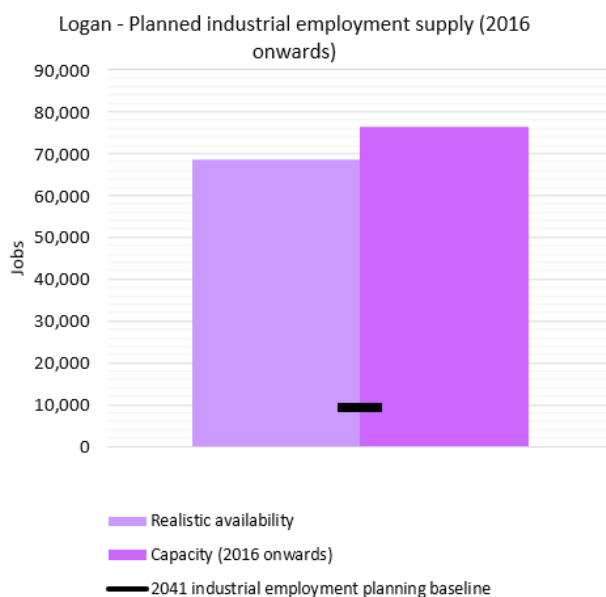
The capacity of planned industrial employment supply in Logan (from 2016 onwards) is about 76,300 employees, while the realistic availability of this supply is about 68,700 employees. These figures are significantly greater than the 2041 industrial employment planning baseline of about 9500 employees. However, some excess of planned industrial employment supply may be appropriate to facilitate strategic economic development opportunities when they arise.

The realisation of this planned industrial employment supply would be supported by improved and more direct connections to the Port of Brisbane, including the southern extension of the Gateway

Motorway as identified by *ShapingSEQ 2017*, which would support the planned Park Ridge industrial area.

Logan City Council has recently adopted and is preparing planning scheme amendments and a new planning scheme which may affect planned industrial employment supply. Where changes proceed, and data sources are updated, their effect on industrial employment supply will be included in future years of LSDM reporting.

For more detail about the calculation of planned industrial employment supply, and identification of planning scheme changes that may affect supply, see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, from 2016 onwards, that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017*'s 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program Delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

Updated planning assumptions provided by Logan City Council in 2021 have supported the estimates of planned industrial employment supply, resulting in a significant increase in estimated supply from 2016 onwards.

Future [Best practice research](#) could consider the availability of data to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the present year. Current years of supply figures (from 2021 onwards) are indicative estimates, effectively assuming the same average annual rate of take-up of employment supply from 2016 to 2021 as the average annual *ShapingSEQ* 2017 employment planning baseline growth from 2016 to 2031.

Moreton Bay

Summary

ShapingSEQ 2017 establishes that Moreton Bay's expected population growth will require an additional 88,300 dwellings between 2016 and 2041, through its dwelling supply benchmarks.

The capacity and realistic availability of planned dwelling supply in the Moreton Bay consolidation and expansion areas provide the minimum 15 years of supply sought by *ShapingSEQ 2017*.

There are about 3.7 years of supply of uncompleted lot approvals in Moreton Bay, which is below the minimum four years of supply sought by *ShapingSEQ 2017*. The rate of lot creation in Moreton Bay has increased in 2020/21 when compared to recent years which has contributed to the lower years of supply figure. There are about 4.5 years of supply of uncompleted multiple dwelling approvals in the Moreton Bay consolidation area, which exceeds the four years of supply sought by *ShapingSEQ 2017*.

Dwelling approvals in the Moreton Bay consolidation area have exceeded the average annual benchmark on average since 2016/17. Dwelling approvals in the expansion area declined below the expansion average annual benchmark in recent years since 2018/19, but moved above the benchmark with increased activity in 2020/21. As such, Moreton Bay remains on track to accommodate the 2041 dwelling supply benchmarks given that the actual number of dwelling approvals for 2016/17 to 2020/21, in the consolidation and expansion areas, are above the average annual benchmarks.

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals indicate an increase in housing diversity in Moreton Bay, however the proportion of house approvals in Moreton Bay has increased and the proportion of middle and high-rise approvals has reduced in recent years. The predominant middle housing type approved in Moreton Bay since 2016/17 is semi-detached, row or terrace houses and townhouses of two or more storeys. Dwelling density has also increased, consistent with SEQ's preferred future.

Moreton Bay Regional Council is continuing to progress a Regional Growth Management Strategy as one of a suite of regional strategies to be recognised in its new Corporate Plan. To date, the Regional Growth Management Strategy (RGMS) project has reviewed Council's base planning assumptions and initiated urgent planning actions such as the completion of a planning scheme amendment for Caboolture West Neighbourhood Plan 1 (NDP1), made formal requests for a PDA at North Harbour and progressed significant work for the recently adopted Temporary Local Planning Instrument for the Morayfield South growth area. These planning actions will mitigate and meet supply considerations. Once completed, the RGMS will form part of Council's corporate strategy and inform future planning scheme and Local Government Infrastructure Plan amendments, and consequently future years of LSDM reporting.

The capacity and realistic availability of the planned industrial employment supply in Moreton Bay provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017* and exceed the 2041 industrial employment planning baseline. The estimated take-up of developed industrial land between 2011 and 2021 in Moreton Bay was about 245 hectares, with about 951 hectares of planned industrial land existing as at 2021. Council is progressing the Urban Employment Lands

Investigation which will provide advice and direction on, amongst other matters, industrial land supply in the region.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ* 2017, [click here](#).
- a map of the urban footprint defined by *ShapingSEQ* 2017, [click here](#).

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data to 30 June 2021, where available at the time of reporting, and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of COVID-19 and government stimulus and investment. These impacts may vary across the region, recognising that the economy and housing markets operate differently in different areas of SEQ. Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – Moreton Bay

Planned dwelling supply – Moreton Bay

The capacity and realistic availability of planned dwelling supply in the Moreton Bay consolidation area provide the minimum 15 years of supply sought by *ShapingSEQ* 2017. The capacity and realistic availability of the planned dwelling supply is also above the minimum 15 years of supply.

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. It is calculated from the Local Government Infrastructure Plan (LGIP) October 2019 residential figures prepared by Moreton Bay Regional Council and supplied by Council in August 2021. The realistic availability figure provides a land supply scenario prepared for this report that considers whether capacity is realistically available by 2041.

Council is progressing a Regional Growth Management Strategy which in time will inform future planning scheme and LGIP amendments, and consequently future years of LSDM reporting.

The realistic availability scenario considers factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

The realistic availability scenario uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

In the Moreton Bay consolidation area, the capacity of planned dwelling supply, from 2021 onwards, is about 70,300 dwellings. This figure is significantly above the consolidation 2041 dwelling supply benchmark (from 2021 onwards) of about 36,800 dwellings.

In the Moreton Bay expansion area, the capacity of planned dwelling supply (from 2021 onwards) is about 69,100 dwellings which is significantly above the expansion 2041 dwelling supply benchmark (from 2021 onwards) of about 28,800. The realistic availability of this supply is about 28,200 dwellings, which equates to about 16 years of supply, which aligns with *ShapingSEQ 2017's* 15 years of supply policy objective.

Much of the planned dwelling supply in the Moreton Bay expansion area is located within the emerging community of Caboolture West, which has an overall capacity of about 27,000 dwellings. This supply has been included in the capacity figure but has not been included as part of the realistic availability scenario, in accordance with the realistic availability method.

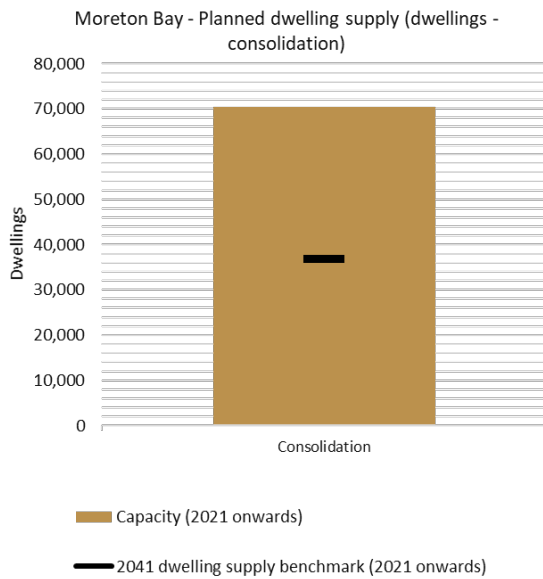
However, in 2021 there has been significant collaboration between the department, the new Growth Areas Team, Moreton Bay Regional Council, infrastructure agencies, and developers. On 20 October 2021, the new Planning Scheme Policy – Caboolture West Local Plan – Neighbourhood Development Plan No.1 (NDP1), was adopted by Council and commenced on 26 October 2021. Loan funding of \$10.5 million from the state government's Building Acceleration Fund for water supply and sewerage infrastructure is supporting the development of about 3000 lots in this area. The area is expected to be reflected as realistically available in future LSDM reporting once relevant infrastructure agreements or development approvals are in place, helping to maintain adequate years of supply.

Overarching land use and infrastructure planning for the broader Caboolture West growth area is also being accelerated as part of the remit of the Growth Areas Team, to support the ongoing realistic availability of planned dwelling supply in the future.

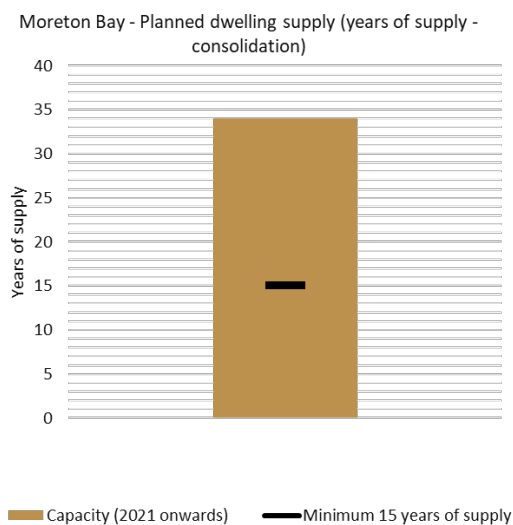
In addition to progressing this work in Caboolture West, Council also completed significant planning work in the Morayfield South Growth Area, which is likely to result in more than 9,000 dwellings being included as realistic availability of planned dwelling supply in Moreton Bay over the long term and as further approvals are issued in the area.

As indicated in Dwelling growth, on average the take-up of planned dwelling supply since 2016 has been somewhat faster than the average annual benchmarks used to calculate years of supply in both the consolidation and expansion areas. The measures taken in 2021 to support development activity in Caboolture West are partly a response to that faster take-up in the expansion area.

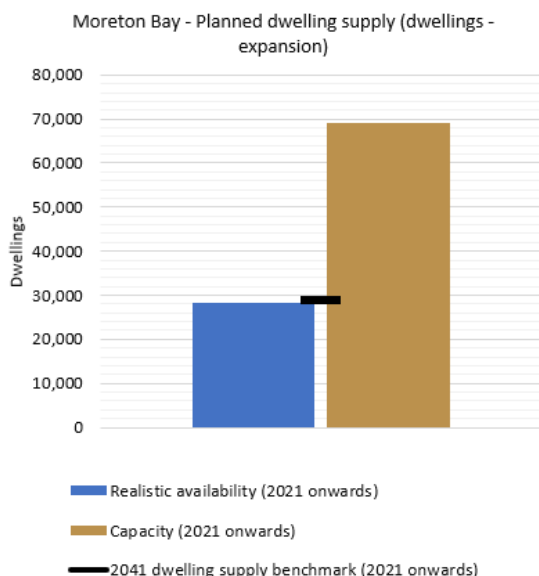
For more detail about the calculation of planned dwelling supply, including years of supply, see the [Technical notes](#).



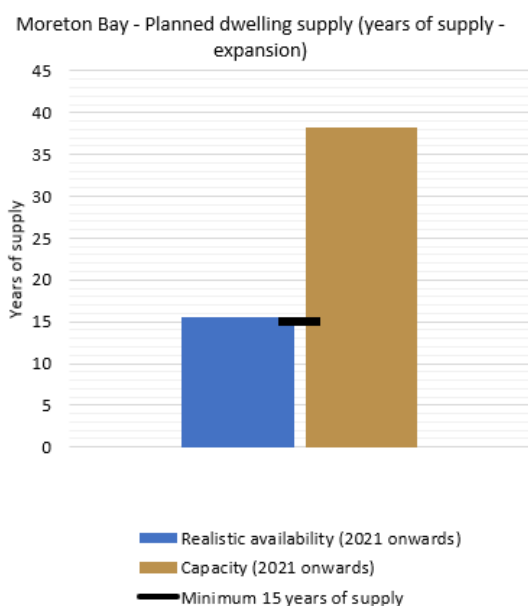
This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the consolidation area. This accounts for the 2016/21 constructed dwellings estimate of 11,447. To view a fact sheet explaining the calculation of the remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s minimum 15 years of supply policy objective in consolidation areas.



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the expansion area. This accounts for the 2016/21 constructed dwellings estimate of 11,274. To view fact sheets on the concept of realistic availability, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent and up-to-date over time, improving the comparability and currency of supply estimates. These improvements can be reflected in future publications of the Land Supply and Development

Monitoring (LSDM) Report. Updated planning assumptions provided by Moreton Bay Regional Council in 2021 have supported the estimates of planned dwelling supply in the 2021 LSDM Report.

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ 2017*'s dwelling supply benchmarks. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region's planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state and local constraints
- recent amendments to the planning scheme and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

Approved supply – Moreton Bay

Approved supply is measured by analysing uncompleted lot approvals and uncompleted multiple dwelling approvals across Moreton Bay.

There are about 3.7 years of supply of uncompleted lot approvals in the Moreton Bay consolidation and expansion areas overall, which is below the minimum four years of supply sought by *ShapingSEQ 2017*.

The total number of uncompleted lot approvals was 9502, decreasing by 570 lots when compared to the uncompleted lot approvals in 2019/20, and continued the downward trend since its historical high in 2017/18. Moreton Bay Regional Council recorded around 1,196 approvals in the March 2021 quarter, some of which may include lot approvals within the Morayfield South Emerging Community Area as advised by Council.

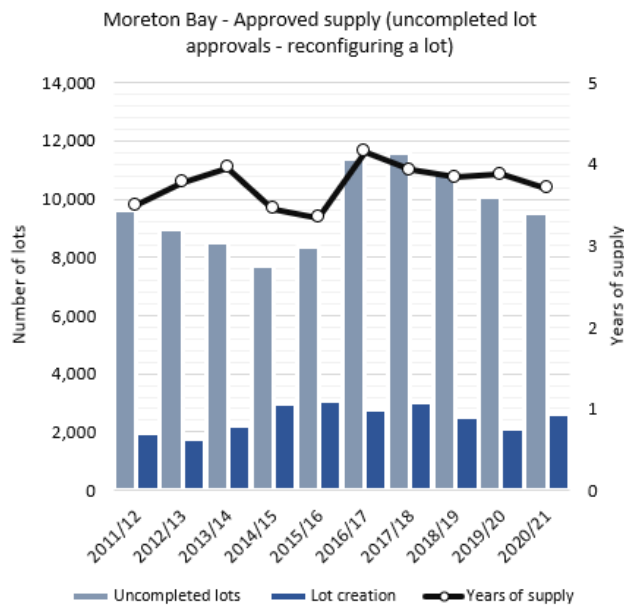
Of the uncompleted lots, approximately 27.5 per cent (2613) had operational works approvals. This represents the number of lots that are readily available for construction in the short-term.

The rate of lot creation increased in 2020/21 when compared to the previous year. This along with the decrease in the total number of uncompleted lot approvals has contributed to a slight decrease in the years of supply figure.

It is noted that the Growth Areas Team established in March 2021 is working to accelerate development in an area known as Caboolture West (Neighbourhood Development Plan 1) as a priority growth area to assist with land supply in Moreton Bay. This along with \$10.5 million in loan funding from the Building Acceleration Fund is expected to support the development of approximately 3000 lots. For further information see Growth Areas Team.

In contrast, Moreton Bay has about 4.5 years of supply of uncompleted multiple dwelling approvals in the consolidation area, which is slightly above the minimum four years of supply sought by *ShapingSEQ 2017*. The supply of uncompleted multiple dwelling approvals decreased from June 2020 to June 2021.

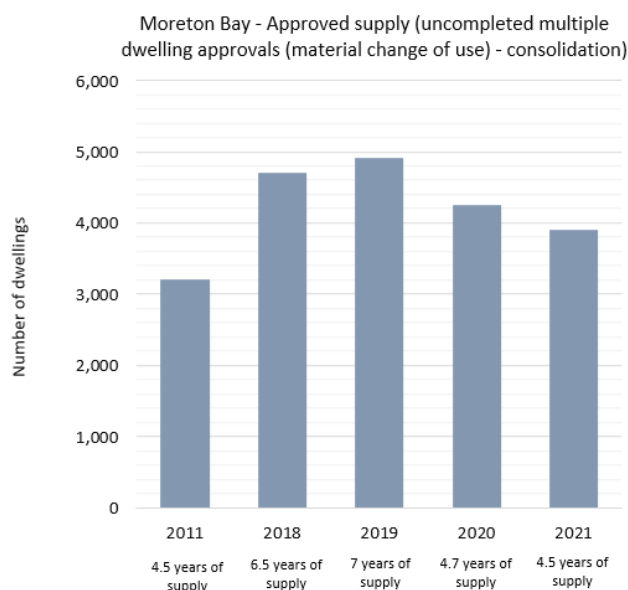
For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical Notes](#).



This graph shows the number of lots that have a development permit but have not yet been certified (uncompleted lots) as at 30 June each year and the number of lots that have been created (certified) in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.



This graph shows the number of multiple dwellings that have a material change of use development permit but have not yet been constructed (uncompleted multiple dwellings) in the consolidation area as at 30 June for all reported years.

Note: The years of supply for uncompleted multiple dwelling approvals is determined by dividing the total number of uncompleted multiple dwellings by the average annual attached dwelling building approvals of the previous four years. The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – Moreton Bay

In 2020/21, 5337 dwelling approvals were recorded for Moreton Bay at a rate of 445 dwellings per month. This is a 13 per cent increase when compared to the total annual growth experienced in Moreton Bay in 2019/20. When compared to long-term averages, the 2020/21 dwelling approvals is higher than the five-year average of 4778 and higher than the ten-year average of 4171 dwelling approvals.

The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see [Market Factors](#).

Within the Moreton Bay consolidation area, there were 2832 dwelling approvals in 2020/21, down from its peak in 2019/20 but remaining well above the consolidation average annual benchmark of 2069 additional dwellings. This has resulted in Moreton Bay continuing to exceed the consolidation average annual benchmark on average since 2016/17.

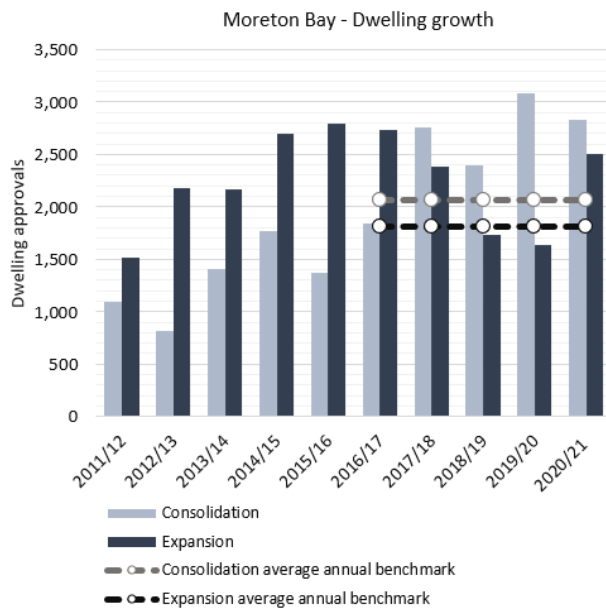
Over the same period, there were 2505 dwelling approvals in Moreton Bay’s expansion area in 2020/21, which was 697 dwellings more than the expansion average annual benchmark of 1808 additional dwellings.

Approximately 54 per cent of dwelling approvals for 2016/17 to 2020/21 were in Moreton Bay’s consolidation area, which is slightly above its expected share of dwelling growth to 2031 identified in

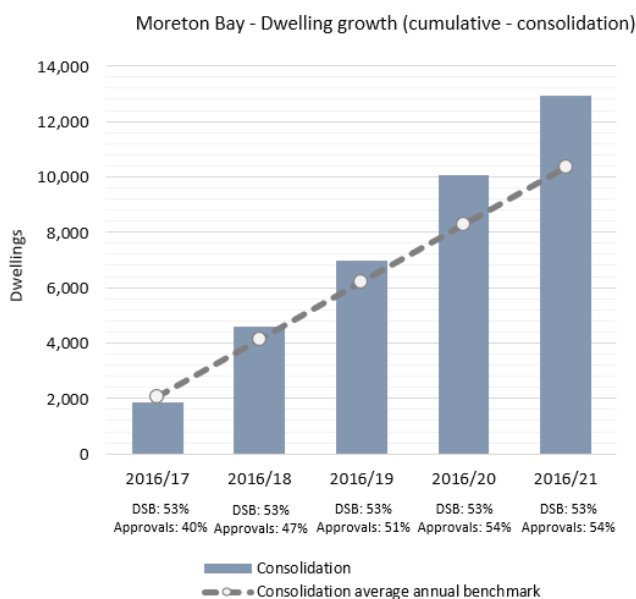
ShapingSEQ 2017 (53 per cent). Approximately 46 per cent of dwelling approvals were in Moreton Bay’s expansion area over the same period, which is slightly below its expected share of 47 per cent.

Moreton Bay remains on track to accommodate the 2041 dwelling supply benchmarks given that the actual number of dwelling approvals for 2016/17 to 2020/21, in the consolidation and expansion areas, are tracking above the average annual benchmarks.

For more information about improvements to the measurement of net growth over time, see [Program Delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).

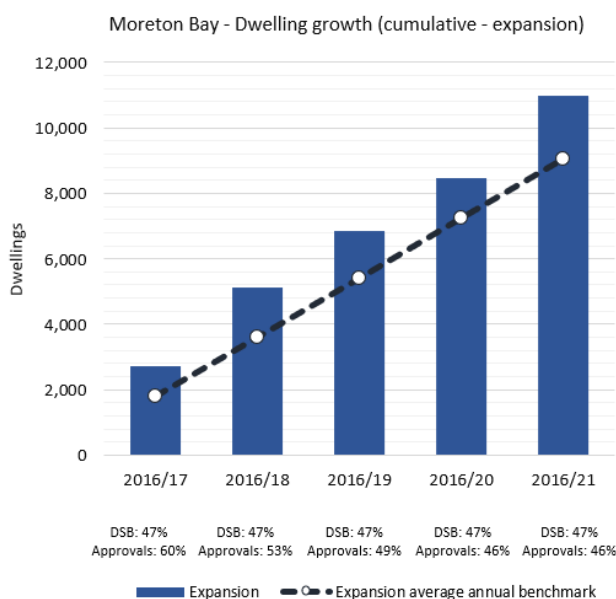


This graph shows annual dwelling approvals compared against *ShapingSEQ* 2017’s average annual benchmarks.



This graph shows the cumulative dwelling growth in the consolidation area against *ShapingSEQ* 2017’s consolidation average annual benchmark.

Note: DSB = Dwelling Supply Benchmark



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ 2017's* expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the 2018 Queensland Government dwelling projections for SEQ. This adjustment resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has been retained in the 2021 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

Changes in dwelling density – Moreton Bay

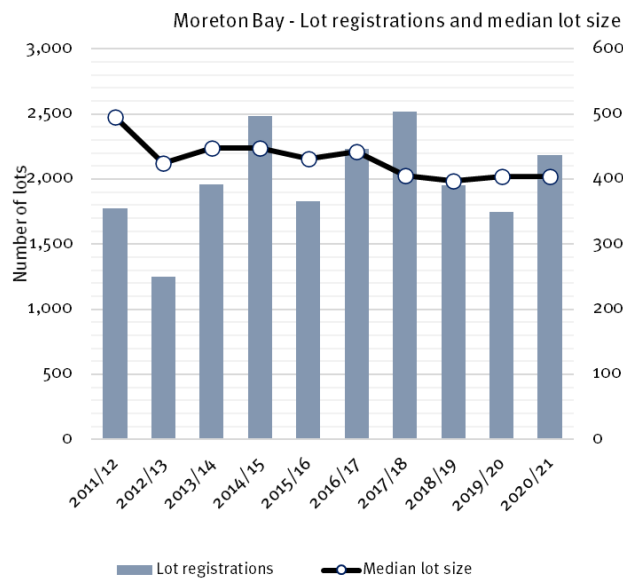
Dwelling density (measured through median lot size and mean population-weighted dwelling density) is increasing in Moreton Bay in accordance with SEQ's preferred future for higher dwelling densities and smaller lots.

Mean population-weighted dwelling density in Moreton Bay increased between 2011 and 2016, from 9.2 to 10.4 dwellings per hectare. This represents the average dwelling density at which the population of Moreton Bay lives and is comparable to the net residential density as used by *ShapingSEQ 2017*. In the consolidation area, mean population-weighted dwelling density increased from 10.9 to 11.7 dwellings per hectare.

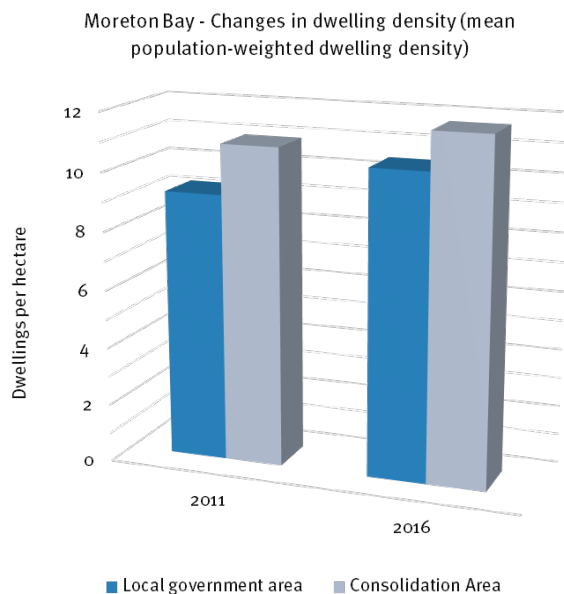
Since 2011/12, the overall median size of new lots in Moreton Bay decreased from 496m² to 404m² in 2020/21. The number of lot registrations fluctuated over the same period. This measure is indicative of an increase in dwelling densities in new urban subdivisions in Moreton Bay.

Changes to Moreton Bay's planning scheme over time have increased planned densities and allowed smaller lots.

For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – Moreton Bay

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals indicate an increase in housing diversity in Moreton Bay, consistent with SEQ's preferred future.

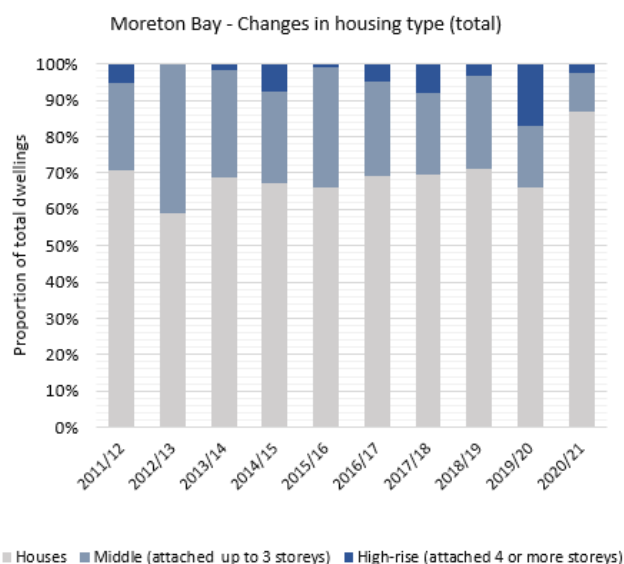
Seventy-three per cent (17,396 dwellings) of all new dwelling approvals in Moreton Bay from 2016/17 to 2020/21 were for houses, which was less than for the existing dwelling stock as at 2016 Census (82 per cent). Between 2016/17 and 2020/21 houses comprised 69 per cent of new dwelling

approvals in the consolidation area and 78 per cent of new dwelling approvals in the expansion area for the same period.

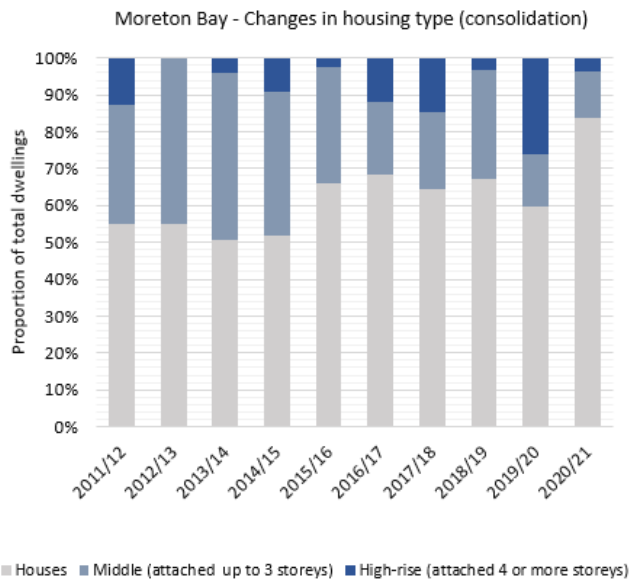
Since 2016/17, dwelling approvals for middle (20 per cent or 4799 dwellings) were higher than their share of the dwelling stock as at the 2016 Census (16 per cent). The predominant middle housing type dwellings approved since 2016/17 in Moreton Bay are semi-detached, row or terrace houses and townhouses of two or more storeys (about 69 per cent or 3285 dwellings). About 51 per cent (2467 dwellings of middle dwelling approvals for the period between 2016/17 and 2020/21 were located within the consolidation area and about 49 per cent (2332 dwellings) were located within the expansion area. At the 2016 Census, high-rise comprised about two percent of existing dwelling stock, whilst between 2016/17 and 2020/21 this was about seven percent of new dwelling approvals (1697 dwellings).

Of all high-rise approvals in Moreton Bay about 56 per cent (958 dwellings) were nine or more storeys.

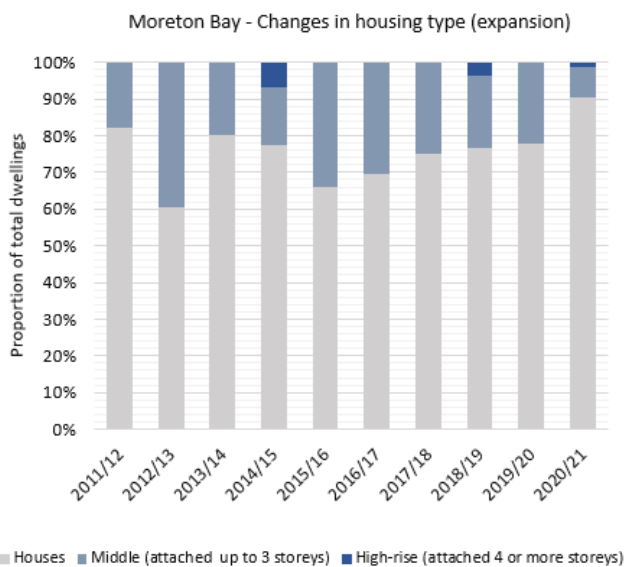
For more detail about dwelling approvals, see the [Technical notes](#).



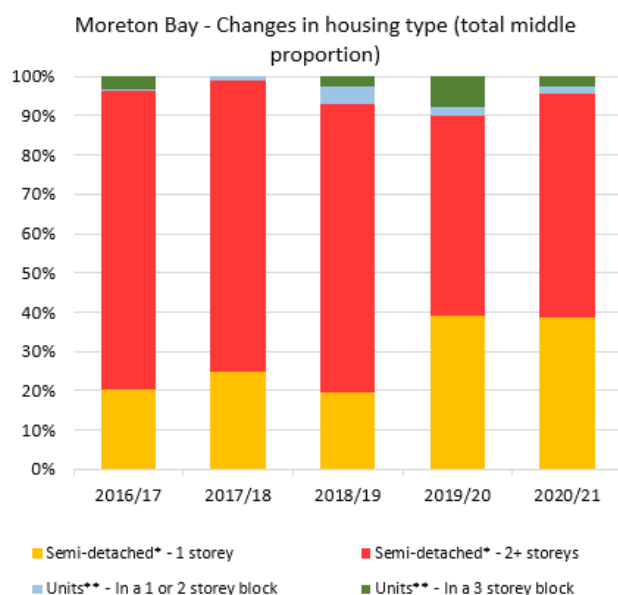
This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the consolidation area.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the expansion area.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of ‘missing middle’ in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – Moreton Bay

The number of sales has increased from 2018/19 to 2020/21 for all categories in Moreton Bay.

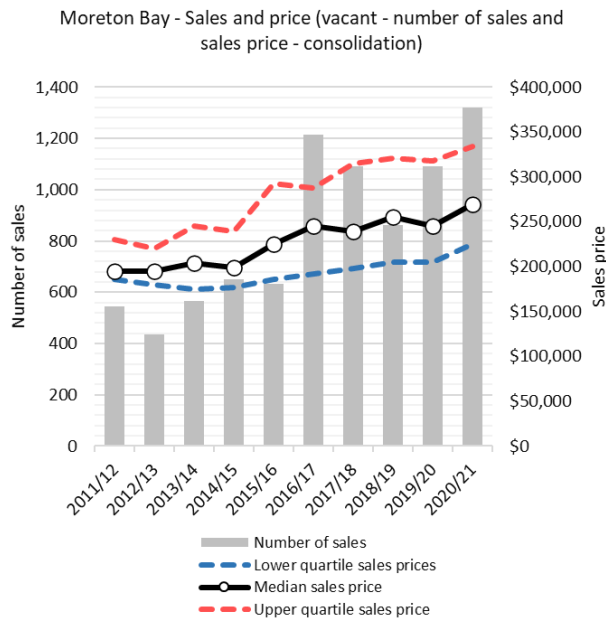
The median sales price for all categories has increased over the period 2011/12 to 2020/21, although median sales prices for attached dwellings in the expansion area and house and land packages in the expansion area slightly decreased from 2018/19 to 2020/21.

The median sales price for all categories is lower in Moreton Bay than for SEQ overall, except for the median sales price for vacant land (per lot and per square metre) in the expansion area, which is higher in Moreton Bay than for SEQ.

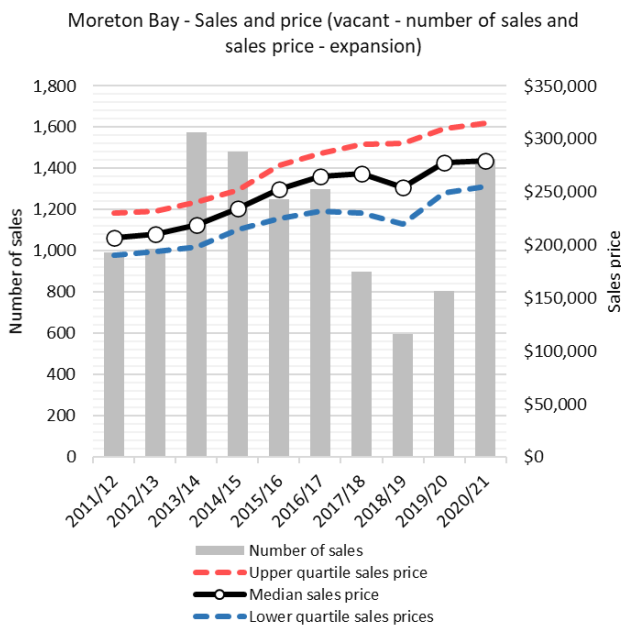
Over the 2011/12 to 2020/21 period, the price per square metre of vacant lots in the consolidation area had the highest rate of median sales price growth (75.7 per cent). Over the same period, the price per square metre of vacant lots in the expansion area also had a high rate of median price growth (44.8 per cent).

The median price is higher in the expansion area than the consolidation area in Moreton Bay (with the exception of house and land packages), which differs to the situation for SEQ overall.

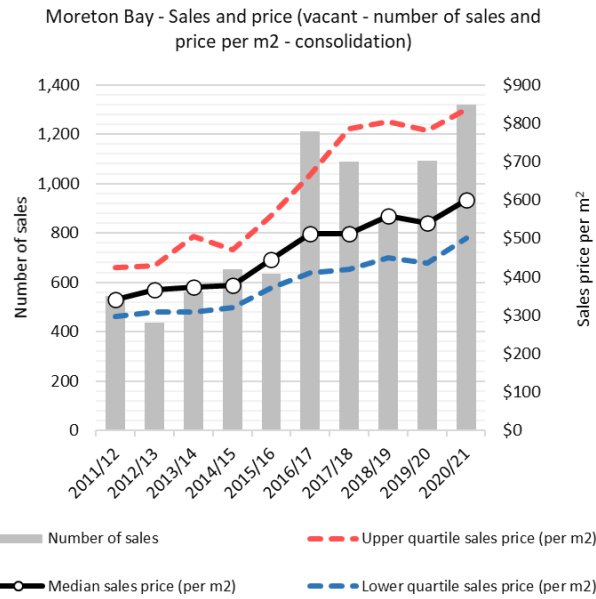
For more detail about the median sales price and number of sales, see the [Technical notes](#).



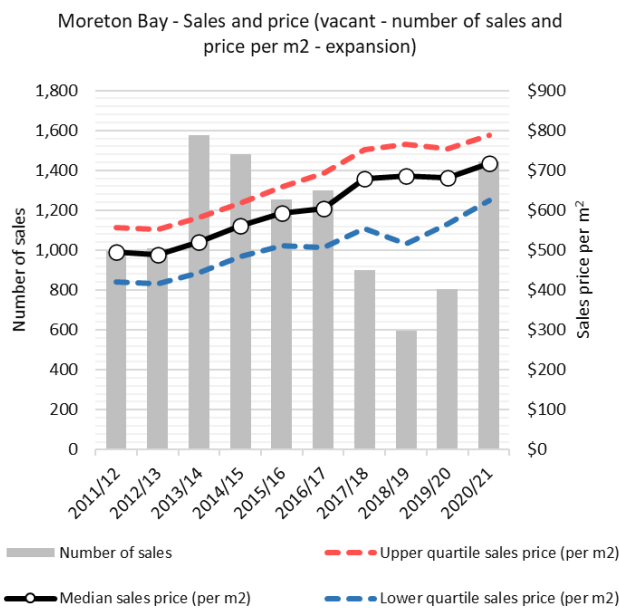
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the consolidation area.



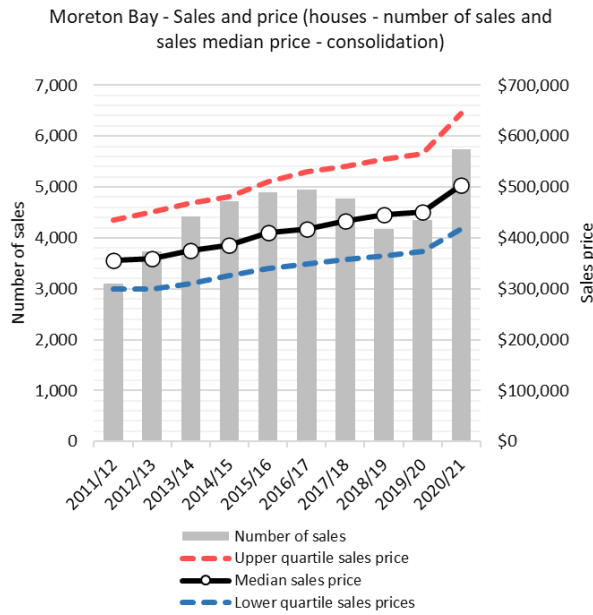
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the expansion area.



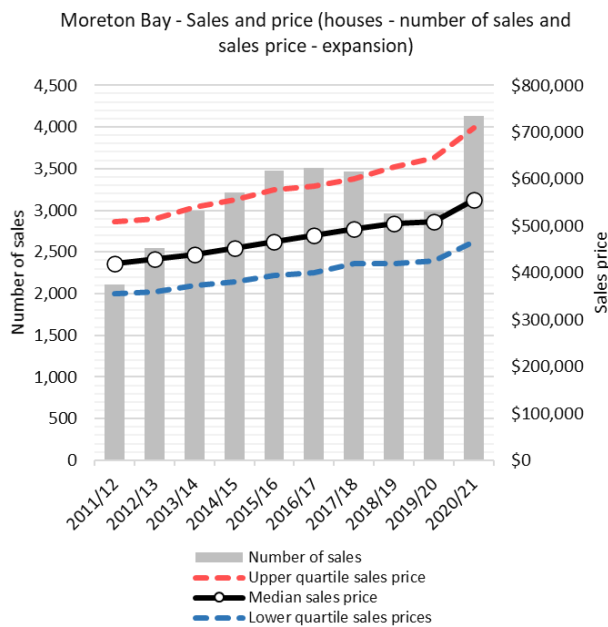
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the consolidation area.



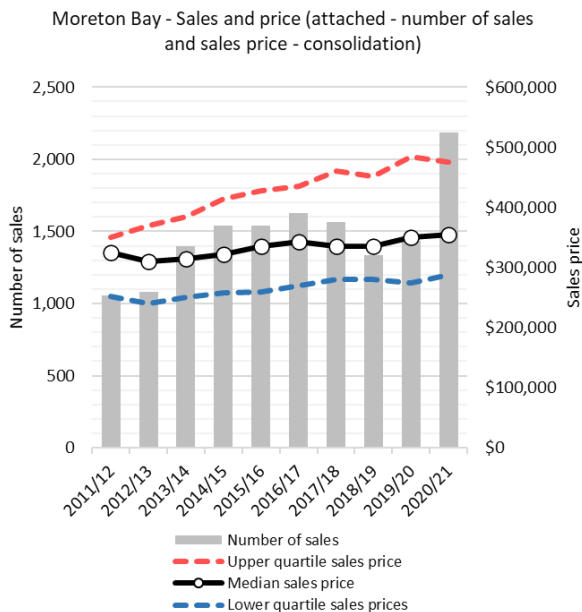
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



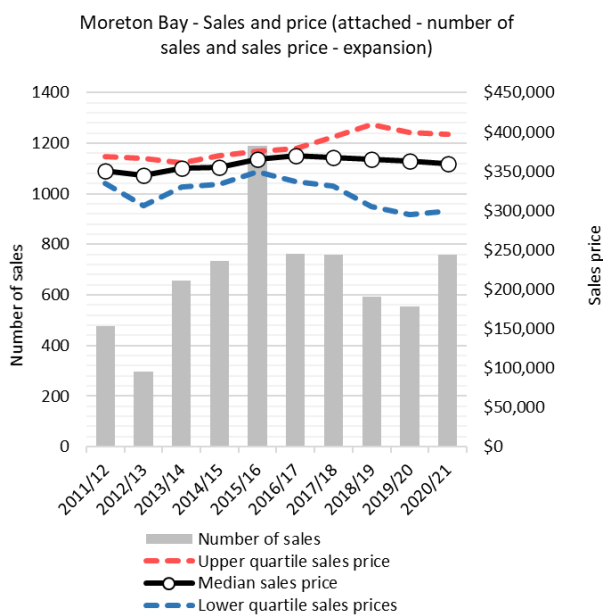
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the consolidation area.



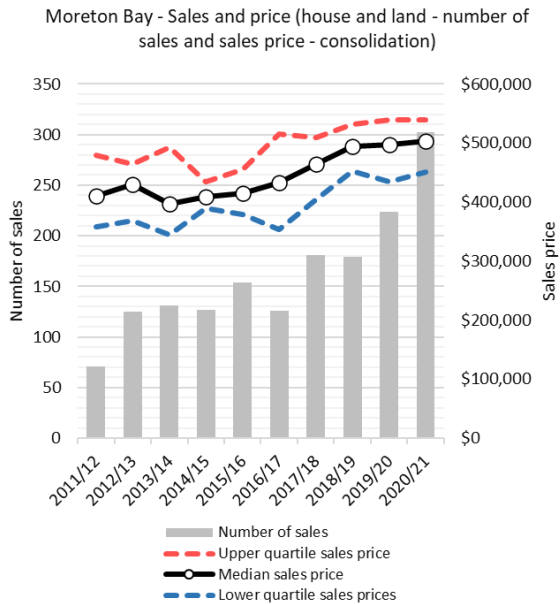
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



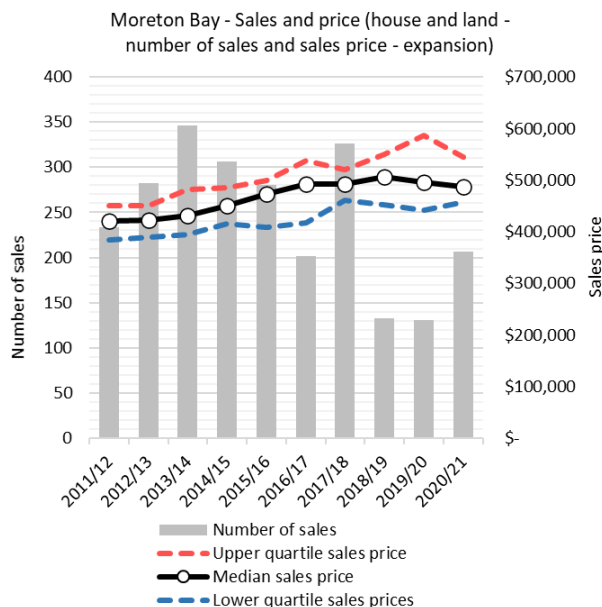
This graph shows the number of sales and the lower, median and upper quartile sales price for attached dwellings in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for house-land packages in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

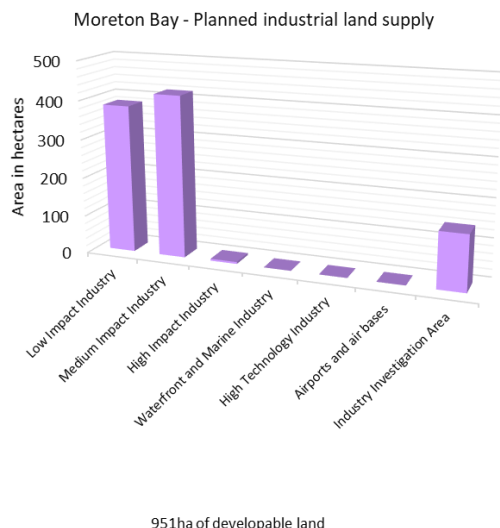
Industrial – Moreton Bay

Planned industrial land supply/take-up – Moreton Bay

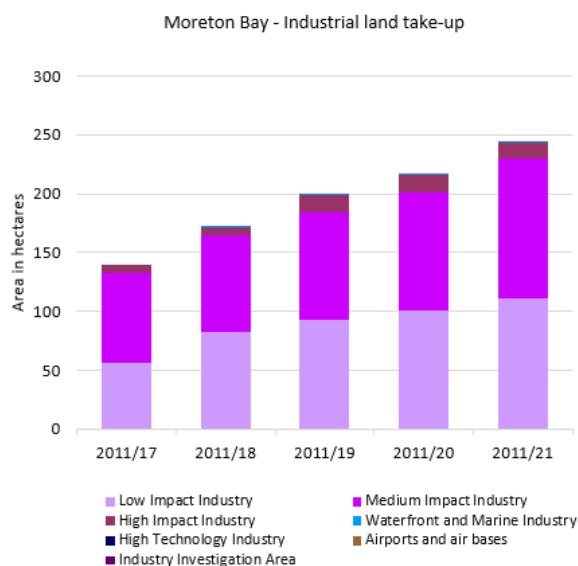
The estimated take-up of developed industrial land between 2011 and 2021 in Moreton Bay was 245 hectares, with about 28 hectares taken-up in 2020/21. The majority of take-up occurred on land intended for medium and low impact industry, followed by high impact industry, and waterfront and marine industry.

There were 951 hectares of planned industrial land supply in Moreton Bay as at 2021, including serviced and un-serviced land. The majority of planned industrial land supply is intended for low and medium impact industry, as well as about 144 hectares for industry investigation area.

For more detail about planned industrial land and take-up, see the [Technical notes](#).



This graph shows the number of hectares of planned industrial land supply as at 2021 by industrial land category.



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for

relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of Planned industrial land supply. Further, Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

The department has continued to build on work undertaken through [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. This higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – Moreton Bay

The capacity and realistic availability of planned industrial employment supply in Moreton Bay provide the minimum 15 years of supply of land sought by *ShapingSEQ 2017* (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for Moreton Bay is equivalent to about 6500 jobs on the graph.

The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. It is calculated from the LGIP October 2019 employment figures prepared by Moreton Bay Regional Council and supplied by Council in August 2021. The realistic availability figure provides a supply scenario prepared for this report that considers whether some of the capacity is not realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

The realistic availability scenario is informed by updated developable area data (to 2021), as reported in the Planned industrial land supply and take-up section of this report, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

The capacity of planned industrial employment supply in Moreton Bay is about 22,600 employees (from 2016 onwards), which represents about 64 years of supply (from 2021 onwards) and is substantially above the 2041 industrial employment planning baseline of 9400 employees. The realistic availability of this supply is about 17,500 employees (from 2016 onwards), which represents about 49 years of supply (from 2021 onwards) and is also well above the 2041 industrial employment planning baseline.

The realisation of this planned industrial employment supply in Moreton Bay may be supported by infrastructure identified in *ShapingSEQ 2017* such as the north/south urban arterial, the proposed northern intermodal freight facility and the Beerburrum to Nambour Rail Upgrade Project, which are anticipated to relieve pressure on the strategic road network and improve freight efficiency.

For more detail about the calculation of planned industrial employment supply, see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, from 2016 onwards, that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017*'s 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

Updated planning assumptions provided by Moreton Bay Regional Council in 2021 have supported the estimates of planned industrial employment supply, resulting in a significant increase in estimated supply from 2016 onwards.

Future [Best practice research](#) could consider the availability of data to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the present year. Current years of supply figures (from 2021 onwards) are indicative estimates, effectively assuming the same average annual rate of take-up of employment supply from 2016 to 2021 as the average annual *ShapingSEQ* 2017 employment planning baseline growth from 2016 to 2031.

Noosa

Summary

ShapingSEQ 2017 establishes that Noosa's expected population growth will require 6400 additional dwellings between 2016 and 2041, through its dwelling supply benchmarks.

The capacity and realistic availability of planned dwelling supply in Noosa provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017*. The new Noosa Plan was adopted by Noosa Shire Council in July 2020 and, based on updated planning assumptions data provided for the Council in 2021, has identified increased planned dwelling supply in both the consolidation and expansion areas.

There are about 0.6 year of supply of uncompleted lot approvals in Noosa, which is below the minimum four years of supply sought by *ShapingSEQ 2017*. There are about 4.8 years of supply of uncompleted multiple dwelling approvals in the Noosa consolidation area.

Dwelling approvals in Noosa increased by 19 per cent when compared to the total dwelling growth recorded in 2019/20, largely influenced by the HomeBuilder government stimulus and low interest rate environment. This has led to Noosa continuing to track above or in-line with the average annual benchmark in both consolidation and expansion areas. Growth in the consolidation area should proportionately increase as expansion land supply diminishes.

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals indicate an increase in housing diversity in Noosa, however the proportion of middle continues to be below that of 2016 dwelling stock. Dwelling density has increased slightly, consistent with SEQ's preferred future.

The capacity and realistic availability of planned industrial employment supply in Noosa provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017* and exceed the 2041 industrial employment planning baseline. The estimated take-up of developed industrial land between 2011 and 2021 in Noosa was about 14 hectares, with about 12 hectares of planned industrial land existing as at 2021.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ 2017*, [click here](#).
- a map of the urban footprint defined by *ShapingSEQ 2017*, [click here](#).

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data to 30 June 2021, where available at the time of reporting, and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of COVID-19 and government stimulus and investment. These impacts may vary across the region,

recognising that the economy and housing markets operate differently in different areas of SEQ. Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – Noosa

Planned dwelling supply – Noosa

The capacity and realistic availability of planned dwelling supply in the Noosa consolidation and expansion areas provide more than the minimum 15 years of supply sought by *ShapingSEQ* 2017.

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. It is calculated from the Unitywater Demand Modeller and Tracking Tool (DMaTT) demand forecasts, supplied by Unitywater June 2021. The realistic availability figure provides a land supply scenario prepared for this report that considers whether capacity is realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

The realistic availability scenario uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

In the Noosa consolidation area, the capacity of planned dwelling supply, from 2021 onwards, is about 7400 dwellings and significantly above the consolidation 2041 dwelling supply benchmark (from 2021 onwards) of about 3800 dwellings.

In the Noosa expansion area, the capacity and realistic availability of planned dwelling supply is about 2800 and 2600 dwellings respectively. These figures are significantly above the expansion 2041 dwelling supply benchmark (from 2021 onwards) of about 700 dwellings. It is noted that most of the remaining supply is for dwellings other than houses.

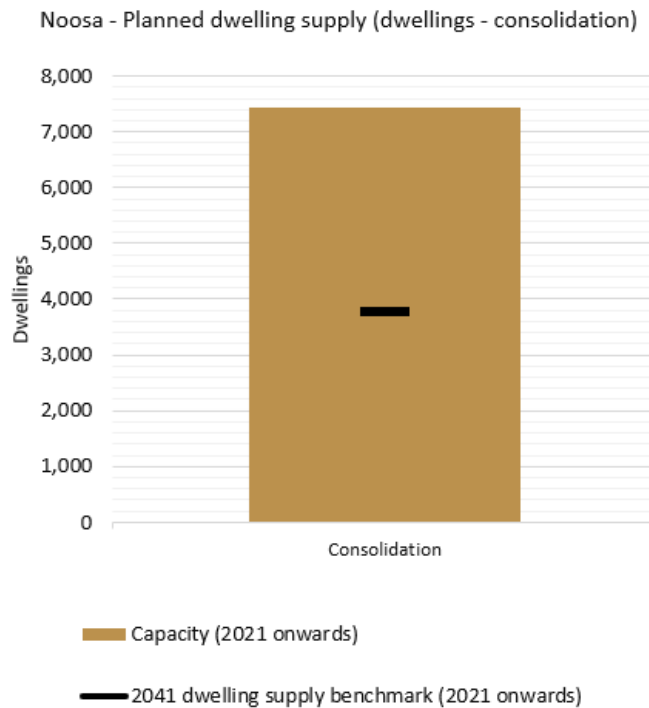
The new Noosa Plan was adopted by Noosa Shire Council in July 2020 and, based on updated planning assumptions data provided for the Council in 2021, has increased planned dwelling supply in both the consolidation and expansion areas.

Further review of the scheme to address housing choice and affordability is ongoing and the Council is finalising its Coastal Hazard Adaptation Plan. Where source data is updated, the effect of future planning scheme changes on planned dwelling supply will be included in future years of LSDM reporting.

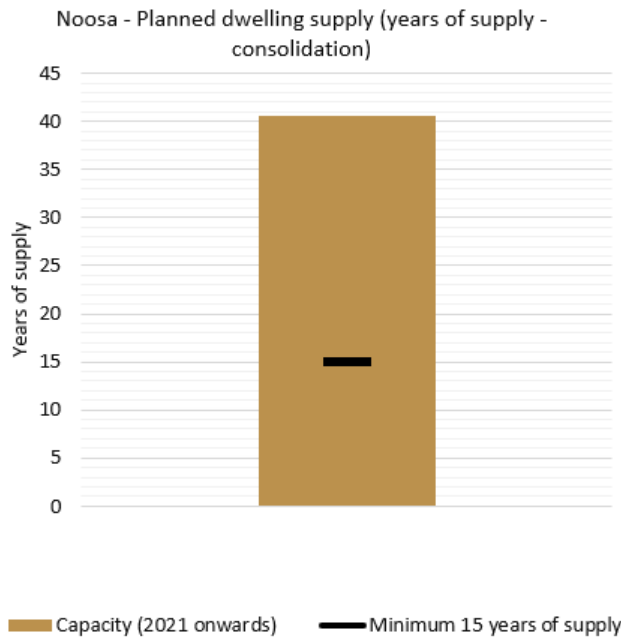
As indicated in Dwelling growth, on average the take-up of planned dwelling supply since 2016 is similar to the average annual benchmark used to calculate years of supply in the consolidation area,

but average take-up since 2016 has been faster than the average annual benchmark in the expansion area. Given the limited expansion supply planned for Noosa, particularly that planned for houses, it is to be expected that take-up in the early years from 2016 will be faster than in later years.

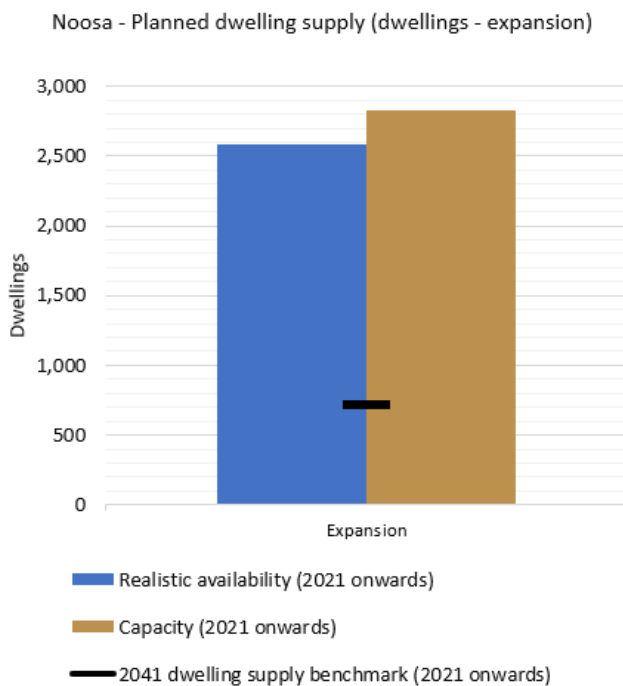
For more detail about the calculation of planned dwelling supply, including years of supply, see the [Technical notes](#).



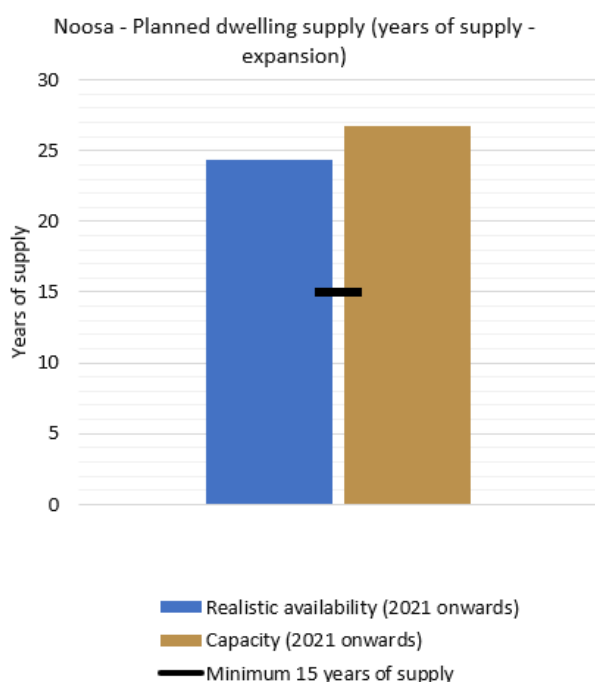
This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the consolidation area. This accounts for the 2016/21 constructed dwellings estimate of 1028. To view a fact sheet explaining the calculation of remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s minimum 15 years of supply policy objective in consolidation areas.



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the expansion area. This accounts for the 2016/21 constructed dwellings estimate of 880. To view fact sheets on the concept of realistic availability, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017*'s minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent and up-to-date over time, improving the comparability and currency of supply estimates. These improvements can be reflected in future publications of the Land Supply and Development Monitoring (LSDM) Report. Updated planning assumptions provided by Unitywater for Noosa Shire Council in 2021 have supported the estimates of planned dwelling supply in the 2021 LSDM Report.

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ 2017*'s dwelling supply benchmarks. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region's planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state and local constraints
- recent amendments to the planning scheme and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

Approved supply – Noosa

Approved supply is measured by analysing uncompleted lot approvals and uncompleted multiple dwelling approvals across Noosa.

There are about 0.6 years of supply of uncompleted lot approvals in the Noosa consolidation and expansion areas overall, less than the minimum four years of supply sought by *ShapingSEQ 2017*. The total number of uncompleted lot approvals has also been declining since 2011/12, with 33 uncompleted lot approvals as at 2020/21.

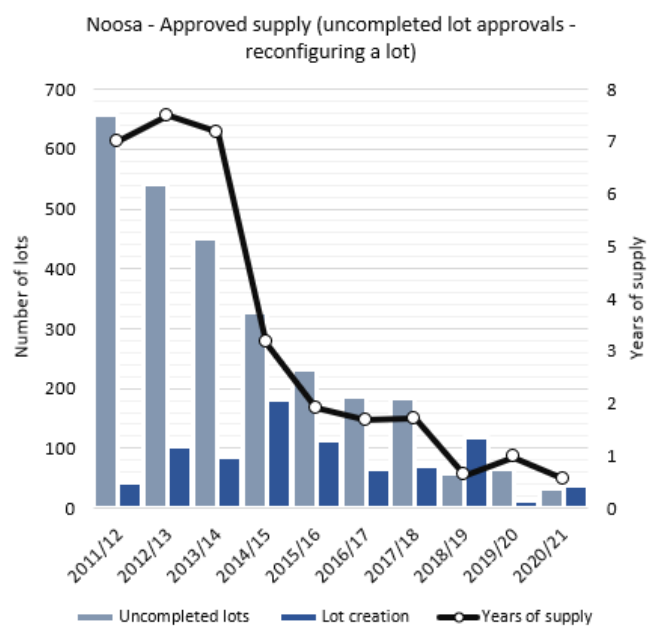
Of the uncompleted lots, approximately 48 per cent (16) had operational works approvals. This represents the number of lots which are readily available for construction in the short-term.

Lot creation increased to 38 lots in 2020/21, which has contributed to the decrease in the years of supply figure.

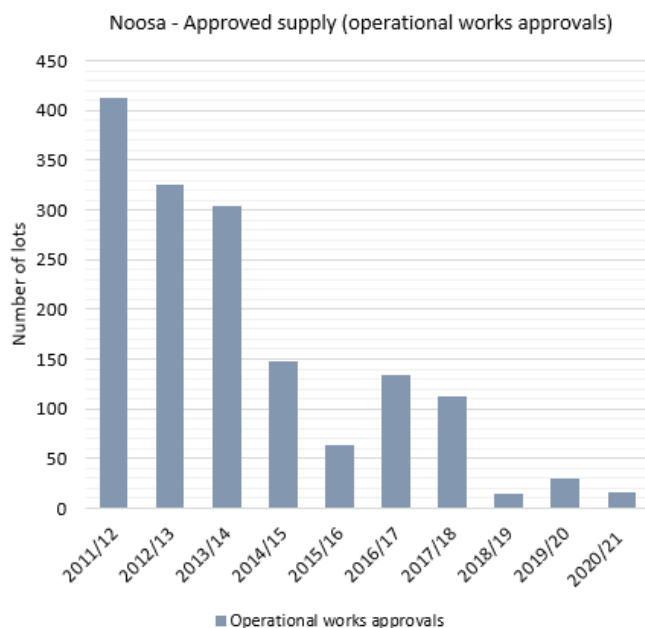
The Growth Areas Team was established in early 2021 to assist in addressing land supply challenges across SEQ. This includes a remit to work collaboratively with local governments, utility providers and the development industry to better match the demands for land and affordable and diverse housing with supply. For further information see Growth Areas Team.

In contrast, Noosa has about 4.8 years of supply of uncompleted multiple dwellings approvals in the consolidation area. This is above the minimum four years of supply sought by *ShapingSEQ 2017*.

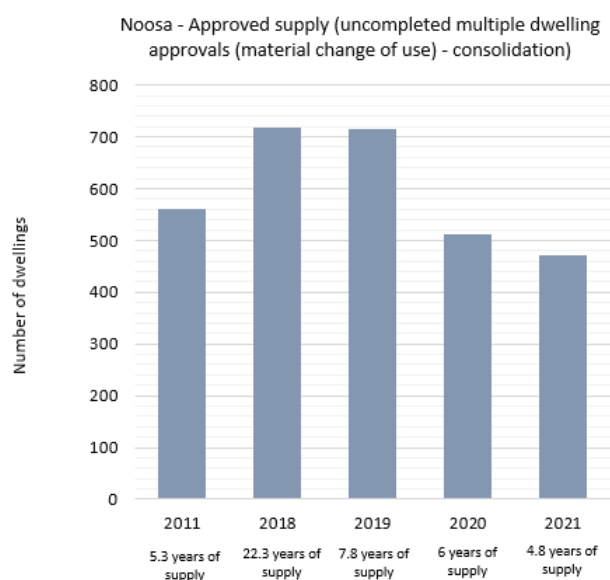
For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical notes](#).



This graph shows the number of lots that have a development permit, but have not yet been certified, as at 30 June each year (uncompleted lots) as well as the number of lots that have been created (certified) in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.



This graph shows the number of multiple dwellings that have a material change of use development permit but have not yet been constructed (uncompleted multiple dwellings) in the consolidation area as at 30 June for all reported years.

Note: The years of supply for uncompleted multiple dwelling approvals is determined by dividing the total number of uncompleted multiple dwellings by the average annual attached dwelling building approvals of the previous four years. The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – Noosa

In 2020/21, 283 dwelling approvals were recorded for Noosa at a rate of 24 dwellings per month. This represents a 19 per cent increase when compared to the total dwelling approvals recorded in 2019/20. When compared to long-term averages, the total dwelling approvals in 2020/21 is however lower than the five-year average of 342 and 10-year average of 324 dwelling approvals.

The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see [Market Factors](#).

Dwelling approvals in Noosa's consolidation area rebounded from its lowest level in a decade of 91 dwellings to 170 dwellings in 2020/21. This was only slightly less than the consolidation average annual benchmark of 184 additional dwellings. Despite the fluctuations in annual dwelling approvals in recent years, Noosa's dwelling growth aligns to the consolidation average annual benchmark on average over the 2016/17 to 2020/21 period.

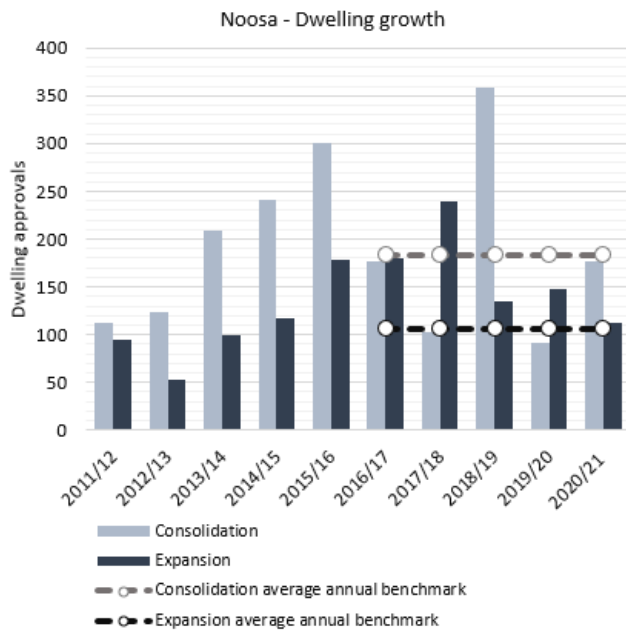
Over the same period, there were 113 dwelling approvals in Noosa's expansion area in 2020/21, which was seven dwellings more than the expansion average annual benchmark of 106 additional dwellings. This has resulted in the continuation of the trend of dwelling approvals consistently exceeding the expansion average annual benchmark.

Approximately 52 per cent of dwelling approvals for 2016/17 to 2019/20 were in Noosa's consolidation area, which is less than its expected share of 63 per cent. Approximately 48 per cent of dwelling approvals were in Noosa's expansion area over the same period, which is more than its expected share of dwelling growth to 2031 identified in *ShapingSEQ 2017* (37 per cent).

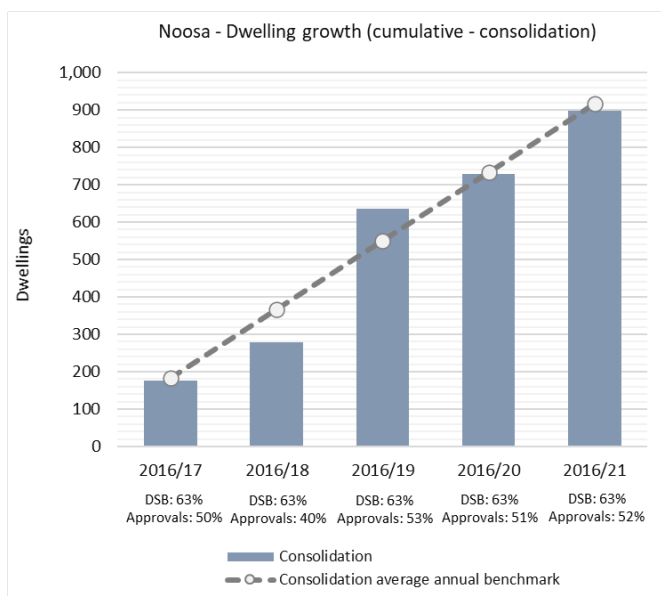
Growth in the consolidation area should proportionately increase as expansion land supply diminishes and consolidation capacity increases. It is noted that the Noosa Plan 2020 adopted on 16 July 2020 has increased consolidation capacity by about 4000 dwellings and this is reflected in Noosa's planned dwelling supply.

Noosa remains on track to accommodate the 2041 dwelling supply benchmarks given that the actual number of dwelling approvals for 2016/17 to 2020/21, in the consolidation and expansion areas, continue to track above or in-line with the average annual benchmarks.

For more information about improvements to the measurement of net growth over time, see [Program Delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).

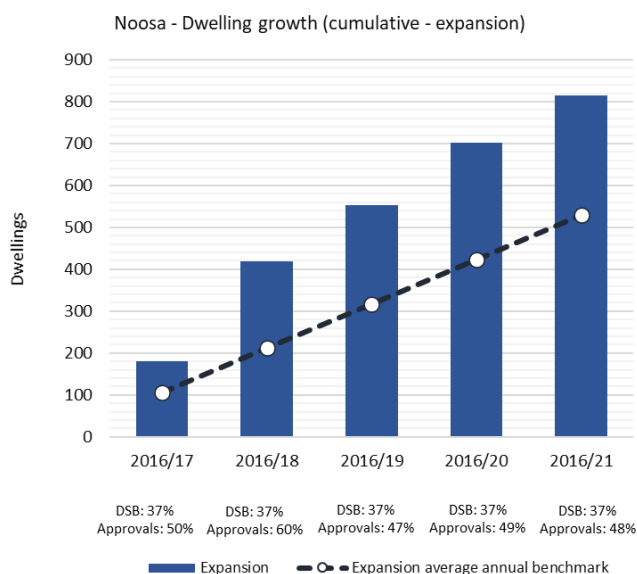


This graph shows annual dwelling approvals compared against *ShapingSEQ* 2017's average annual benchmark.



This graph shows the cumulative dwelling growth in the consolidation area against *ShapingSEQ* 2017's consolidation average annual benchmark.

Note: DSB = Dwelling Supply Benchmark



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ* 2017’s expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the 2018 Queensland Government dwelling projections for SEQ. This adjustment resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has been retained in the 2021 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

Changes in dwelling density – Noosa

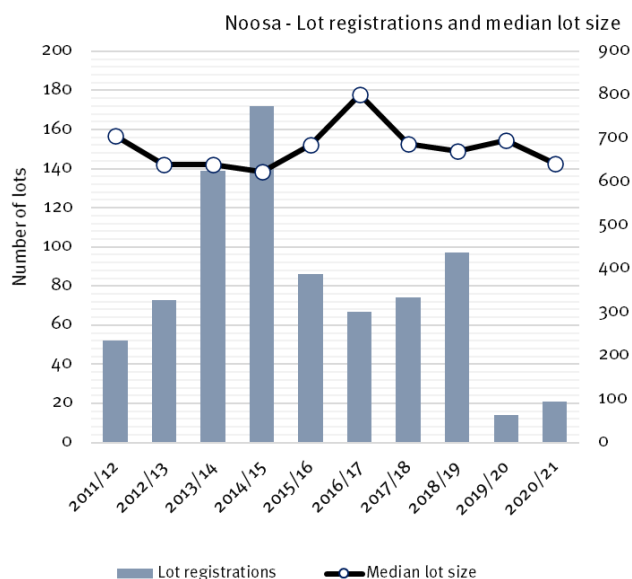
Dwelling density (measured through median lot size and mean population-weighted dwelling density) has increased slightly in Noosa in recent years in accordance with SEQ's preferred future for higher dwelling densities and smaller lots.

Mean population-weighted dwelling density in Noosa increased slightly between 2011 and 2016, from 7.9 to eight dwellings per hectare. This represents the average dwelling density at which the population of Noosa lives and is comparable to the net residential density as used by *ShapingSEQ* 2017. In the consolidation area, mean population-weighted dwelling density slightly increased from 11.1 to 11.4 dwellings per hectare.

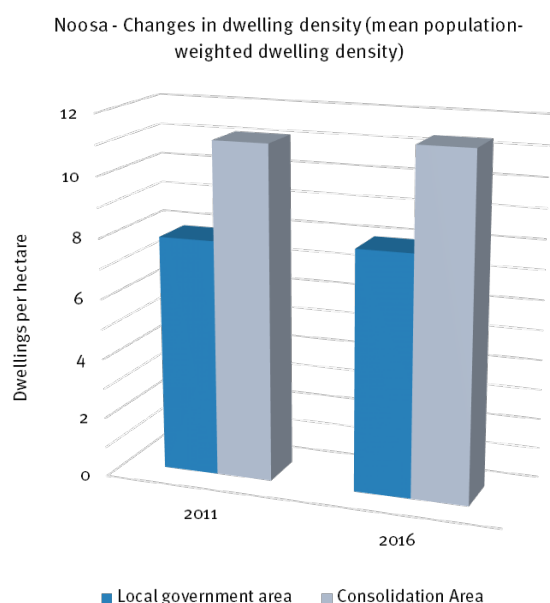
Since 2011/12, the median size of new lots in Noosa has generally decreased from 706m² to 642m² in 2020/21. However, lot sizes peaked at 800m² in 2016/17. The number of lot registrations fluctuated over the same period, contributing to the variability in the median lot sizes from year to year.

The new planning scheme for Noosa provides the opportunity to support higher dwelling densities in the future, which may contribute to SEQ’s preferred future for increased dwelling densities and smaller lot sizes over time.

For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – Noosa

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals for houses and high-rise indicate an increase in housing diversity in Noosa, consistent with SEQ's preferred future. However, recent dwelling approvals for middle are slightly below their proportion at the 2016 Census, which is not consistent with SEQ's preferred future.

Seventy-two per cent (1224 dwellings) of all new dwelling approvals in Noosa from 2016/17 to 2020/21 were for houses, which was less than the existing dwelling stock as at 2016 Census (77 per cent). Between 2016/17 and 2020/21 houses comprised 53 per cent of new dwelling approvals in the consolidation area and 92 per cent of new dwelling approvals in the expansion area for the same period.

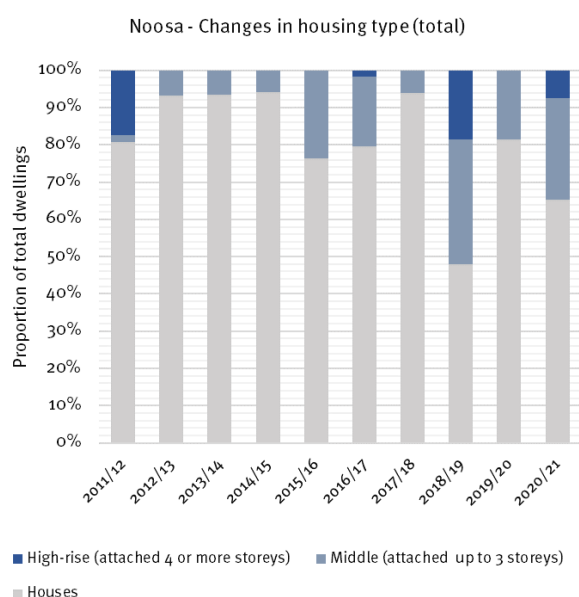
Dwelling approvals for middle (22 per cent or 376 dwellings) were proportionately less than the share of existing dwellings as at the 2016 Census (23 per cent). Since 2016/17, the predominant middle housing type approved in Noosa is flats, units or apartments in a three-storey block (about 51 per cent or 192 dwellings). About 84 per cent (314 dwellings) of all middle dwelling approvals for the period between 2016/17 and 2020/21 were located within the consolidation area and about 16 per cent (62 dwellings) were located within the expansion area for the same period.

The proportion of approvals for high-rise (seven per cent or 112 dwellings) was greater than the existing dwelling stock as at the 2016 Census (one per cent).

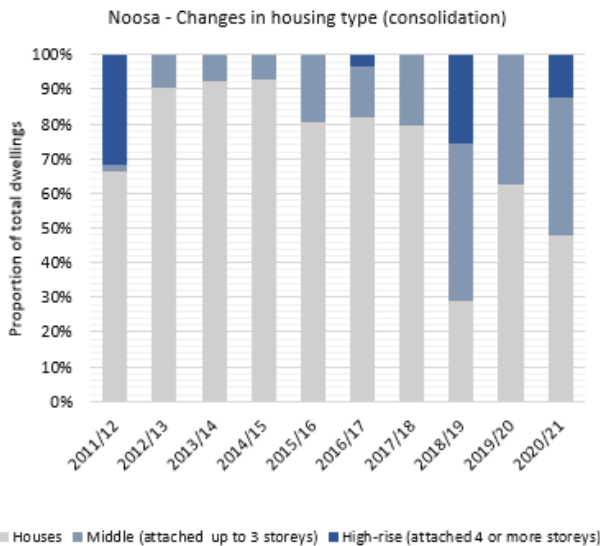
All high-rise approvals in Noosa were located within the consolidation area and were of four to eight storeys.

While high-rise product exceeds the existing dwelling stock at the 2016 Census, houses remain the predominant housing type of dwelling approvals in Noosa.

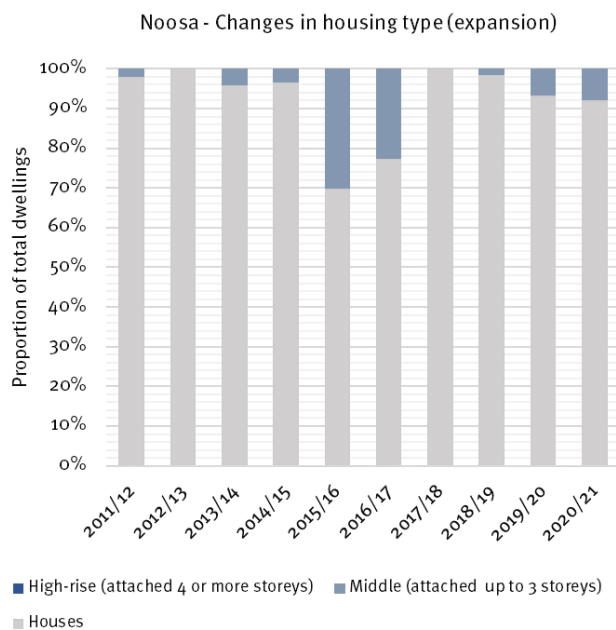
For more detail about dwelling approvals, see the [Technical notes](#).



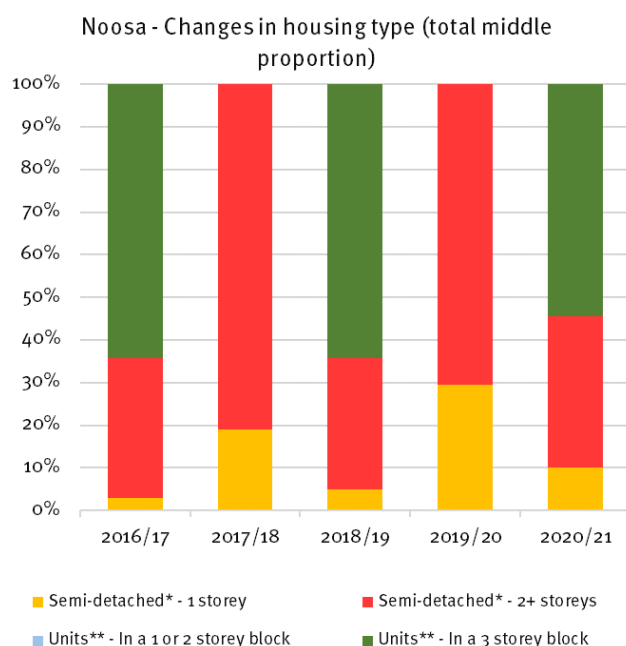
This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the consolidation area.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the expansion area.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of ‘missing middle’ in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – Noosa

Sales prices have not been reported for years with fewer than 10 sales.

The number of sales has increased from 2018/19 to 2020/21 for all categories in Noosa except vacant lots in the expansion area, which have decreased.

Median sales prices have increased in all categories over the period 2011/12 to 2020/21. However, median sales prices for vacant land (per lot) in the consolidation area and vacant land (per square metre) in the expansion area have decreased over the period 2018/19 to 2020/21.

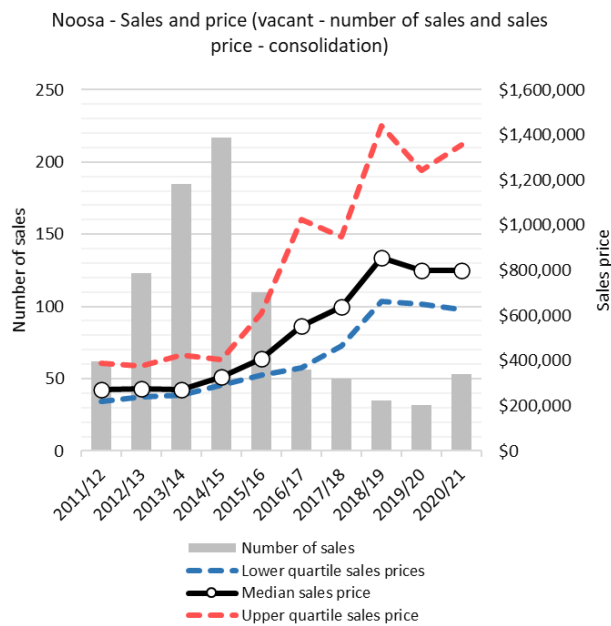
The median sales price for all categories within the consolidation and expansion areas, and with a reported sales price in 2020/21, is higher in Noosa than for SEQ overall, except for vacant land per square metre in the expansion area.

The rate of median sales price growth was also higher in Noosa than for SEQ between 2011/12 and 2020/21 for all categories with a reported median price in 2020/21, except vacant lots per square metre in the expansion area. Over the same period, the greatest growth in median sales price was

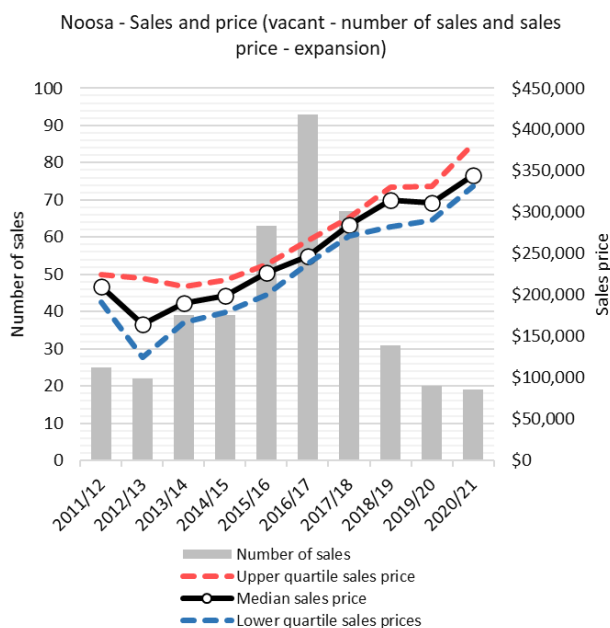
for vacant lots in the consolidation area (196.3 per cent per lot and 227.5 per cent per square metre).

For all categories with a reported median price in 2020/21, the rate of median price growth and actual prices are higher in the consolidation area than in the expansion area within Noosa. This is consistent with the outcome for SEQ as a whole.

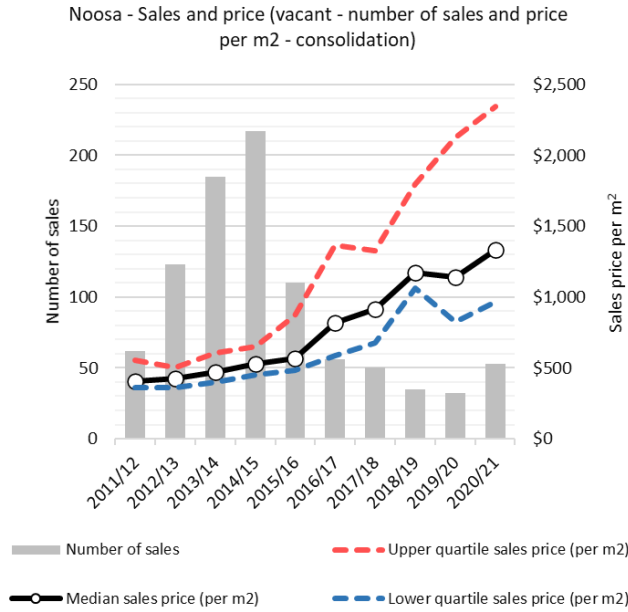
For more detail about the median sales price and number of sales, see the [Technical notes](#).



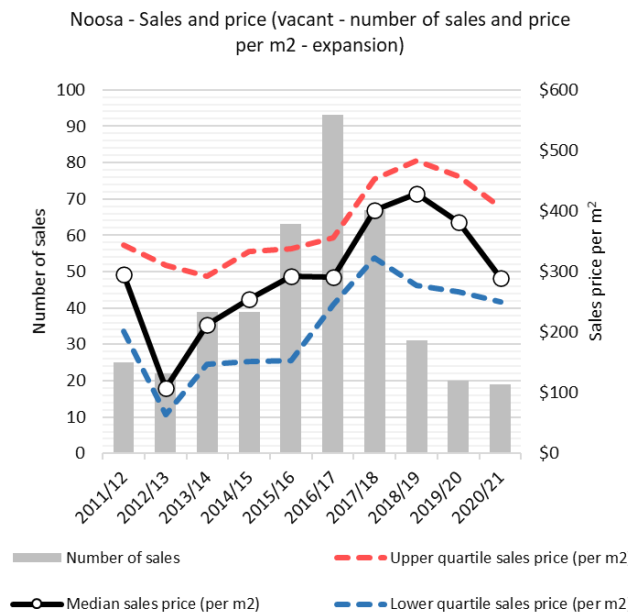
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the consolidation area.



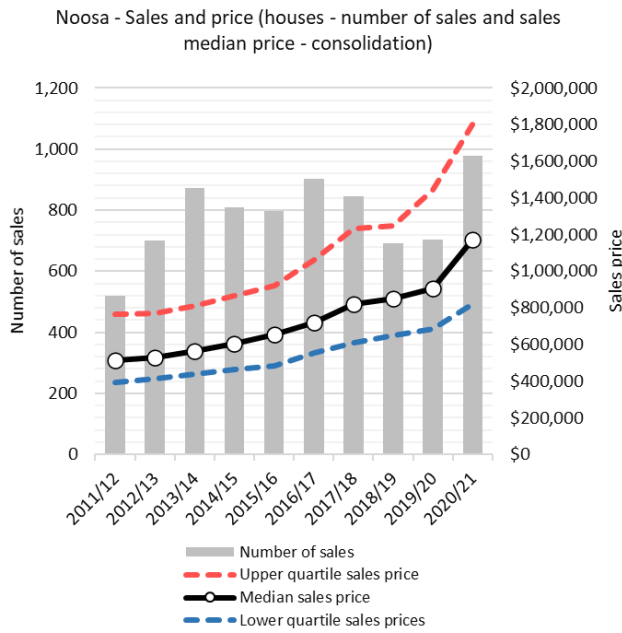
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the expansion area.



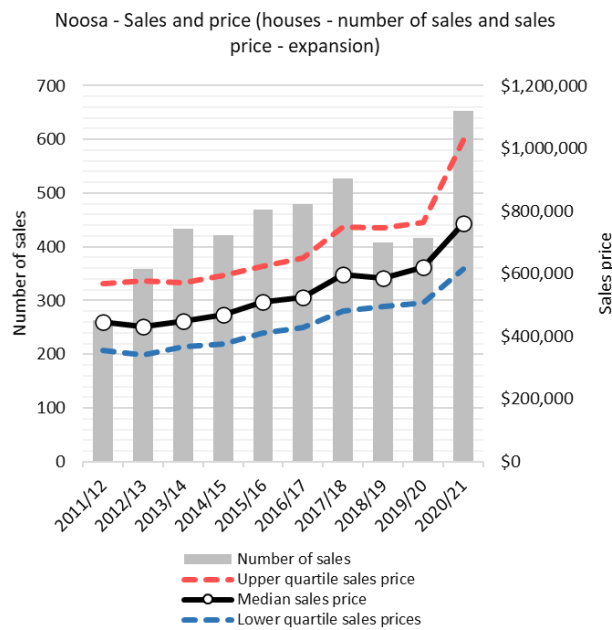
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the consolidation area.



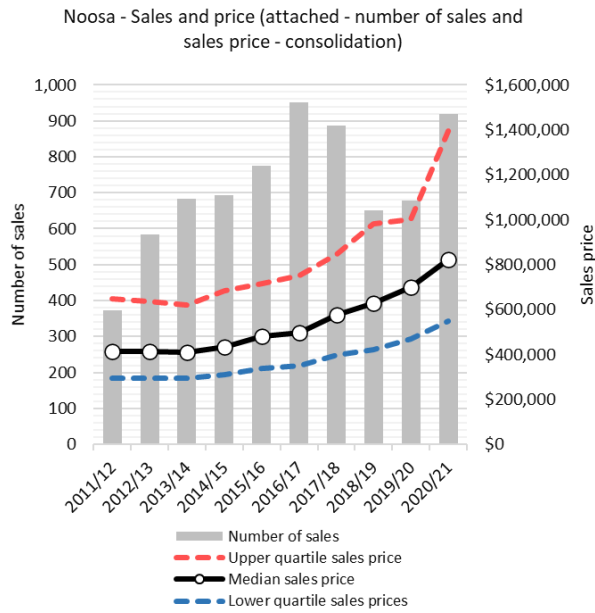
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



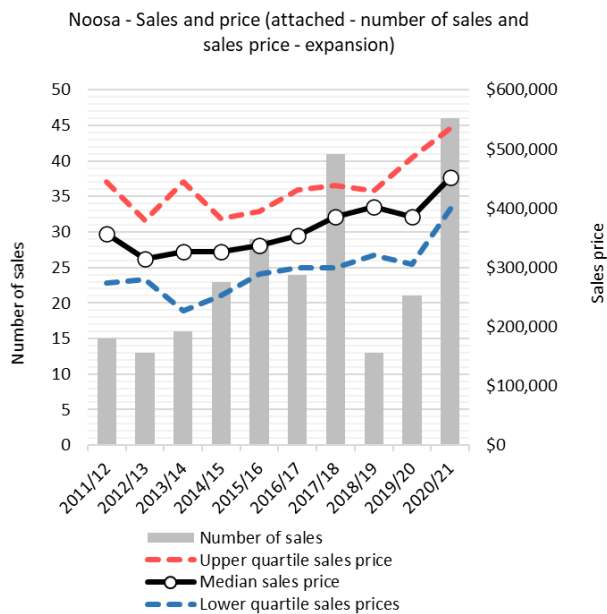
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the consolidation area.



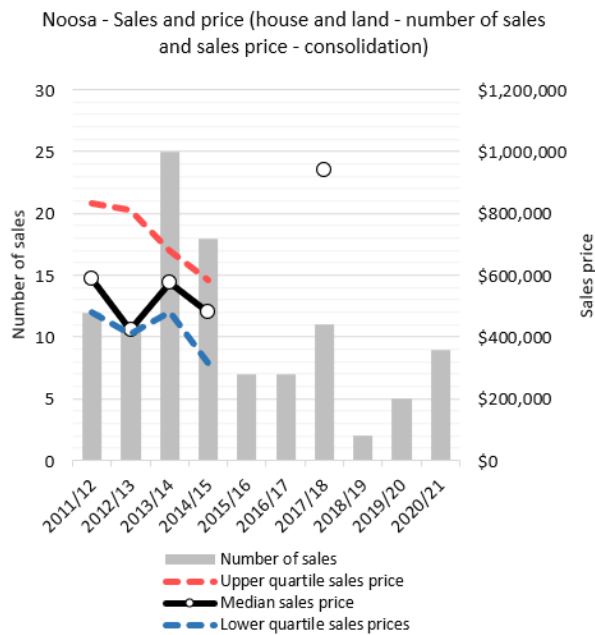
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



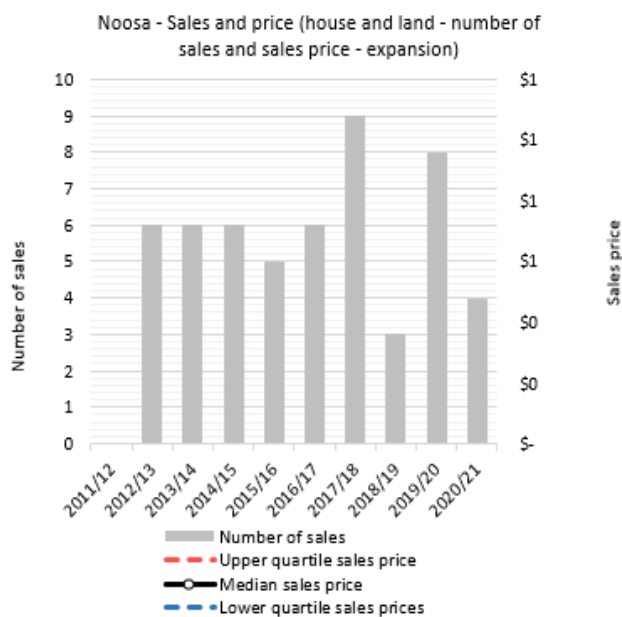
This graph shows the number of sales and the lower, median and upper quartile sales price for attached dwellings in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for house-land packages in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

Note: Sales prices have not been reported for years with fewer than 10 sales. For more details, see the [Technical notes](#).

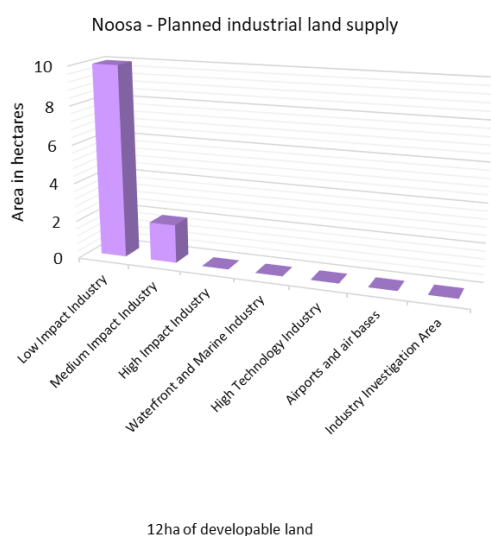
Industrial – Noosa

Planned industrial land supply/take-up – Noosa

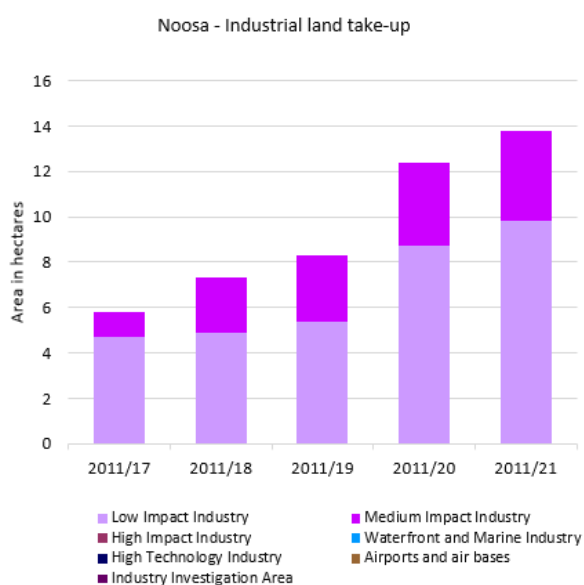
About 14 hectares of developed industrial land was taken-up in Noosa between 2011 and 2021 with about two hectares taken up in 2020/21. The take-up occurred on land intended for low and medium impact industry.

There were about 12 hectares of planned industrial land supply in Noosa as at 2021, including serviced and un-serviced land. This planned industrial land supply mostly comprised land intended for low impact industry with some medium impact industry included.

For more detail about planned industrial land supply and take-up, see the [Technical notes](#).



This graph shows the number of hectares of planned industrial land as at 2021 by industrial land category.



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of Planned industrial land supply. Further, Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

The department has continued to build on work undertaken through [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. This higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – Noosa

The capacity and realistic availability of planned industrial employment supply in Noosa provide more than the minimum 15 years of supply of land sought by *ShapingSEQ 2017* (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for Noosa is equivalent to about 600 jobs on the graph.

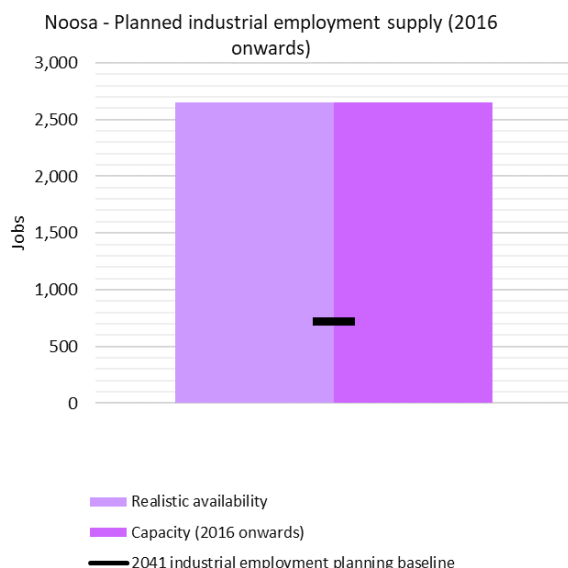
The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. It is calculated from the Unitywater Demand Modeller and Tracking Tool (DMaTT) demand forecasts, supplied by Unitywater June 2021. The realistic availability figure provides a supply scenario that considers whether some of the capacity is not realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

The realistic availability scenario is informed by updated developable area data (to 2021), as reported in the Planned industrial land supply and take-up section of the report, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

The capacity of planned industrial employment supply in Noosa is about 2700 employees (from 2016 onwards), representing about 91 years of supply (from 2021 onwards). The realistic availability of this supply is also 2700 employees. These are well above the 2041 industrial employment planning baseline of about 710 employees.

For more detail about the meaning and calculation of the capacity and realistic availability of planned industrial employment supply and years of supply measures, see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, from 2016 onwards, that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program Delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

Updated planning assumptions provided by Unitywater (for Noosa Shire Council) in 2021 have supported the estimates of planned industrial employment supply, consistent with the new planning scheme adopted by the Council in July 2020.

Future [Best practice research](#) could consider the availability of data to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the present year. Current years of supply figures (from 2021 onwards) are indicative estimates,

effectively assuming the same average annual rate of take-up of employment supply from 2016 to 2021 as the average annual *ShapingSEQ* 2017 employment planning baseline growth from 2016 to 2031.

Redland

Summary

ShapingSEQ 2017 establishes that Redland's expected population growth will require an additional 17,200 dwellings between 2016 and 2041, through its dwelling supply benchmarks.

The capacity and realistic availability of planned dwelling supply in the Redland consolidation and expansion areas provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017*.

There are about 4.6 years of supply of uncompleted lot approvals in Redland, which is above the minimum four years of supply sought by *ShapingSEQ 2017*. The increase in uncompleted lot approvals in 2021 and the generally reduced rate of lot creation since 2017/18 has contributed to an increase in the years of supply figure. Furthermore, the Growth Areas team established earlier in 2021 has identified Southern Redland Bay as a priority growth area to coordinate the delivery of critical infrastructure to support planned growth. This along with \$15 million of loan funding from the Building Acceleration Fund is expected to support the development of approximately 5000 lots.

There are 9.7 years of supply of uncompleted multiple dwelling approvals in the Redland consolidation area, which is also above the minimum four years of supply sought by *ShapingSEQ 2017*.

Dwelling approvals in Redland increased by 54 per cent when compared to the total dwelling growth recorded in 2019/20, largely influenced by the HomeBuilder government stimulus and low interest rate environment. As a result, Redland remains on track to accommodate the 2041 dwelling supply benchmarks, given the actual number of dwelling approvals for 2016/17 to 2020/21 is tracking generally in line with the consolidation average annual benchmark and is significantly above the expansion average annual benchmark.

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals indicate that housing in Redland has become more diverse. Dwelling density has increased, in accordance with SEQ's preferred future.

The capacity and realistic availability of planned industrial employment supply in Redland are less than the minimum 15 years of supply sought by *ShapingSEQ 2017*. The estimated take-up of developed industrial land between 2011 and 2021 in Redland was about 11 hectares, with about 37 hectares of planned industrial land existing as at 2021. Redland City Council is currently investigating preferred land uses in the Southern Thornlands area and an appropriate amendment to their planning scheme.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ 2017*, [click here](#).
- a map of the urban footprint defined by *ShapingSEQ 2017*, [click here](#).

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data to 30 June 2021, where available at the time of reporting, and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of COVID-19 and government stimulus and investment. These impacts may vary across the region, recognising that the economy and housing markets operate differently in different areas of SEQ. Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – Redland

Planned dwelling supply – Redland

The capacity and realistic availability of planned dwelling supply in the Redland consolidation and expansion areas provide more than the minimum 15 years of supply sought by *ShapingSEQ* 2017.

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. It is calculated from the Redland Land Supply Review prepared by Urbis in 2014. The realistic availability figure provides a land supply scenario prepared for this report that considers whether capacity is realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

The realistic availability scenario uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

In the Redland consolidation area, the capacity of planned dwelling supply, from 2021 onwards, is about 35,500 dwellings, which is significantly above the consolidation 2041 dwelling supply benchmark (from 2021 onwards) of 9500 dwellings.

In the Redland expansion area, the capacity of planned dwelling supply (from 2021 onwards) is about 7900 dwellings, while the realistic availability of this supply is about 6100 dwellings. These are greater than the expansion 2041 dwelling supply benchmark (from 2021 onwards) of about 1700 dwellings.

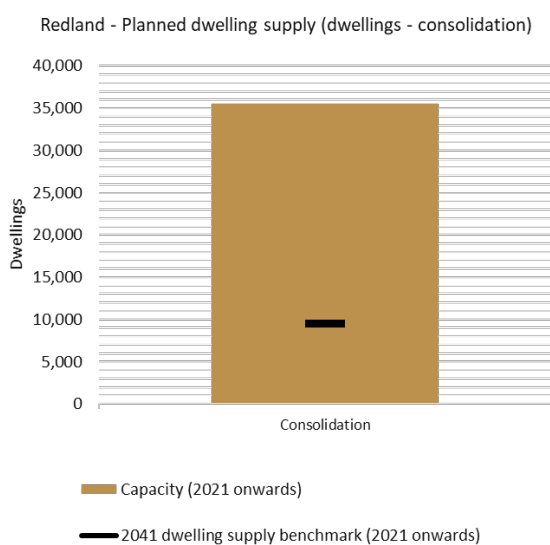
Redland City Council is progressing a number of amendments to its planning scheme, including the Victoria Point Local Area Plan which will facilitate development in the consolidation area.

The realisation of the planned dwelling supply in the consolidation area would be supported by the provision of key region-shaping infrastructure as identified in *ShapingSEQ* 2017 and the State

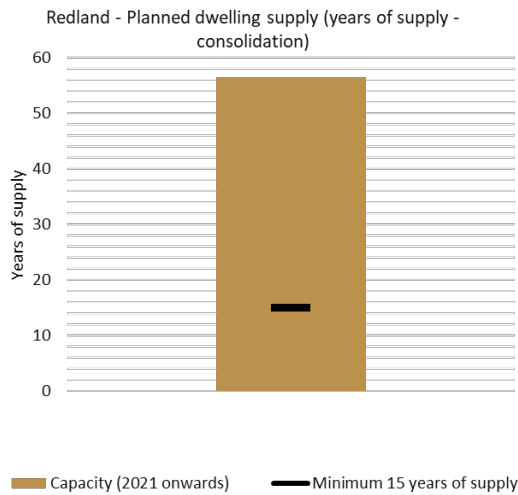
Infrastructure Plan, including the Eastern Busway extension to Carindale and Capalaba (as busway or other priority corridor). The state government’s \$30 million Eastern Transitway (Stage 1) (bus priority lane extensions of the Eastern Busway from Coorparoo to Carindale) will improve access from Redland City. Other relevant state infrastructure projects currently progressing include \$110 million of works to upgrade the Cleveland-Redland Bay Road. It could also be supported by higher frequency rail services to Cleveland, subject to future investigation if sufficient dwelling densities are achieved in the corridor.

As indicated in Dwelling growth, on average the take-up of planned dwelling supply since 2016 is similar to the average annual benchmark used to calculate years of supply in the consolidation area, but average take-up has been faster than the average annual benchmark in the expansion area. The scale of planned dwelling supply in the Redland expansion area compared to the 2041 dwelling supply benchmark will support continued faster take-up into the medium term. This includes Southern Redland Bay which is now identified by the Growth Areas Team as a priority growth area with \$15 million from the state government’s Building Acceleration Fund for a new wastewater management plant.

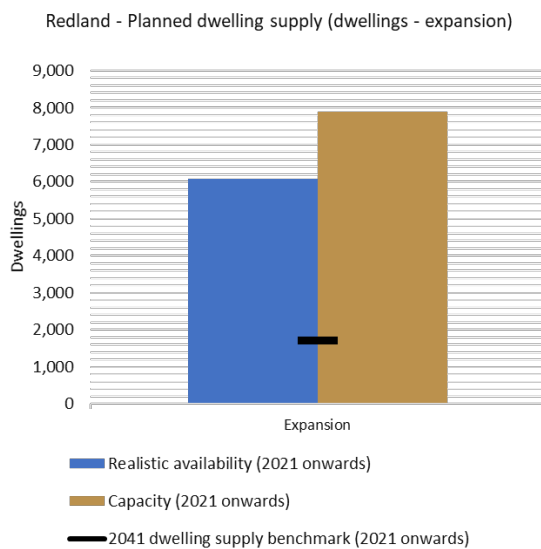
For more detail about the calculation of planned dwelling supply, including years of supply, see the [Technical notes](#).



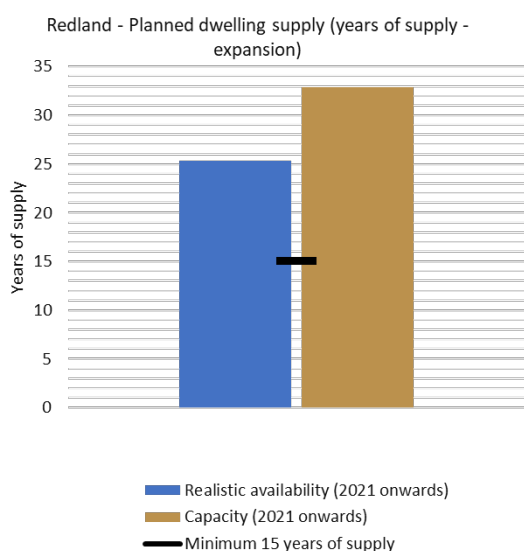
This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the consolidation area. This accounts for the 2016/21 constructed dwellings estimate of 3034. To view a fact sheet explaining the calculation of remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017's* minimum 15 years of supply policy objective in consolidation areas.



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ 2017's* dwelling supply benchmark (from 2021 onwards) in the expansion area. This accounts for the 2016/21 constructed dwellings estimate of 2995. To view fact sheets on the concept of realistic availability, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017*'s minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent and up-to-date over time, improving the comparability and currency of supply estimates. These improvements can be reflected in future publications of the Land Supply and Development Monitoring (LSDM) Report.

Redland City Council is currently preparing a new property-level planning assumptions database / model to inform future land use and infrastructure planning for the City. Appropriate outputs from this work will be reflected in future updates of the LSDM Report when available.

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ 2017*'s dwelling supply benchmarks. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region's planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state and local constraints
- recent amendments to the planning scheme and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

Approved supply – Redland

Approved supply is measured by analysing uncompleted lot approvals and uncompleted multiple dwelling approvals across Redland.

There are about 4.6 years of supply of uncompleted lot approvals in the Redland consolidation and expansion areas overall, which is above the minimum four years of supply sought by *ShapingSEQ* 2017. In recent years there has been an increase in the years of supply, reversing the previous downward trend from 2013/14 to 2017/18. The total number of uncompleted lot approvals was 1682 for 2020/21.

Of the uncompleted lots, approximately 30.4 per cent (512 lots) had operational works approvals. This represents that number of lots which are readily available for construction in the short-term.

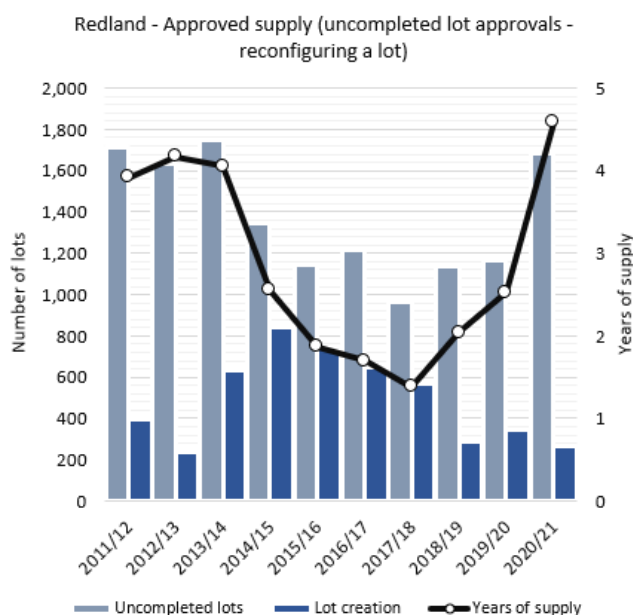
The increased lot approvals when compared to 2019/20 along with the reduced rate of lot creation has contributed to an increase in the years of supply.

Further, the Growth Areas Team established earlier in 2021 has identified Southern Redland Bay as a priority growth area to coordinate the delivery of critical infrastructure to support planned growth. This along with \$15 million of funding from the Building Acceleration Fund is expected to support the development of approximately 5,000 lots. For further information see Growth Areas Team.

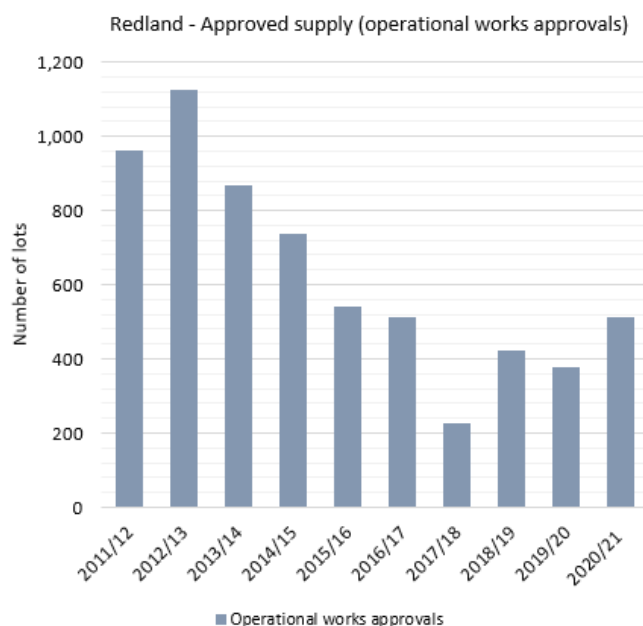
In contrast, Redland has about 9.7 years of supply of uncompleted multiple dwelling approvals in the consolidation area, which is above the minimum four years of supply sought by *ShapingSEQ* 2017.

The number of uncompleted multiple dwelling approvals increased from June 2020 to June 2021, which has resulted in the increase of the years of supply figure.

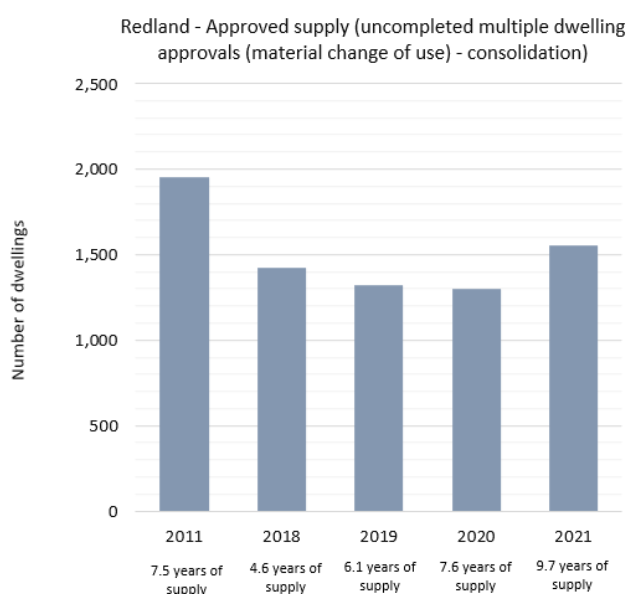
For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical notes](#).



This graph shows the number of lots that have a development permit, but have not yet been certified (uncompleted lots) as at 30 June each year as well as the number of lots that have been created (certified) in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.



This graph shows the number of multiple dwellings that have a material change of use development permit but have not yet been constructed (uncompleted multiple dwellings) in the consolidation area as at 30 June for all reported years.

Note: The years of supply for uncompleted multiple dwelling approvals is determined by dividing the total number of uncompleted multiple dwellings by the average annual attached dwelling building approvals of the previous four years. The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – Redland

In 2020/21, 1151 dwelling approvals were recorded for Redland at a rate of 96 dwellings per month. This represents a 54 per cent increase when compared to the total dwelling approvals recorded in 2019/20. When compared to long-term averages, the 2020/21 dwelling approvals is generally in line with the five-year average of 1131 and the ten-year average of 1076 dwelling approvals.

The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see [Market Factors](#).

Within the Redland consolidation area, there were 789 dwelling approvals in 2020/21 which was 161 dwellings more than the consolidation average annual benchmark of 628 additional dwellings. The increase in activity in 2020/21 indicates an upward trend towards meeting the cumulative average annual consolidation benchmark with the gap narrowing from 252 dwellings in 2019/20 to 98 in 2020/21.

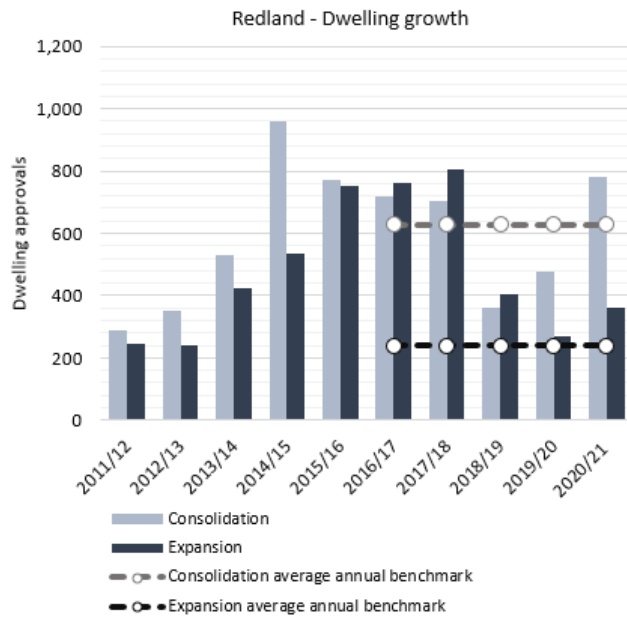
Over the same period, there were 362 dwelling approvals in the Redland expansion area in 2020/21, which was 122 dwellings more than the expansion average annual benchmark of 240 additional dwellings. This has resulted in Redland continuing to exceed the expansion average annual benchmark.

Approximately 54 per cent of dwelling approvals for 2016/17 to 2020/21 were in the Redland consolidation area, which was less than its expected share of 72 per cent. Approximately 46 per cent of dwelling approvals were in Redland's expansion area over the same period, which is more than its expected share of dwelling growth to 2031 identified in *ShapingSEQ 2017* (28 per cent).

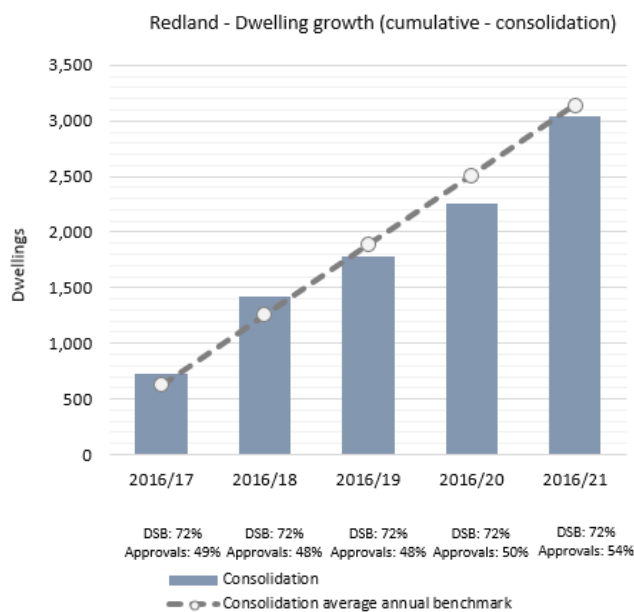
Redland remains on track to accommodate the 2041 dwelling supply benchmarks given that the actual number of dwelling approvals for 2016/17 to 2020/21, is tracking generally in line with the consolidation area average annual benchmark and is significantly above the expansion average annual benchmarks.

Dwelling growth in the consolidation area would be supported by the provision of key region-shaping infrastructure such as the state government's \$30 million Eastern Transitway (Stage 1) (bus priority lane extensions of the Eastern Busway from Coorparoo to Carindale) that will improve public transport access to Redland City. This could also be supported by higher frequency rail services to Cleveland, subject to future investigation if sufficient dwelling densities are achieved in the corridor.

For more information about improvements to the measurement of net growth over time, see [Program Delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).

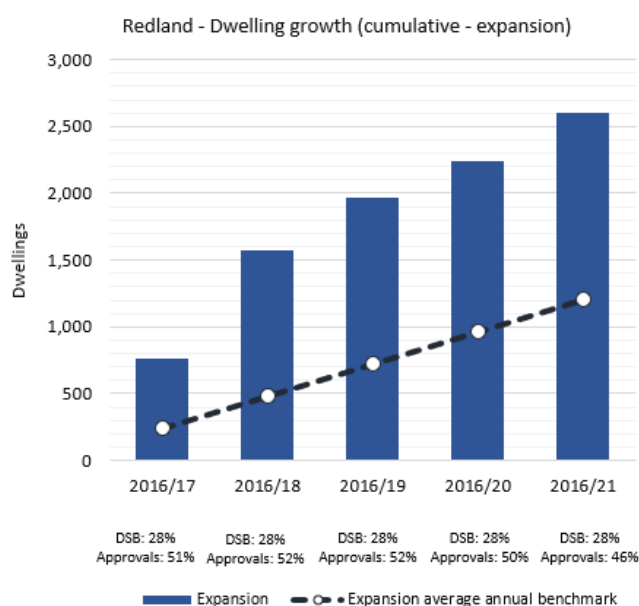


This graph shows annual dwelling approvals compared against *ShapingSEQ* 2017's average annual benchmarks.



This graph shows the cumulative dwelling growth in the consolidation area against *ShapingSEQ* 2017's consolidation average annual benchmark.

Note: DSB = Dwelling Supply Benchmark



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ 2017's* expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the 2018 Queensland Government dwelling projections for SEQ. This adjustment resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has been retained in the 2021 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

Changes in dwelling density – Redland

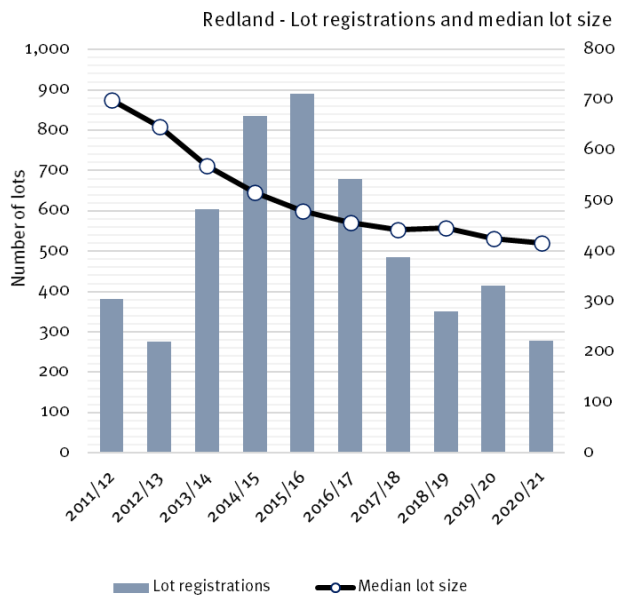
Dwelling density (measured through median lot sizes and mean population-weighted dwelling density) is increasing in Redland in accordance with SEQ's preferred future for higher dwelling densities and smaller lots.

Mean population-weighted dwelling density in Redland increased between 2011 and 2016, from 8.9 to 9.2 dwellings per hectare. This represents the average dwelling density at which the population of Redland lives and is comparable to the net residential density as used by *ShapingSEQ 2017*. In the consolidation area, mean population-weighted dwelling density slightly increased from 9.5 to 9.8 dwellings per hectare.

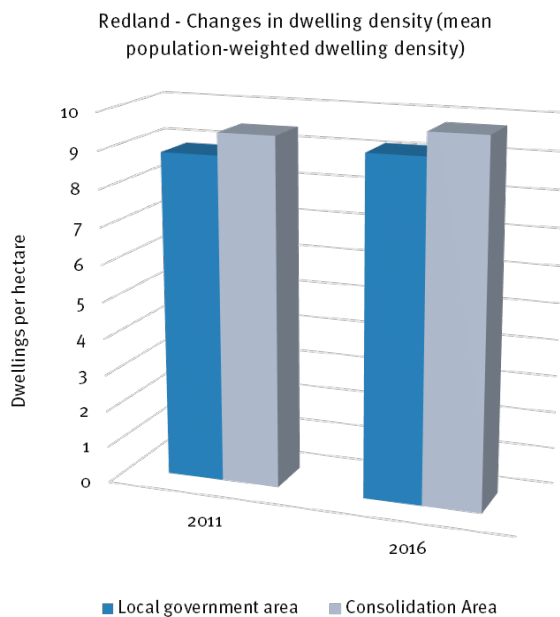
Since 2011/12, the median size of new lots in Redland significantly decreased from 700m² to 417m² in 2020/21. This was associated with a significant upward trend in the volume of lot registrations to 2015/16, which has since declined. The median lot size for 2020/21 has reduced slightly from 2019/20, from 425m² to 417m².

This measure is indicative of increased dwelling densities in new urban subdivisions across the Redland area.

For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – Redland

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals in Redland indicate an increase in housing diversity, consistent with SEQ's preferred future.

Seventy-one per cent (4025 dwellings) of all new dwelling approvals in Redland for 2016/17 to 2020/21 were for houses, which was less than for the existing dwelling stock (85 per cent as at the 2016 Census).

Dwelling approvals for middle (22 per cent or 1240 dwellings) were higher than their share of the dwelling stock as at the 2016 Census (14 per cent).

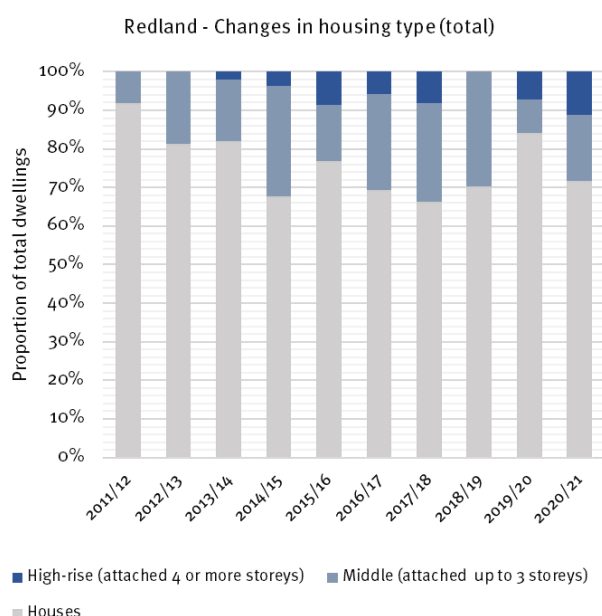
Of middle dwelling approvals since 2016/17, the predominant middle housing type approved in Redland is semi-detached, row or terrace houses and townhouses of two or more storeys (73 per cent or 904 dwellings).

Since 2016/17, forty-six per cent (572 dwellings) of middle dwelling approvals were located within the consolidation area and 54 per cent (668 dwellings) were located within the expansion area.

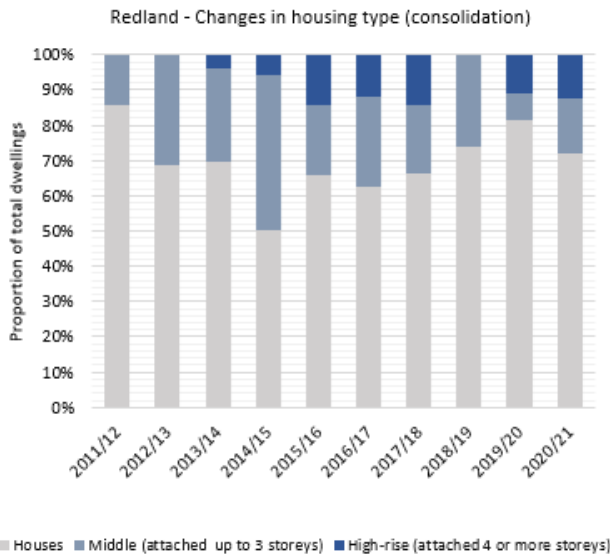
The proportion of approvals for high-rise (seven per cent or 390 dwellings) was greater than the existing dwelling stock as at the 2016 Census (one per cent). All high-rise approvals were of four to eight storeys.

While the proportions of recent middle and high-rise approvals exceed the existing dwelling stock at the 2016 Census, houses remain the predominant housing type of dwelling approvals.

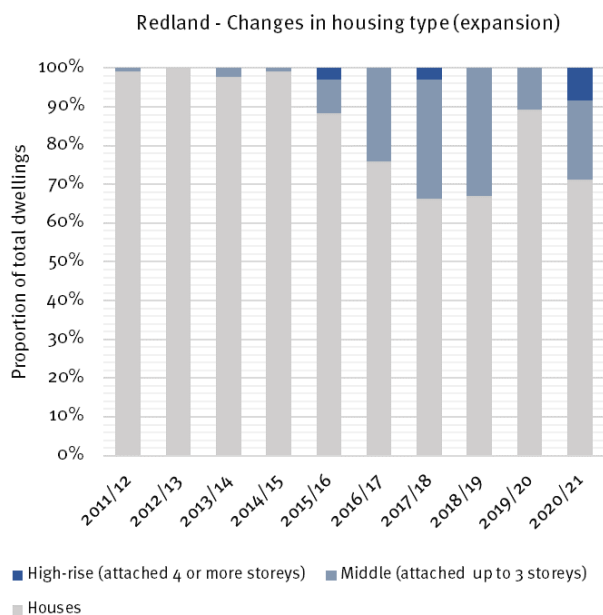
For more detail about dwelling approvals, see the [Technical notes](#).



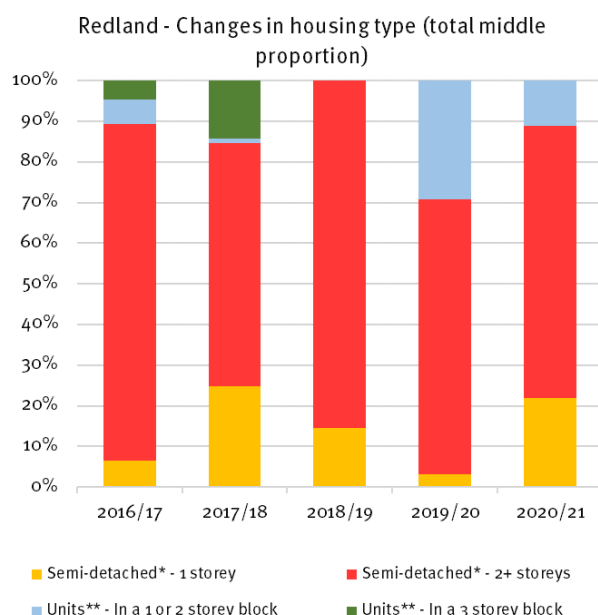
This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the consolidation area.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the expansion area.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of ‘missing middle’ in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – Redland

The number of sales has increased from 2018/19 to 2020/21 for all categories in Redland except for vacant lots and house and land packages in the expansion area, which decreased.

Median sales prices have increased for all categories over the period 2011/12 to 2020/21.

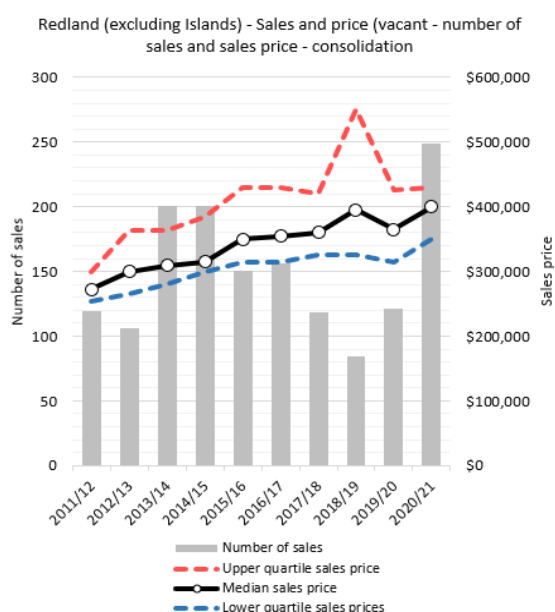
The median sales price for all categories in the expansion area is higher in Redland than for South East Queensland (SEQ) overall, except for houses and attached dwellings. Conversely, the median sales price for all categories in the consolidation area is lower in Redland than for SEQ, except for house and land packages and attached dwellings.

The rate of median sales price growth in Redland was lower than, or similar to SEQ, between 2011/12 and 2020/21 for most categories, except vacant lots per square metre in the expansion area, which showed a higher rate of growth, and house and land packages.

The rate of median price growth from 2011/12 to 2020/21 was lower in the consolidation area than the expansion area for all categories except for house and land packages. The relatively low median

sales price for vacant lots in the consolidation area (\$36,875) is due to the substantial supply of vacant lots on the Southern Moreton Bay Islands (SMBIs).

For more detail about the median sales price and number of sales, see the [Technical notes](#).

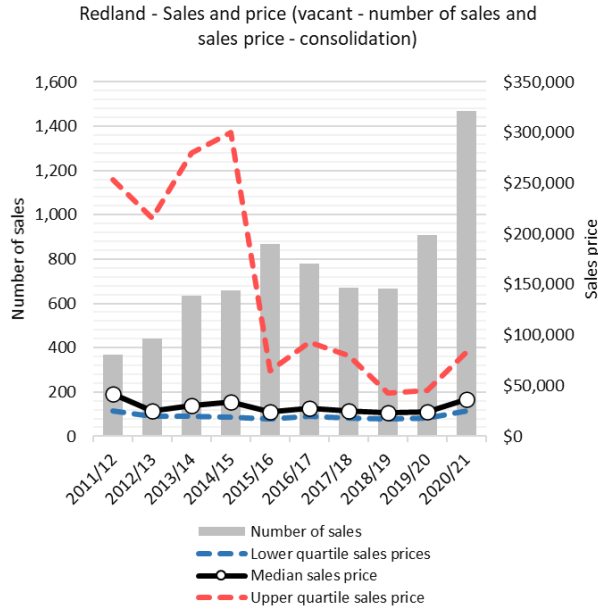


This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the consolidation area excluding the SMBIs.

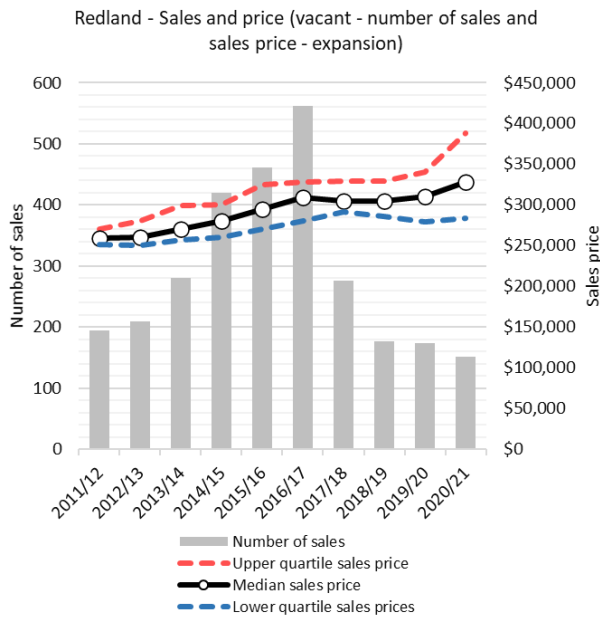
Excluding the sales and price metrics of the SMBIs for the Redland consolidation area found that there was limited impact on all categories except for vacant land sales due to the larger proportion of these sales on the SMBIs.

Vacant land sales on the SMBIs represented on average 80 per cent of all total vacant land sales of Redland’s consolidation area from 2011/12 to 2020/21. The inclusion of these sales for Redland’s consolidation area significantly reduces the sales prices for vacant land sales when combined with sales prices for the mainland.

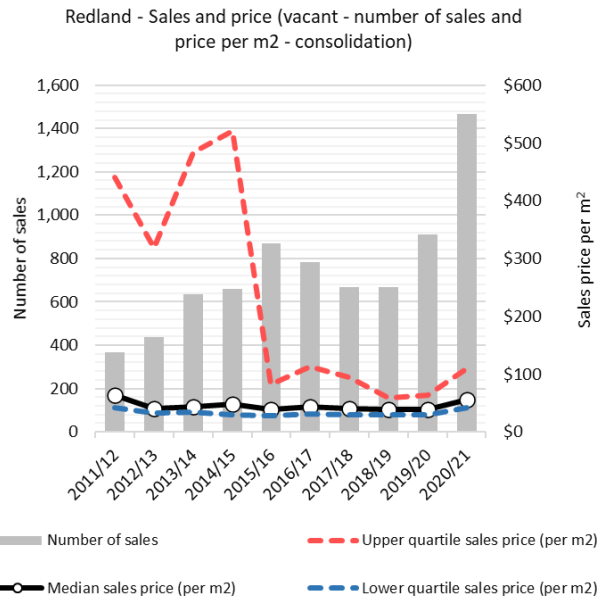
For 2020/21, there were around 250 vacant lot sales in the consolidation area on the mainland with a median sales price of \$400,000 (refer graph to the left).



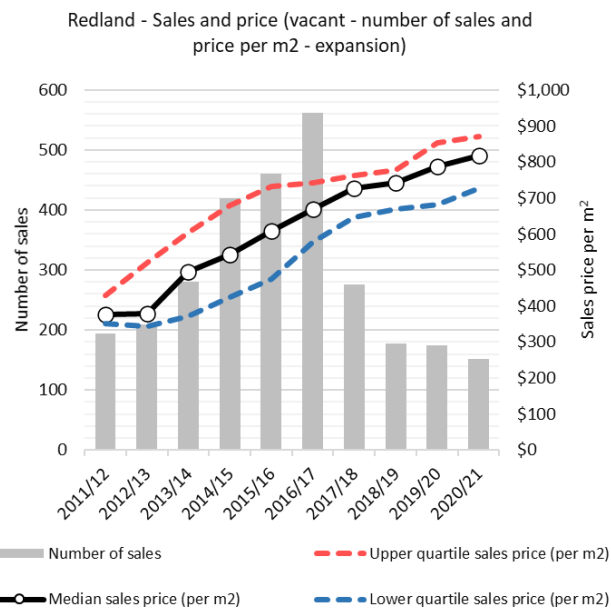
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the consolidation area.



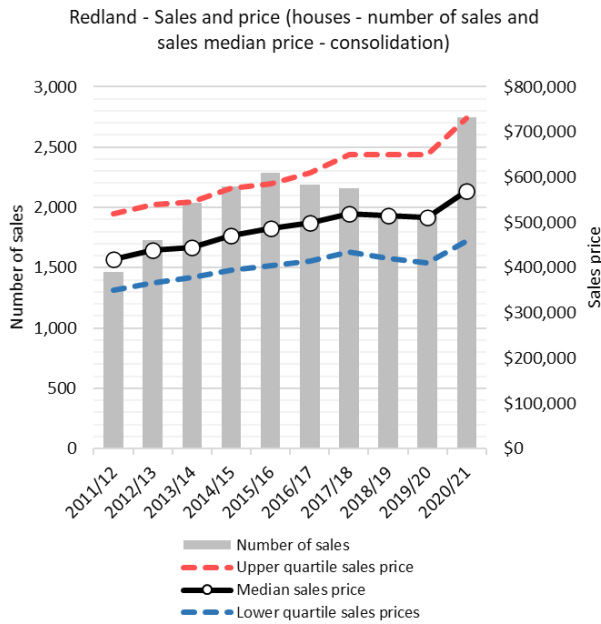
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the expansion area.



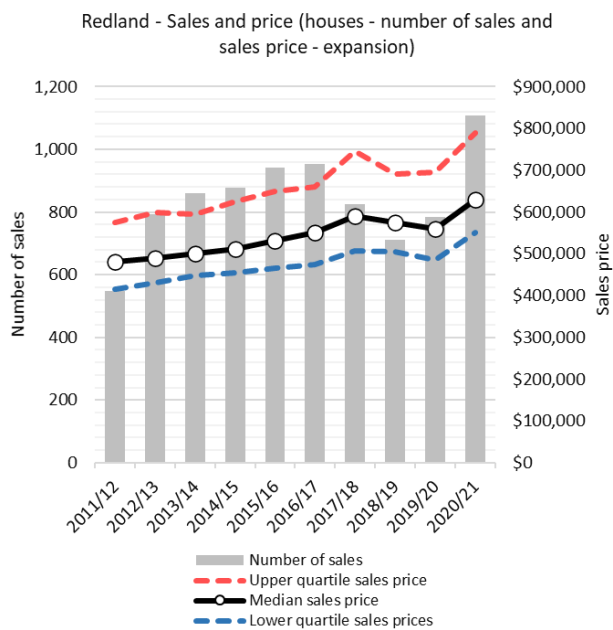
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the consolidation area.



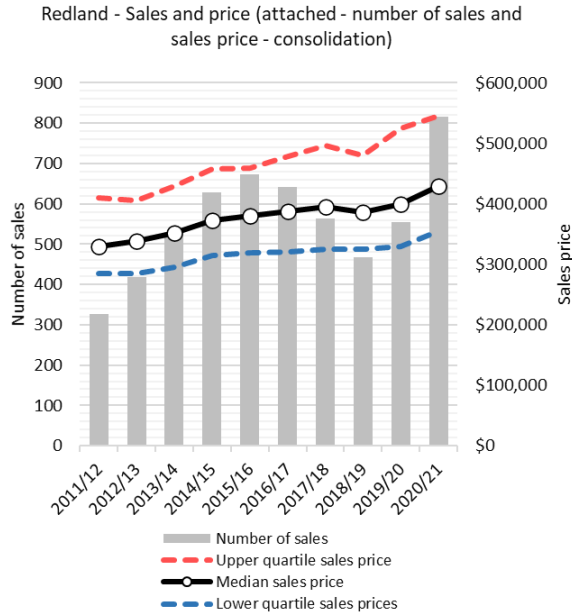
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



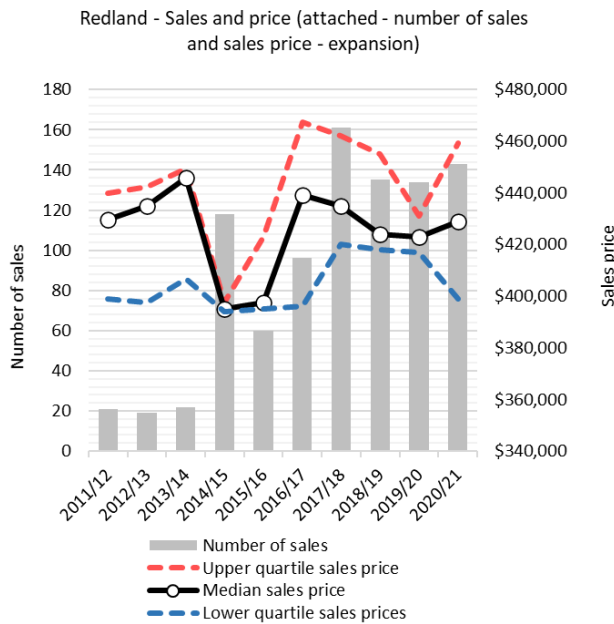
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the consolidation area.



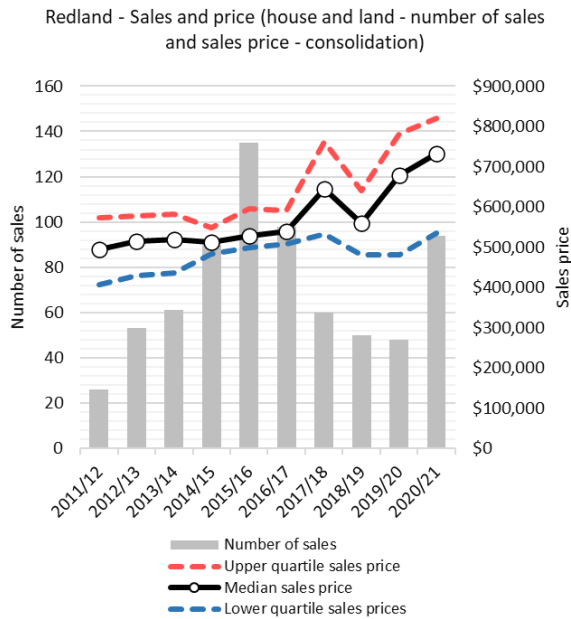
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



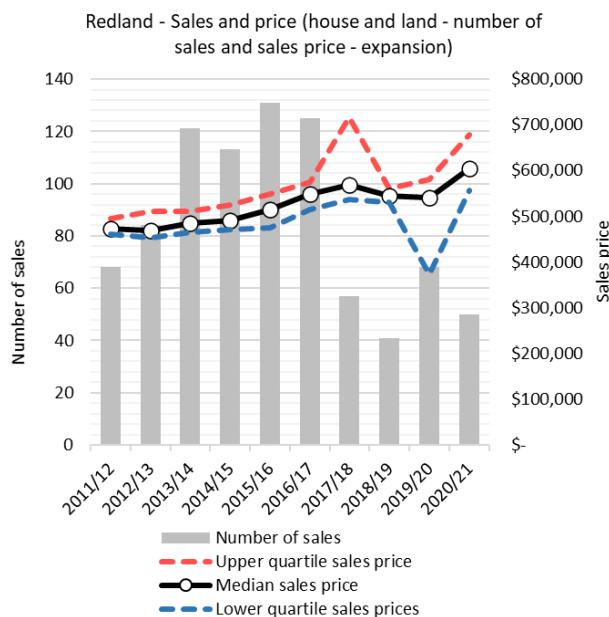
This graph shows the number of sales and the lower, median and upper quartile sales price for attached dwellings in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for house-land packages in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

Industrial – Redland

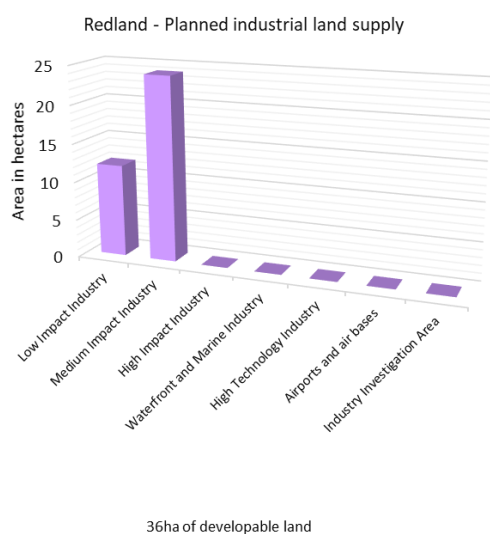
Planned industrial land supply/take-up – Redland

About 11 hectares of developed industrial land was taken-up in Redland between 2011 and 2021, with about three hectares taken up in 2020/21. The take-up occurred on land intended for low and medium impact industry.

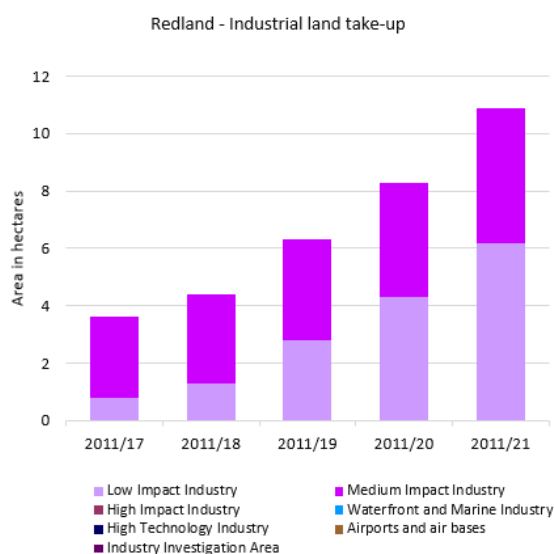
There were about 36 hectares of planned industrial land supply in Redland as at 2021, including serviced and un-serviced land. This planned industrial land supply comprised land intended for low and medium impact industry.

Land within the Southern Thornlands area in Redland City (outside the *ShapingSEQ* 2017 Urban Footprint) has been identified as a Potential Future Growth Area by *ShapingSEQ* 2017. Redland City Council is currently investigating preferred land uses in this area and an appropriate amendment to their planning scheme. Planning scheme changes may increase the Planned industrial land supply in Redland to help address the current apparent shortfall in Planned industrial employment supply.

For more detail about planned industrial land supply and take-up, see the [Technical notes](#).



This graph shows the number of hectares of planned industrial land as at 2021 by industrial land category.



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of Planned industrial land supply. Further, Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

The department has continued to build on work undertaken through [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. This higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – Redland

The capacity and realistic availability of planned industrial employment supply in Redland is less than the minimum 15 years of supply sought by *ShapingSEQ 2017* (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for Redland is equivalent to about 1300 jobs on the graph.

The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. It is calculated from the Council's adopted LGIP (sourced August 2018). The realistic availability figure provides a supply scenario prepared for this report that considers whether some of the capacity is not realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

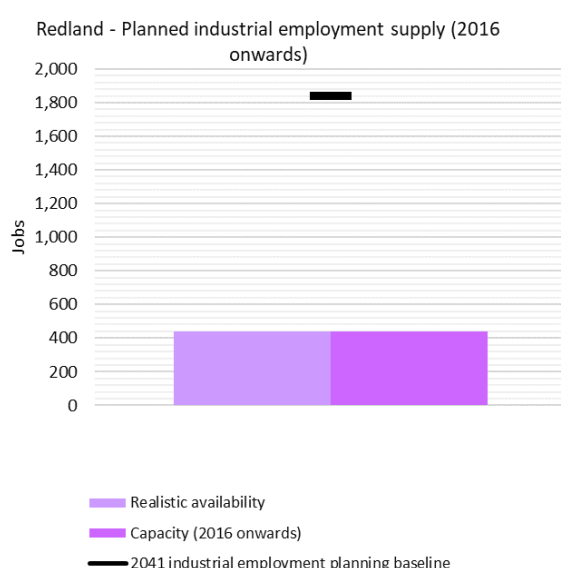
The realistic availability scenario is informed by updated developable area data (to 2021), as reported in the Planned industrial land supply and take-up section of this report, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

Both the capacity and realistic availability of planned industrial employment supply are about 440 employees (from 2016 onwards), representing less than the minimum 15 years of supply (from 2021

onwards) sought by *ShapingSEQ* 2017. These figures are approximately 1400 employees less than the 2041 industrial employment planning baseline of about 1840 employees.

Land within the Southern Thornlands area in Redland City (outside the *ShapingSEQ* 2017 Urban Footprint) has been identified as a Potential Future Growth Area by *ShapingSEQ* 2017. Redland City Council is currently investigating preferred land uses in this area and an appropriate amendment to their planning scheme. Any planning scheme changes could help to address the current shortfall in the planned industrial employment supply. Where amendments proceed, and data sources are updated, their effect on industrial employment supply will be included in future years of LSDM reporting.

For more detail about the calculation of planned industrial employment supply, see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, from 2016 onwards, that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program Delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases. To the extent the assumed industrial employment densities used for Council’s adopted LGIP, that

underpin the reported Planned industrial employment supply, are lower than actually achieved, the figures may underestimate supply. Council is preparing new planning assumptions which will include updated employment assumptions and when those become available they can be reflected in future LSDM reports as appropriate.

Future [Best practice research](#) could consider the availability of data to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the present year. Current years of supply figures (from 2021 onwards) are indicative estimates, effectively assuming the same average annual rate of take-up of employment supply from 2016 to 2021 as the average annual *ShapingSEQ* 2017 employment planning baseline growth from 2016 to 2031.

Scenic Rim

Summary

ShapingSEQ 2017 establishes Scenic Rim's expected population growth will require 10,000 additional dwellings between 2016 and 2041, through its dwelling supply benchmarks.

The capacity of planned dwelling supply in the Scenic Rim expansion area provides more than the minimum 15 years of supply sought by *ShapingSEQ* 2017.

There are about 14 years of supply of uncompleted lot approvals in the Scenic Rim, which exceeds the minimum four years of supply sought by *ShapingSEQ* 2017.

Dwelling approvals in the Scenic Rim increased by 85 per cent when compared to the dwelling approvals in 2019/20, largely influenced by the HomeBuilder government stimulus and low interest rate environment. Despite this increase, Scenic Rim continues to show a gap between dwelling growth figures and the expansion area average annual benchmark (there is no consolidation area in the Scenic Rim). Council is currently progressing the Scenic Rim Growth Management Strategy which may include recommendations to update existing policies that will assist to increase growth.

Housing in the Scenic Rim is predominantly houses in urban and rural residential environments. However, when compared to existing stock at the 2016 Census, recent dwelling approvals indicate an increase in housing diversity in Scenic Rim, consistent with SEQ's preferred future. Based on an overall decline in median lot size up to 2020/21, dwelling density has increased in accordance with SEQ's preferred future.

The capacity and realistic availability of planned industrial employment supply in the Scenic Rim provide more than the minimum 15 years of supply sought by *ShapingSEQ* 2017 and exceed the 2041 industrial employment planning baseline. The estimated take-up of developed industrial land between 2011 and 2021 in Scenic Rim was about 138 hectares, with about 1305 hectares of planned industrial land existing as at 2021.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ* 2017, [click here](#).
- a map of the urban footprint defined by *ShapingSEQ* 2017, [click here](#).

Note: The local government areas of Lockyer Valley, Scenic Rim and Somerset do not have a consolidation area.

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data to 30 June 2021, where available at the time of reporting, and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of COVID-19 and government stimulus and investment. These impacts may vary across the region,

recognising that the economy and housing markets operate differently in different areas of SEQ. Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – Scenic Rim

Planned dwelling supply – Scenic Rim

The capacity of planned dwelling supply in Scenic Rim, which is wholly within the expansion area, provides more than 15 years of supply. While the realistic availability of planned dwelling supply provides less than the minimum 15 years of supply sought by *ShapingSEQ 2017*, the actual take up of supply since 2016 has been significantly slower than assumed by the estimated years of supply (see Dwelling growth).

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. It is calculated from the Scenic Rim Land Supply Monitoring data, as supplied by Scenic Rim Regional Council in June 2018. The realistic availability figure provides a land supply scenario prepared for this report that considers whether capacity is realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

The realistic availability scenario uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

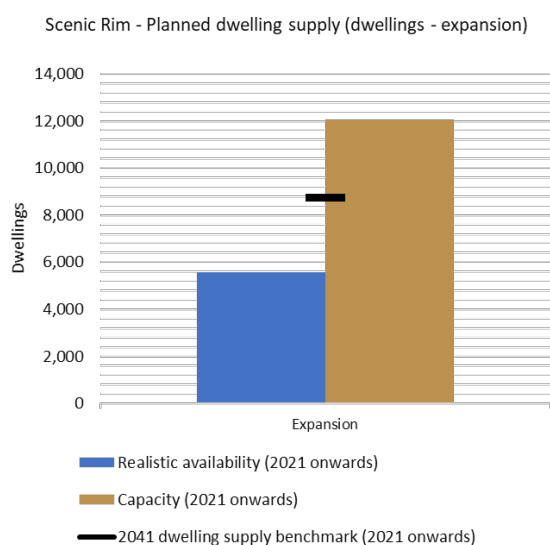
The capacity of planned dwelling supply in Scenic Rim, from 2021 onwards, is about 12,100 dwellings, which is about 3400 dwellings more than the expansion 2041 dwelling supply benchmark (from 2021 onwards) of about 8700 dwellings and equates to about 27 years of supply. The realistic availability of this supply (from 2021 onwards) is about 5600 dwellings, which equates to about 13 years of supply and is below *ShapingSEQ 2017*'s 15 years of supply policy objective.

The new Scenic Rim Planning Scheme 2020 commenced 20 March 2020 and may affect planned dwelling supply in future LSDM reporting. In July 2020, Council commenced the Scenic Rim Growth Management Strategy. Ultimately the outcomes of this work will update Council's growth management policy position and may include recommendations to update existing policies, such as a planning scheme amendment. Where amendments proceed, and source data is updated, their effect on planned dwelling supply will be included in future years of LSDM reporting.

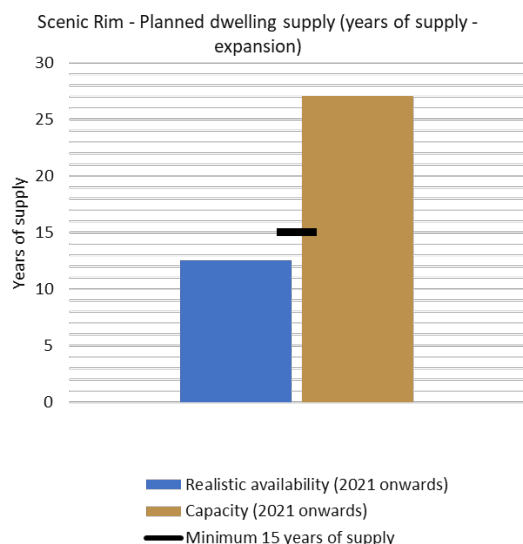
Given that the capacity of planned dwelling supply is more than adequate to accommodate expected growth in Scenic Rim, improved infrastructure availability would be required to address the current shortfall in the realistic availability of planned dwelling supply. As part of undertaking its Growth Management Strategy, Scenic Rim Regional Council has the opportunity to increase infrastructure availability, e.g. through changes to its Priority Infrastructure Area.

As indicated in Dwelling growth, on average the take-up of planned dwelling supply since 2016 has been significantly slower than the average annual benchmark used to calculate years of supply. The situation is similar in rural local government areas in SEQ, including Lockyer Valley and Somerset.

For more detail about the calculation of planned dwelling supply, including years of supply, see the [Technical notes](#).



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017's dwelling supply benchmark (from 2021 onwards) in the expansion area. This accounts for the 2016/21 constructed dwellings estimate of 1283. To view fact sheets on the concept of realistic availability, [click here](#). To view a fact sheet explaining the calculation of remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017’s* minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent and up-to-date over time, improving the comparability and currency of supply estimates. These improvements can be reflected in future publications of the Land Supply and Development Monitoring (LSDM) Report.

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ 2017’s* dwelling supply benchmarks. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region’s planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state and local constraints
- recent amendments to the planning scheme and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

Approved supply – Scenic Rim

Approved supply is measured by analysing uncompleted lot approvals across Scenic Rim.

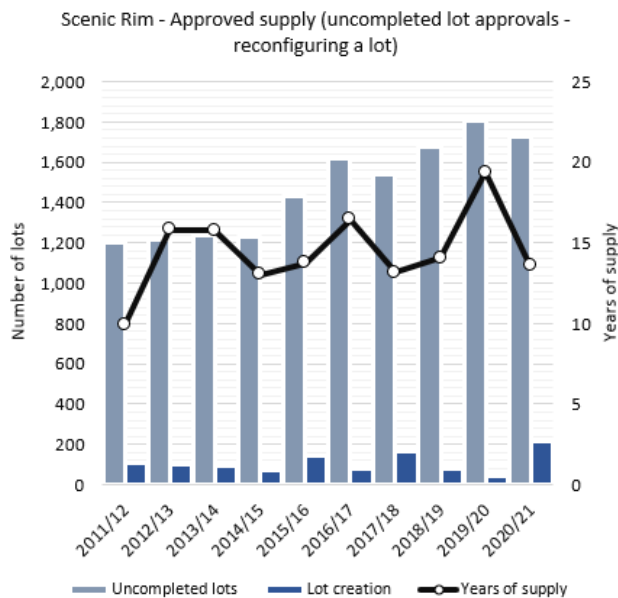
Scenic Rim has about 13.6 years of supply of uncompleted lot approvals. This is well above the minimum four years of supply sought by *ShapingSEQ 2017*. The total number of uncompleted lot approvals has decreased from its historical high of 1807 in 2019/20 to 1725.

Of the uncompleted lots, approximately 19.8 per cent (341) had operational works approvals. This represents the number of lots which are readily available for construction in the short-term.

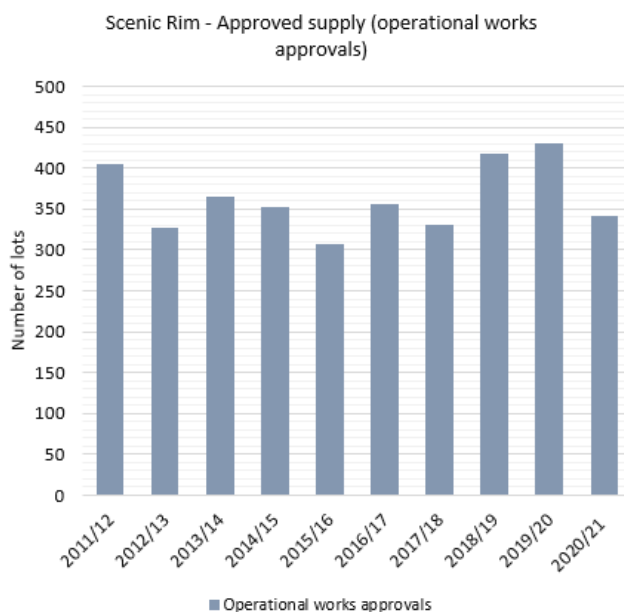
The higher rate of lot creation in 2020/21 has contributed to a decrease in the years of supply.

There are no uncompleted multiple dwelling approvals to report for Scenic Rim because it has no consolidation area.

For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical Notes](#).



This graph shows the number of lots that have a development permit, but have not yet been certified (uncompleted lots) as at 30 June each year, as well as the number of lots that have been created (certified) in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.

Note: The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – Scenic Rim

The expansion area applies to the whole of the Scenic Rim.

There were 313 dwelling approvals recorded in the Scenic Rim expansion area in 2020/21 at a rate of 26 dwellings per month. This represents an 85 per cent increase when compared to the dwelling approvals in 2019/20 and is the highest level of dwelling growth in the last decade. When compared to the long-term averages, the 2020/21 dwelling approvals are also higher than the five-year average of 263 and ten-year average of 249.

The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see [Market Factors](#).

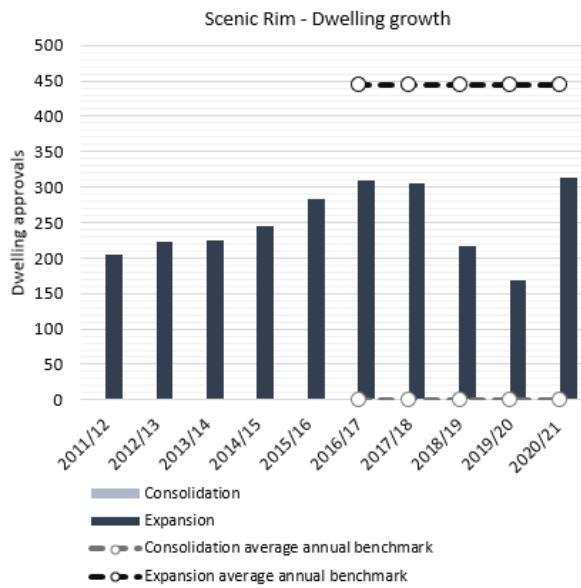
Notwithstanding the increased activity, the dwelling approvals in 2020/21 are 132 dwellings fewer than the expansion average annual benchmark of 445 additional dwellings.

As a result, the cumulative growth for the 2016/17 to 2020/21 period continues to show a gap between dwelling growth figures and the *ShapingSEQ* 2017 benchmark, which may lead to a challenge in addressing this shortfall into the future.

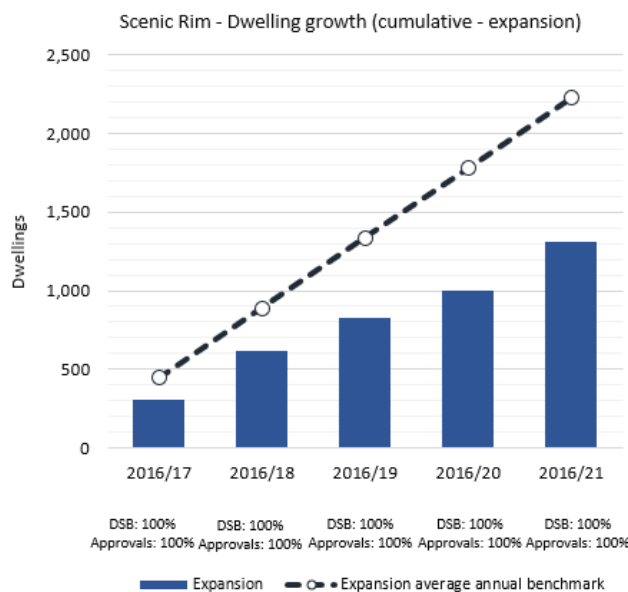
Scenic Rim has recently adopted a new planning scheme which may affect planned dwelling supply and help to address the growing gap between the annual average benchmarks and the dwelling growth data. Council is currently progressing the Scenic Rim Growth Management Strategy with formal community engagement anticipated early 2022 and the final strategy set to be completed by mid-2022. Ultimately, the outcomes of this work will update Council's growth management policy position, and may include recommendations to update existing policies to better support the growth of the region through planning scheme amendments and a review of the Local Government Infrastructure Plan.

Dwelling growth in the Scenic Rim may increase as the availability of local employment opportunities, e.g. at the Bromelton State Development Area (SDA), and the availability of services increases. In 2021, Scenic Rim Regional Council's proposal for a study of the local road connections to the SCT logistics terminal and broader Bromelton SDA was assessed as meeting the principles for the productive enhancement program under Federal Government's Inland Rail Interface Improvement Program (II Program) and was eligible to proceed through the program's gateway assessment process.

For more information about improvements to the measurement of net growth over time, see [Program Delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).



This graph shows annual dwelling approvals compared against *ShapingSEQ 2017's* average annual benchmark.



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ 2017's* expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the 2018 Queensland Government dwelling projections for SEQ. This adjustment resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has been retained in the 2021 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

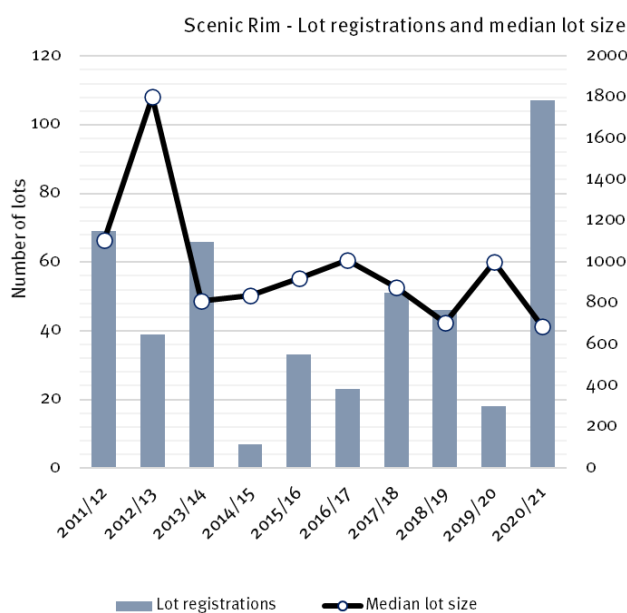
Changes in dwelling density – Scenic Rim

Dwelling density (measured through median lot sizes and mean population-weighted dwelling density) has not changed significantly in Scenic Rim in recent years and has not contributed to SEQ's preferred future for increased dwelling densities and smaller lot sizes.

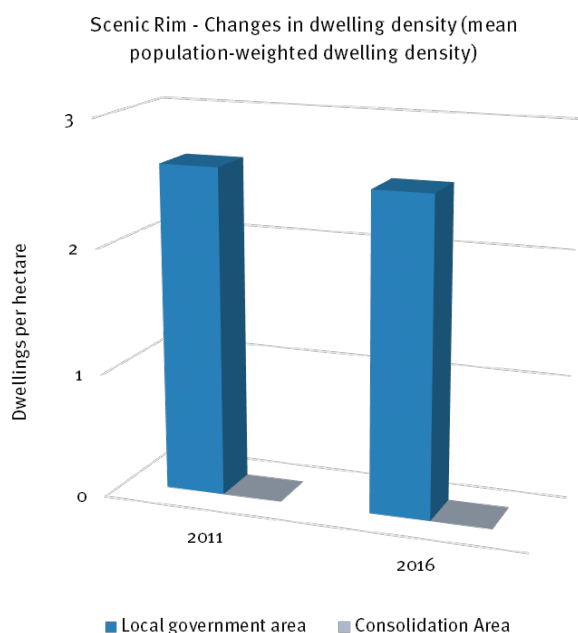
There was a minor decrease in mean population-weighted dwelling density in the Scenic Rim between 2011 and 2016, from 2.6 to 2.5 dwellings per hectare. This represents the average dwelling density at which the population of Scenic Rim lives and is comparable to the net residential density as used by *ShapingSEQ 2017*.

Consistent with other rural local governments, there have been significant fluctuations in median lot size in Scenic Rim. The median size of new lots has fluctuated from a peak of about 1800m² in 2012/13 to 690m² in 2020/21. This may be related to the small number of lot registrations in Scenic Rim over that period. However, lot registrations significantly increased in 2020/21 to 107, compared to 18 in 2019/20.

For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – Scenic Rim

Housing in the Scenic Rim is predominantly houses in urban and rural residential environments. However, when compared to existing dwelling stock at the 2016 Census, recent dwelling approvals indicate an increase in housing diversity in Scenic Rim, consistent with SEQ's preferred future.

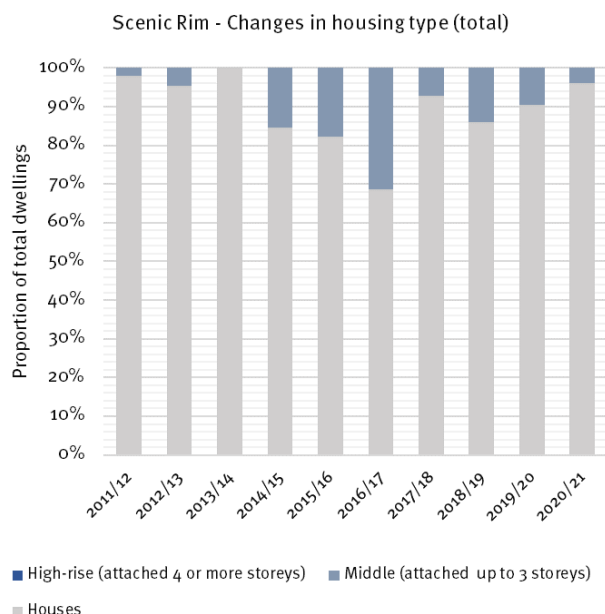
Eighty-seven per cent (1136 dwellings) of all new dwelling approvals in the Scenic Rim from 2016/17 to 2020/21 were for houses, which was a lower proportion than for existing dwelling stock as at the 2016 Census (95 per cent).

The proportion of dwelling approvals for middle (about 13 per cent or 177 dwellings) exceeded existing dwelling stock as at the 2016 Census (middle six per cent).

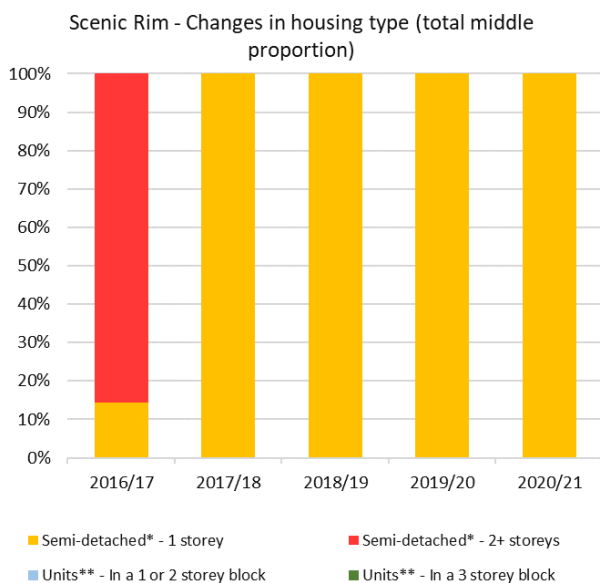
Of middle dwelling approvals since 2016/17, the predominant middle housing type approved in the Scenic Rim was semi-detached, row or terrace houses and townhouses of one storey (94 dwellings or about 53 per cent).

All house and middle dwelling approvals for the period between 2016/17 and 2020/21 were located within the expansion area as Scenic Rim does not have a consolidation area.

For more detail about dwelling approvals, see the [Technical notes](#).



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of ‘missing middle’ in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the

ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – Scenic Rim

Sales prices and the number of sales have only been reported for the expansion area because no consolidation area is identified for Scenic Rim. Sales prices have also only been reported for years with 10 or more sales.

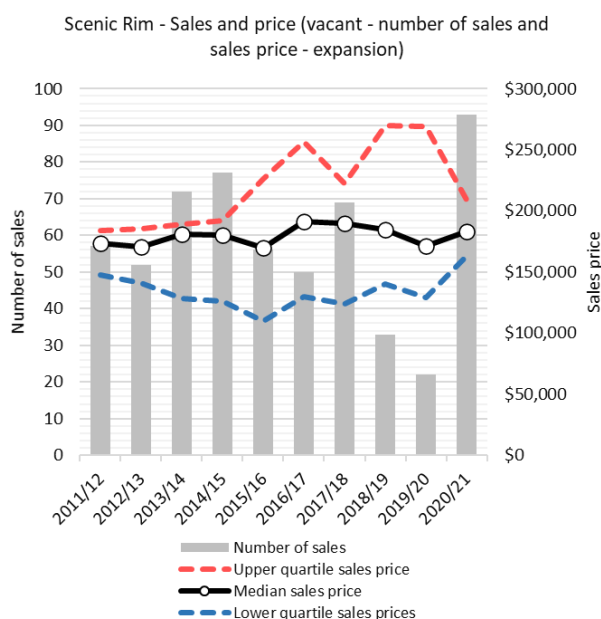
The number of sales has increased from 2018/19 to 2020/21 for all categories in Scenic Rim and represents the highest number of sales in over 10 years.

The low number of sales, except for houses, is typical for rural local government areas in South East Queensland (SEQ) and contributes to fluctuations in price from year to year.

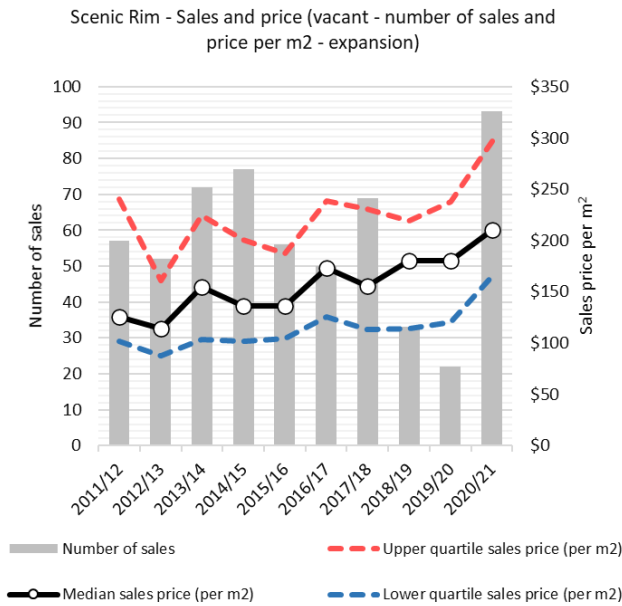
Median sales price increased over the period 2011/12 to 2020/21 for all categories. However, except for vacant land (per square metre) and houses, these price increases have been minimal.

The median sales price for all categories is lower in the Scenic Rim than SEQ overall. The rate of growth in median sales price from 2011/12 to 2020/21 is also lower than in SEQ for all categories with a reported median price, except for houses (at 37.4 per cent) and vacant lots per square metre (at 66.7 per cent).

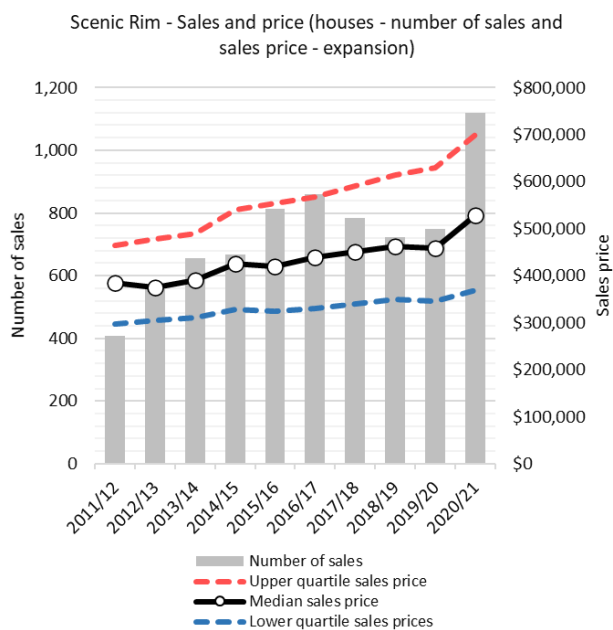
For more detail about the median sales price and number of sales, see the [Technical notes](#).



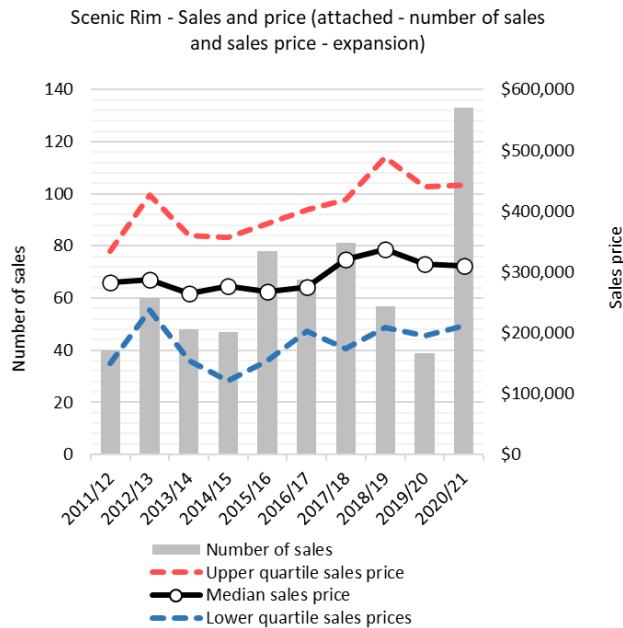
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the expansion area.



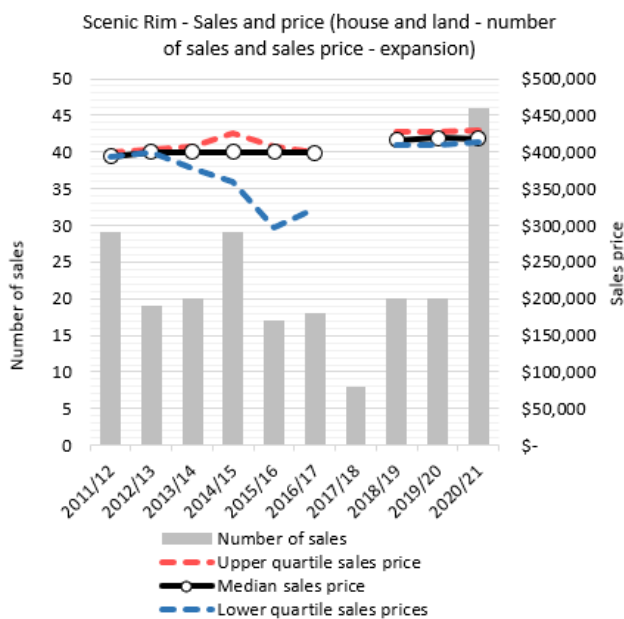
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

Note: Sales prices have not been reported for years with fewer than 10 sales. For more details, see the [Technical notes](#).

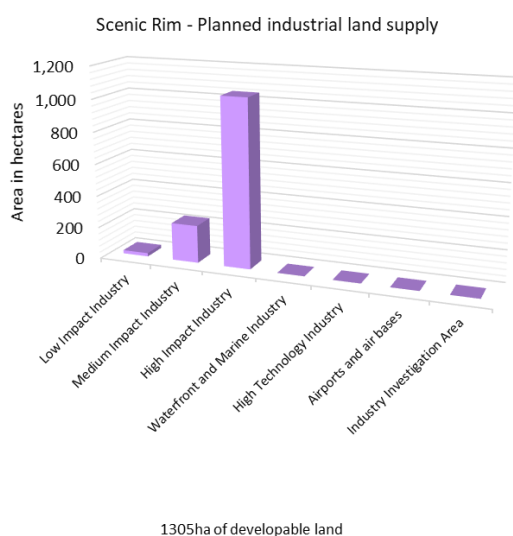
Industrial – Scenic Rim

Planned industrial land supply/take-up – Scenic Rim

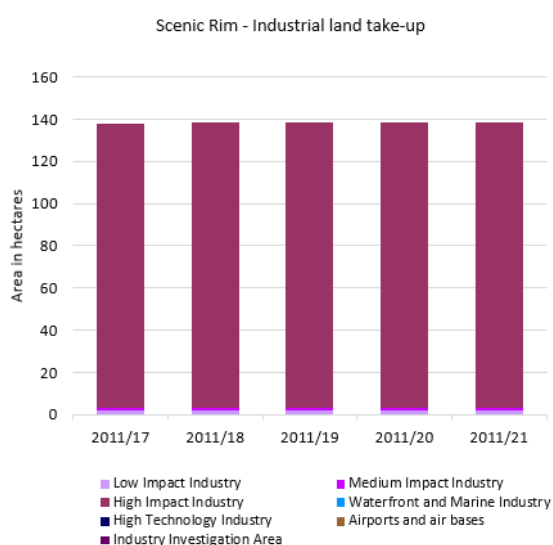
About 138 hectares of developed industrial land in Scenic Rim was taken up between 2011 and 2021. The take-up mostly occurred on land intended for high impact industry, followed by low and medium impact industry.

There were about 1305 hectares of planned industrial land supply in Scenic Rim as at 2021, including serviced and un-serviced land. The majority of planned industrial land supply comprised land intended for high impact industry, with some medium and low impact industry.

For more detail about planned industrial land supply and take-up, see the [Technical notes](#).



This graph shows the number of hectares of planned industrial land as at 2021 by industrial land category.



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of Planned industrial land supply. Further, Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

The department has continued to build on work undertaken through [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. This higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – Scenic Rim

The capacity and realistic availability of planned industrial employment supply in Scenic Rim provide the minimum 15 years of supply of land sought by *ShapingSEQ 2017* (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for Scenic Rim is equivalent to about 400 jobs on the graph.

The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. It is calculated from Attachment 1a of the LGIP, November 2017. The realistic availability figure provides a supply scenario prepared for this report that considers whether some of the capacity is not realistically available by 2041.

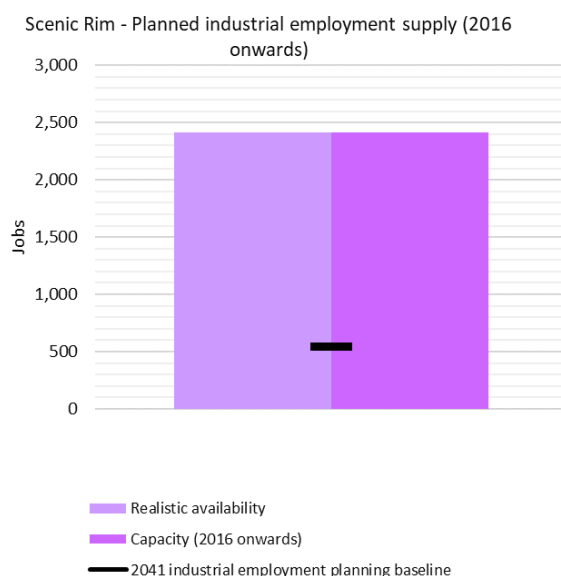
The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

The realistic availability scenario is informed by updated developable area data (to 2021), as reported in the Planned industrial land supply and take-up section of this report, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

Both the capacity and realistic availability of planned industrial employment supply in Scenic Rim (from 2016 onwards) are about 2400 employees. These figures are much greater than the 2041 industrial employment planning baseline of about 500 employees. A large proportion of this supply is provided at the Bromelton State Development Area. Some excess of planned industrial employment supply may be appropriate to facilitate strategic economic development opportunities when they arise. Also, as a large new growth area, the industrial employment planning baseline for Scenic Rim may not fully recognise the emerging employment potential of Bromelton.

In March 2020 a new planning scheme commenced for Scenic Rim, which may have affected planned industrial employment supply. Where data sources are updated, their effect on industrial employment supply will be included in future years of LSDM reporting.

For more detail about the calculation of planned industrial employment supply, see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, from 2016 onwards, that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017's* 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program Delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

Future [Best practice research](#) could consider the availability of data to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the present year. Current years of supply figures (from 2021 onwards) are indicative estimates, effectively assuming the same average annual rate of take-up of employment supply from 2016 to 2021 as the average annual *ShapingSEQ* 2017 employment planning baseline growth from 2016 to 2031.

Somerset

Summary

ShapingSEQ 2017 establishes Somerset's expected population growth will require an additional 6200 dwellings between 2016 and 2041, through its dwelling supply benchmarks.

The capacity and realistic availability of planned dwelling supply in the Somerset expansion area provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017*.

There are about 51 years of supply of uncompleted lot approvals in Somerset, which far exceeds the minimum four years of supply sought by *ShapingSEQ 2017*.

Dwelling approvals in Somerset have increased by 110 per cent when compared to the dwelling approvals in 2019/20, largely influenced by the HomeBuilder government stimulus and low interest rate environment. Despite this increase, Somerset continues to show a gap between dwelling growth figures and the expansion average annual benchmark (there is no consolidation area in Somerset). Dwelling growth in Somerset may increase as the availability of local employment opportunities and services increase.

Housing diversity in Somerset has remained generally consistent with the existing dwelling stock as at the 2016 Census, contrary to SEQ's preferred future. Based on a low level of lot creation, the median lot size in Somerset has increased to the highest peak seen over the last 10 years, which is not in accordance with *ShapingSEQ 2017's* preferred future.

The capacity and realistic availability of planned industrial employment supply in Somerset provide more than the minimum 15 years of supply sought by *ShapingSEQ 2017* and exceed the 2041 industrial employment planning baseline. The estimated take-up of developed industrial land between 2011 and 2021 in Somerset was about three hectares, with about 97 hectares of planned industrial land existing as at 2021.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ 2017*, [click here](#).
- a map of the urban footprint defined by *ShapingSEQ 2017*, [click here](#).

Note: The local government areas of Lockyer Valley, Scenic Rim and Somerset do not have a consolidation area.

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data to 30 June 2021, where available at the time of reporting, and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of COVID-19 and government stimulus and investment. These impacts may vary across the region, recognising that the economy and housing markets operate differently in different areas of SEQ.

Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – Somerset

Planned dwelling supply – Somerset

The capacity and realistic availability of planned dwelling supply in Somerset, which is wholly within the expansion area, provides more than the 15 years of supply minimum sought by *ShapingSEQ* 2017.

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. It is calculated from the Population and Demand Model supplied by Somerset Regional Council in May 2018. The realistic availability figure provides a land supply scenario prepared for this report that considers whether capacity is realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

The realistic availability scenario uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

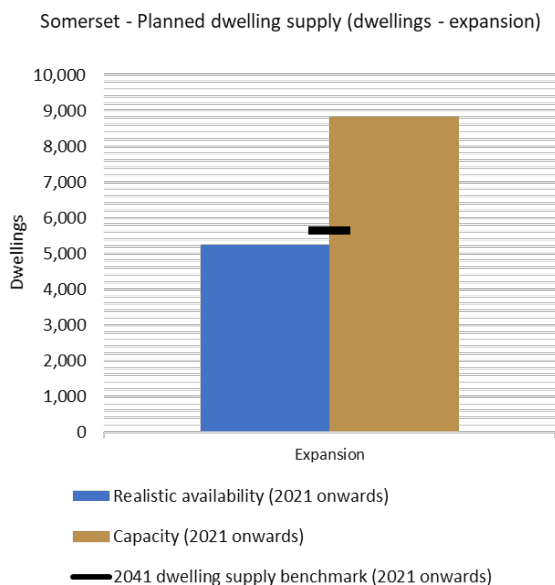
The capacity of planned dwelling supply in Somerset, from 2021 onwards, is about 8800 dwellings and exceeds the expansion 2041 dwelling supply benchmark (from 2021 onwards) of about 5600 dwellings. The realistic availability of this supply (from 2021 onwards) is about 5200 dwellings, which equates to about 19 years of supply and is above *ShapingSEQ* 2017's 15 years of supply policy objective.

Somerset Regional Council recently adopted a planning scheme amendment. Where source data is consequently updated, its effect on planned dwelling supply will be included in future years of LSDM reporting.

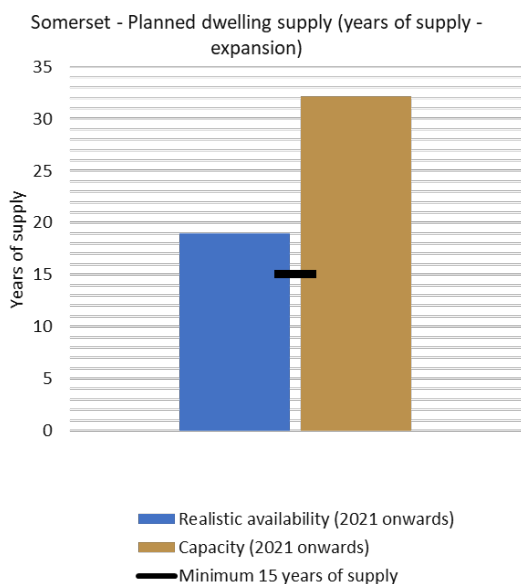
Council is also undertaking the Fernvale Growth Planning and Transport Strategy, with Fernvale's emergence over time as a more significant urban area supported by current state government investment in road user safety improvements to Main Street (the Brisbane Valley Highway) in Fernvale.

As indicated in Dwelling growth, on average the take-up of planned dwelling supply since 2016 is significantly slower than the average annual benchmark used to calculate years of supply. The situation is similar in rural local government areas in SEQ, including Lockyer Valley and Scenic Rim.

For more detail about the calculation of planned dwelling supply, including years of supply, see the [Technical notes](#).



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ 2017's* dwelling supply benchmark (from 2021 onwards) in the expansion area. This accounts for the 2016/21 constructed dwellings estimate of 563. To view fact sheets on the concept of realistic availability, [click here](#). To view a fact sheet explaining the calculation of remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017's* minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with

guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent and up-to-date over time, improving the comparability and currency of supply estimates. These improvements can be reflected in future publications of the Land Supply and Development Monitoring (LSDM) Report.

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ 2017*'s dwelling supply benchmarks. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region's planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state and local constraints
- recent amendments to the planning scheme and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

Approved supply – Somerset

Approved supply is measured by analysing uncompleted lot approvals across Somerset.

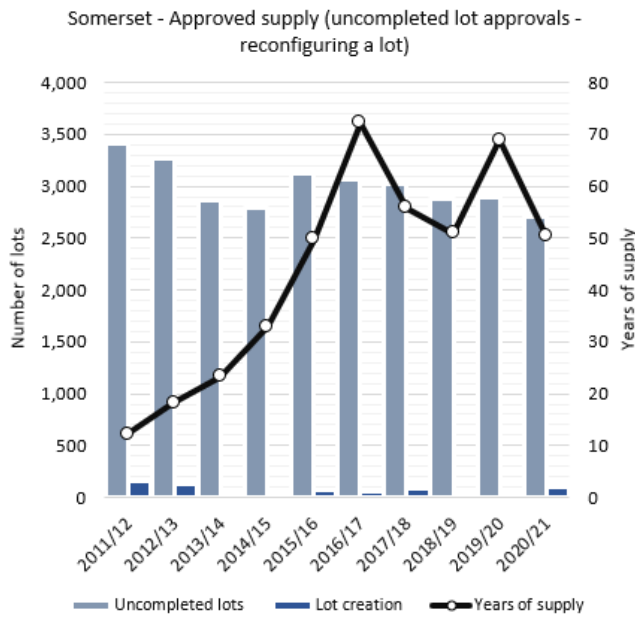
Somerset has about 50.5 years of supply of uncompleted lot approvals, which far exceeds the minimum four years of supply sought by *ShapingSEQ 2017*. However, the total number of uncompleted lot approvals has declined from 2011/12. The total number of uncompleted lot approvals for 2020/21 was 2701.

Of the uncompleted lots, approximately 14.9 per cent (403) had operational works approvals. This represents the number of lots which are readily available for construction in the short-term.

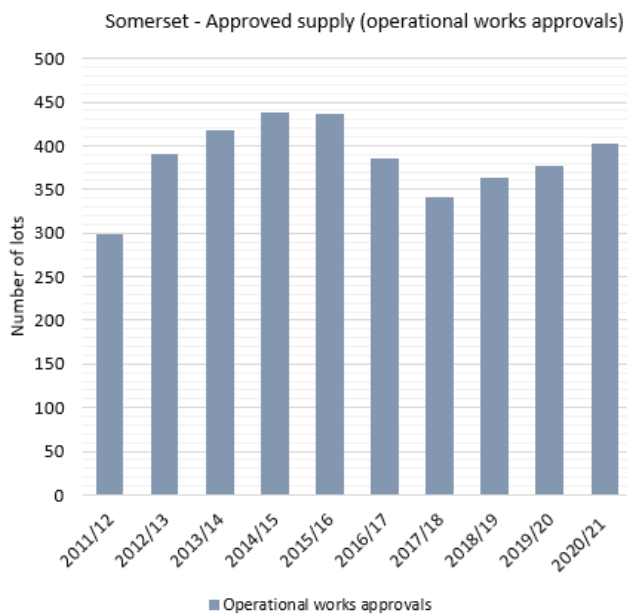
The very high years of supply figure is due to the very low rate of lot creation in recent years.

There are no uncompleted multiple dwelling approvals to report for Somerset because it has no consolidation area.

For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical Notes](#).



This graph shows the number of lots that have a development permit, but have not yet been certified (uncompleted lots) as at 30 June each year as well as the number of lots that have been created (certified) in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.

Note: The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – Somerset

The expansion area applies to the whole of Somerset.

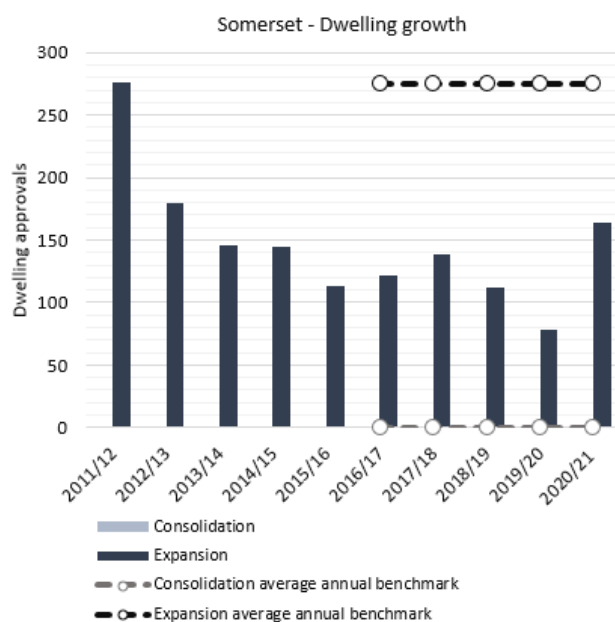
There were 164 dwelling approvals recorded in Somerset’s expansion area in 2020/21 at a rate of 14 per month. This represents a 110 per cent increase when compared to the dwelling approvals in 2019/20 and is the highest level of dwelling growth since 2012/13. When compared to long-term averages, the 2020/21 dwelling approvals are also higher than the five-year average of 123 and ten-year average of 147.

The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see [Market Factors](#).

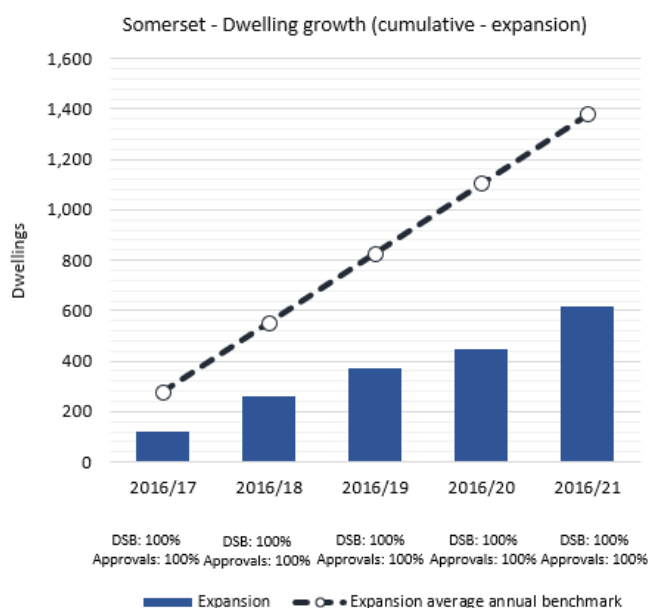
Notwithstanding the increased activity, Somerset dwelling approvals in 2020/21 is 111 dwellings fewer than the expansion average annual benchmark of 275 additional dwellings.

As a result, the cumulative growth for 2016/17 to 2020/21 continues to show a gap between dwelling growth figures and the *ShapingSEQ* 2017 benchmark, which may lead to a challenge in addressing this shortfall into the future.

For more information about improvements to the measurement of net growth over time, see [Program Delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).



This graph shows annual dwelling approvals compared against *ShapingSEQ* 2017’s average annual benchmark.



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ* 2017’s expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the 2018 Queensland Government dwelling projections for SEQ. This adjustment resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has been retained in the 2020 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

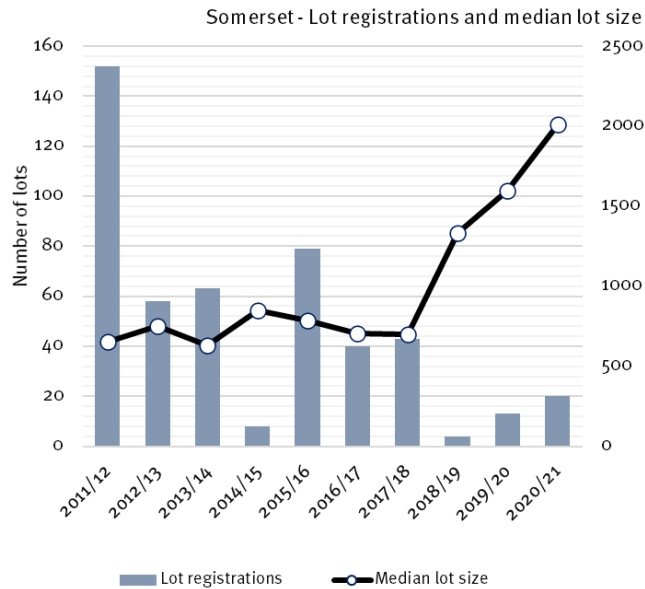
Changes in dwelling density – Somerset

Dwelling density (measured through mean population-weighted dwelling density) is increasing in Somerset in accordance with SEQ’s preferred future for higher dwelling densities. However, the median lot size in Somerset has increased to the highest peak seen over the last 10 years, which is not in accordance with SEQ’s preferred future.

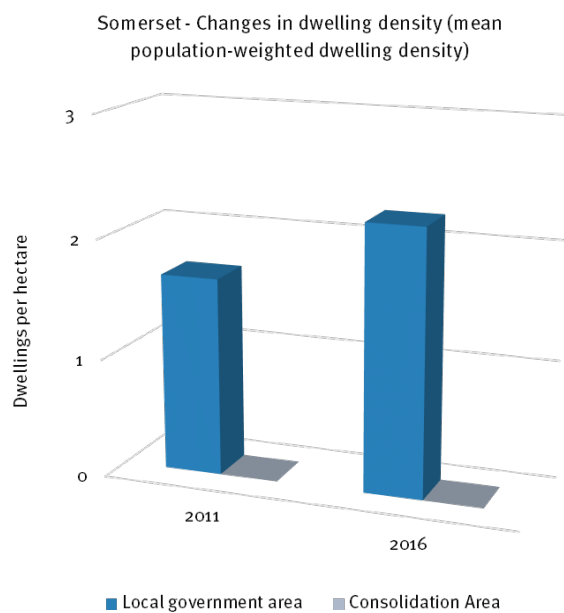
Mean population-weighted dwelling density in Somerset increased between 2011 and 2016, from 1.7 to 2.2 dwellings per hectare. This represents the average dwelling density at which the population of Somerset lives and is comparable to the net residential density as used by *ShapingSEQ* 2017.

Consistent with other rural local governments, there are fluctuations in median lot sizes in Somerset between 2011/12 and 2020/21. Since 2011/12, the median lot size has generally increased from 651m² in 2011/21 to 2013m² in 2020/21. This fluctuation may be related to the small number of lot registrations in Somerset over that period.

For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – Somerset

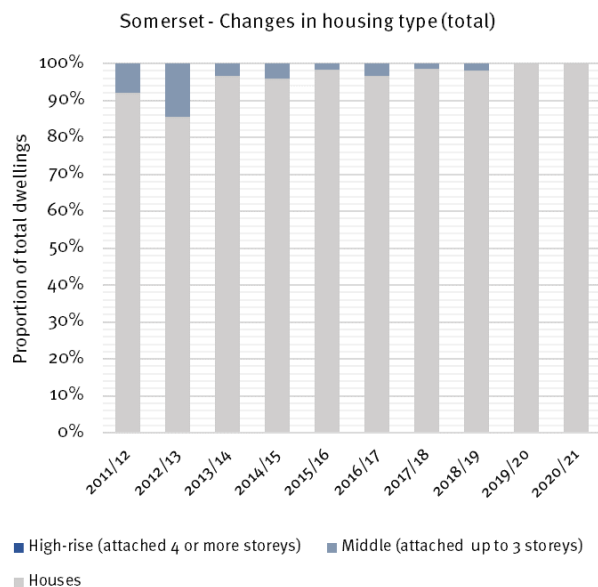
Housing in Somerset is predominantly houses in urban and rural residential environments, and recent dwelling approvals have been consistent with that characteristic.

The proportion of dwelling approvals for houses (99 per cent or 606 dwellings) and middle (one per cent or eight dwellings) for 2016/17 to 2020/21 was generally consistent with the existing dwelling stock as at the 2016 Census (houses 98 per cent, middle two per cent).

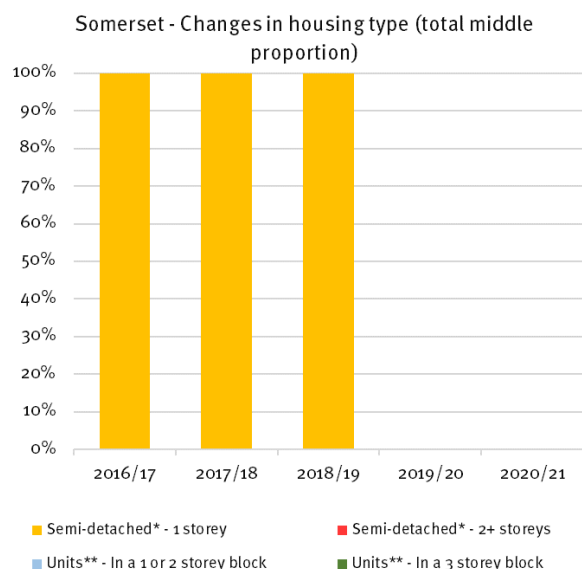
Of middle dwelling approvals since 2016/17, the predominant middle housing type approved in Somerset is semi-detached, row or terrace houses and townhouses of one storey. There were no new dwelling approvals for middle dwellings in 2020/21.

All house and middle dwelling approvals for the period between 2011/12 and 2020/21 were located within the expansion area as there is no consolidation area within Somerset.

For more detail about dwelling approvals, see the [Technical notes](#).



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of 'missing middle' in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – Somerset

Sales prices and the number of sales have only been reported for the expansion area because no consolidation area is identified for Somerset. Sales prices have also only been reported for years with 10 or more sales.

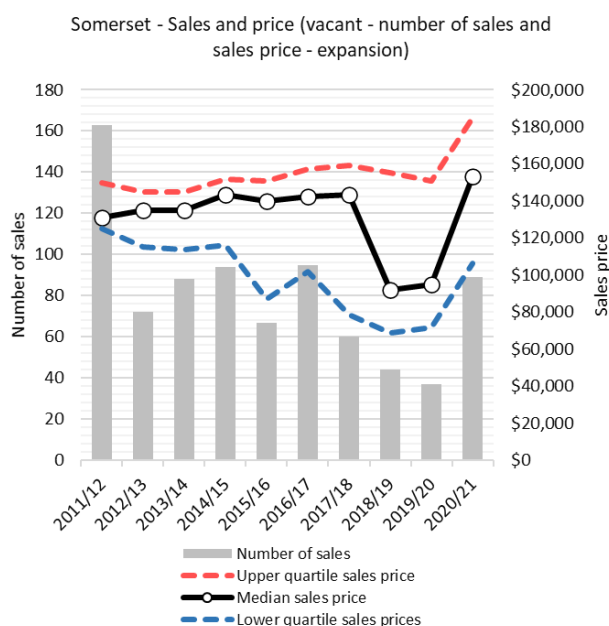
The number of sales has increased from 2018/19 to 2020/21 for all categories in Somerset.

The low number of sales, except for houses, is typical for rural local government areas in South East Queensland (SEQ) and contributes to fluctuations in price from year to year.

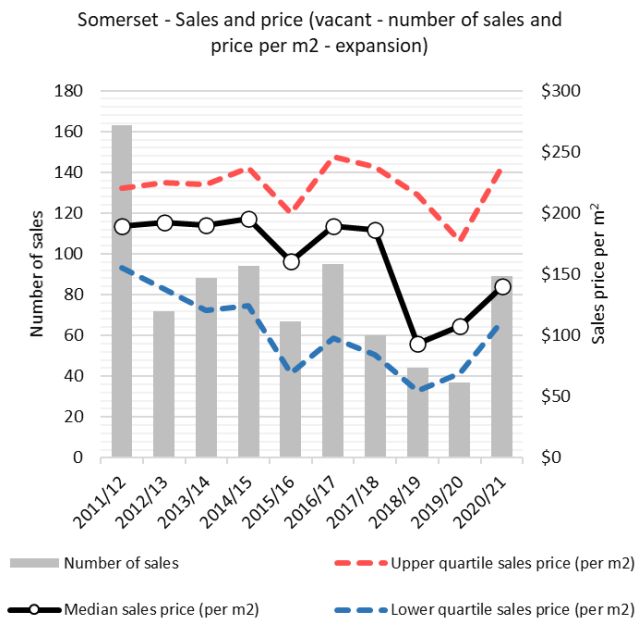
Median sales price for vacant land (per lot), houses and house and land packages increased over the 2011/12 to 2020/21 period while vacant land (per square metre) and attached dwellings decreased over that period.

The median sales price for all categories is lower in Somerset than for SEQ overall. The rate of growth from 2011/12 to 2020/21 in median sales price, in all categories with a reported median price, is also lower than for SEQ, except for house and land packages which increased by 73.8 per cent.

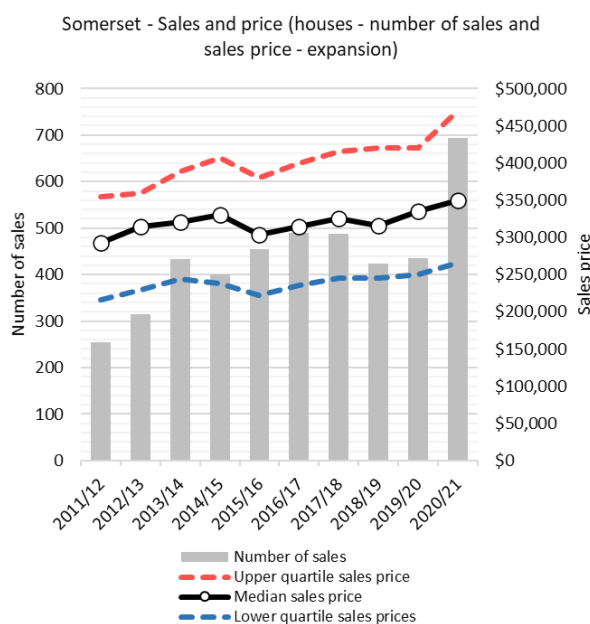
For more detail about the median sales price and number of sales, see the [Technical notes](#).



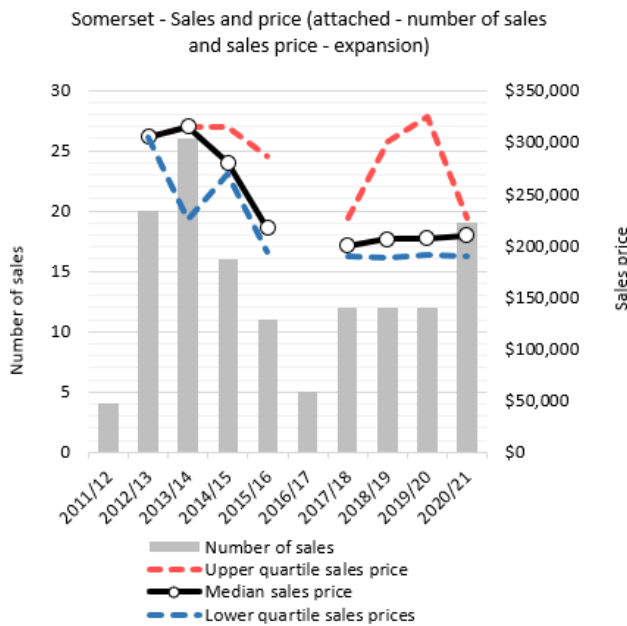
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the expansion area



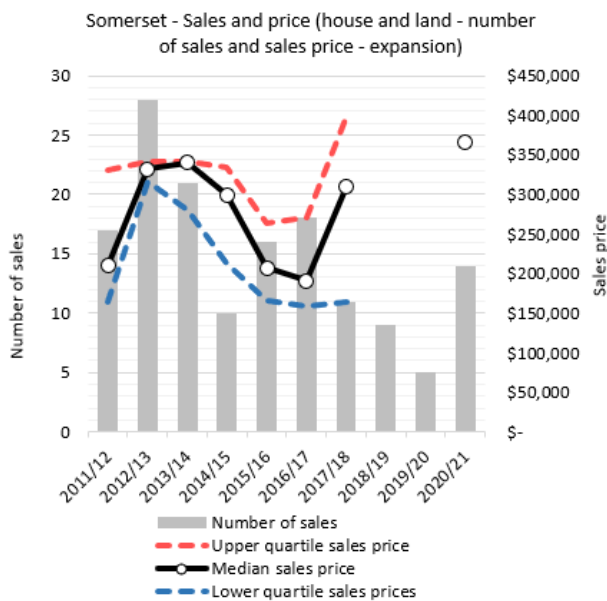
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

Note: Sales prices have not been reported for years with fewer than 10 sales. For more details, see the [Technical notes](#).

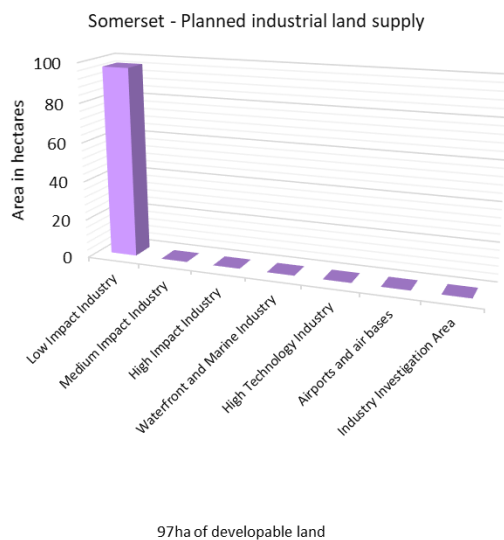
Industrial – Somerset

Planned industrial land supply/take-up – Somerset

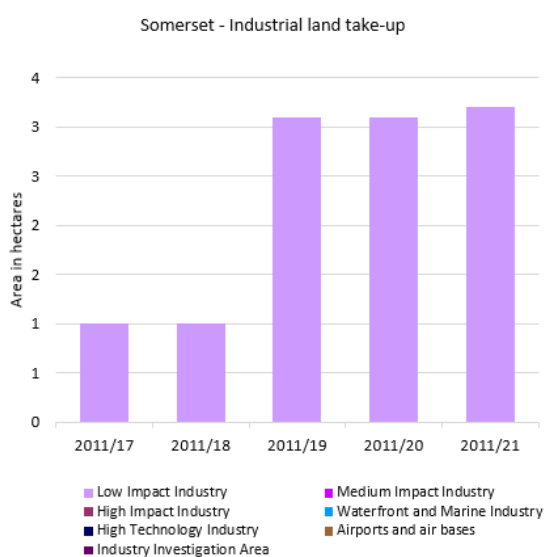
The estimated take-up of developed industrial land between 2011 and 2021 in Somerset was about three hectares. The take-up occurred on land intended for low impact industry.

There were about 97 hectares of planned industrial land supply in Somerset as at 2021, including serviced and un-serviced land. This planned industrial land supply comprised land intended for low impact industry.

For more detail about planned industrial land supply and take-up, see the [Technical notes](#).



This graph shows the number of hectares of planned industrial land supply as at 2021 by industrial land category.



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of Planned industrial land supply. Further, Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

The department has continued to build on work undertaken through [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. This higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – Somerset

The capacity and realistic availability of planned industrial employment supply in Somerset provide the minimum 15 years of supply of land sought by *ShapingSEQ 2017* (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for Somerset is equivalent to about 200 jobs on the graph.

The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. It is calculated from the Extrinsic Material to the LGIP (May 2016). The realistic availability figure provides a supply scenario prepared for this report that considers whether some of the capacity is not realistically available by 2041.

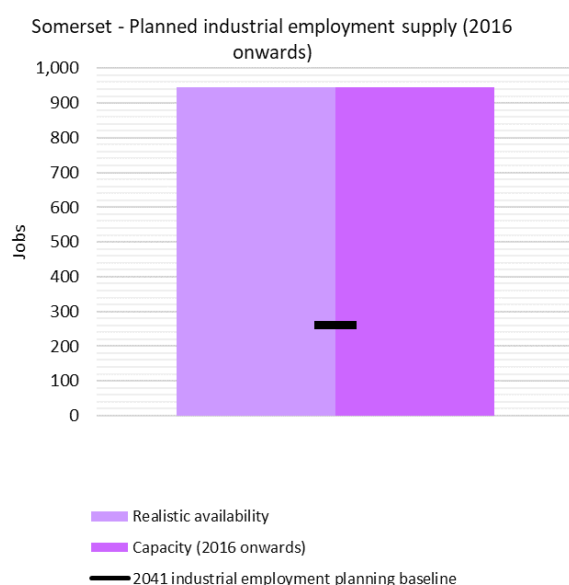
The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

The realistic availability scenario is informed by updated developable area data (to 2021), as reported in the Planned industrial land supply and take-up section of this report, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

Both the capacity and realistic availability of planned industrial employment supply (from 2016 onwards) are about 940 employees, representing about 97 years of supply (from 2021 onwards). These figures are significantly greater than the 2041 industrial employment planning baseline of about 260 employees.

In late 2020 Somerset Regional Council adopted planning scheme amendments that may affect planned industrial employment supply. Where data sources are updated, their effect on industrial employment supply will be included in future years of LSDM reporting.

For more detail about the calculation of planned industrial employment supply, see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, from 2016 onwards, that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program Delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

Future [Best practice research](#) could consider the availability of data to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the

present year. Current years of supply figures (from 2021 onwards) are indicative estimates, effectively assuming the same average annual rate of take-up of employment supply from 2016 to 2021 as the average annual *ShapingSEQ* 2017 employment planning baseline growth from 2016 to 2031.

Sunshine Coast

Summary

ShapingSEQ 2017 establishes that Sunshine Coast's expected population growth will require 87,000 additional dwellings between 2016 and 2041, through its dwelling supply benchmarks.

The capacity and realistic availability of planned dwelling supply in the Sunshine Coast expansion area provide the minimum 15 years of supply sought by *ShapingSEQ* 2017. The capacity of planned dwelling supply in the consolidation area is just below the minimum 15 years of supply, at 14 years.

However, the capacity of planned dwelling supply in the Sunshine Coast consolidation area is significantly less than the 2041 dwelling supply benchmark. Opportunities to increase the planned dwelling supply in the consolidation area may be facilitated as a part of the new Sunshine Coast planning scheme, for example, through the potential densification of development in specific designated locations. A range of transport projects, such as the Maroochy River Interchange Upgrade and the Sunshine Coast Mass Transit project, are proposing to provide significant additional capacity to support population growth, particularly in the urban corridor.

There are about 3.2 years of supply of uncompleted lot approvals, which is below the minimum four years of supply sought by *ShapingSEQ* 2017. The considerable increase in the number of uncompleted lot approvals has largely contributed to the increase in the years of supply figure when compared to recent years. Sunshine Coast Council recorded over 3000 lot approvals in the March 2021 quarter, which may include approvals in the Caloundra South Priority Development Area. In the Sunshine Coast, 5396 (84 per cent) of uncompleted lots also have operational works approval supporting lot creation in the short term.

Further, there are about 5.9 years of uncompleted multiple dwelling approvals in the Sunshine Coast consolidation area.

Dwelling approvals in the Sunshine Coast increased by 30 per cent compared to the total dwelling approvals in 2019/20, largely influenced by the HomeBuilder government stimulus and low interest rate environment. This has led to Sunshine Coast's expansion and consolidation areas continuing to exceed the expansion and consolidation average annual benchmarks.

Dwelling approvals indicate a slightly lower proportion of houses and a higher proportion of high-rise relative to existing dwelling stock at the 2016 Census. Dwelling density on the Sunshine Coast is also increasing in accordance with SEQ's preferred future.

The capacity and realistic availability of planned industrial employment supply on the Sunshine Coast provide more than the minimum 15 years of supply sought by *ShapingSEQ* 2017 and exceed the 2041 industrial employment planning baseline. The estimated take-up of developed industrial land between 2011 and 2021 on the Sunshine Coast was about 135 hectares, with about 219 hectares of planned industrial land existing as at 2021.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ* 2017, [click here](#)

- a map of the urban footprint defined by *ShapingSEQ* 2017, [click here](#)

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data to 30 June 2021, where available at the time of reporting, and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of COVID-19 and government stimulus and investment. These impacts may vary across the region, recognising that the economy and housing markets operate differently in different areas of SEQ. Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – Sunshine Coast

Planned dwelling supply – Sunshine Coast

The capacity and realistic availability of planned dwelling supply in the Sunshine Coast expansion area provide the minimum 15 years of supply sought by *ShapingSEQ* 2017. The capacity of planned dwelling supply in the consolidation area is just below the minimum 15 years of supply, at 14 years.

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. It is calculated from the population and employment figures underpinning the LGIP as supplied by Sunshine Coast Council in July 2018. The realistic availability figure provides a land supply scenario that considers whether capacity is realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

The realistic availability scenario uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

In the Sunshine Coast consolidation area, the capacity of planned dwelling supply, from 2021 onwards, is about 29,500 dwellings, approximately 12,300 less than the consolidation 2041 dwelling supply benchmark (from 2021 onwards) of about 41,800.

In the Sunshine Coast expansion area, the capacity of planned dwelling supply (from 2021 onwards) is about 32,300 dwellings which is above the expansion 2041 dwelling supply benchmark (from 2021 onwards) of about 25,200 dwellings. The realistic availability of this supply (from 2021 onwards) is

about 24,800 dwellings, which equates to about 17 years of supply and is above *ShapingSEQ* 2017's 15 years of supply policy objective.

A substantial proportion of the expansion planned dwelling supply is provided by the Caloundra South Priority Development Area and the Palmview structure plan area. Realisation of the planned dwelling supply in Caloundra South and Palmview is expected to be supported by infrastructure delivered under existing infrastructure agreements. Growth at Caloundra South is now being supported by the state government's contribution of \$35 million to bring forward the construction of the Bells Creek Arterial Road to complete the connection through the Aura development from the Bruce Highway to Caloundra Road.

The Beerwah East Major Development Area is considered to be an important part of the Sunshine Coast's future planned dwelling supply but it is not yet reflected in the LSDM Report. The department, in conjunction with Sunshine Coast Council and other stakeholders, is completing a preliminary evaluation to assist with the next phase to unlock this large-scale growth area.

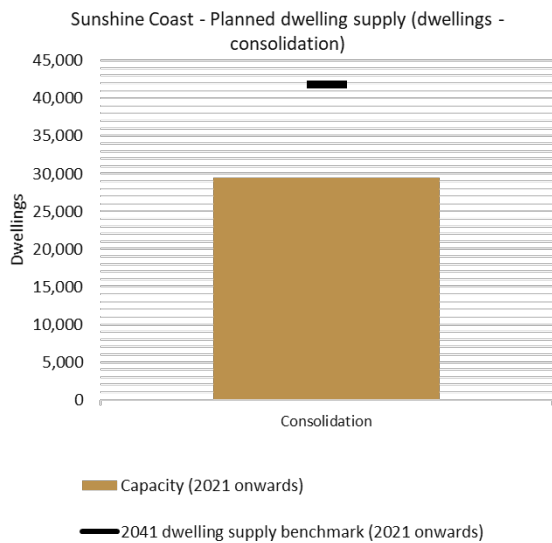
Sunshine Coast Council's planning scheme foreshadows opportunities to increase the planned dwelling supply in the consolidation area over time. The potential densification of development in specified areas, including part of the Sunshine Coast Enterprise Corridor, may make an important contribution. The introduction of a high quality and high-frequency public transport service such as that being considered by the Sunshine Coast Mass Transit Project could provide support for increased densities by improving the level of service in the local transport network. Incorporating opportunities for increased densities as part of the Council's proposed new planning scheme would directly address the identified shortfall in planned dwelling supply in the consolidation area. Where a change in policy proceeds, and source data is updated, the effect on planned dwelling supply will be included in future LSDM reporting.

It is important to note there may be scope in the interim for additional consolidation planned dwelling supply under the current planning scheme, the Sunshine Coast Planning Scheme 2014. It is noted that community engagement has been undertaken on an Options Analysis for the Sunshine Coast Mass Transit Project. It is acknowledged that further consultation and a business case are required to be completed before any uplift in consolidation dwelling supply could be realised as a consequence of this project. This may include additional yield that could be achieved in the Sunshine Coast Enterprise Corridor and within the Sunshine Coast existing urban area, even without future potential changes to the planning scheme to respond to mass transit outcomes.

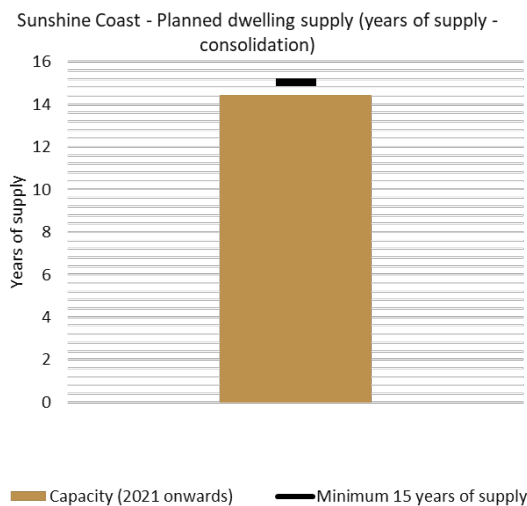
Planning scheme amendments in Sunshine Coast, either recently adopted or in process, are expected to increase planned dwelling supply overall. Where amendments proceed, and source data is updated, their effect on planned dwelling supply will be included in future years of LSDM reporting.

As indicated in Dwelling growth, on average the take-up of planned dwelling supply since 2016 has been faster than the average annual benchmark used to calculate years of supply for both consolidation and expansion areas. At this stage the current shortfall in planned dwelling supply in the consolidation area has not constrained the faster take-up. The rate of growth in the expansion area is supported by the two major development areas, Caloundra South (Aura) and Palmview, being at or approaching the peak of their dwelling production potential.

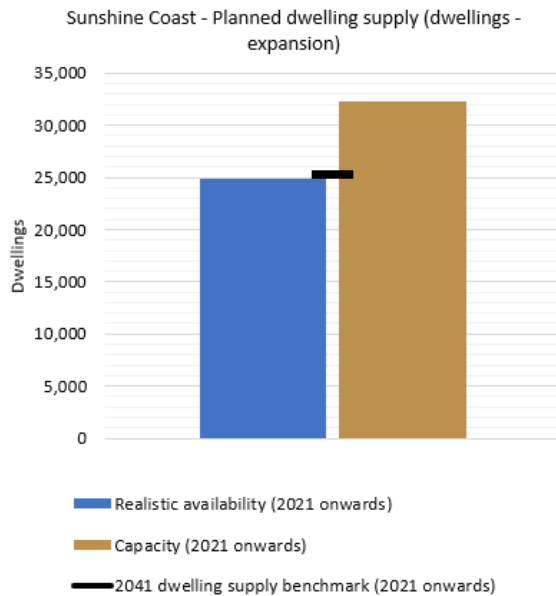
For more detail about the calculation of planned dwelling supply, including years of supply, and a list of planning scheme amendments either recently adopted or in process for the Sunshine Coast, see the [Technical notes](#).



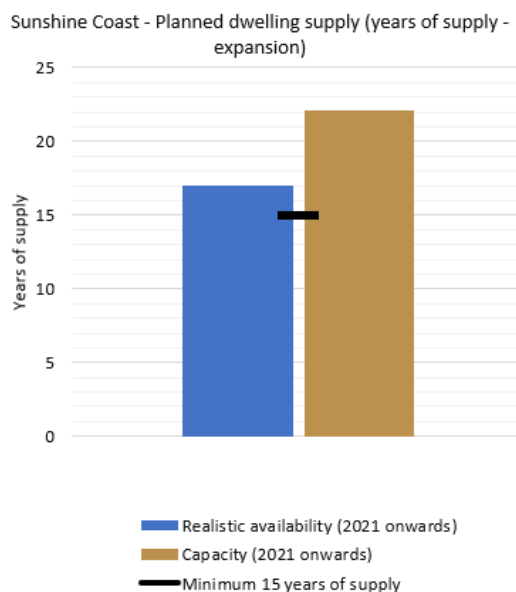
This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017’s dwelling supply benchmark (from 2021 onwards) in the consolidation area. This accounts for the 2016/21 constructed dwellings estimate of 11,931. To view a fact sheet explaining the calculation of remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s minimum 15 years of supply policy objective in consolidation areas.



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017's dwelling supply benchmark (from 2021 onwards) in the expansion area. This accounts for the 2016/21 constructed dwellings estimate of 8075. To view fact sheets on the concept of realistic availability, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017's minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent and up-to-date over time, improving the comparability and currency of supply estimates. These

improvements can be reflected in future publications of the Land Supply and Development Monitoring (LSDM) Report.

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ 2017*'s dwelling supply benchmarks. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region's planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state and local constraints
- recent amendments to the planning scheme and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

Approved supply – Sunshine Coast

Approved supply is measured by analysing uncompleted lot approvals and uncompleted multiple dwelling approvals across Sunshine Coast.

There are about 3.2 years of supply of uncompleted lot approvals in the Sunshine Coast consolidation and expansion areas overall, less than the minimum four years of supply sought by *ShapingSEQ 2017*.

From 2011/12 to 2019/20, the total number of uncompleted lot approvals showed a general downward trend. However, the total number of uncompleted lot approvals was 6415 in 2020/21, up by 1616 when compared to the previous year. Sunshine Coast Council recorded over 3000 lot approvals in the March 2021 quarter, which may include approvals in the Caloundra South Priority Development Area.

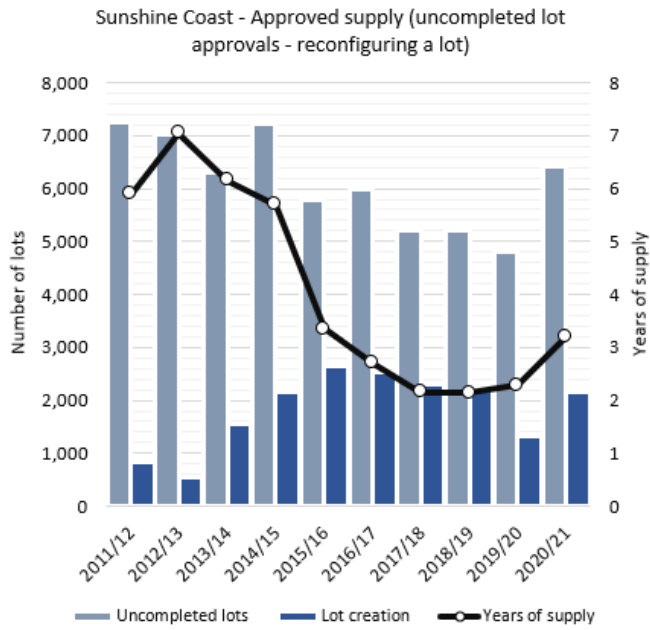
Of the uncompleted lots, approximately 84.1 per cent (5396) had operational works approvals. This represents the number of lots which are readily available for construction in the short-term.

The considerable increase in the total number of uncompleted lot approvals in 2020/21 has largely contributed to the increase in the years of supply figure.

Further, the Growth Areas Team was established in 2021 to address emerging land supply challenges as appropriate in each area and is investigating these challenges in key markets, including the Sunshine Coast.

In contrast, the Sunshine Coast has about 5.9 years of supply of uncompleted multiple dwelling approvals in the consolidation area, which is above the minimum four years of supply sought by *ShapingSEQ 2017*. The June 2021 supply of multiple dwelling approvals on the Sunshine Coast is over two times the number reported as at June 2011. The number of uncompleted multiple dwelling approvals increased from June 2020 to June 2021.

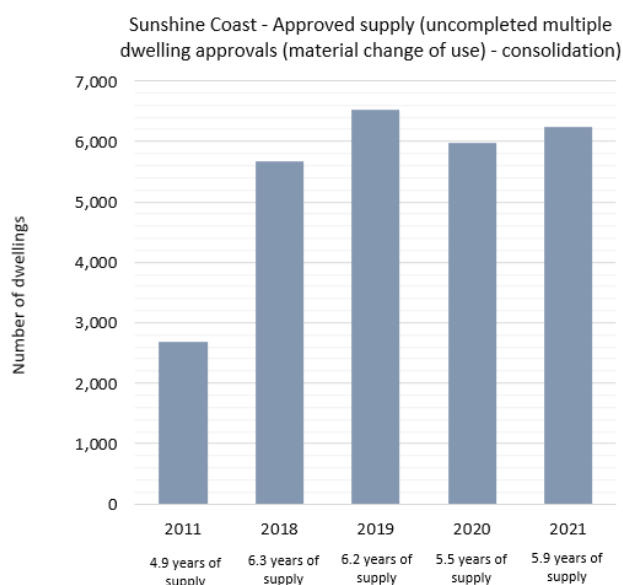
For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical notes](#).



This graph shows the number of lots that have a development permit, but have not yet been certified (uncompleted lots) as at 30 June each year as well as the number of lots that have been created (certified) in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.



This graph shows the number of multiple dwellings that have a material change of use development permit but have not yet been constructed (uncompleted multiple dwellings) in the consolidation area as at 30 June for all reported years.

Note: The years of supply for uncompleted multiple dwelling approvals is determined by dividing the total number of uncompleted multiple dwellings by the average annual attached dwelling building approvals of the previous four years. The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – Sunshine Coast

In 2020/21, 4350 dwelling approvals were recorded for Sunshine Coast at a rate of 363 dwellings per month. This represents a 30 per cent increase when compared to the total dwelling approvals recorded in 2019/20. When compared to long-term averages, the 2020/21 dwelling approvals are above the five-year average of 4088 and significantly higher than the ten-year average of 3310 dwelling approvals.

The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see [Market Factors](#).

Within the Sunshine Coast consolidation area, there were 2279 dwelling approvals in 2020/21, which was approximately 238 dwellings more than the consolidation average annual benchmark of 2041 additional dwellings. Approvals in the Sunshine Coast consolidation area have continued to exceed the average annual benchmark, on average, over the 2016/17 to 2020/21 period.

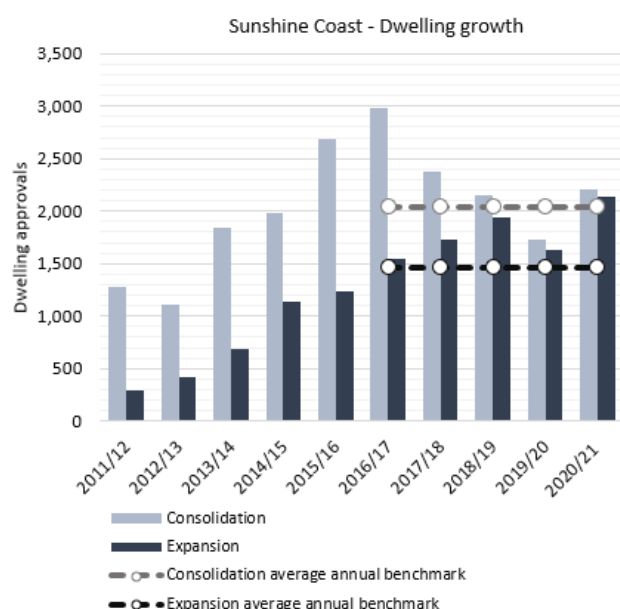
There were 2071 dwelling approvals in the Sunshine Coast expansion area in 2020/21, which was 609 dwellings more than the expansion average annual benchmark of 1462 additional dwellings. This has resulted in the continuation of the trend of dwelling approvals consistently exceeding the expansion average annual benchmark since this was set under *ShapingSEQ 2017*. Of note, the dwelling approvals recorded in 2020/21 for Sunshine Coast’s expansion area represents the highest level of expansion dwelling growth in the last decade and has been principally driven by the major

growth fronts of the Caloundra South Priority Development Area and Palmview structure plan area. It is anticipated that this growth will be maintained in coming years.

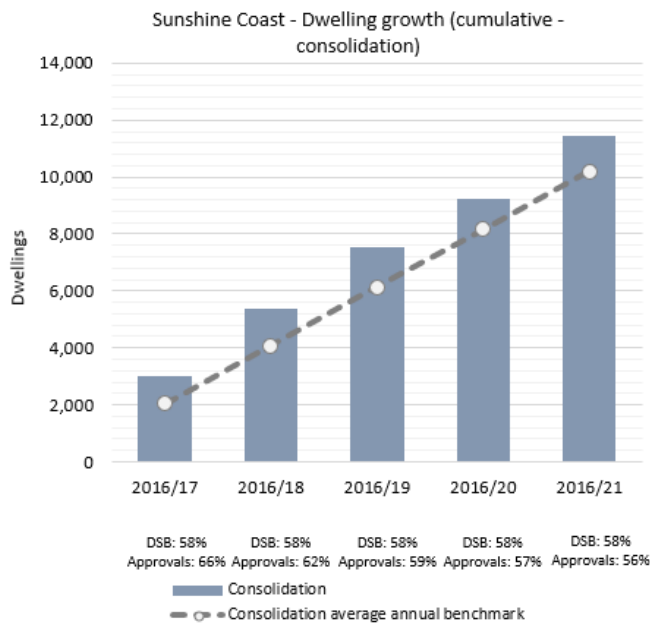
Approximately 56 per cent of dwelling approvals for 2016/17 to 2020/21 were in the Sunshine Coast’s consolidation area, which is slightly less than its expected share of dwelling growth to 2031 identified by *ShapingSEQ 2017* (58 per cent). Approximately 44 per cent of dwelling approvals were in the Sunshine Coast’s expansion area over the same period, which slightly more than its expected share of 42 per cent.

Based on the above, Sunshine Coast remains on track to accommodate the 2041 dwelling supply benchmarks given that the actual number of dwelling approvals for 2016/17 to 2020/21 is exceeding the average annual benchmarks for both consolidation and expansion areas.

For more information about improvements to the measurement of net growth over time, see [Program Delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).

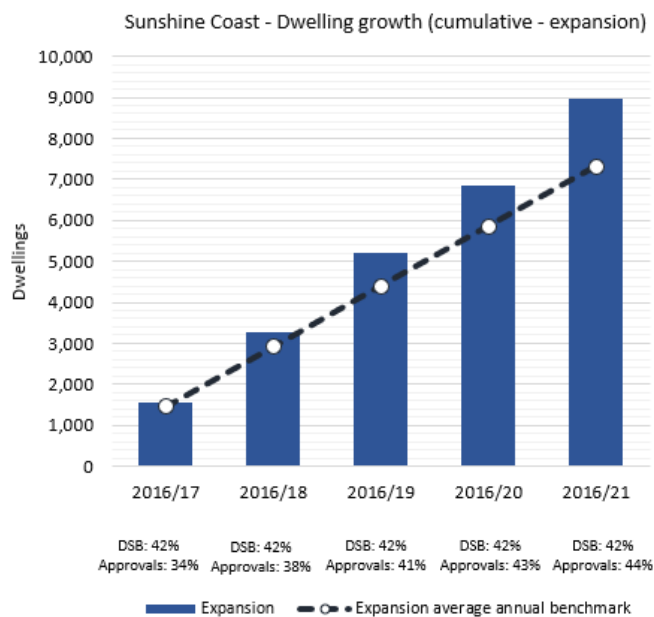


This graph shows annual dwelling approvals compared against *ShapingSEQ 2017*’s average annual benchmarks.



This graph shows the cumulative dwelling growth in the consolidation area against *ShapingSEQ* 2017’s consolidation average annual benchmark.

Note: DSB = Dwelling Supply Benchmark



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ* 2017’s expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the 2018 Queensland Government dwelling projections for SEQ. This adjustment resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has

been retained in the 2020 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

Changes in dwelling density – Sunshine Coast

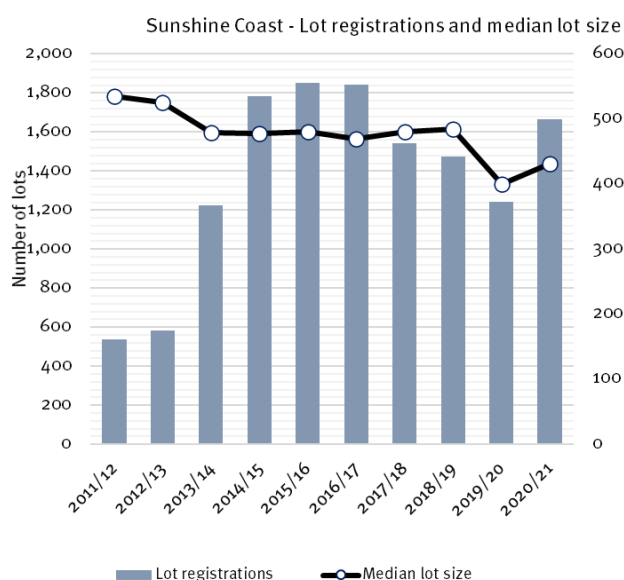
Dwelling density (measured through median lot size and mean population-weighted dwelling density) is increasing on the Sunshine Coast in accordance with the SEQ's preferred future for higher dwelling densities and smaller lots.

Mean population-weighted dwelling density on the Sunshine Coast increased between 2011 and 2016, from 10.5 to 11.3 dwellings per hectare. This represents the average dwelling density at which the population of the Sunshine Coast lives and is comparable to the net residential density as used by *ShapingSEQ 2017*. In the consolidation area, mean population-weighted dwelling density increased from 13.4 to 14.2 dwellings per hectare.

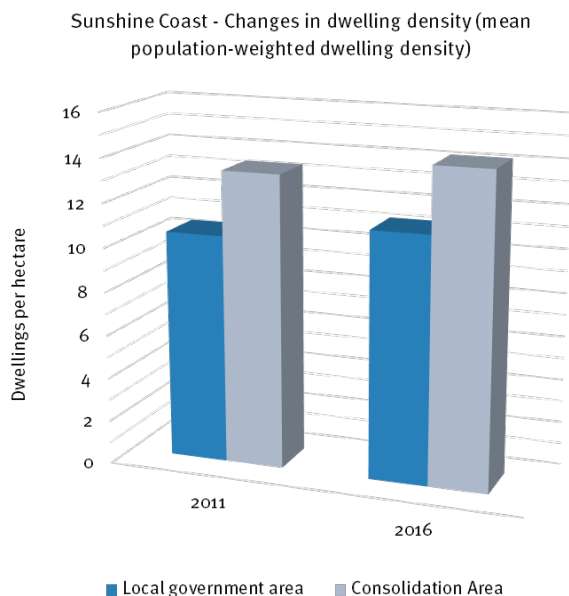
Since 2011/12, the median size of new lots on the Sunshine Coast has decreased from 535m² to 432m² in 2020/21. This was associated with a larger number of new lot registrations up to 2016/17, followed by a decline until 2020/21, where lot registrations increased to 1664 lots. This measure is indicative of increased dwelling densities in new urban subdivisions on the Sunshine Coast.

The preparation of a new planning scheme for the Sunshine Coast provides the opportunity to support increased dwelling densities in the future and allow smaller lots over time. Planning instruments such as the Caloundra South and Maroochydore City Centre development schemes and the Palmview and Kawana Waters structure plans continue to support increased dwelling densities.

For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – Sunshine Coast

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals on the Sunshine Coast indicate an increase in housing diversity, consistent with SEQ's preferred future.

Houses remain the predominant housing type, however the percentage of approvals that are for houses has fluctuated over the last 10 years. Sixty-nine per cent (14,127 dwellings) of all new dwelling approvals on the Sunshine Coast from 2016/17 to 2020/21 were for houses, which was less than their proportion of the existing dwelling stock as at the 2016 Census (72 per cent).

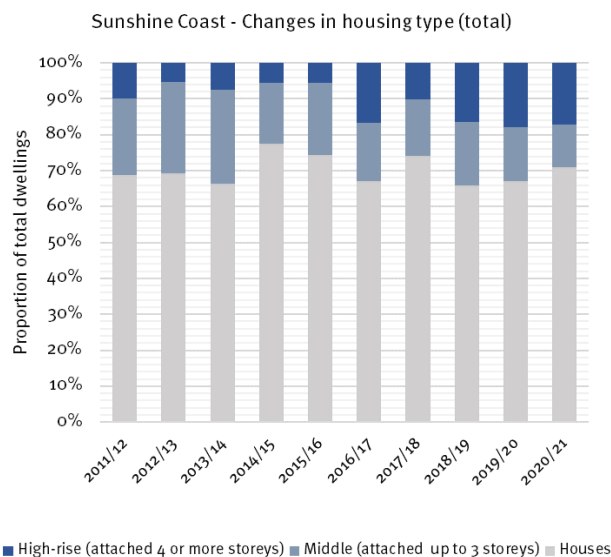
Between 2016/17 and 2020/21 houses comprised 52 per cent of new dwelling approvals in the consolidation area, compared to 91 per cent of new dwelling approvals in the expansion area for the same period.

The proportion of dwelling approvals for high-rise (16 per cent or 3185 dwellings) exceeded existing dwelling stock as at the 2016 Census (seven per cent). Since 2016/17, high-rise comprised 28 per cent of all new dwelling approvals in the consolidation area, however there were no new dwelling approvals for high-rise in the expansion area for the same period. From 2016/17 to 2020/21 about 19 per cent (or 601 dwellings) of high-rise approvals were nine or more storeys and about 81 per cent (or 2584 dwellings) were four to eight storeys.

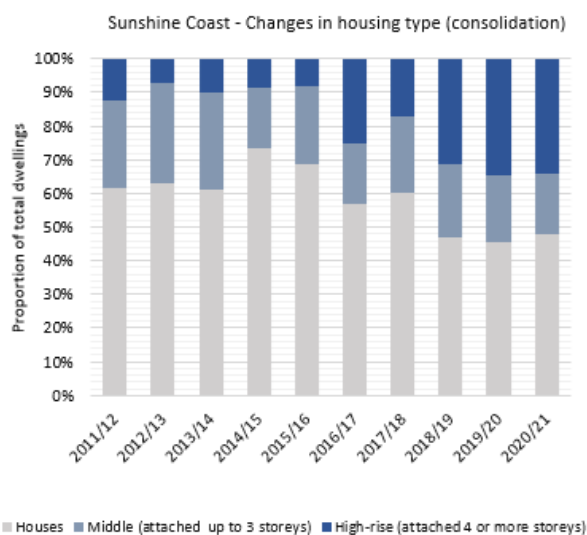
Dwelling approvals for middle (15 per cent or 3128) were proportionately less than the share of existing dwelling stock as at the 2016 Census (21 per cent), which is not consistent with SEQ's preferred future. The introduction of a high quality and high-frequency public transport service, such as that being considered by the Sunshine Coast Mass Transit Project, may facilitate urban transformation in some areas by improving the level of service in the local transport network, which will likely result in the delivery of more middle dwellings over the long term. Of middle dwelling approvals since 2016/17, the predominant middle housing type approved on the Sunshine Coast is semi-detached, row or terrace houses and townhouses of two or more storeys (about 62 per cent or

1928 dwellings). Seventy-three per cent (2297 dwellings) of middle dwelling approvals for the period between 2016/17 and 2020/21 were located within the consolidation area and 27 per cent (831 dwellings) were located within the expansion area.

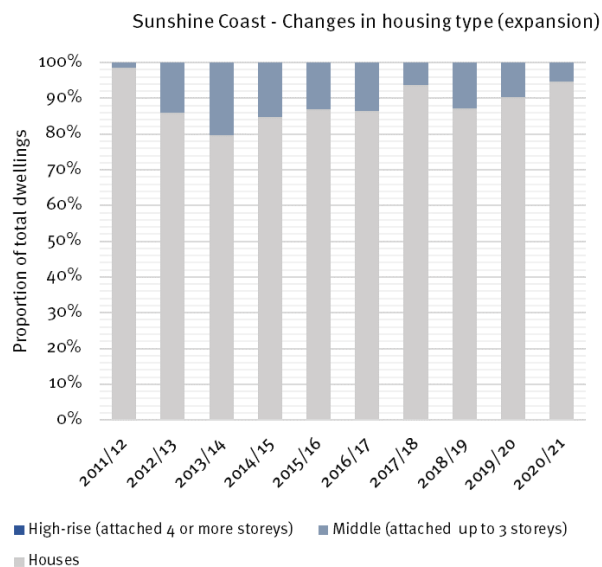
For more detail about dwelling approvals, see the [Technical notes](#).



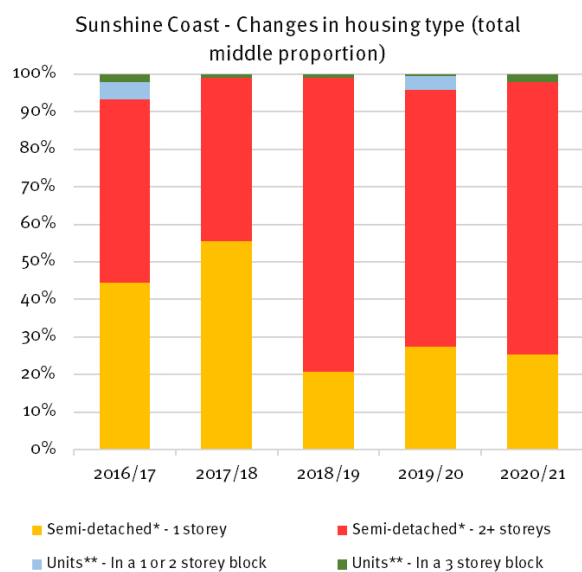
This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the consolidation area.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the expansion area.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of 'missing middle' in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the

ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – Sunshine Coast

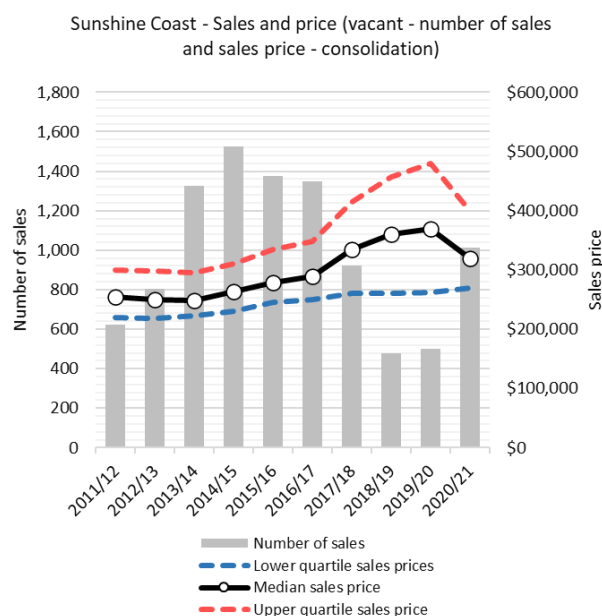
The number of sales has increased from 2018/19 to 2020/21 for all categories on the Sunshine Coast.

The median sales price in all categories has increased over the period 2011/12 to 2020/21. However, vacant land sales (per lot) in the consolidation area has shown a decrease in 2020/21.

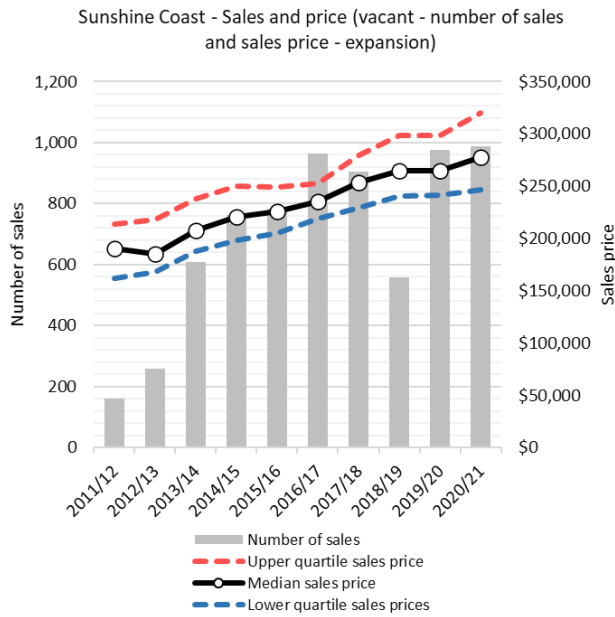
The median sales price for all categories is higher in Sunshine Coast than South East Queensland (SEQ) overall. The rate of median price growth for all categories between 2011/12 and 2020/21 was also higher in Sunshine Coast.

Median price growth was higher in the consolidation area than the expansion area for all categories except for house-land packages and vacant lots (per lot and per square metre). Vacant lots per square metre in the expansion area experienced the highest price growth, increasing 139.9 per cent between 2011/12 and 2020/21.

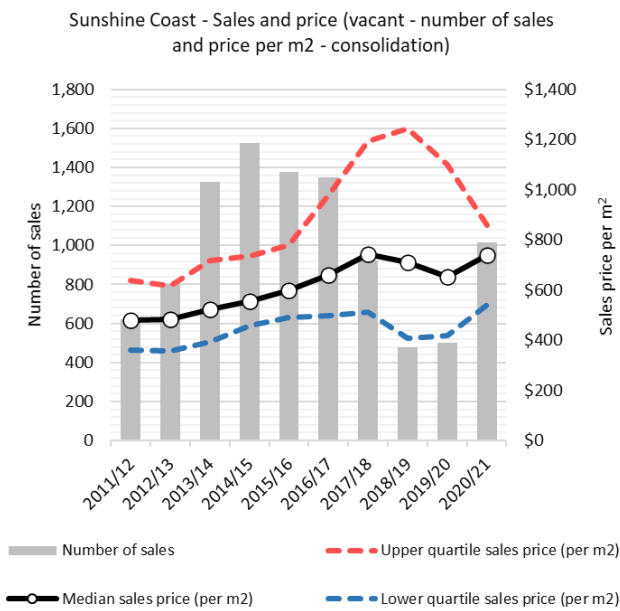
For more detail about the median sales price and number of sales, see the [Technical notes](#).



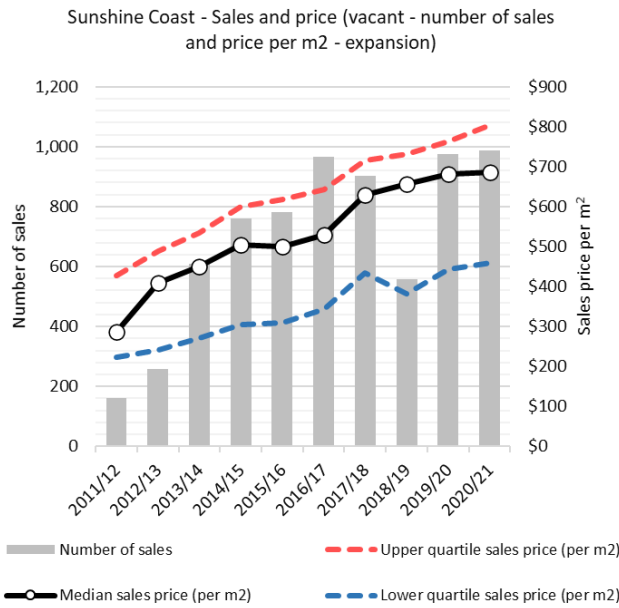
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the consolidation area.



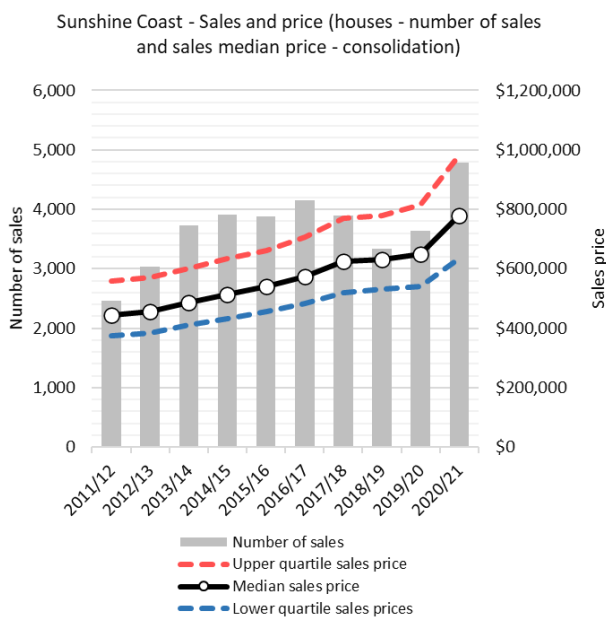
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the expansion area.



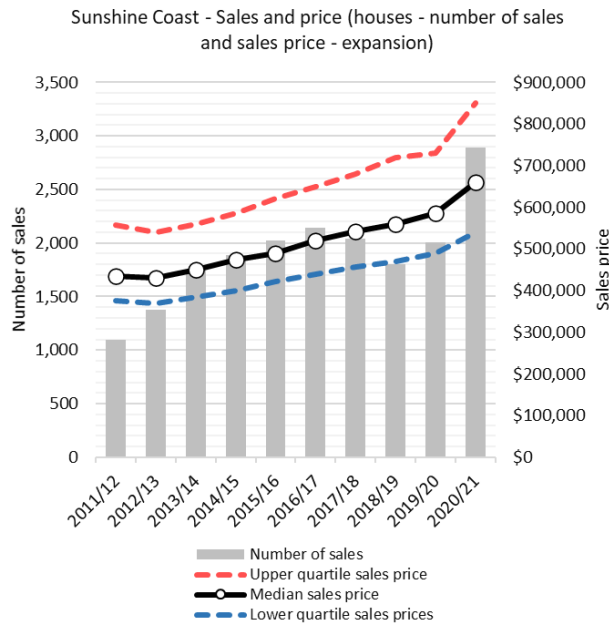
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the consolidation area.



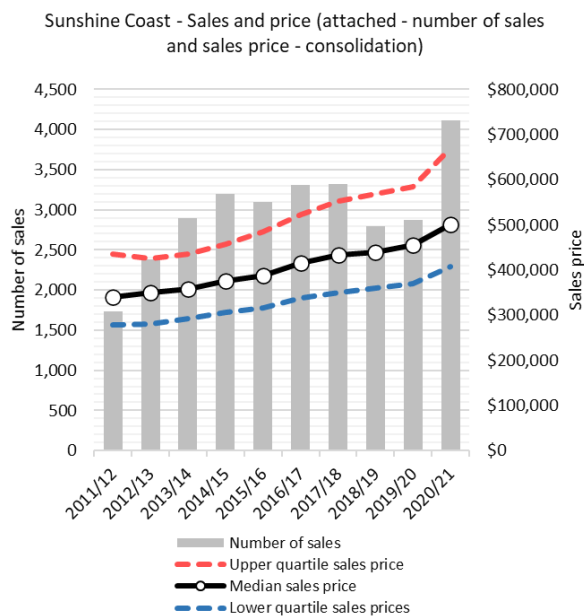
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



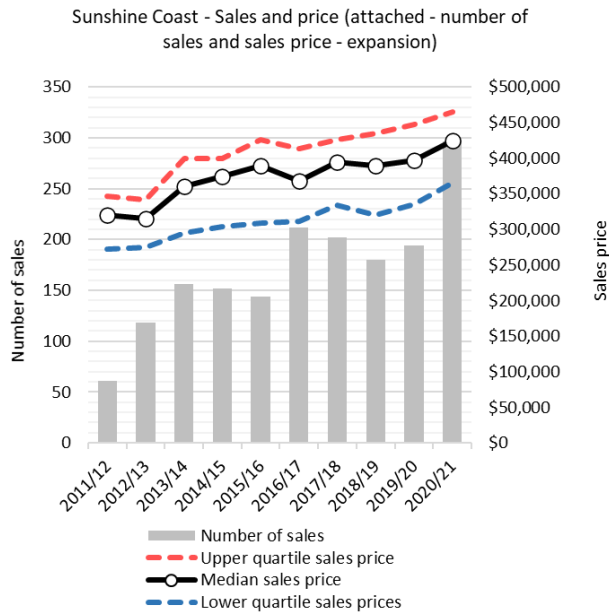
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the consolidation area.



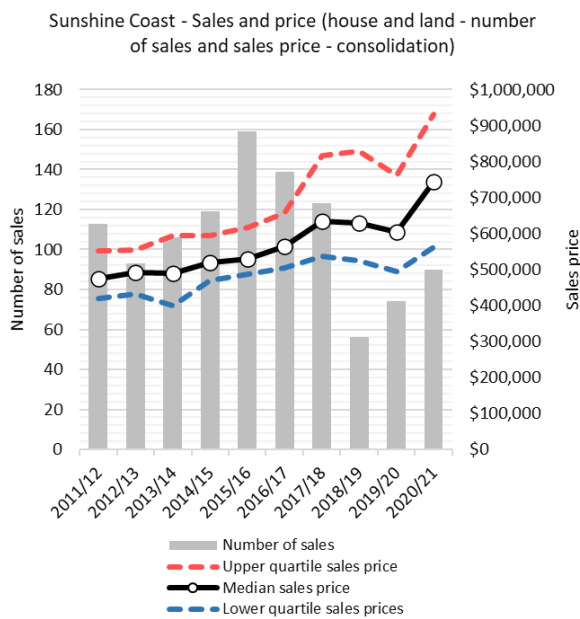
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



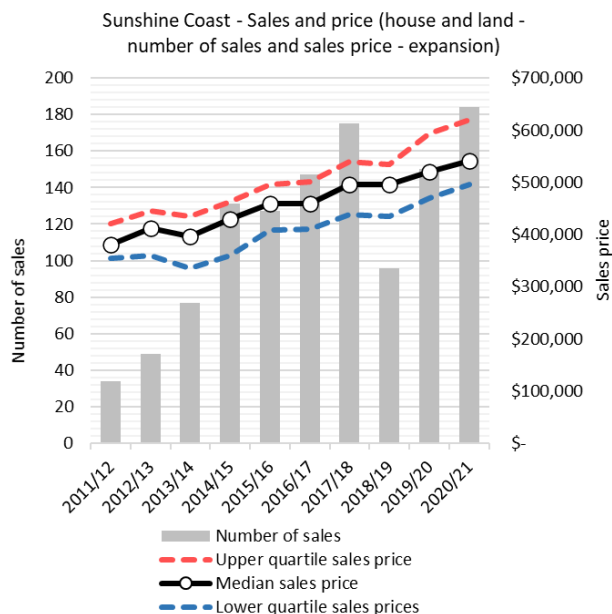
This graph shows the number of sales and the lower, median and upper quartile sales price for attached dwellings in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for house-land packages in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

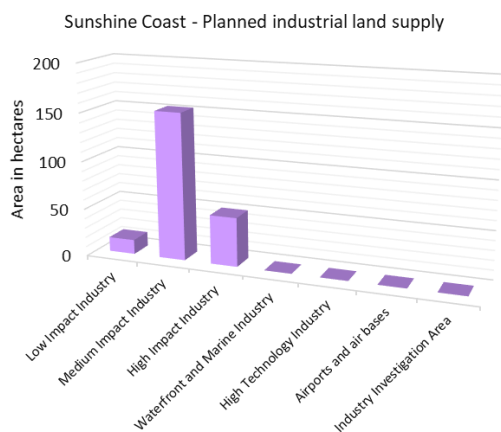
Industrial – Sunshine Coast

Planned industrial land supply/take-up – Sunshine Coast

The estimated take-up of developed industrial land between 2011 and 2021 on the Sunshine Coast was about 135 hectares, with about 20 hectares taken up in 2020/21. The take-up occurred on land intended for low, medium and high impact industry.

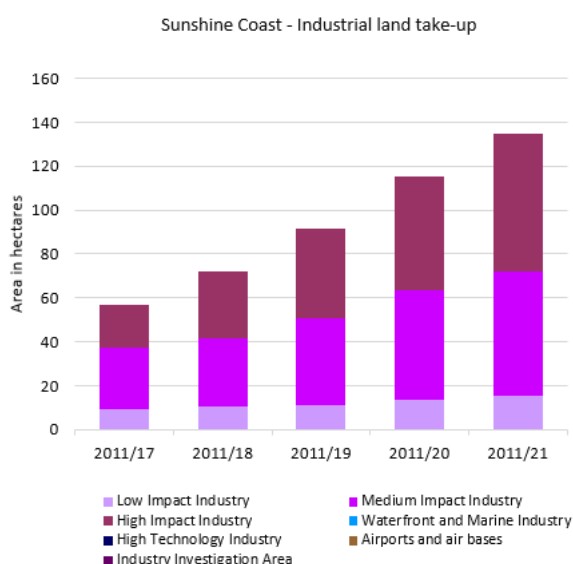
There were about 219 hectares of planned industrial land supply on the Sunshine Coast as at 2021, including serviced and un-serviced land. The majority of planned industrial land supply is intended for medium impact industry, with some low and high impact industry.

For more detail about planned industrial land supply and take-up, see the [Technical notes](#).



219ha of developable land

This graph shows the number of hectares of planned industrial land as at 2021 by industrial land category.



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of Planned industrial land supply. Further, Planned

industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

The department has continued to build on work undertaken through [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. This higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – Sunshine Coast

The capacity and realistic availability of planned industrial employment supply on the Sunshine Coast provide the minimum 15 years of supply of land sought by *ShapingSEQ 2017* (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for Sunshine Coast is equivalent to about 4400 jobs on the graph.

The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. It is calculated from the Population and employment figures underpinning the LGIP as supplied by Sunshine Coast Council in July 2018. The realistic availability figure provides a supply scenario prepared for this report that considers whether some of the capacity is not realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

The realistic availability scenario is informed by updated developable area data (to 2021), as reported in the Planned industrial land supply and take-up section of this report, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

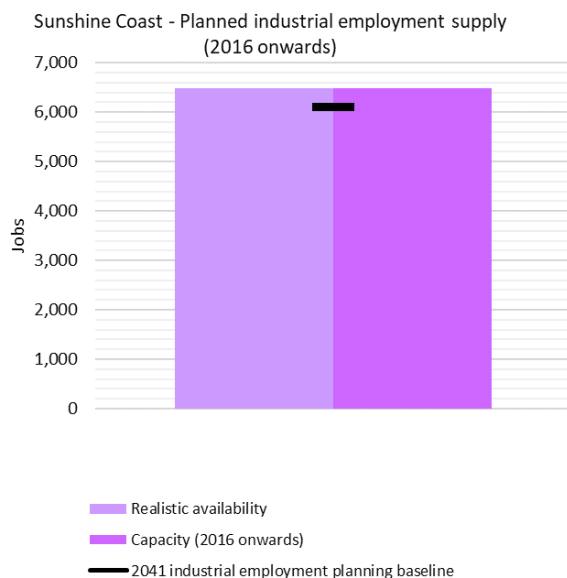
The capacity of planned industrial employment supply on the Sunshine Coast (from 2016 onwards) is about 6500 employees. The realistic availability of this supply is also about 6500 employees. These figures represent about 24 years of supply (from 2021 onwards) and are above the 2041 industrial employment planning baseline of about 6100 employees.

The realisation of this planned industrial employment supply on the Sunshine Coast is supported by key enabling infrastructure which is either already available or expected to be provided prior to 2041 (as assessed by Urban Economics in 2021).

Sunshine Coast Council is preparing a new planning scheme and other planning scheme amendments in process for Sunshine Coast may affect planned industrial employment supply.

Where data sources are updated, their effect on industrial employment supply will be included in future years of LSDM reporting.

For more detail about the calculation of planned industrial employment supply, see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, from 2016 onwards, that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program Delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

Future [Best practice research](#) could consider the availability of data to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the present year. Current years of supply figures (from 2021 onwards) are indicative estimates, effectively assuming the same average annual rate of take-up of employment supply from 2016 to 2021 as the average annual *ShapingSEQ* 2017 employment planning baseline growth from 2016 to 2031.

Toowoomba (urban extent)

Summary

ShapingSEQ 2017 establishes Toowoomba's expected population growth will require 20,300 additional dwellings between 2016 and 2041, through its dwelling supply benchmarks.

The capacity and realistic availability of planned dwelling supply provide more than the minimum 15 years of supply sought by *ShapingSEQ* 2017.

There are about 6.2 years of supply of uncompleted lot approvals in the Toowoomba (urban extent) and about 7.9 years of supply of uncompleted multiple dwelling approvals in the Toowoomba (urban extent) consolidation area, which provide the minimum four years of supply sought by *ShapingSEQ* 2017.

Dwelling approvals in the Toowoomba (urban extent) increased by 82 per cent when compared to the total dwelling approvals recorded in 2019/20. As a result, dwelling growth in the consolidation area continues to exceed the consolidation average annual benchmark, whilst dwelling growth in the expansion area is up from its lowest level in 2019/20 and narrowing the gap between dwelling growth figures and the expansion area average annual benchmark.

When compared to existing dwelling stock at the 2016 Census, housing in the Toowoomba (urban extent) is more diverse, despite an increase in houses in 2020/21. Dwelling density has continued to fluctuate in 2020/21 with median lot sizes increasing contrary to SEQ's preferred future.

The capacity and realistic availability of planned industrial employment supply in the Toowoomba (urban extent) provide more than the minimum 15 years of supply sought by *ShapingSEQ* 2017 and exceed the 2041 industrial employment planning baseline. The estimated take-up of developed industrial land between 2011 and 2021 in the Toowoomba (urban extent) was about 633 hectares, with about 824 hectares of planned industrial land existing as at 2021.

For:

- more information about the terms used above, [click here](#).
- a map of the consolidation area defined by *ShapingSEQ* 2017, [click here](#).
- a map of the urban footprint defined by *ShapingSEQ* 2017, [click here](#).

Note:

The 2021 Land Supply and Development Monitoring (LSDM) Report has been prepared using residential data to 30 June 2021, where available at the time of reporting, and planned industrial land supply data nominally to 30 June 2021.

Since 2020 the dynamic nature of land supply and development activity across SEQ has been highlighted through disrupted migration flows and increased demand for houses as a result of COVID-19 and government stimulus and investment. These impacts may vary across the region, recognising that the economy and housing markets operate differently in different areas of SEQ. Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply and infrastructure delivery and

funding. The GMP will continue to monitor this information and consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available.

Residential – Toowoomba (urban extent)

Planned dwelling supply – Toowoomba (urban extent)

The capacity and realistic availability of planned dwelling supply in the Toowoomba (urban extent) consolidation and expansion areas is significantly above the minimum 15 years of supply sought by *ShapingSEQ* 2017.

The capacity figure represents the number of dwellings that have been or could be approved, based on current planning intent. It is calculated from the Business-as-Usual model prepared by Toowoomba Regional Council in 2021, based on the Toowoomba Region Planning Scheme 2012, in support of the Toowoomba Region Growth Plan. The realistic availability figure provides a land supply scenario prepared for this report that considers whether capacity is realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for development. Such factors may include infrastructure availability, land ownership fragmentation, landowner intent, practical staging of and capability for development, and the age of existing development.

The realistic availability scenario uses the Current Intent to Service layer which is derived as explained in Appendix F of the [Technical notes](#). This is used in combination with other updated data, to derive new estimates of the realistic availability of planned dwelling supply. For more information about the method applied in the 2021 LSDM Report, see the [Technical notes](#).

In the Toowoomba (urban extent) consolidation area, the capacity of planned dwelling supply, from 2021 onwards, is about 9000, which is significantly above the consolidation 2041 dwelling supply benchmark (from 2021 onwards) of about 1700 dwellings.

Similarly, in the Toowoomba (urban extent) expansion area, the capacity of planned dwelling supply (from 2021 onwards) is about 32,700, which is greatly above the expansion 2041 dwelling supply benchmark (from 2021 onwards) of about 13,800 dwellings. The realistic availability of this supply (from 2021 onwards) is about 23,100 dwellings, which equates to about 33 years of supply and is above *ShapingSEQ* 2017's 15 years of supply policy objective.

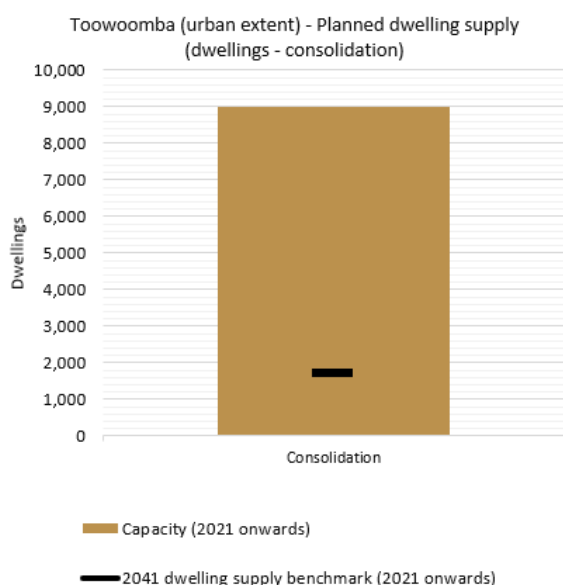
Toowoomba Regional Council is preparing a new planning scheme, including a Toowoomba Region Growth Plan. In addition, analysis of apparent short-term land supply challenges has been undertaken which could inform this work. Other planning scheme amendments that have been recently adopted may affect planning dwelling supply. Where changes proceed, and source data is updated, their effect on planned dwelling supply will be included in future years of LSDM reporting.

As part of investigations identified by *ShapingSEQ* 2017, the Australian and Queensland governments are working together to deliver the Toowoomba to Brisbane Passenger Rail Strategic Business Case, expected to be completed in late 2021. Any such service in the medium to long term

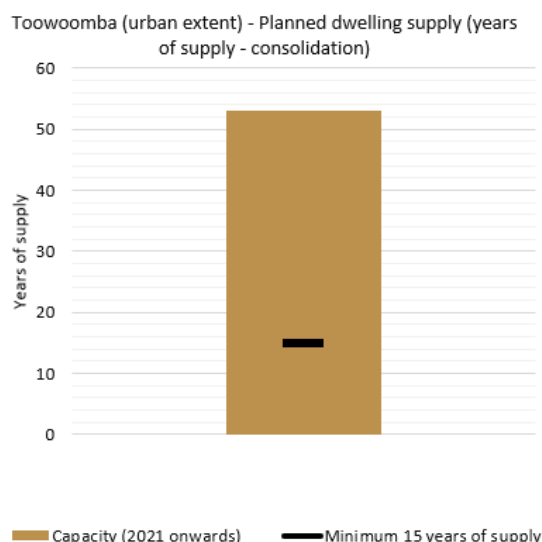
might improve regional connectivity and provide efficient and reliable travel options for those taking up planned dwelling supply in Toowoomba.

As indicated in Dwelling growth, on average the take-up of planned dwelling supply since 2016 has been somewhat faster than the average annual benchmark used to calculate years of supply in the consolidation area, but average take-up since 2016 is similar to the average annual benchmark in the expansion area. The large excess of supply compared to the 2041 dwelling supply benchmark (from 2021 onwards) appears to provide for continued growth at the higher rate in the consolidation area.

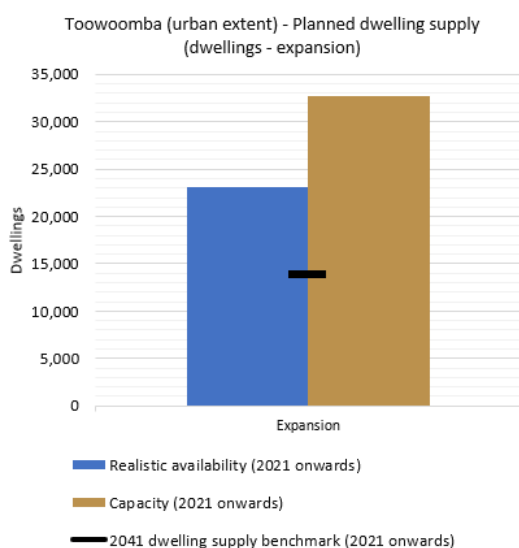
For more detail about the calculation of planned dwelling supply, including years of supply, and a list of planning scheme changes either recently adopted or in process for Toowoomba, see the [Technical notes](#).



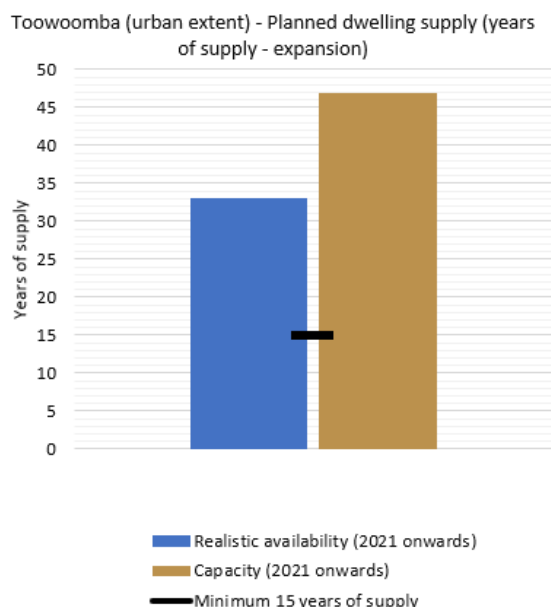
This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017's dwelling supply benchmark (from 2021 onwards) in the consolidation area. The benchmark accounts for the 2016/21 constructed dwellings estimate of 1459. To view a fact sheet explaining the calculation of remaining planned dwelling supply from 2021, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017's minimum 15 years of supply policy objective in consolidation areas.



This graph shows the estimated number of unconstructed dwellings that have been or could be approved based on current planning intent compared against *ShapingSEQ* 2017's dwelling supply benchmark (from 2021 onwards) in the expansion area. The benchmark accounts for the 2016/21 constructed dwellings estimate of 3256. To view fact sheets on the concept of realistic availability, [click here](#).



This graph shows the estimated number of years of supply of unconstructed dwellings that have been or could be approved based on current planning intent, compared against *ShapingSEQ 2017*'s minimum 15 years of supply policy objective in expansion areas.

Note: The planned dwelling supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent and up-to-date over time, improving the comparability and currency of supply estimates. These improvements can be reflected in future publications of the Land Supply and Development Monitoring (LSDM) Report.

To support Toowoomba Regional Council in preparing a new planning scheme, including the Toowoomba Region Growth Plan, a new Business-as-Usual model of land supply and development potential has been developed (in 2021). This has been used for the purpose of the 2021 LSDM Report, with the dwelling yields reflected in the new model significantly less than the current LGIP planning assumptions previously used to inform the 2018, 2019, and 2020 LSDM reports.

The use of average annual benchmarks to calculate years of supply recognises the long-term nature of *ShapingSEQ 2017*'s dwelling supply benchmarks. It is expected that take-up of supply will vary over time and therefore the expected average annual rate of growth over the 2016 to 2031 period is the preferred basis for calculating the region's planned years of supply whilst also monitoring the impact of short-term trends.

More regular updates of planned dwelling supply can reflect changed circumstances including:

- new state and local constraints
- recent amendments to the planning scheme and development schemes that may increase or reduce planned dwelling supply
- current development approvals that may increase or reduce planned dwelling supply.

Approved supply – Toowoomba (urban extent)

Approved supply is measured by analysing uncompleted lot approvals and uncompleted multiple dwelling approvals across Toowoomba (urban extent).

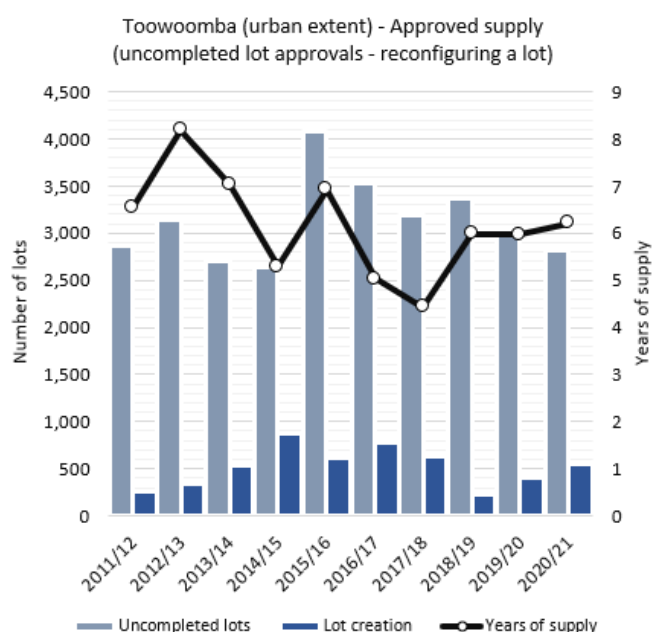
There are about 6.2 years of supply of uncompleted lot approvals in the Toowoomba (urban extent) consolidation and expansion areas overall, which is more than the minimum four years of supply sought by *ShapingSEQ* 2017. The number of uncompleted lot approvals and total years of supply have fluctuated in accordance with the rate of lot creation.

The total number of uncompleted lot approvals was 2814 in 2020/21 which is about 1269 lots below the long-term historical high for Toowoomba (urban extent) in 2015/16.

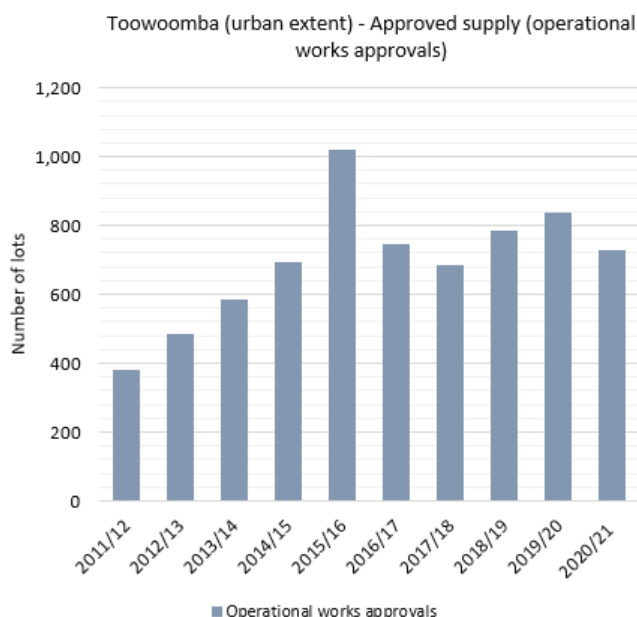
Of the uncompleted lots, approximately 25.9 per cent (729) had operational works approvals. This represents the number of lots which are readily available for construction in the short-term.

Toowoomba (urban extent) currently has about 7.9 years of supply of uncompleted multiple dwelling approvals in the consolidation area, which is above the minimum four years of supply sought by *ShapingSEQ* 2017. The number of uncompleted multiple dwelling approvals fell slightly from June 2020 to June 2021, but the years of supply has increased because of the fall in the rate of attached dwelling building approvals, decreasing the assumed level of demand in the years of supply calculation.

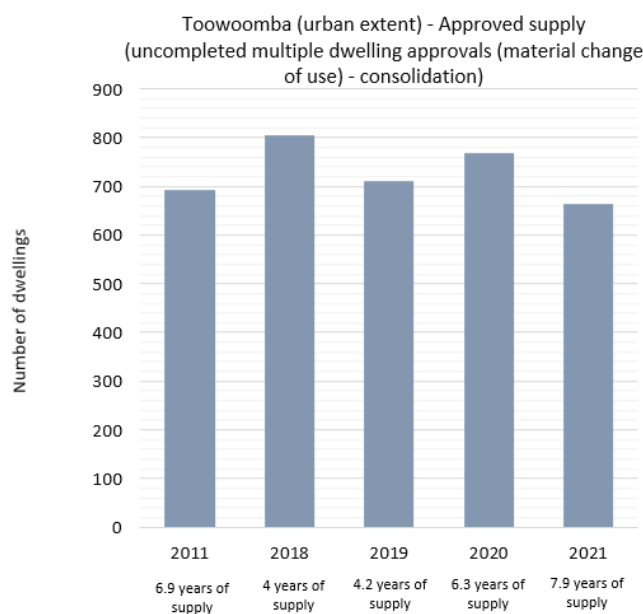
For details of the calculation and comparability over time of the approved supply figures, refer to the [Technical Notes](#).



This graph shows the number of lots that have a development permit, but have not yet been certified (uncompleted lots) as at 30 June each year as well as the number of lots that have been created (certified) in the 12 months up to 30 June each year.



This graph shows the number of uncompleted lot approvals which also have operational works approvals as at 30 June each year.



This graph shows the number of multiple dwellings that have a material change of use development permit but have not yet been constructed (uncompleted multiple dwellings) in the consolidation area as at 30 June for all reported years.

Note: The years of supply for uncompleted multiple dwelling approvals is determined by dividing the total number of uncompleted multiple dwellings by the average annual attached dwelling building approvals of the previous four years. The years of supply for uncompleted lot approvals is determined by dividing the total number of uncompleted lots by the average annual lot certifications of the previous four years.

Dwelling growth – Toowoomba (urban extent)

In 2020/21, 1061 dwelling approvals were recorded for Toowoomba (urban extent) at a rate of 88 dwellings per month. This represents an 82 per cent increase when compared to the total dwelling approvals recorded in 2019/20. When compared to long-term averages, the 2020/21 dwelling approvals is above the five-year average of 904 and the ten-year average of 975.

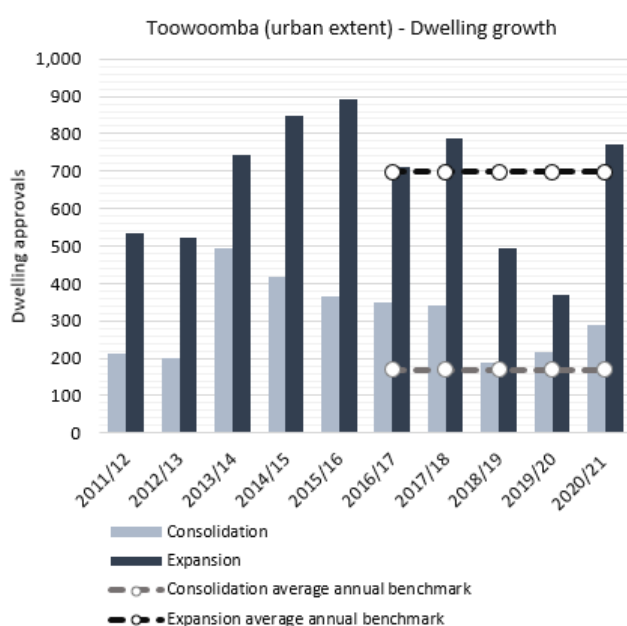
The increase in dwelling approvals in 2020/21 has been largely influenced by the HomeBuilder stimulus and low interest rate environment. For further information on these elements see [Market Factors](#).

Within the Toowoomba (urban extent) consolidation area, there were 288 dwelling approvals in 2020/21, which was 119 dwellings more than the consolidation average annual benchmark of 169 additional dwellings. This has resulted in the continuation of dwelling approvals consistently exceeding the consolidation average annual benchmark since these were set under *ShapingSEQ* 2017.

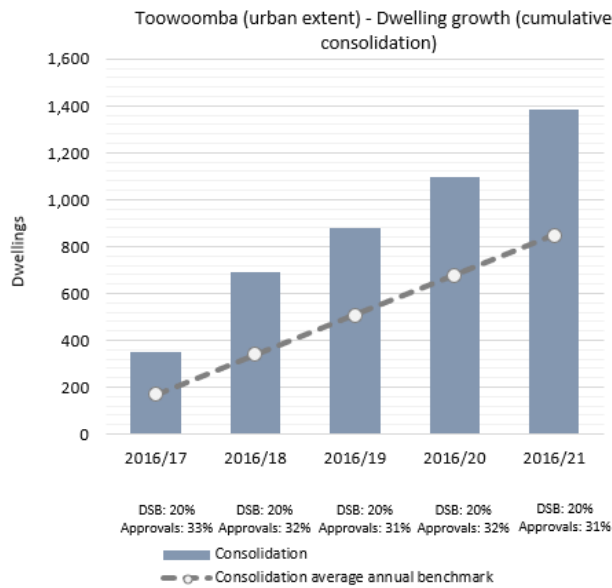
There were 773 dwelling approvals in Toowoomba’s expansion area in 2020/21, up from their lowest level in a decade in 2019/20 and exceeding the expansion average annual benchmark of 699 additional dwellings. The increase in activity in 2020/21 indicates an upward trend towards meeting the cumulative expansion average annual benchmark with the gap narrowing from 434 dwellings in 2019/20 to 360 dwellings in 2020/21. This will continue to be closely monitored in future reporting.

Approximately 31 per cent of dwelling approvals for 2016/17 to 2020/21 were in Toowoomba’s consolidation area, which exceeds its expected share of dwelling growth to 2031 identified in *ShapingSEQ* 2017 (20 per cent). Approximately 69 per cent of dwelling approvals were in Toowoomba’s expansion area over the same period, which is less than its expected share of 80 per cent.

For more information about improvements to the measurement of net growth over time, see [Program Delivery](#). For more detail about dwelling approvals, see the [Technical notes](#).

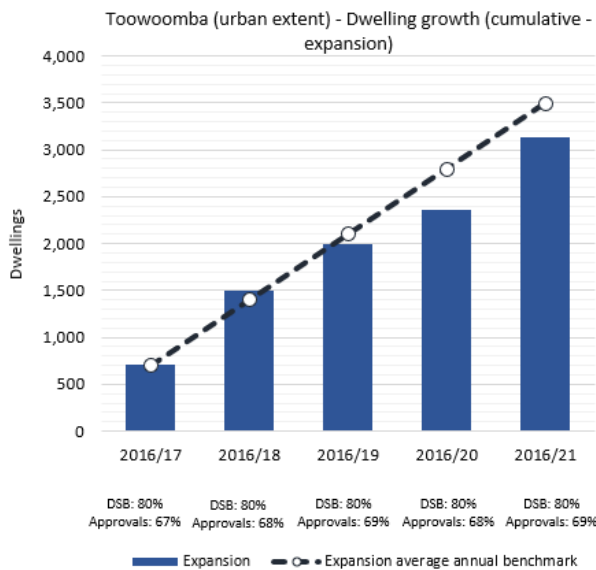


This graph shows annual dwelling approvals compared against *ShapingSEQ* 2017's average annual benchmarks.



This graph shows the cumulative dwelling growth in the consolidation area against *ShapingSEQ* 2017's consolidation average annual benchmark.

Note: DSB = Dwelling Supply Benchmark



This graph shows the cumulative dwelling growth in the expansion area against *ShapingSEQ* 2017's expansion average annual benchmark.

Note: DSB = Dwelling Supply Benchmark

Note: The average annual benchmark (2016 to 2031) was adjusted in the 2019 Land Supply and Development Monitoring Report to reflect the growth rate of the 2018 Queensland Government dwelling projections for SEQ. This adjustment resulted in the average annual benchmark increasing marginally for the consolidation and expansion area in each local government. This adjustment has

been retained in the 2020 reporting. For more detail about the adjustment method and reasoning, see the [Technical notes](#).

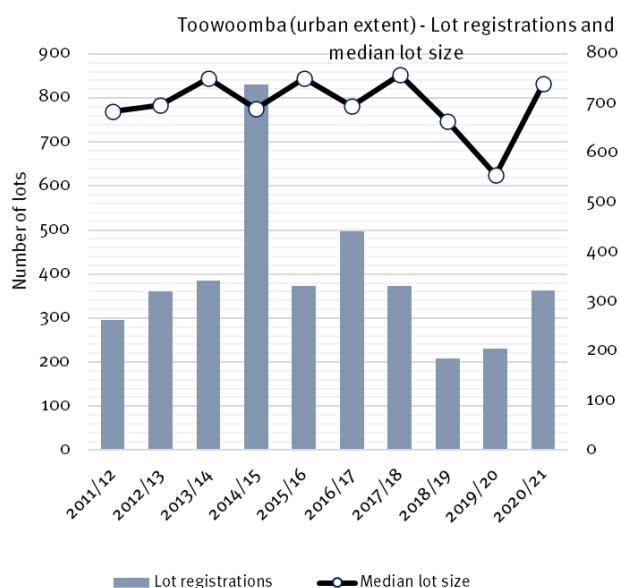
Changes in dwelling density – Toowoomba (urban extent)

Dwelling density (measured through median lot sizes and mean population-weighted dwelling density) has increased in Toowoomba (urban extent) in recent years, consistent with SEQ's preferred future, for higher dwelling densities and smaller lot sizes.

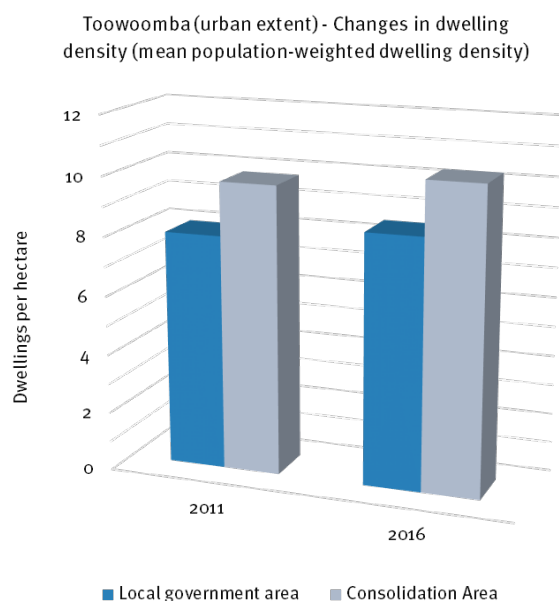
Mean population-weighted dwelling density in Toowoomba (urban extent) increased between 2011 and 2016, from eight to 8.5 dwellings per hectare. This represents the average dwelling density at which the population of Toowoomba (urban extent) lives and is comparable to the net residential density as used by *ShapingSEQ 2017*. In the consolidation area, mean population-weighted dwelling density increased from 9.8 to 10.3 dwellings per hectare

The median size of new lots in Toowoomba (urban extent) has fluctuated since 2011/12. In 2020/21 lot sizes increased from 555m² in 2019/20 to 741m². The number of lot registrations fluctuated over the same period, with a peak in 2014/15. Large new lot sizes may still have contributed to higher dwelling densities in Toowoomba (urban extent) if they are smaller than average existing lots.

For more detail about the calculation of mean population-weighted dwelling density and median size of new lots, see the [Technical notes](#).



This graph shows the number and median size of new lots registered annually.



This graph shows the dwelling density (mean population-weighted dwelling density) at which people were living in 2011 and 2016.

Changes in housing type – Toowoomba (urban extent)

When compared to existing dwelling stock at the 2016 Census, recent dwelling approvals in Toowoomba (urban extent) indicate an increase in housing diversity, consistent with SEQ's preferred future.

Seventy-five per cent (3403 dwellings) of all new dwelling approvals in Toowoomba (urban extent) from 2016/17 to 2020/21 were for houses, which was less than the dwelling stock as at the 2016 Census (80 per cent).

However, houses remain the predominant housing type and the proportion of houses has increased since 2016/17. Between 2016/17 and 2020/21 houses comprised 61 per cent of new dwelling approvals in the consolidation area and 82 per cent of new dwelling approvals in the expansion area for the same period.

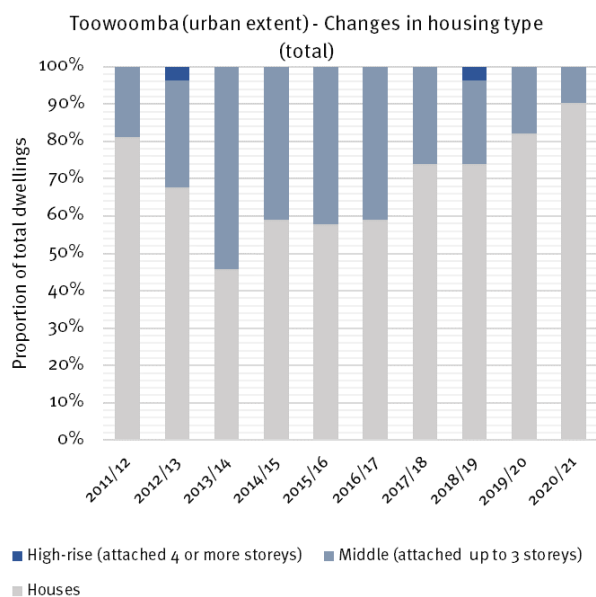
Dwelling approvals for middle (24 per cent or 1090 dwellings) were higher than their share of the dwelling stock as at the 2016 Census (20 per cent). Between 2016/17 and 2020/21 middle comprised 37 per cent of new dwelling approvals in the consolidation area and 18 per cent of new dwelling approvals in the expansion area for the same period.

About 47 per cent (517 dwellings) of middle dwelling approvals for the period between 2016/17 and 2020/21 were located within the consolidation area and about 53 per cent (573 dwellings) were located within the expansion area. Of middle dwelling approvals since 2016/17, the predominant middle housing type approved in Toowoomba (urban extent) is semi-detached, row or terrace houses and townhouses of one storey (about 78 per cent or 852 dwellings).

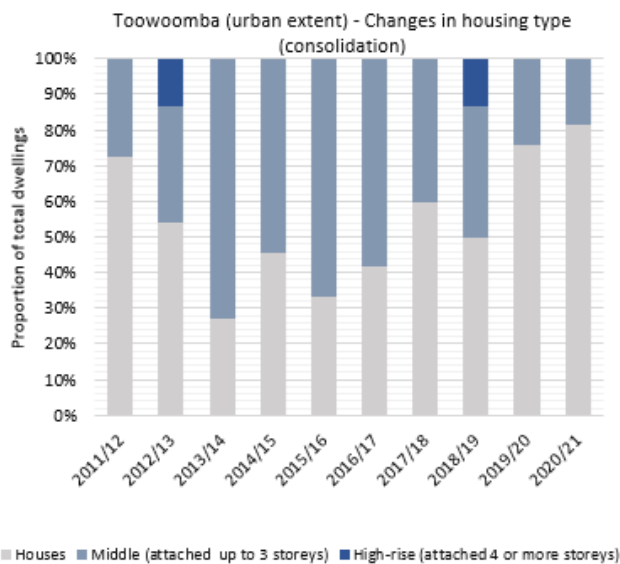
Approvals for high-rise dwellings for 2016/17 to 2020/21 were about one per cent (25 dwellings), higher than their share of dwelling stock as at the 2016 Census (zero per cent).

All high-rise approvals in Toowoomba (urban extent) were located within the consolidation area and were of four to eight storeys.

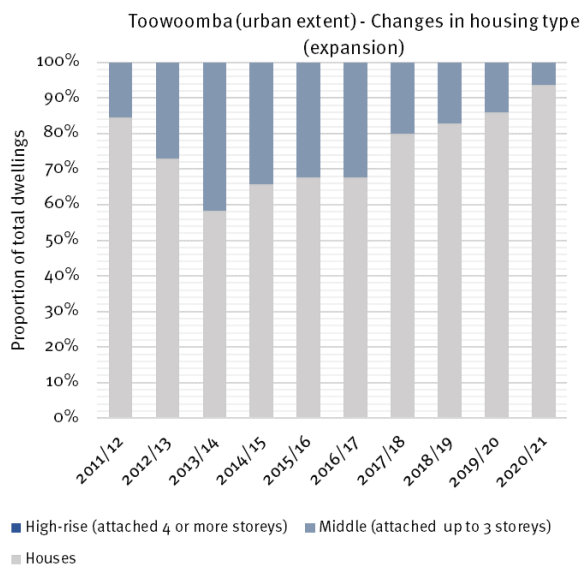
For more detail about dwelling approvals, see the [Technical notes](#).



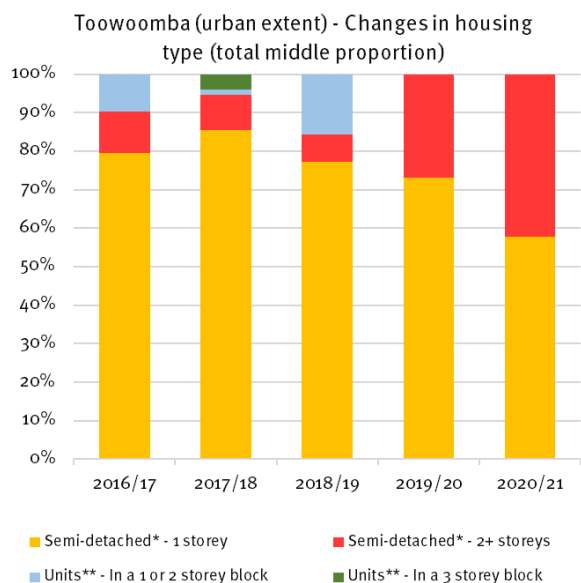
This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the consolidation area.



This graph shows the proportion of dwelling approvals that are for houses, middle (attached dwellings up to three storeys) and high-rise (attached dwellings four storeys or more) annually in the expansion area.



This graph shows the proportion of housing types contained within middle dwelling approvals annually since the introduction of 'missing middle' in *ShapingSEQ* 2017.

Note:

* includes semi-detached, row or terrace houses, townhouses

** includes flats, units or apartments

Note: Housing type data is based on building approval and Census categories as reported by the Australian Bureau of Statistics (ABS) and may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the

ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Sales and price – Toowoomba (urban extent)

The number of sales has increased from 2018/19 to 2020/21 for all categories in Toowoomba (urban extent) except vacant lots in the consolidation area and house and land packages in the expansion area.

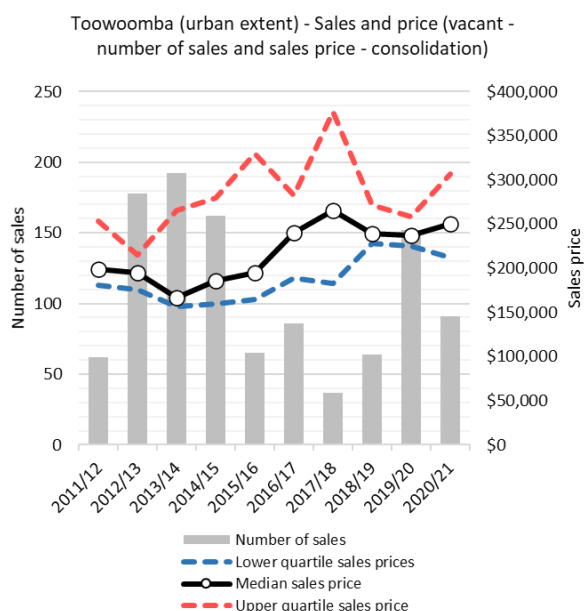
The median sales price in all categories has increased across the period 2011/12 to 2020/21.

The median sales price for all categories is lower in Toowoomba (urban extent) than for South East Queensland (SEQ). The rate of median sales price growth in Toowoomba (urban extent) between 2011/12 and 2020/21 was greater than SEQ for most categories except for vacant lots (per lot and per square metre), house and land packages in the consolidation area and attached dwellings in the consolidation and expansion area.

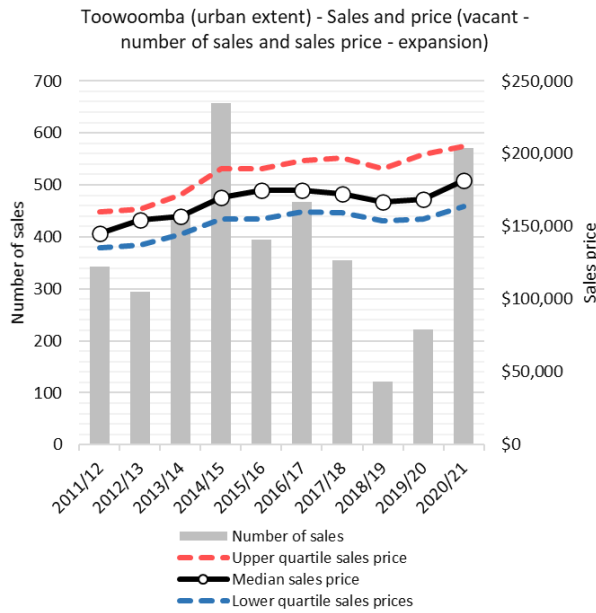
The greatest median price growth was for house and land packages (55 per cent) in the consolidation area followed by vacant lots per square metre in the expansion area (53.8 per cent) over the 2011/12 to 2020/21 period.

The median sales price and rate of median sales price growth in all categories are higher in the consolidation area than in the expansion area within Toowoomba (urban extent). The exception is houses, which experienced greater median sales price growth in the consolidation area but remain more expensive in the expansion area.

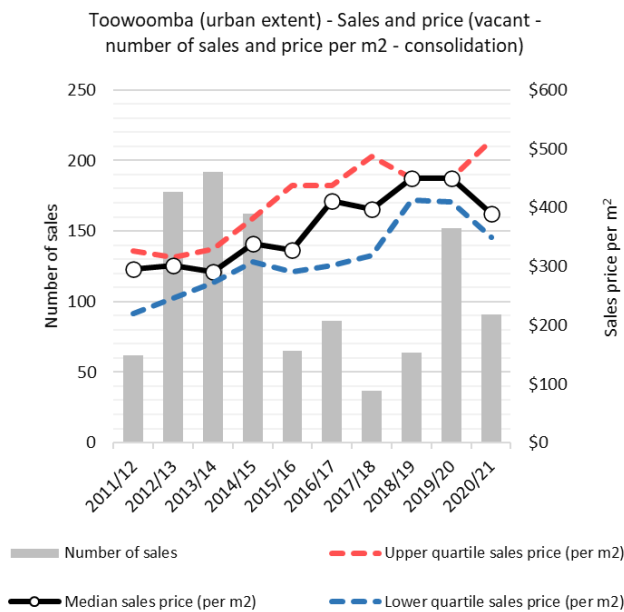
For more detail about the median sales price and number of sales, see the [Technical notes](#).



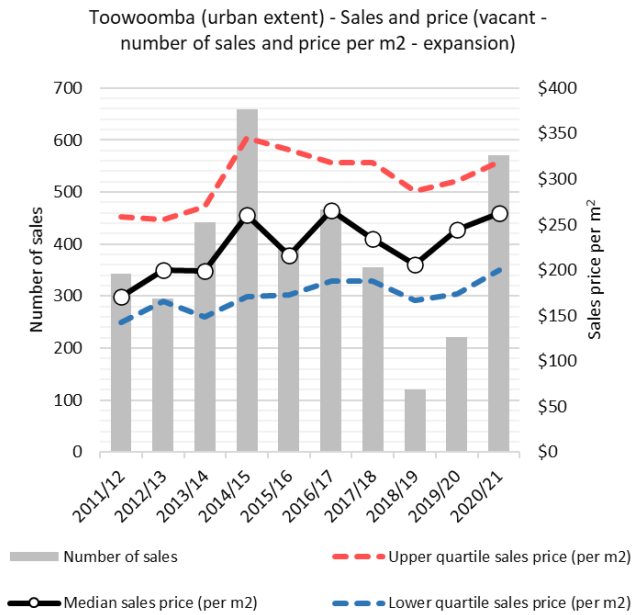
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the consolidation area.



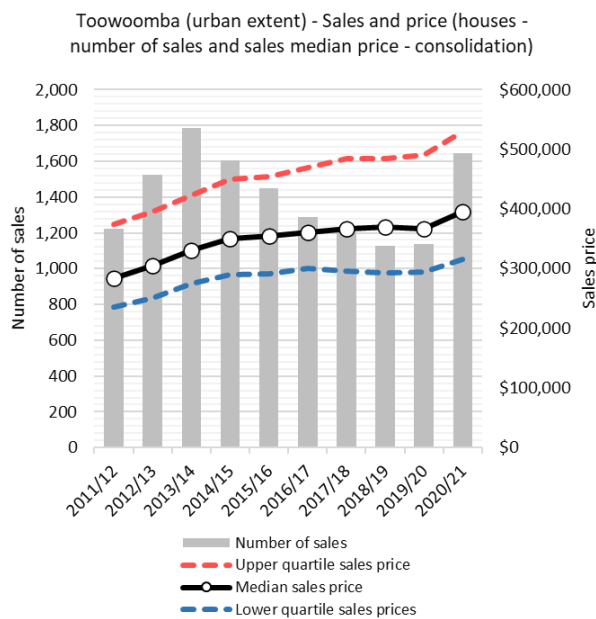
This graph shows the number of sales and the lower, median and upper quartile sales price for vacant lots in the expansion area.



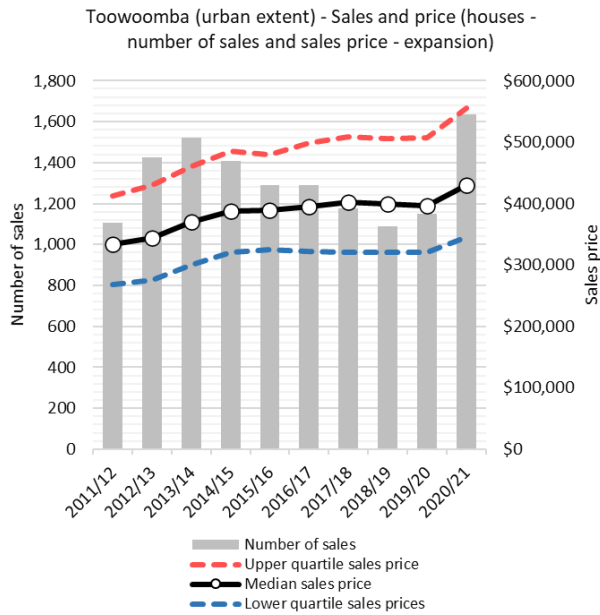
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the consolidation area.



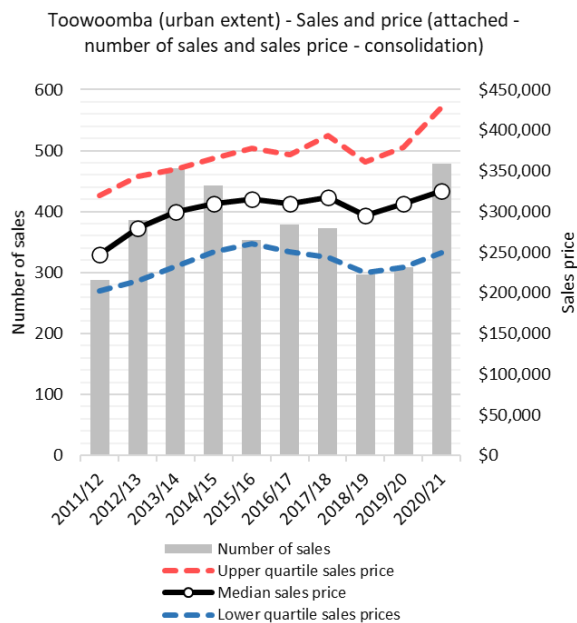
This graph shows the number of sales and the lower, median and upper quartile sales price per square metre for vacant lots in the expansion area.



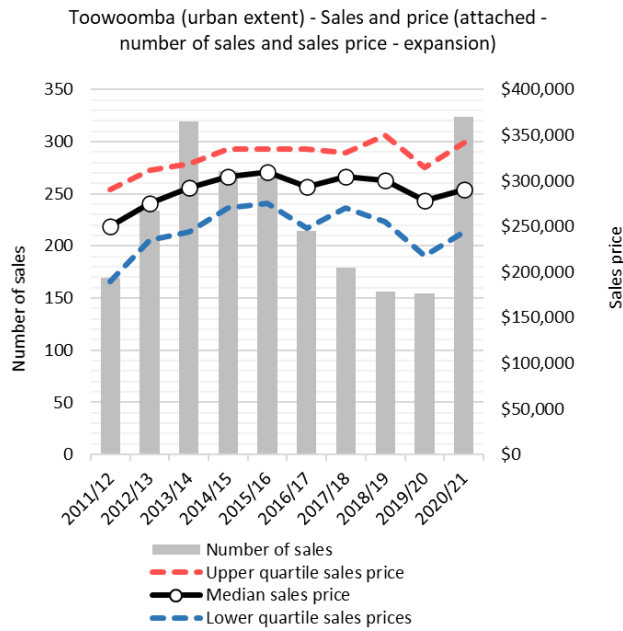
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the consolidation area.



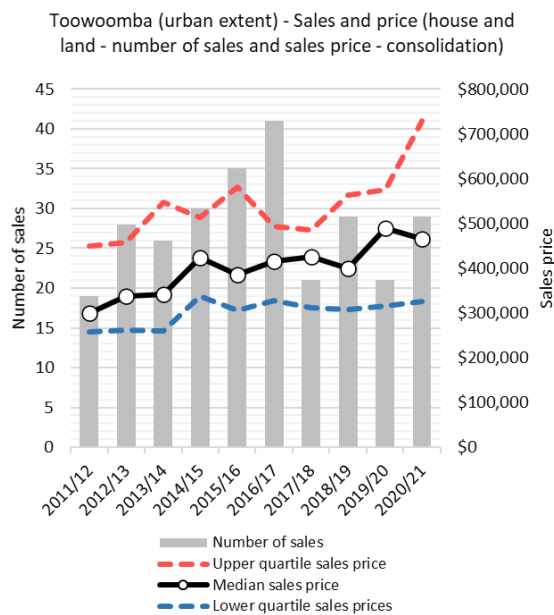
This graph shows the number of sales and the lower, median and upper quartile sales price for houses in the expansion area.



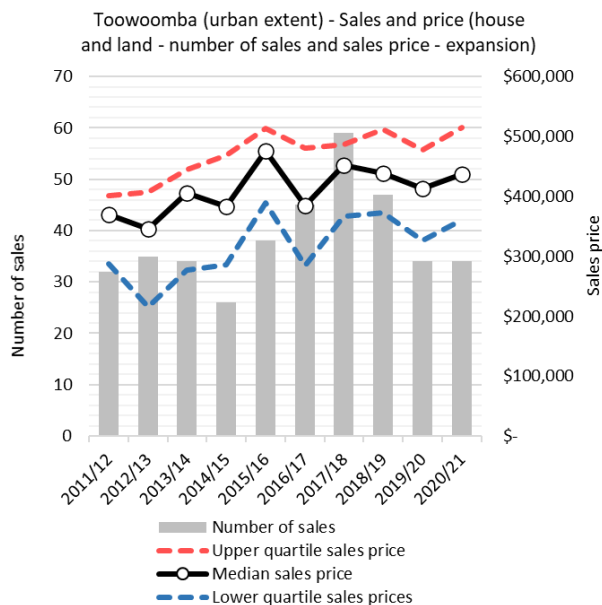
This graph shows the number of sales and the lower, median and upper quartile sales price for attached dwellings in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for attached dwellings in the expansion area.



This graph shows the number of sales and the lower, median and upper quartile sales price for house-land packages in the consolidation area.



This graph shows the number of sales and the lower, median and upper quartiles sales price for house-land packages in the expansion area.

Industrial – Toowoomba (urban extent)

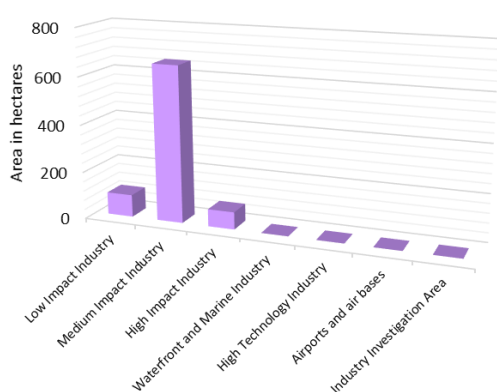
Planned industrial land supply/take-up – Toowoomba (urban extent)

The estimated take-up of developed industrial land in Toowoomba (urban extent) between 2011 and 2021 was about 633 hectares. The take-up occurred on land intended for low, medium and high impact industry.

There were about 825 hectares of planned industrial land supply in Toowoomba (urban extent) as at 2021, including serviced and un-serviced land. The majority of this planned industrial land supply comprised land intended for medium impact industry, with some areas for low and high impact industry.

For more detail about planned industrial land supply and take-up, see the [Technical notes](#).

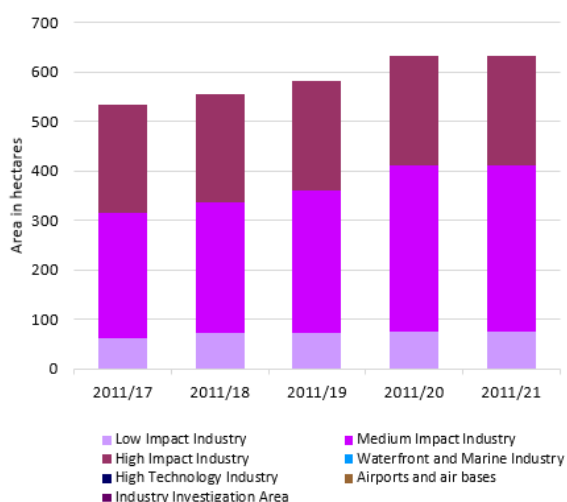
Toowoomba (urban extent) - Planned industrial land supply



825ha of developable land

This graph shows the number of hectares of planned industrial land supply as at 2021 by industrial land category.

Toowoomba (urban extent) - Industrial land take-up



This graph shows the cumulative take-up of developed industrial land between 2011 and 2021 by industrial land category. The take-up includes developed industrial land whether used for industrial or non-industrial purposes.

Note: The planned industrial land supply measure identifies land (serviced and un-serviced) that may be developable in the long term based on current zoning or intent and applicable constraints in a planning instrument. Much of this land may not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry. Also, planned industrial land is a gross area which does not include any allowance for new roads, infrastructure corridors, open space and the like.

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of Planned industrial land supply. Further, Planned

industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

The department has continued to build on work undertaken through [Best practice research](#) in 2018, 2019 and 2020 to apply a consistent and repeatable methodology in monitoring industrial land supply and take-up. In 2021, the department has utilised up-to-date aerial imagery to allow reporting in the 2021 LSDM Report to be as at June 2021. This higher resolution imagery has also resulted in clearer identification of land use over time, changing the vacant versus taken-up classification and measurement for some land parcels in previous years, using the same visual guide for consistent assessment. For further information, see the [Technical notes](#).

Planned industrial employment supply – Toowoomba (urban extent)

The capacity and realistic availability of planned industrial employment supply in Toowoomba (urban extent) provide the minimum 15 years of supply of land sought by *ShapingSEQ 2017* (for industrial employment purposes). The 15 years of supply (from 2021 onwards) for Toowoomba (urban extent) is equivalent to about 2300 jobs on the graph.

The capacity figure represents the number of employees that could be supported by industrial developments that have been or could be approved, based on current planning intent. It is calculated from the Business-as-Usual model prepared by Toowoomba Regional Council in 2021, based on the Toowoomba Region Planning Scheme 2012, in support of the Toowoomba Region Growth Plan. The realistic availability figure provides a supply scenario prepared for this report that considers whether some of the capacity is not realistically available by 2041.

The realistic availability scenario considers factors that may constrain the availability of land for industrial development and employment. Such factors include constraints affecting the feasibility of development and lower than assumed employment densities.

The realistic availability scenario is informed by updated developable area data (to 2021), as reported in the Planned industrial land supply and take-up section of this report, together with an updated assessment of the realistic employment yield of those developable areas by 2041. This updated assessment included a refined set of economic and developability criteria and local project information to estimate realistic availability in selected Major Enterprise and Industry Areas, resulting in changes to the realistic availability of planned industrial employment supply in some areas compared to previous LSDM reports. For more information about the method, see the [Technical notes](#).

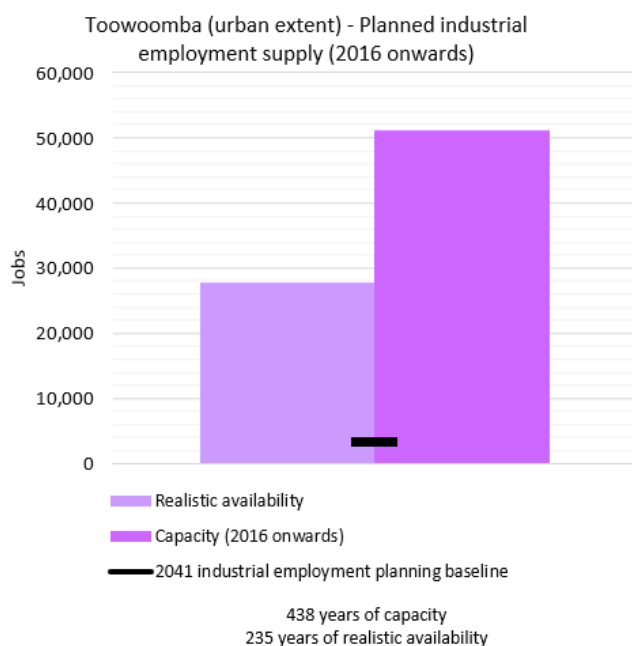
The capacity of planned industrial employment supply in Toowoomba (urban extent) (from 2016 onwards) is about 51,200 employees, while the realistic availability of this supply is about 27,700 employees. These figures are considerably greater than the 2041 industrial employment planning baseline of about 3400 employees. The majority of this supply is in Charlton-Wellcamp. Some excess of planned industrial employment supply may be appropriate to facilitate strategic economic development opportunities when they arise. Also, as a large emerging industrial area, the industrial employment planning baselines may not fully recognise the employment potential of Charlton-Wellcamp.

The realisation of this planned industrial employment supply has been supported by the opening of the Toowoomba Second Range Crossing in 2019 and is expected to be supported by the

development of the Melbourne to Brisbane Inland Rail and its relationship with inter-modal freight to support increased logistics activity. It has also been supported by recent investment in the Steger Road Infrastructure Enabling project and Toowoomba Enterprise Hub Stimulus project, providing key transport and water links for Toowoomba’s Trade Gateway at Charlton-Wellcamp.

A new planning scheme is in preparation for Toowoomba, and a planning scheme amendment has recently been adopted and another is in process, that may affect planned industrial employment supply. Where changes proceed, and data sources are updated, their effect on industrial employment supply will be included in future years of LSDM reporting.

For more detail about the calculation of planned industrial employment supply, see the [Technical notes](#).



This graph shows the number of employees that could be supported by industrial developments, from 2016 onwards, that have been or could be approved based on current planning intent, compared against *ShapingSEQ* 2017’s 2041 industrial employment planning baseline.

Note: The planned industrial employment supply measures are as calculated by the department using information provided by local governments and utility providers that was generally developed in accordance with guidelines that applied at the time. These measures, their method of calculation and the assumptions that underpin the source data are expected to improve and become more consistent over time, improving the comparability of supply estimates between local government areas. These improvements will be implemented progressively (see [Program Delivery](#)) and be reflected in future publications of the Land Supply and Development Monitoring Report. Much of the planned industrial employment supply will not be developable in the short-medium term due to a lack of necessary infrastructure or other factors that may constrain or delay its availability for relevant types of industry.

Planned industrial land supply is calculated differently from Planning industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

To support Toowoomba Regional Council in preparing a new planning scheme, including the Toowoomba Region Growth Plan, a new Business-as-Usual model of land supply and development potential has been developed (in 2021). This has been used for the purpose of the 2021 LSDM Report, providing updated planned industrial employment supply numbers compared to the 2018, 2019 and 2020 LSDM reports,

Future [Best practice research](#) could consider the availability of data to estimate actual industrial employment growth by local government area over time, to enable re-basing of the supply to the present year. Current years of supply figures (from 2021 onwards) are indicative estimates, effectively assuming the same average annual rate of take-up of employment supply from 2016 to 2021 as the average annual *ShapingSEQ* 2017 employment planning baseline growth from 2016 to 2031.

Definitions

Term	Definition
15 years of supply	The minimum 15 years of supply policy objective of <i>ShapingSEQ 2017</i> (p.46). Note: For further information see the 'Years of supply' definition and the method of measurement as explained in the Planned dwelling supply and Planned industrial employment supply sections of the Technical notes.
2016/21 constructed dwellings estimate	An estimate of the dwellings constructed in an area from 1 July 2016 to 30 June 2021 based on building approvals for new dwellings in that area from 1 July 2015 to 30 June 2020 (assuming a 12-month lag from approval to completion of construction).
2041 dwelling supply benchmark	The dwelling supply that needs to be planned for to accommodate the dwelling growth to 2041 expected in an area by the South East Queensland Regional Plan 2017, <i>ShapingSEQ 2017</i> (see Figure 7).
2041 industrial employment planning baseline	The industrial employment supply that needs to be planned for to accommodate the industrial employment growth from 2015-16 to 2040-41 expected in an area by the South East Queensland Regional Plan 2017, <i>ShapingSEQ 2017</i> (see Appendix A in <i>ShapingSEQ 2017</i>).
All categories	For sales and price are vacant lots (per lot and per square metre), attached dwellings, houses and house-land package.
Approved supply	The number of uncompleted lot approvals and uncompleted multiple dwelling approvals (which are separately defined) in an area.
Attached dwellings	For: <ul style="list-style-type: none"> • housing type—are other residential buildings including semi-detached, row or terrace houses or townhouses, and flats, units or apartments. • sales and price—are attached dwellings (units and townhouses), as identified by the Department of Resources' Queensland Valuation and Sales database as being sold.
Average annual baseline	The average annual growth of employment expected for an area and industry sector from 2016 to 2031 in order to align with the employment planning baselines as identified in Appendix A of <i>ShapingSEQ 2017</i> .

Average annual benchmark	<p>The average annual dwelling growth from 2016 to 2031 expected in an area by <i>ShapingSEQ 2017</i>, proportionally adjusted to align with the rate of growth projected for SEQ as a whole by using current Queensland Government dwelling projections (2018 edition medium series), compared to the rate of growth assumed by <i>ShapingSEQ 2017</i>.</p> <p>Note: The rationale and method for the adjustment are explained in Appendix G of the Technical notes.</p>
Capacity of planned dwelling supply	<p>An estimate of the number of dwellings that could be developed in an area when fully developed given the expected nature of dwelling demand and densities over time and in compliance with the planning instruments that currently apply in that area.</p>
Capacity of planned industrial employment supply	<p>An estimate of the number of industrial employees that could be accommodated by industrial development in an area when fully developed given the expected nature of industrial employment demand and densities over time and in compliance with the planning instruments that currently apply in that area.</p>
Consolidation	<p>Development on land inside the existing urban area boundary (as defined by <i>ShapingSEQ 2017</i> based on selected Australian Bureau of Statistics 2016 Statistical Area Level 2 boundaries).</p>
Developed industrial land	<p>The total area of land parcels with a zoning or intent for industrial purposes in a planning instrument (e.g. planning scheme, development scheme, port land use plan, etc.) where those parcels are developed for use (including land which may be underutilised).</p>
Dwelling approvals	<p>The number of dwellings that have obtained building approval in a given area for a given period. This figure is used as an approximate measure of dwelling growth.</p>
Expansion	<p>Development on land outside the existing urban area boundary (as defined by <i>ShapingSEQ 2017</i> based on selected Australian Bureau of Statistics 2016 Statistical Area Level 2 boundaries).</p>
Expected share	<p>The proportion of total dwelling growth in a given area that is consolidation or expansion from 2016 to 2031, as expected by <i>ShapingSEQ 2017</i>.</p>
Four years of supply	<p><i>ShapingSEQ 2017</i>'s minimum four years of approved supply preferred future (p.167).</p>
High-rise	<p>For housing type are attached dwellings of four or more storeys.</p>

Houses	<p>For:</p> <ul style="list-style-type: none"> housing type— are a detached building primarily used for long-term residential purposes consisting of one dwelling unit. Includes detached houses associated with a non-residential building, and kit and transportable homes. sales and price— are a detached dwelling, as identified by the Department of Resources' Queensland Valuation and Sales database as being sold.
Lot creation	Lot certification, previously and commonly referred to as plan sealing, which is the final stage of local government approval of lots prior to lot registration by the state government.
Lot registrations	The number of lots registered in a given area for a given period.
Lower quartile sales price	The lower quartile sales price (\$) for reported sales of vacant lots (per lot and per square metre), attached dwellings, houses and house-land packages in a given area for a given period.
Mean population-weighted dwelling density	<p>The mean population-weighted dwelling density of all Census mesh blocks in a region. It is calculated as follows:</p> <p>The sum for all Census mesh blocks of ((mesh block dwelling count divided by area of mesh block) multiplied by mesh block population count) divided by the sum of all mesh block population counts.</p>
Median lot size	The median size of new urban lots 60 to < 2,500 m ² registered in a given area for a given period.
Median sales price	The median sales price (\$) for reported sales of vacant land (per lot and per square metre), attached dwellings, houses and house-land packages in a given area for a given period..
Mesh blocks	The smallest geographical area defined by the Australian Bureau of Statistics and form the building blocks for the larger regions of the Australia Statistical Geography Standard (ASGS). All other statistical areas or regions are built up from or approximated by them. They broadly identify land use such as residential, commercial, primary production and parkland and can be combined to accurately approximate a large range of other statistical regions.
Middle	<p>For housing type— Middle aligns with ABS dwelling building approval reporting and includes:</p> <ul style="list-style-type: none"> Flats, units or apartments, in a one or two storey block; Flats, units or apartments in a three storey block; Semi-detached, row or terrace houses, or townhouses of one storey; or

	<ul style="list-style-type: none"> Semi-detached, row or terrace houses, or townhouses of two or more storeys.
Number of sales	The number of reported sales, at the date of data extraction, for vacant lots, houses, house-land packages, or attached dwellings, in a given area for a given period.
Off-the-plan sales	Sales of ‘proposed lots’ as defined under the Land Sales Act 1984, where the contract for sale is entered into before the lot has been constructed and the plan of survey registered with the Department of Resources.
Operational works approvals	The number of uncompleted lots that also have an operational works approval (e.g. to construct roads or drainage) at the relevant date.
Planned dwelling supply	<p>A collective term for the capacity of planned dwelling supply and the realistic availability of planned dwelling supply, which are separately defined.</p> <p>For further information on Planned Dwelling Supply in the 2021 LSDM Report, refer to Fact sheet 1: Planned Dwelling Supply.</p>
Planned industrial land	<p>Land that is vacant, has a zoning or intent for industrial purposes in a planning instrument (e.g. planning scheme, development scheme, port land use plan, etc.) and is not affected by identified constraints.</p> <p>This is effectively the gross developable area, i.e. it does not exclude any allowance for new roads, infrastructure corridors, open space and the like. It also does not exclude any allowance for some constraints which affect the economic feasibility of industrial development, e.g. geotechnical conditions, mining impacts, availability of infrastructure and the like.</p>
Realistic availability of planned dwelling supply	<p>A scenario which assumes some of the capacity of planned dwelling supply is not available for development by 2041 due to factors that may constrain the availability of land for development to accommodate dwellings. Such factors may include:</p> <ul style="list-style-type: none"> infrastructure availability the practical staging of and capability for development land ownership fragmentation landowner intent insufficient demand for the planned scale/density of uses in some areas up to 2041 existing versus planned density (or land value in the existing versus the planned use)

	<ul style="list-style-type: none"> the age of existing development accessibility constraints affecting the economic feasibility of development. <p>For further information, refer to Fact sheet 2: Realistic availability concept and Fact sheet 3: Realistic availability scenarios.</p>
Realistic availability of planned industrial employment suppl	<p>A scenario which assumes some of the capacity of planned industrial employment supply is not available for development by 2041 due to factors that may constrain the availability of land for development to accommodate industrial employment. Such factors may include:</p> <ul style="list-style-type: none"> infrastructure availability the practical staging of and capability for development land ownership fragmentation landowner intent lower employment densities than expected accessibility constraints affecting the economic feasibility of development.
SEQ's preferred future	The 'SEQ's preferred future' identified in Table 22: Measures that Matter of <i>ShapingSEQ 2017</i> (p.167).
<i>ShapingSEQ 2017</i>	The South East Queensland Regional Plan, August 2017
Take-up	For developed industrial land— an estimate of the amount of land that was developed for use (including land which may be considered underutilised / not fully taken-up) from being vacant, in a given time-period, e.g. 2011 to 2021.
The department	Department of State Development, Infrastructure, Local Government and Planning.
Ultimate development	<p>The Minister's Guidelines and Rules defines ultimate development for a Local Government Infrastructure Plan, for an area or premises, as the likely extent of development that is anticipated in the area, or on the premises, if the area or premises are fully developed.</p> <p>Note: The department's 2021 guideline 'Local infrastructure planning - Guidance for local governments and applicants' (see sub-section 2.2.1.2 Development projections) now provides guidance on the determination of ultimate development in each area.</p>

Uncompleted lot approvals	The number of lots that have a reconfiguring a lot development permit but have not yet been certified (also known as plan sealing) at the relevant date.
Uncompleted multiple dwelling approvals	<p>The number of multiple dwellings that have a material change of use development permit but have not yet been constructed at the relevant date.</p> <p>For the purpose of this report, multiple dwellings include developments where more than one self-contained dwelling is planned for a parcel, or where there is one dwelling per lot and they are subject to a Community Titles Scheme. Determination of whether dwellings have been constructed is based primarily on consideration of lot registrations information and recent aerial imagery.</p>
Upper quartile sales price	The upper quartile sales price (\$) for reported sales of vacant lots (per lot and per square metre), attached dwellings, houses and house-land packages in a given area for a given period.
Urban extent	For Toowoomba — that part of the Toowoomba Regional Council’s local government area that is contained within the Toowoomba Statistical Area Level 4 as defined for the purposes of the Australian Statistical Geography Standard. This is the part of Toowoomba included in <i>ShapingSEQ</i> 2017.
Years of supply	<p>The number of years it will take for a given supply of dwellings or industrial employment to be consumed based on the assumed level of annual demand.</p> <p>For industrial employment supply – the assumed level of annual demand is the average annual baseline.</p> <p>For planned dwelling supply – the assumed level of annual demand is the average annual benchmark.</p>

Technical notes

Introduction

These technical notes provide information on data collected and compiled and calculations reported on for the 2021 release of the South East Queensland (SEQ) Regional Plan 2017 (*ShapingSEQ* 2017) Growth Monitoring Program's (GMP) Land Supply and Development Monitoring (LSDM) Report.

LSDM reporting is a core deliverable of the GMP in working to achieve the vision, goals and strategies of *ShapingSEQ* 2017. The GMP annually monitors land supply and development activity for both residential and non-residential land uses in SEQ and reports on associated measures, as appropriate.

Further detail on information used for the LSDM Report, including description, rationale, limitations, data sources, custodians, data geography, method, data updates and reporting units is provided, where relevant.

The LSDM Report has:

- been developed in good faith
- utilised appropriate data and consistent and repeatable methodologies, where possible
- made use of publicly available datasets (local, state and regional), where possible
- used information that may be refined over time and will be updated for annual reviews of the LSDM Report.

In some instances, the LSDM Report has relied on unpublished datasets provided by local governments. These are unique to each local government area and represent data captured at a point in time for the purposes of informing the 2021 LSDM Report.

For future LSDM reports, data improvements are expected to be made progressively over time through the application of new and more consistent methodologies and approaches (Program Delivery).

For the purposes of LSDM reporting, the SEQ region comprises the following local government areas:

- Brisbane
- Gold Coast
- Ipswich
- Lockyer Valley
- Logan
- Moreton Bay
- Noosa
- Redland
- Scenic Rim
- Somerset
- Sunshine Coast

- Toowoomba (urban extent), i.e. those parts within the Toowoomba Statistical Area Level 4 (SA4) boundary.

Any data collected at a lower geographical area (e.g. parcel level or Statistical Area Level 2 (SA2)) are reported on for these local government areas unless otherwise stated.

The Department of State Development, Infrastructure, Local Government and Planning (DSDILGP), reviews and produces the LSDM Report annually to ensure the most appropriate and up-to-date information is reported.

It is acknowledged that other agencies (State and local) may have metric dashboards or other reports displaying similar information and these may provide more detail for their area.

While every care has been taken to ensure the currency and accuracy of the LSDM Report, the State of Queensland, SEQ local governments and utility providers make no representations or warranties about the report's accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage), decisions or actions taken as a result of any data, information, statement or advice, expressed or implied or contained within.

The 2021 LSDM Report has been prepared using data, where possible, to 30 June 2021.

It is anticipated that the COVID-19 pandemic will continue to impact development activity and markets in SEQ. Ongoing data collection and evidence-based reporting will therefore be critical moving forward to help guide and inform directions and decisions about land supply, infrastructure, and ongoing economic recovery responses. The GMP will continue to monitor this information and may consider the release of more regular metric-by-metric reporting of land supply and development activity data as information becomes available (e.g. an addendum to the 2021 LSDM Report).

Further information on selected terms used through this document are listed in [definitions section](#).

Planned dwelling supply

Description

Planned dwelling supply is a collective term for both the capacity of and the realistic availability of planned dwelling supply, which are separately defined.

Planned dwelling supply is based on estimates of the dwellings that have been or could be approved, based on current planning intent and the expected nature of demand and densities over time, to accommodate the region's expected dwelling growth, within consolidation and expansion areas.

For the 2018, 2019 and 2020 Land Supply and Development Monitoring (LSDM) Reports, planned dwelling supply was expressed in terms of additional dwellings (from a 2016 base) in the region and by local government area for consolidation and expansion areas. This was compared to the 2041 dwelling supply benchmarks of *ShapingSEQ* 2017. It was also expressed in terms of years of supply (from the current year base).

In 2021, planned dwelling supply is expressed in terms of additional dwellings (from a 2021 base) in the region and local government area, for consolidation and expansion areas, consistent with the methodology used for estimating remaining dwelling supply for the years of supply calculation.

For the purposes of the 2021 LSDM Report, the capacity of the planned dwelling supply has been estimated using the identified growth in dwellings (generally from 2016 to ultimate development, with adjustment to 2021 using the 2016–21 constructed dwellings estimate, unless otherwise noted) from the best available local government datasets. This includes detailed planning assumptions datasets or summary reporting prepared for Local Government Infrastructure Plans (LGIPs), and other studies and databases as identified for use by the relevant local government.

The reporting also incorporates a sensitivity analysis in the form of realistic availability scenarios, which are informed by the recommendations of the best practice research (see Moving forward sections of the 2018 and 2019 and the Program Delivery sections of the 2020 and 2021 LSDM reports) and previous studies.

Rationale

Current status of the amount of planned dwelling supply (preferred minimum 15 years of supply) is analysed and presented for the region and for each local government area, by consolidation and expansion areas.

Each measure of realistic availability is presented as an alternative measure of supply, i.e. compared to the corresponding capacity measure. It is included as a scenario or sensitivity analysis that seeks to represent the effect of factors that may constrain the availability of some of the identified capacity for development, up to the 2041 planning horizon.

Factors that either alone or in combination may constrain the realistic availability by 2041 of the capacity for urban development include:

- infrastructure availability
- the practical staging of and capability for development
- land ownership fragmentation
- landowner intent
- insufficient demand for the planned scale/density of uses in some areas up to 2041
- existing versus planned density (or land value in the existing versus the planned use)
- the age of existing development
- accessibility
- constraints affecting the economic feasibility of development.

Consideration of realistic availability as an alternative scenario provides a greater level of confidence about the adequacy of dwelling supply.

For the LSDM Report, realistic availability has been reported by local government area for expansion areas only. This recognises the varying extent to which the source datasets already consider some of

the identified realistic availability factors, particularly for urban redevelopment in consolidation areas.

Limitations

Years of supply for planned dwelling supply is calculated based on the adjusted average annual benchmark, i.e. the average annual growth of dwellings expected 2016-2031 in order to align with the relevant 2041 dwelling supply benchmarks of *ShapingSEQ* 2017. For the 2019, 2020 and 2021 LSDM Reports, this rate of growth was adjusted to take account of the projected increased rate of dwelling growth from 2016-2031 identified for SEQ overall in the Queensland Government's 2018 edition medium series projections (see Appendix G of the [Technical notes](#) for a detailed explanation of the adjustment).

There is some source data inconsistency across local government areas, including timing, outputs and assumptions about densities and developable areas. Limitations of timing also effect the development of the Current Intent to Service layer used to inform realistic availability of expansion area supply.

The interpretation, determination and timing of ultimate development may affect the consistency and comparability of reporting across local government areas.

The intent of the planned dwelling supply measure is to report dwellings that have been or could be approved based on current planning intent. However, the timing of the preparation of available datasets means that the effect of some draft changes to planning schemes may be included in, and the effect of some recently adopted changes may be excluded from, the data. More regular updates of planning assumptions datasets will help to address this issue as well as the fact that recent actual development and approvals, which may be significantly more or less than the datasets assume, will not be reflected in older datasets,

The information extracted from individual local government datasets and included in the LSDM Report may be different to the estimates of dwelling supply used to inform *ShapingSEQ* 2017. For example, vacant lots at the base date are generally counted as supply in the source data and the LSDM Report, whereas *ShapingSEQ* 2017 assumed an equivalent stock of vacant lots would exist in 2041 and did not therefore count them as dwelling supply. There may be other variations in assumptions about developable area, density and land availability up to 2041.

Some local governments may have more recent, sophisticated but not yet adopted models which are able to provide greater detail including small scale modelling which may indicate potential supply greater or less than shown in the LSDM Report. For the LSDM Reports, the GMP has aimed for a consistent approach to measuring land supply, capacity and realistic availability across the region, using the data made available by local governments. The LSDM Reports continue to monitor the region's land supply information and improve this information over time in consultation with all stakeholders, in particular, local governments.

The Department of State Development, Infrastructure, Local Government and Planning (DSDILGP) is continually working towards applying a more consistent methodology across the region for calculating planned dwelling supply. This will be informed by the findings of and further work to progress and implement best practice research (Program Delivery).

DSDILGP, through its ongoing Measuring Development best practice research, is working towards developing methodologies to understand, amongst other elements, the impact of visitor or tourist dwellings in calculating the planned dwelling supply from source data. As some visitor dwellings are effectively not counted as part of the *ShapingSEQ* 2017 dwelling supply benchmarks, which are a response to the projected growth of resident population and dwellings, future reporting will seek an appropriate and consistent basis for excluding them from the planned dwelling supply.

The indicative realistic availability scenarios for consolidation in SEQ sum the 2016-21 constructed dwellings estimate and material change of use (MCU) approvals (as at June 2021) as a base for applying proportions to the balance of the consolidation capacity to calculate realistic availability. There may be some overlap between the 2016-21 constructed dwellings estimate and MCU approvals, including a proportion of high-rise multiple dwellings that are counted in both data elements due to the length of time required for construction of taller buildings.

For Lockyer Valley and Somerset Regional councils, parcel-level equivalent demand units (EDUs) were used as projected dwelling figures. For this analysis, one EDU was assumed to be one dwelling unit. A comparison with the dwelling units reported in the corresponding LGIPs undertaken as part of the 2018 LSDM Report found only a slight difference in values.

The Current Intent to Service layer was derived from information available from local governments, utility providers and the Queensland Government Statistician's Office (QGSO), including development and preliminary approvals, infrastructure agreements, priority development areas, priority infrastructure areas and existing and future sewerage connection areas. DSDILGP is continuing to work with these agencies to prepare and utilise the most accurate and relevant information in the identification of the Current Intent to Service layer.

Data source/custodian

- DSDILGP, *ShapingSEQ* 2017, Existing Urban Area (EUA), August 2017
- DSDILGP, Residential growth areas, July 2021 (see Appendix A)
- DSDILGP, *ShapingSEQ* 2017, Dwelling Supply Benchmarks, August 2017
- DSDILGP, SEQ regional plan boundary, 2017
- Australian Bureau of Statistics (ABS), SA2, 2016
- SGS Economics and Planning, SEQ Realistic Dwelling Take-up 2021 Update November 2021 (see extracts at Appendix C)
- DSDILGP, Priority Development Areas (PDA), 2021
- Queensland Treasury, 2018 edition medium series dwellings projections, 2019.
- Queensland Treasury, Queensland Government Statisticians Office (QGSO), MCU approvals for multiple dwellings (unconstructed), as at 30 June 2021, as provided November 2021. This data is based on development approval data provided by local governments and Economic Development Queensland (EDQ).
- Planning scheme zones (see Appendix B, Table B4)
 - Brisbane – Brisbane City Plan 2014
 - Gold Coast – N/A see individual local government method

- Ipswich – Ipswich Planning Scheme, December 2019
- Lockyer Valley – Laidley and Gatton Planning schemes v2, 27 June 2018 and Grantham development scheme (updated layer provided by Council July 2021)
- Logan – Planning Scheme v8, 2021
- Moreton Bay – MBRC Planning Scheme 2016
- Noosa – Noosa Plan, July 2020
- Redland - N/A see individual local government method
- Scenic Rim Planning Scheme 2020, 20 March 2020 (updated minor amendment, 16 April 2021)
- Somerset – Planning Scheme, v4, 2021
- Sunshine Coast – Planning Scheme v23, 2021
- Toowoomba - Planning Scheme 2021 (updated layer provided by Council July 2021).
- LGIPs and related datasets
 - Brisbane – Brisbane Urban Growth model 2016 data as supplied by council to reflect LGIP v1, February 2016 (parcel-level)
 - Gold Coast – LGIP Extrinsic Material Report Planning Assumptions, June 2017 (draft for state interest review) (SA2-level) and Gold Coast Water and Waste Infrastructure Demand Model 2014 dataset ‘IDM GCW May 2014’ as supplied 2018 (parcel-level) (latter used for Financial Feasibility Model analyses only)
 - Ipswich – Ipswich LGIP Residential as supplied by council from the Ipswich Population Modeller in 2017 (parcel-level)
 - Lockyer Valley – External Demand Model, as supplied by council July 2018 which aligns to the LGIP as adopted June 2018 (parcel-level)
 - Logan – Logan Growth Model, June 2020 Base, 16 Feb 2021 model run, as supplied by council in July 2021 (parcel-level)
 - Moreton Bay – LGIP2 Plus 2041 Residential Oct2019 as supplied by council August 2021 (parcel-level)
 - Noosa – Unitywater DMaTT demand forecasts, July 2018, supplied by Unitywater June 2021 (parcel-level – point dataset)
 - Redland – Redland Land Supply Review 2014, Urbis (summary data by parcel-size, zone and locality)
 - Scenic Rim – Land Supply Monitoring, as supplied by council June 2018 (parcel-level)
 - Somerset – Population and Demand Model supplied by council in May 2018 (parcel-level)
 - Sunshine Coast – Population and employment figures underpinning the LGIP as supplied by council in July 2018 (parcel-level)
 - Toowoomba – Business-as-Usual Model 2021, supplied October 2021.
- Current Intent to Service layer datasets
 - Priority Infrastructure Areas
 - Brisbane – supplied by Council June 2019

- Gold Coast – supplied by Council July 2019
- Ipswich – supplied by Council March 2019
- Lockyer Valley – supplied by Council June 2019
- Logan – sourced from Council’s open data portal (layer dated May 2019)
- Moreton Bay –sourced from Council’s open data portal (layer dated July 2017)
- Noosa –supplied by Council July 2020
- Redland – supplied by Council July 2019
- Scenic Rim – supplied by Council June 2021
- Somerset –supplied by Council, July 2019
- Sunshine Coast –supplied by Council June 2019
- Toowoomba – supplied by Council July 2019
- Development Approvals, including residential uncompleted lots and uncompleted multiple dwelling approvals (Note: for QGSO information this includes uncompleted lot and uncompleted multiple dwelling approvals as at 30 June 2021)
 - Brisbane – QGSO approvals data, current to 30 June 2021
 - Gold Coast – supplied by City of Gold Coast, current from 1 January 2011 to 31 March 2021
 - Ipswich – supplied by Council current from 1 July 2003 to 30 June 2020
 - Lockyer Valley – QGSO approvals data, current to 30 June 2021
 - Logan – supplied by Council current from 19 February 2010 to 8 June 2021
 - Moreton Bay – supplied by Unitywater and Council, current from 14 July 2000 to 30 June 2021
 - Noosa – supplied by Unitywater, current from 7 April 2010 to 16 August 2019
 - Redland - QGSO approvals data, current to 30 June 2021
 - Scenic Rim – QGSO approvals data, current to 30 June 2021
 - Somerset – QGSO approvals data, current to 30 June 2021
 - Sunshine Coast – supplied by Unitywater, current from 19 December 2008 to 4 May 2021
 - Toowoomba - QGSO approvals data, current to 30 June 2020, in addition, council supplied data current from 24 August 2020 to 17 June 2021
- Preliminary Approvals
 - Brisbane – supplied by Council, current to 01 August 2019 (outside PIA only)
 - Gold Coast – supplied by City of Gold Coast, current from 1 November 2011 to 29 June 2020
 - Ipswich – supplied by Council, current from 1 January 2014 to 7 June 2021
 - Lockyer Valley – supplied by Council, current to June 2021
 - Logan – supplied by Council, current from 8 June 2010 to May 2020

- Moreton Bay – supplied by Unitywater and Council, 2 November 2011 to June 2021
- Noosa – supplied by Unitywater, current to 16 August 2019
- Redland - no information was available at the time of reporting, council are continuing to investigate the availability of this information.
- Scenic Rim – Council advised no preliminary approvals issued between July 2018 – June 2020. No update provided for 2021.
- Somerset – Council advised one issued between July 2014 and July 2019 and no residential preliminary approvals issued between June 2019 and June 2021
- Sunshine Coast – supplied by Unitywater, 22 December 2006 to 4 May 2021
- Toowoomba – supplied by Council, current from 1993 to 6 April 2021
- Existing and Future Sewerage Connection Areas
 - Brisbane, Ipswich, Lockyer Valley, Scenic Rim and Somerset – Netserv plan supplied by Urban Utilities October 2020
 - Gold Coast – Future areas supplied by Council July 2019, Current areas supplied by Council, June 2021
 - Logan – sourced from Council’s open data portal, current to 02 June 2019
 - Moreton Bay – supplied by Unitywater June 2021
 - Noosa – supplied by Unitywater June 2021
 - Redland - supplied by Council July 2019
 - Sunshine Coast – supplied by Unitywater June 2021
 - Toowoomba – incorporated into the Priority Infrastructure Area boundary
- Infrastructure Agreements
 - Brisbane – supplied by council, current from 1 July 2011 to 31 May 2021
 - Gold Coast – supplied by Council, current from 2011 to 8 July 2021
 - Ipswich – supplied by Council, current from 1998 to 7 June 2021
 - Lockyer Valley – supplied by Council, related to preliminary approvals current to 25 June 2019
 - Logan – no information was available at the time of reporting, council are continuing to investigate the availability of this information.
 - Moreton Bay – supplied by Unitywater, current to 15 July 2019, Council supplied July 2020 to June 2021
 - Noosa – supplied by Unitywater, current to 15 July 2019
 - Redland – supplied by Council, current to June 2020
 - Scenic Rim – Council advised there were no infrastructure agreements issued between July 2018 and June 2020. No update provided for 2021.
 - Somerset – council supplied two infrastructure agreements, current to July 2019 and no residential infrastructure agreements issued between July 2019 and June 2021

- Sunshine Coast – supplied by Unitywater, current to 15 July 2019
- Toowoomba – supplied by Council, current from 2010 to July 2019
- Future amendments to local government planning schemes and development schemes (including EDQ) that may increase planned dwelling supply in the future have also been considered where appropriate.

Source data geography

Various – parcel-level, ABS SA2 and by parcel-size, zone and locality.

Method

SEQ

Capacity

Calculate the capacity of the planned dwelling supply for the region by adding each local government's consolidation and expansion area's capacity using the methods outlined in each local government section below.

Realistic availability

Consolidation

To provide indicative realistic availability scenarios for the region's consolidation areas, two percentages were used to consider the impact of assuming 25 or 50 per cent of the region's total identified consolidation dwelling capacity, that is not yet built or approved, will not be available for development by 2041.

These proportions were chosen, and only applied at the overall regional level, in recognition of the range of circumstances and assumptions used in the source local government area datasets. Those circumstances, and consideration of the influence of the various realistic availability factors (see Rationale section above), means that it is not appropriate to consider a more precise scale of assumed realistic availability than zero, 25, 50, 75 or 100 per cent.

Realistic availability for the region, from 2016 onwards, is calculated as:

$$(A - B - C) \times D] + B + C$$

Where:

A = Total dwelling capacity from 2016 onwards

B = 2016-21 constructed dwellings estimate, which includes the five years of dwelling building approvals from July 2015 to June 2020 (assumed as constructed from July 2016 to June 2021)

C = uncompleted multiple dwelling approvals as at 30 June 2021, as reported in Approved supply

D = 0.75 or 0.5, depending on the scenario.

Realistic availability from 2021 onwards is then calculated by subtracting B, the 2016-21 constructed dwellings estimate, from the realistic availability from 2016 onwards.

No estimate of realistic availability has been made for consolidation for each local government. DSDILGP is continuing to investigate a more refined realistic availability measure as informed by further work to progress and implement best practice research (Program Delivery).

Expansion

Calculate the regional realistic availability of planned dwelling supply by adding each local government's expansion realistic availability of planned dwelling supply, as calculated using the methods outlined in each local government section below.

In summary, the general approach to estimating expansion realistic availability by local government area involves reducing the expansion capacity by assumed unavailable 'growth area' dwellings, assumed unavailable dwellings inside and outside the identified Current Intent to Service layer (see Appendix F for further information on the makeup of this layer) and assumed unavailable 'fragmented area' dwellings. The assumed unavailable dwellings are estimated, respectively, as follows:

- Growth Areas – for growth areas inside the Current Intent to Service layer, the dwellings assumed unavailable to 2041 in identified growth areas are based on the difference between the base capacity and estimated supply to 2041 identified in the SGS SEQ Realistic Dwelling Take-up 2021 Update, November 2021 (see extracts at Appendix C). For growth areas outside the Current Intent to Service layer, the whole growth area is assumed unavailable to 2041.
- Fragmented Areas – subject to the further adjustments identified under the 'Current Intent to Service layer' below, the dwellings assumed unavailable to 2041 in fragmented areas are based mainly on the rules used for the 2013 broadhectare study (BHS) to calculate expected yield from theoretical yield (see Appendix B). For Gold Coast and Redland, where suitable parcel-level information was not available, the difference between 'Theoretical yield' and 'Expected yield' from the 2013 BHS (updated to June 2021) was used as an allowance for this measure (see individual local government areas below for further detail).
- Current Intent to Service layer - the dwellings assumed unavailable to 2041 (see Appendix F for further detail) include:
 - inside the Current Intent to Service layer, those not covered by an existing development approval, preliminary approval or infrastructure agreement and identified as unavailable dwellings in a Fragmented Area. For Gold Coast and Redland local government areas BHS 'Theoretical yield' minus 'Expected yield' in these areas was used.
 - outside the Current Intent to Service layer and inside the Urban Footprint, those not covered by an existing development approval, preliminary approval or infrastructure agreement (the whole of the capacity of the planned dwelling supply for those areas was assumed unavailable). For Gold

Coast and Redland local government areas BHS 'Theoretical yield' in these areas was used.

- outside the Current Intent to Service layer and outside the Urban Footprint, those not covered by an existing development approval, preliminary approval or infrastructure agreement and identified as unavailable dwellings in a Fragmented Area. For Gold Coast and Redland local government areas BHS 'Theoretical yield' minus 'Expected yield' in these areas was used.

Local government

The following provides a summary of the methodology used to calculate each SEQ local government's planned dwelling supply. This method uses the following information for each SEQ local government area:

- Parcel-level information, generally as developed for LGIPs, as provided by Brisbane, Ipswich, Lockyer Valley, Logan, Moreton Bay, Noosa (from Unitywater), Scenic Rim, Somerset, Sunshine Coast and Toowoomba councils.
- Where suitable parcel-level information was unavailable, current LGIP documentation was used for Gold Coast and a land supply study provided by the council was used for Redland.

Brisbane

- Identify parcels within the consolidation and expansion areas
- Determine capacity

From 2016 onwards, extract the total number of additional dwellings from 2016 to the identified ultimate dwellings by consolidation and expansion areas.

From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the capacity from a 2016 base.

- Determine realistic availability

Consolidation

No estimate of the consolidation realistic availability has been made. Ongoing research is being undertaken to improve the estimate of realistic availability in consolidation areas.

Expansion

Realistic availability from 2016 onwards is calculated by removing any dwellings assumed unavailable for development to 2041 from the total local government expansion area's capacity from 2016 onwards. The calculations were different depending on whether an area is within an identified growth area or fragmented area and/or is inside or outside the Current Intent to Service layer as follows:

- For growth areas:
Brisbane does not contain any identified growth areas.
- For fragmented areas:

Subject to variations based on the Current Intent to Service layer below, 2013 BHS rules for calculating expected yield from theoretical yield are used, including identified proportions for selected zones and parcel-size ranges (see Appendix B), as follows:

- Identify parcels greater than 2500m² (BHS cut-off) and zoned for low density residential purposes (see Appendix B for the selected zones) within the expansion area
- Using these identified parcels, select parcels where:
 - there is dwelling growth from 2021 to ultimate (it is assumed that the identified dwelling growth to 2021 is all realistically available for development to 2041, as an allowance for development approvals existing at the time of dataset creation), and
 - the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
- Calculate the capacity of these selected areas by totalling the additional dwellings from 2021 to ultimate.
- Calculate the realistic availability of the selected areas using the identified proportions (see Appendix B) multiplied by the capacity for those areas.
- Calculate the assumed unavailable fragmented area dwellings as: capacity minus realistic availability.
- For areas within the Current Intent to Service layer without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
- For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Identify all parcels where the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the total capacity of these areas by totalling the additional dwellings from 2021 to ultimate and assume all such dwellings are unavailable.

Note: it has been considered that areas outside the Current Intent to Service layer and inside the Urban Footprint are not currently realistically available. This is based on the approach that these areas are intended for urban development (requiring trunk infrastructure to service them) but no decisions, agreements or planning are currently in place to service them.
- For areas outside the Current Intent to Service layer, outside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:

- Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - Calculate overall expansion realistic availability:
 - From 2016 onwards, [Total expansion area capacity from 2016 onwards minus assumed unavailable dwellings inside and outside the Current Intent to Service layer].

Note: In addition to considering existing and available development approvals, dwelling growth up to 2021 has also been assumed to be realistically available.

 - From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the realistic availability from a 2016 base.
- Determine years of supply

Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply sought by *ShapingSEQ 2017*. The calculations are as follows:

Consolidation

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified capacity from 2016 onwards and divide this by *ShapingSEQ 2017*'s adjusted average annual benchmark, i.e. the average annual growth of consolidation dwellings expected 2016-2031 in order to align with the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

Expansion

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified expansion capacity from 2016 onwards and divide this by *ShapingSEQ 2017*'s adjusted average annual benchmark, i.e. the average annual growth of expansion dwellings expected 2016-2031 in order to align with the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

For realistic availability, subtract the 2016-21 constructed dwellings estimate from the identified expansion realistic availability from 2016 onwards and divide this by *ShapingSEQ 2017*'s adjusted average annual benchmark.

- Identifying planning scheme amendments
- The following list identifies planning and development scheme amendments, recently adopted or in process, that may affect planned dwelling supply in Brisbane:
- Northshore Hamilton PDA development scheme (amendment publicly notified from 22 October to 3 December 2021)
 - Bowen Hills PDA development scheme (amended 21 June 2019)
 - Herston Quarter PDA development scheme (commenced 21 December 2017)
 - Queens Wharf PDA development scheme (commenced 28 January 2016)
 - Oxley PDA development scheme (adopted 9 August 2019)

- Yeronga PDA development scheme (adopted 9 August 2019)
- Albert Street Cross River Rail PDA development scheme (adopted 13 December 2019)
- Woolloongabba Cross River Rail PDA development scheme (new Interim land Use Plan commenced 24 November 2021 - development scheme being prepared)
- Boggo Road Cross River Rail PDA development scheme (Interim land Use Plan adopted 2 October 2020 - development scheme being prepared)
- Roma Street PDA development scheme (adopted 30 July 2021)
- Banyo-Northgate Neighbourhood Plan (adopted 26 November 2019)
- Eight Mile Plains Gateway Neighbourhood Plan (undergoing public consultation 8 November – 6 December 2021)
- Sandgate District Neighbourhood Plan (Council reviewing the draft neighbourhood plan following public consultation)
- Bridgeman Downs Neighbourhood Plan (undergoing first state interest review)
- Nathan, Salisbury, Moorooka Neighbourhood Plan (preparing draft neighbourhood plan)
- Major amendment package K, including zone changes from Emerging Community to Low Density Residential (underwent public consultation 12 July to 23 August 2021)
- Major amendment package H - restricting townhouses from single-home areas and associated consequential amendments to the balance of City Plan (adopted 11 February 2020)
- Major amendment package E, including changes to Strategic Framework and Emerging community zone code (adopted 8 September 2020) Minor amendment J, including updates to flood overlay mapping, zone and overlay mapping (effective 28 May 2021).

Gold Coast

At the time of reporting, the City of Gold Coast were developing new growth projections for their LGIP2. As these numbers were not available at the time of compiling this report the planned dwelling supply figures from LGIP1 have had to be used in the interim. It is acknowledged that these supply figures may overstate the available supply for the Gold Coast expansion area.

- Identify SA2s within the consolidation and expansion areas.

Parcel-level information was not used for this analysis as, at the time of compiling the first LSDM Report in 2018, the available information at a parcel level could not be readily concurred to the published LGIP. The City of Gold Coast Council is currently developing a new parcel-level growth model and updated LGIP information.

- Determine capacity

From 2016 onwards, extract the total number of additional dwellings from 2016 to the identified LGIP ultimate dwellings, by consolidation and expansion areas.

From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the capacity from 2016 onwards.

- Determine realistic availability

Consolidation

No estimate of the consolidation realistic availability has been made. Ongoing research is being undertaken to improve the estimate of realistic availability in consolidation areas.

Expansion

As parcel-level information was not available for this analysis, realistic availability from 2016 onwards was calculated by using the findings of the SGS report and BHS information as follows:

- For growth areas:
 - For Coomera and Worongary, as the urban growth areas are inside the Current Intent to Service layer, dwellings were identified as assumed unavailable for development to 2041 using the information in the SGS report (Appendix C, Table C1), i.e. its 'Base capacity' minus its 'Estimated supply to 2041'.
- For fragmented areas inside and outside the Current Intent to Service layer:
 - Dwellings were assumed unavailable for development using the 2013 BHS (adjusted to account for development to June 2021) by:
 - For areas within the Current Intent to Service layer without a development approval, preliminary approval or infrastructure agreement, calculating 'Theoretical yield' minus 'Expected yield'
 - For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval or infrastructure agreement, including all of the 'Theoretical yield' as unavailable. Note: it has been considered that areas outside the Current Intent to Service layer and inside the Urban Footprint are not currently realistically available. This is based on the approach that these areas are intended for urban development (requiring trunk infrastructure to service them) but no decisions, agreements or planning are currently in place to service them.
 - For areas outside the Current Intent to Service layer, outside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement, calculating 'Theoretical yield' minus 'Expected yield'.
- Calculate overall expansion realistic availability:
 - From 2016 onwards, [Total expansion area capacity from 2016 onwards minus assumed unavailable dwellings in growth areas minus unavailable dwellings inside and outside the Current Intent to Service layer].
 - From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the realistic availability from 2016 onwards.

- Determine years of supply

Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply sought by *ShapingSEQ 2017*. The calculations are as follows:

Consolidation

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified capacity from 2016 onwards and divide this by *ShapingSEQ 2017*'s adjusted average annual benchmark, i.e. the average annual growth of consolidation dwellings expected 2016-2031 in order to align to the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

Expansion

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified expansion capacity from 2016 onwards and divide this by *ShapingSEQ 2017*'s adjusted average annual benchmark, i.e. the average annual growth of expansion dwellings expected 2016-2031 in order to align with the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

For realistic availability, subtract the 2016-21 constructed dwellings estimate from the identified expansion realistic availability from 2016 onwards and divide this by *ShapingSEQ 2017*'s adjusted average annual benchmark.

- Identify planning scheme amendments

The following list identifies planning scheme amendments, recently adopted or in process, that may affect planned dwelling supply on the Gold Coast:

- Major Update – New communities (Eggersdorf Road, Ormeau) (commenced on 15 December 2020)
- Major Update 2 and 3 (Council finalising review of submissions after second consultation period concluded on 10 June 2020)
- The Spit Master Plan Implementation (commenced on 15 December 2020)
- Landslide hazard mapping (being prepared).

Note

The City of Gold Coast Council (CoGC), in collaboration with the Griffith University Cities Research Institute (GU-CRI), has developed an urban growth model called Planning & Urban Growth (PUG). Once approved by council, the growth projections delivered by the PUG model will be used to inform a major amendment to the LGIP. The PUG is also jointly funded by the Queensland Government Round 2 Innovation Funding program to assist City of Gold Coast to develop a more reliable and consistent urban modelling framework to inform future amendment to City Plan and LGIP.

Significant re-baselining of the existing land use database against the ABS 2016 Population Census data was completed by the project to ensure the model is as consistent with the Census as possible. The PUG model has also taken into consideration all development and building approvals up to a point in time (being February 2019) to ensure investments by the development industry sector are

captured and accounted for in development projections. The City of Gold Coast with support of the GU-CRI has also recalibrated the realistic estimation of development yields at small area level across all land use designations and zonings on the Gold Coast in order to establish a more reliable and realistic ultimate development scenario. This is a clear shift in the consideration of development capacity from the conventional “ultimate capacity at 50 years horizon” nominal approach commonly adopted by various councils and utility providers.

The preliminary findings and assessment of the PUG model works have revealed that the City of Gold Coast has more realistic ultimate development capacity post 2041 and 2066 horizons based on designations in the current City Plan.

Once finalised, outputs from the PUG model are expected to inform future LSDM reports.

Ipswich

- Identify parcels within the consolidation and expansion areas
- Determine capacity

From 2016 onwards, extract the total number of additional dwellings from 2016 to the identified ultimate dwellings by consolidation and expansion areas.

From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the capacity from 2016 onwards.

- Determine realistic availability

Consolidation

No estimate of the consolidation realistic availability has been made. Ongoing research is being undertaken to improve the estimate of realistic availability in consolidation areas.

Expansion

Realistic availability from 2016 onwards is calculated by removing any dwellings assumed unavailable for development to 2041 from the total local government expansion area’s capacity.

The calculations were different depending on whether an area is within an identified growth area or fragmented area and/or is inside or outside the Current Intent to Service layer as follows:

- For growth areas:

For the Ripley Valley PDA and Springfield, as they are inside the Current Intent to Service layer, dwellings were identified as assumed unavailable for development to 2041 using the information identified in the SGS report (Appendix C, Table C1), i.e. its ‘Base capacity’ minus its ‘Estimated supply to 2041’.

- For fragmented areas:

Subject to variations based on the Current Intent to Service layer below, 2013 BHS rules for calculating expected yield from theoretical yield are used, including

identified proportions for selected zones and parcel-size ranges (see Appendix B), as follows:

- Identify parcels greater than 2500m² (BHS cut-off) and zoned for low density residential purposes (see Appendix B for the selected zones) within the expansion area and not within the Ripley Valley PDA or Springfield growth areas.
- Using these identified parcels, select parcels where:
 - there is dwelling growth from 2021 to ultimate (it is assumed that the identified dwelling growth to 2021 is all realistically available for development to 2041, as an allowance for development approvals existing at the time of dataset creation), and
 - the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
- Calculate the capacity of these selected areas by totalling the additional dwellings from 2021 to ultimate.
- Calculate the realistic availability of the selected areas using the identified proportions (see Appendix B) multiplied by the capacity for those areas.
- Calculate the assumed unavailable fragmented dwellings as: capacity minus realistic availability.
- For areas within the Current Intent to Service layer without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
- For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Identify all parcels where the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the total capacity of these areas by totalling the additional dwellings from 2021 to ultimate and assume all such dwellings are unavailable. Note: it has been considered that areas outside the Current Intent to Service layer and inside the Urban Footprint are not currently realistically available. This is based on the approach that these areas are intended for urban development (requiring trunk infrastructure to service them) but no decisions, agreements or planning are currently in place to service them.
- For areas outside the Current Intent to Service layer, outside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
- Calculate overall expansion realistic availability:

- From 2016 onwards, [Total expansion area capacity from 2016 onwards minus assumed unavailable dwellings in growth areas minus assumed unavailable dwellings inside and outside the Current Intent to Service layer]. Note: In addition to considering existing and available development approvals, dwelling growth up to 2021 has also been assumed to be realistically available.
 - From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the realistic availability from 2016 onwards.
- Determine years of supply

Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply sought by *ShapingSEQ 2017*. The calculations are as follows:

Consolidation

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of consolidation dwellings expected 2016-2031 in order to align with the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

Expansion

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified expansion area capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of expansion dwellings expected 2016-2031 in order to align with the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

For realistic availability, subtract the 2016-21 constructed dwellings estimate from the identified expansion realistic availability from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark.

- Identify planning scheme amendments

The following list identifies planning scheme amendments recently adopted or in process that may affect planned dwelling supply in Ipswich:

 - New planning scheme in preparation (preparing draft planning scheme).

Lockyer Valley

- As Lockyer Valley does not contain any consolidation areas all parcels are within the expansion area.

Note: Lockyer Valley calculations are based on the number of residential equivalent demand units (EDUs), which based on the corresponding LGIP are only slightly different to the number of dwellings and are therefore counted as dwellings.
- Determine capacity

From 2016 onwards, extract the total number of additional dwellings from 2016 to the identified ultimate dwellings.

From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the capacity from 2016 onwards.

- Determine realistic availability

Expansion

Realistic availability from 2016 onwards is calculated by removing any dwellings assumed unavailable for development to 2041 from the total local government expansion area's capacity. The calculations were different depending on whether an area is within an identified growth area or fragmented area and/or is inside or outside the Current Intent to Service layer as follows:

- For growth areas:
 - Lockyer Valley does not contain any identified growth areas.
- For fragmented areas:
 - Subject to variations based on the Current Intent to Service layer below, 2013 BHS rules for calculating expected yield from theoretical yield are used, including identified proportions for selected zones and parcel-size ranges (see Appendix B), as follows:
 - Identify parcels greater than 2500m² (BHS cut-off) and zoned for low density residential purposes (see Appendix B for selected zones), within the expansion area.
 - Using these identified parcels, select parcels where:
 - there is dwelling growth from 2021 to ultimate (it is assumed that the identified dwelling growth to 2021 is all realistically available for development to 2041, as an allowance for development approvals existing at the time of dataset creation) and
 - the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the capacity of these selected areas by totalling the additional dwellings from 2021 to ultimate.
 - Calculate the realistic availability of these areas using the identified proportions (see Appendix B) multiplied by the capacity for those areas.
 - Calculate the assumed unavailable fragmented dwellings as: capacity minus realistic availability.
 - For areas within the Current Intent to Service layer without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.

- For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Identify all parcels where the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the total capacity of these areas by totalling the additional dwellings from 2021 to ultimate and assume all such dwellings are unavailable. Note: it has been considered that areas outside the Current Intent to Service layer and inside the Urban Footprint are not currently realistically available. This is based on the approach that these areas are intended for urban development (requiring trunk infrastructure to service them) but no decisions, agreements or planning are currently in place to service them.
- For areas outside the Current Intent to Service layer, outside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
- Calculate overall expansion realistic availability
 - From 2016 onwards, [Total expansion area capacity from 2016 onwards minus assumed unavailable dwellings in growth areas minus assumed unavailable dwellings inside and outside the Current Intent to Service layer]. Note: In addition to considering existing and available development approvals, dwelling growth up to 2021 has also been assumed to be realistically available.
 - From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the realistic availability from 2016 onwards.
- Determine years of supply

Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply sought by *ShapingSEQ 2017*. The calculations are as follows:

Expansion

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified expansion area capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of expansion dwellings expected 2016-2031 in order to align with the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

For realistic availability, subtract the 2016-21 constructed dwellings estimate from the identified expansion realistic availability from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark.

- Identify planning scheme amendments

The following list provides planning scheme amendments either recently adopted or in process that may affect planned dwelling supply in Lockyer Valley:

- New planning scheme in preparation (undergoing first state interest review).

Logan

- Identify parcels within the consolidation and expansion areas.
- Determine capacity

From 2016 onwards, extract the total number of additional dwellings from 2020 to the identified ultimate dwellings by consolidation and expansion areas and add in the 2016-2020 constructed dwellings estimate.

From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the capacity from 2016 onwards.

Note: The method for determining capacity in Logan varies from most other areas because the new planning assumptions data provided by the Council in 2021 has a base date of June 2020 rather than 2016.

- Determine realistic availability

Consolidation

No estimate of the consolidation realistic availability has been made. Ongoing research is being undertaken to improve the estimate of realistic availability in consolidation areas.

Expansion

Realistic availability from 2016 onwards is calculated by removing any dwellings assumed unavailable for development to 2041 from the total local government expansion area's capacity. The calculations were different depending on whether an area is within an identified growth area or fragmented area and/or is inside or outside the Current Intent to Service layer as follows:

- For growth areas:

For Greater Flagstone and Yarrabilba PDAs and Flinders, as they are inside the Current Intent to Service layer, dwellings were identified as assumed unavailable for development to 2041 using information in the SGS report (Appendix C, Table C1), i.e. its 'Base capacity' minus its 'Estimated supply to 2041'.

- For fragmented areas:

Subject to variations based on the Current Intent to Service layer below, 2013 BHS rules for calculating expected yield from theoretical yield are used, including identified proportions for selected zones and parcel-size ranges (see Appendix B), as follows:

- Identify parcels greater than 2500m² (BHS cut-off) and zoned for low density residential purposes (see Appendix B for the selected zones), within the

expansion area and not within Greater Flagstone and Yarrabilba PDAs and Flinders growth areas.

- Using these identified parcels, select parcels where:
 - there is dwelling growth from 2021 to ultimate (it is assumed that the identified dwelling growth to 2021 is all realistically available for development to 2041, as an allowance for development approvals existing at the time of dataset creation) and
 - the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the capacity of these selected areas by totalling the additional dwellings from 2021 to ultimate.
 - Calculate the realistic availability of the selected areas using the identified proportions (see Appendix B) multiplied by the capacity for those areas.
 - Calculate the assumed unavailable fragmented dwellings as: capacity minus realistic availability.
- For areas within the Current Intent to Service layer without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Identify all parcels where the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the total capacity of these areas by totalling the additional dwellings from 2021 to ultimate and assume all such dwellings are unavailable. Note: it has been considered that areas outside the Current Intent to Service layer and inside the Urban Footprint are not currently realistically available. This is based on the approach that these areas are intended for urban development (requiring trunk infrastructure to service them) but no decisions, agreements or planning are currently in place to service them.
 - For areas outside the Current Intent to Service layer, outside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - Calculate overall expansion realistic availability
 - From 2016 onwards, [Total expansion area capacity from 2016 onwards minus assumed unavailable dwellings in growth areas minus assumed unavailable dwellings inside and outside the Current Intent to Service layer]. Note: In addition to considering existing and available development

approvals, dwelling growth up to 2021 has also been assumed to be realistically available.

- From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the realistic availability from 2016 onwards.
- Determine years of supply

Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply sought by *ShapingSEQ 2017*.

Consolidation

For capacity, subtract the 2016-21 constructed dwelling estimate from the identified capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of consolidation dwellings expected 2016-2031 to align with the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

Expansion

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified expansion area capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of expansion dwellings expected 2016-2031 in order to align to the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

For realistic availability, subtract the 2016-21 constructed dwellings estimate from the identified expansion realistic availability from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark.

- Identify planning scheme amendments

The following list identifies planning scheme amendments either recently adopted or in process that may affect planned dwelling supply in Logan:

- Logan City Council has decided to prepare a new planning scheme (intended to be completed by 2025)
- Meadowbrook Local Plan Amendment (expected to be adopted late 2022)
- Springwood Local Plan amendment (on hold – under review)

Note:

Logan City Council has advised that the new Logan Growth Model (previously the Logan Development Projections Model), which has informed the 2021 LSDM Report, is an improved fit-for-purpose model that reflects best practice growth modelling to predict growth and capacity across the City of Logan. The model incorporates revised dwelling density assumptions based on the existing development pipeline and recent development trends, housing studies, the latest planning scheme amendments, improved developability and constraints analysis, bespoke research and new data layers to inform developability and sequencing.

Moreton Bay

- Identify parcels within the consolidation and expansion areas
- Determine capacity

From 2016 onwards, extract the total number of additional dwellings from 2016 to the identified ultimate dwellings by consolidation and expansion areas.

From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the capacity from 2016 onwards.

- Determine realistic availability

Consolidation

No estimate of the consolidation realistic availability has been made. Ongoing research is being undertaken to improve the estimate of realistic availability in consolidation areas.

Expansion

Realistic availability from 2016 onwards is calculated by removing any dwellings assumed unavailable for development to 2041 from the total local government expansion area's capacity. The calculations were different depending on whether an area is within an identified growth area or fragmented area and/or is inside or outside the Current Intent to Service layer as follows:

- For growth areas:

For Caboolture West and North East Business Park, capacity was first determined by selecting all parcels within the growth area, within the Urban Footprint. This capacity is the total dwelling growth from 2016 to ultimate dwellings for the growth areas.

Calculate dwellings assumed unavailable for development to 2041 by:

- For North East Business Park, as it is inside the Current Intent to Service layer, dwellings were identified as assumed unavailable for development to 2041 using the information in the SGS report (Appendix C, Table C1), i.e. its 'Base capacity' minus its 'Estimated supply to 2041':
- Caboolture West is not within the identified Current Intent to Service layer, therefore for this report its total dwelling supply has been assumed unavailable for development to 2041 (see 'Base capacity' in Table C1 in Appendix C).

- For fragmented areas:

Subject to variations based on the Current Intent to Service layer below, 2013 BHS rules for calculating expected yield from theoretical yield are used, including identified proportions for selected zones and parcel-size ranges (see Appendix B), as follows:

- Identify parcels greater than 2500m² (BHS cut-off) and zoned for low density residential purposes (see Appendix B for the selected zones), within the expansion area and not within Caboolture West and North East Business Park growth areas.

- Using these identified parcels, select parcels where:
 - there is dwelling growth from 2021 to ultimate (it is assumed that the identified dwelling growth to 2021 is all realistically available for development to 2041, as an allowance for development approvals existing at the time of dataset creation), and
 - ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the capacity of these selected areas by totalling the additional dwellings from 2021 to ultimate.
 - Calculate the realistic availability of the selected areas using the identified proportions (see Appendix B) multiplied by capacity for those areas.
 - Calculate the unavailable fragmented dwellings as: capacity minus realistic availability.
 - For areas within the Current Intent to Service layer without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Identify all parcels where the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the total capacity of these areas by totalling the additional dwellings from 2021 to ultimate and assume all such dwellings are unavailable. Note: it has been considered that areas outside the Current Intent to Service layer and inside the Urban Footprint are not currently realistically available. This is based on the approach that these areas are intended for urban development (requiring trunk infrastructure to service them) but no decisions, agreements or planning are currently in place to service them.
 - For areas outside the Current Intent to Service layer, outside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - Calculate overall expansion realistic availability:
 - From 2016 onwards, [Total expansion area capacity from 2016 onwards minus assumed unavailable dwellings in growth areas and minus assumed unavailable dwellings inside and outside the Current Intent to Service layer]. Note: In addition to considering existing and available development approvals, dwelling growth up to 2021 has also been assumed to be realistically available.

- From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the realistic availability from 2016 onwards.
- Determine years of supply

Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply sought by *ShapingSEQ 2017*. The calculations are as follows:

Consolidation

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of consolidation dwellings as expected 2016-2031 in order to align with the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

Expansion

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified expansion area capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of expansion dwellings as expected 2016-2031 in order to align to the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

For realistic availability, subtract the 2016-21 constructed dwellings estimate from the identified expansion realistic availability from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark.

- The following list identifies planning scheme amendments either recently adopted or in process that may affect planned dwelling supply in Moreton Bay:
 - Neighbourhood Development Plan No.1 (NDP1) of the Caboolture West Local Plan (effective from 26 October 2021)
 - Temporary Local Planning Instrument No.2 of 2021 Morayfield South Emerging Community Area (effective from 15 September 2021)
 - Planning scheme tailored amendment no.1 (commenced 29 January 2020).

Note:

Moreton Bay Regional Council has advised that the LSDM 2021 is the first report to reflect Council's October 2019 adopted planning assumptions. These planning assumptions do not yet reflect the outcomes of Council's Regional Growth Management Strategy 2041 and current planning for growth areas such as Caboolture West and Morayfield South, which are all in development. Council remains committed to collaborate with all parties involved to achieve a well-planned region.

Noosa

- Identify parcels within the consolidation and expansion areas.
- Determine capacity

From 2016 onwards, extract the total number of additional dwellings from January 2017 to the identified ultimate dwellings by consolidation and expansion areas and add in the July 2016 to December 2016 constructed dwellings estimate.

From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the capacity from 2016 onwards.

Note: The method for determining capacity in Noosa varies from most other areas because the new planning assumptions data provided by Unitywater for the Council in 2021 has a base date of January 2017 rather than 2016

- Determine realistic availability

Consolidation

No estimate of the consolidation realistic availability has been made. Ongoing research is being undertaken to improve the estimate of realistic availability in consolidation areas.

Expansion

Realistic availability from 2016 onwards is calculated by removing any dwellings assumed unavailable for development to 2041 from the total local government expansion area's capacity. The calculations were different depending on whether an area is within an identified growth area or fragmented area and/or is inside or outside the Current Intent to Service layer as follows:

- For growth areas:

Noosa does not contain any identified growth areas.

- For fragmented areas:

Subject to variations based on the Current Intent to Service layer below, 2013 BHS rules for calculating expected yield from theoretical yield are used, including identified proportions for selected zones and parcel-size ranges (see Appendix B), as follows:

- Identify parcels greater than 2500m² (BHS cut-off) and zoned for low density residential purposes (see Appendix B for selected zones), within the expansion area.
- Using these identified parcels, select parcels where:
 - there is dwelling growth from 2021 to ultimate (it is assumed that the identified dwelling growth to 2021 is all realistically available for development to 2041, as an allowance for development approvals existing at the time of dataset creation), and
 - the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
- Calculate the capacity of these selected areas by totalling the additional dwellings from 2021 to ultimate.

- Calculate the realistic availability of the selected areas using the identified proportions (see Appendix B) multiplied by the capacity for those areas.
 - Calculate the assumed unavailable fragmented dwellings as: capacity minus realistic availability.
 - For areas within the Current Intent to Service layer without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Identify all parcels where the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the total capacity of these areas by totalling the additional dwellings from 2021 to ultimate and assume all such dwellings are unavailable. Note: it has been considered that areas outside the Current Intent to Service layer and inside the Urban Footprint are not currently realistically available. This is based on the approach that these areas are intended for urban development (requiring trunk infrastructure to service them) but no decisions, agreements or planning are currently in place to service them.
 - For areas outside the Current Intent to Service layer, outside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - Calculate overall expansion realistic availability
 - From 2016 onwards, [Total expansion area capacity from 2016 onwards minus assumed unavailable dwellings inside and outside the Current Intent to Service layer]. Note: In addition to considering existing and available development approvals, dwelling growth up to 2021 has also been assumed to be realistically available.
 - From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the realistic availability from 2016 onwards.
- Determine years of supply

Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply sought by *ShapingSEQ 2017*. The calculations are as follows:

Consolidation

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of consolidation dwellings expected

2016-2031 in order to align with the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

Expansion

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified expansion area capacity from 2016 onwards and divide this by *ShapingSEQ 2017*'s adjusted average annual benchmark, i.e. the average annual growth of expansion dwellings expected 2016-2031 in order to align with the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*). For realistic availability, subtract the 2016-21 constructed dwellings estimate from the identified expansion realistic availability from 2016 onwards and divide this by *ShapingSEQ 2017*'s adjusted average annual benchmark.

- Identify planning scheme amendments

The following list identifies planning scheme amendments either recently adopted or in process that may affect planned dwelling supply:

- Nil

Note:

The key changes that have resulted in the reported increased capacity of planned dwelling supply, based on the new planning assumptions used for the 2021 LSDM Report, include:

- provision in the new Noosa Plan 2020 for high and medium density residential on some sites not previously zoned for such use
- additional capacity in town centres of all sizes for small dwellings (less than 100 m²), and
- increased density and bonus density provisions.

The calculation of dwelling yield was also done assuming small dwellings to achieve the highest possible yield on all sites. The dwelling numbers reported in the 2021 LSDM Report do, however, exclude growth of 1671 secondary dwellings (1476 consolidation and 195 expansion) estimated by the new planning assumptions, consistent with the Best practice research approach to measuring dwellings (see the Measuring development Best practice research).

Redland

- Parcel-level information was not readily available for Redland. Therefore, an estimate of the capacity of the Redland's consolidation and expansion areas was based on the Redland Land Supply Review 2014, Urbis (2014 study). This was used to estimate Redland's ultimate development growth from 2016 based on:
 - Aligning the relevant locations provided in the report with either the City's consolidation and expansion areas as best as possible by location, zoning and lot size information.
 - Where reported dwelling yields were distributed across the city, breakdowns for consolidation and expansion areas were proportionally calculated based on the relevant zoned land in each area.

- As the report identified circumstances as at January 2014, an estimate of dwelling construction to June 2016 was made using building approvals from January 2013 to June 2015 to estimate remaining capacity as at June 2016.
- Determine capacity
 - From 2016 onwards:
 - Using the above approach extract the total number of additional dwellings by consolidation and expansion areas.
 - Subtract the estimate of dwelling construction from January 2014 to June 2016
 - As the 2014 study did not include an estimate for Southern Redland Bay (Shoreline), the estimated dwelling yield of this area was added to the calculated expansion area capacity (see Table C1 in Appendix C), i.e. the 'Base capacity'.

From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the capacity from 2016 onwards.

- Determine realistic availability

Consolidation

No estimate of the consolidation realistic availability has been made. Ongoing research is being undertaken to improve the estimate of realistic availability in consolidation areas.

Expansion

As parcel-level information was not available for this analysis, realistic availability was calculated by using the findings of the SGS report and BHS information as follows:

- For growth areas:
 - For Southern Redland Bay (Shoreline), as it is included in the Current Intent to Service layer, dwellings were identified as assumed unavailable for development to 2041 using the information identified in the SGS report (Appendix C, Table C1), i.e. its 'Base capacity' minus its 'Estimated supply to 2041'.
- For areas inside and outside the Current Intent to Service layer
 - Dwellings were assumed unavailable for development using the 2013 BHS (adjusted to account for development to June 2021) by:
 - For areas within the Current Intent to Service layer without a development approval, preliminary approval or infrastructure agreement, calculating 'Theoretical yield' minus 'Expected yield'
 - For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement, including all of the 'Theoretical yield'. Note: it has been considered that areas outside the Current Intent to Service layer and inside the Urban Footprint are not currently realistically available. This is based on the approach that these areas are intended for urban

development (requiring trunk infrastructure to service them) but no decisions, agreements or planning are currently in place to service them.

- For areas outside the Current Intent to Service layer, outside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement, calculating 'Theoretical yield' minus 'Expected yield'.
 - Calculate overall expansion realistic availability:
 - From 2016 onwards, [Total expansion area capacity from 2016 onwards minus assumed unavailable dwellings in growth areas minus assumed unavailable dwellings inside and outside the Current Intent to Service layer].
 - From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the realistic availability from 2016 onwards.
- Determine years of supply

Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply sought by *ShapingSEQ 2017*. The calculations are as follows:

Consolidation

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of consolidation dwellings expected 2016-2031 in order to align to the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

Expansion

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified expansion area capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of expansion dwellings expected 2016-2031 in order to align to the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

For realistic availability, subtract the 2016-21 constructed dwellings estimate from the identified expansion realistic availability from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark.

- Identify planning scheme amendments
- The following identifies a list of planning and development scheme amendments recently adopted or in process that may affect planned dwelling supply in Redland:
- Development in the Toondah Harbour and Weinam Creek PDAs is subject to ongoing planning and approval processes, so no changes were made to the yields estimated by the 2014 study for those areas for the purposes of the LSDM Report.
 - Major planning scheme amendment package (01/19) (adopted 29 January 2020).
 - Southern Thornlands Potential Future Growth Area (STPFGA) amendment (02/21) (consideration ongoing).

- Major Amendment Package (04/20): Medium density residential zone code review (consideration ongoing).
- Major Amendment – General (02/20) (being prepared).
- Major Amendment (South West Victoria Point Local Plan) (05/19) (consideration ongoing).

Scenic Rim

- As Scenic Rim does not contain any consolidation areas, all parcels are within the expansion area.
- Determine capacity

From 2016 onwards, extract the total number of additional dwellings from 2016 to the identified ultimate dwellings.

From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the capacity from 2016 onwards.

- Determine realistic availability

Expansion

Realistic availability is calculated by removing any dwellings assumed unavailable for development to 2041 from the local government expansion area's capacity. The calculations were different depending on whether an area is within an identified growth area or fragmented area and/or is inside or outside the Current Intent to Service layer as follows:

- For growth areas:

Scenic Rim does not contain any identified growth areas.

- For fragmented areas:

Subject to variations based on the Current Intent to Service layer below, 2013 BHS rules for calculating expected yield from theoretical yield are used, including identified proportions for selected zones and parcel-size ranges (see Appendix B), as follows:

- Identify parcels greater than 2500m² (BHS cut-off) and zoned for low density residential purposes (see Appendix B for the selected zones), within the expansion area.
- Using these identified parcels, select parcels where:
 - there is dwelling growth from 2021 to ultimate (it is assumed that the identified dwelling growth to 2021 is all realistically available for development to 2041, as an allowance for development approvals existing at the time of dataset creation) and
 - the ultimate dwellings are greater than one (effectively counting all single dwellings on vacant lots as realistically available).

- Calculate the capacity of these selected areas by totalling the additional dwellings from 2021 to ultimate.
 - Calculate the realistic availability of the selected areas using the identified proportions (see Appendix B) multiplied by the capacity for those areas.
 - Calculate the assumed unavailable fragmented dwellings as: capacity minus realistic availability.
 - For areas within the Current Intent to Service layer without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Identify all parcels where the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the total capacity of these areas by totalling the additional dwellings from 2021 to ultimate and assume all such dwellings are unavailable. Note: it has been considered that areas outside the Current Intent to Service layer and inside the Urban Footprint are not currently realistically available. This is based on the approach that these areas are intended for urban development (requiring trunk infrastructure to service them) but no decisions, agreements or planning are currently in place to service them.
 - For areas outside the Current Intent to Service layer, outside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - Calculate overall expansion realistic availability
 - From 2016 onwards, [Total expansion area capacity from 2016 onwards minus assumed unavailable dwellings inside and outside the Current Intent to Service layer]. Note: In addition to considering existing and available development approvals, dwelling growth up to 2021 has also been assumed to be realistically available.
 - From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the realistic availability from 2016 onwards.
- Determine years of supply

Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply sought by *ShapingSEQ* 2017. The calculations are as follows

Expansion

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified expansion area capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of expansion dwellings expected 2016-2031 to align with the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

For realistic availability, subtract the 2016-21 constructed dwellings estimate from the identified expansion realistic availability from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark.

- Identify planning scheme amendments in process

The following list identifies planning scheme amendments either recently adopted or in process that may affect planned dwelling supply in Scenic Rim:

- Scenic Rim Planning Scheme 2020 (commenced 20 March 2020)
- Scenic Rim Growth Management Strategy (in preparation to inform future planning scheme amendments).

Somerset

- As Somerset does not contain any consolidation areas all parcels are within the expansion area.

Note: Somerset calculations are based on the number of residential equivalent demand units (EDUs), which based on the corresponding LGIP are only slightly different to the number of dwellings and are therefore counted as dwellings.

- Determine capacity

From 2016 onwards, extract the total number of additional dwellings from 2016 to the identified ultimate dwellings.

From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the capacity from 2016 onwards.

- Determine realistic availability

Expansion

Realistic availability from 2016 onwards is calculated by removing any dwellings assumed unavailable for development to 2041 from the total local government expansion area's capacity. The calculations were different depending on whether an area is within an identified growth area or fragmented area and/or is inside or outside the Current Intent to Service layer as follows:

- For growth areas:
Somerset does not contain any identified growth areas.
- For fragmented areas:
Subject to variations based on the Current Intent to Service layer below, 2013 BHS rules for calculating expected yield from theoretical yield are used, including

identified proportions for selected zones and parcel-size ranges (see Appendix B), as follows:

- Identify parcels greater than 2500m² (BHS cut-off) and zoned for low density residential purposes (see Appendix B for selected zones), within the expansion area.
- Using these identified parcels, select parcels where:
 - there is dwelling growth from 2021 to ultimate (it is assumed that the identified dwelling growth to 2021 is all realistically available for development to 2041, as an allowance for development approvals existing at the time of dataset creation), and
 - the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
- Calculate the capacity of these selected areas by totalling the additional dwellings from 2021 to ultimate.
- Calculate the realistic availability of the selected areas using the identified proportions (see Appendix B) multiplied by the capacity for those areas.
- Calculate the assumed unavailable fragmented dwellings as: capacity minus realistic availability.
- For areas within the Current Intent to Service layer without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
- For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Identify all parcels where the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the total capacity of these areas by totalling the additional dwellings from 2021 to ultimate and assume all such dwellings are unavailable. Note: it has been considered that areas outside the Current Intent to Service layer and inside the Urban Footprint are not currently realistically available. This is based on the approach that these areas are intended for urban development (requiring trunk infrastructure to service them) but no decisions, agreements or planning are currently in place to service them.
- For areas outside the Current Intent to Service layer, outside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
- Calculate overall expansion realistic availability

- From 2016 onwards, [Total expansion area capacity from 2016 onwards minus assumed unavailable dwellings inside and outside the Current Intent to Service layer]. Note: In addition to considering existing and available development approvals, dwelling growth up to 2021 has also been assumed to be realistically available.
 - From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the realistic availability from 2016 onwards.
- Determine years of supply

Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply sought by *ShapingSEQ* 2017. The calculations are as follows:

Expansion

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified expansion area capacity from 2016 onwards and divide this by *ShapingSEQ* 2017's adjusted average annual benchmark, i.e. the average annual growth of expansion dwellings expected 2016-2031 to align with the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ* 2017).

For realistic availability, subtract the 2016-21 constructed dwellings estimate from the identified expansion realistic availability from 2016 onwards and divide this by *ShapingSEQ* 2017's adjusted average annual benchmark.

- Identified planning scheme amendments

The following list identifies planning scheme amendments either recently adopted or in process that may affect planned dwelling supply in Somerset:

- Major amendment – Somerset Regional Planning Scheme version 4 (commenced 2 November 2020)

Sunshine Coast

- Identify parcels within the consolidation and expansion areas.

Note: Sunshine Coast Council supplied information included assumptions about future dwellings that may result from the Beerwah East Major Development Area (BEMDA) and future dwelling density increases associated with the Enterprise Corridor.

The LSDM Report seeks to describe planned dwelling supply, i.e. dwellings that could be approved under the current zoning and code provisions of planning schemes. As the expected future dwelling density increases associated with the Enterprise Corridor have not been incorporated within the current Sunshine Coast planning scheme, the LSDM Report calculations have sought to exclude any future density increases attributed to the Enterprise Corridor.

Effectively, for this analysis any additional dwellings assumed for the BEMDA and Enterprise Corridor beyond 2031 are not reported.

The Sunshine Coast Council supplied information did not capture an increase in dwelling yield in the Maroochydore City Centre PDA resulting from the development scheme

amendment adopted 9 August 2019. The increased dwelling yield to 4000 dwellings has been reflected in the 2020 and 2021 LSDM Report calculations. The inclusion of the increased yield in LSDM reporting is considered appropriate as the amendment to the development scheme has been adopted by Council and construction activity within the PDA is advanced.

In addition, the information supplied did not include data for ultimate development, therefore the 2041 data has been used as ultimate for this analysis.

- Determine capacity

From 2016 onwards, extract the total number of additional dwellings from 2016 to the identified ultimate (in this case 2041) dwellings by consolidation and expansion areas.

From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the capacity from 2016 onwards.

- Determine realistic availability

Consolidation

No estimate of the consolidation realistic availability has been made. Ongoing research is being undertaken to improve the estimate of realistic availability in consolidation areas.

Expansion

Realistic availability from 2016 onwards is calculated by removing any dwellings assumed unavailable for development to 2041 from the total local government expansion area's capacity. The calculations were different depending on whether an area is within an identified growth area or fragmented area and/or is inside or outside the Current Intent to Service layer as follows:

- For growth areas:

For Caloundra South PDA and Palmview, as they are included in the Current Intent to Service layer, dwellings were identified as assumed unavailable for development to 2041 using the information in the SGS report (Appendix C, Table C1), i.e. its 'Base capacity' minus its 'Estimated supply to 2041'.

- For fragmented areas:

Subject to variations based on the Current Intent to Service layer below, 2013 BHS rules for calculating expected yield from theoretical yield are used, including identified proportions for selected zones and parcel-size ranges (see Appendix B), as follows:

- Identify parcels greater than 2500m² (BHS cut-off) and zoned for low density residential purposes (see Appendix B for selected zones), within the expansion area and not within the Caloundra South PDA or Palmview growth area.
- Using these identified parcels, select parcels where:

- there is dwelling growth from 2021 to ultimate (it is assumed that the identified dwelling growth to 2021 is all realistically available for development to 2041, as an allowance for development approvals existing at the time of dataset creation), and
 - the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the capacity of these selected areas by totalling the additional dwellings from 2021 to ultimate.
 - Calculate the realistic availability of the selected areas using the identified proportions (see Appendix B) multiplied by the capacity for those areas.
 - Calculate the assumed unavailable fragmented dwellings as: capacity minus realistic availability.
- For areas within the Current Intent to Service layer without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Identify all parcels where the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the total capacity of these areas by totalling the additional dwellings from 2021 to ultimate. and assume all such dwellings are unavailable. Note: it has been considered that areas outside the Current Intent to Service layer and inside the Urban Footprint are not currently realistically available. This is based on the approach that these areas are intended for urban development (requiring trunk infrastructure to service them) but no decisions, agreements or planning are currently in place to service them.
 - For areas outside the Current Intent to Service layer, outside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - Calculate overall expansion realistic availability
 - From 2016 onwards, [Total expansion area capacity from 2016 onwards minus assumed unavailable growth area dwellings minus assumed unavailable dwellings inside and outside the Current Intent to Service layer]. Note: In addition to considering existing and available development approvals, dwelling growth up to 2021 has also been assumed to be realistically available.

- From 2021 onwards, subtract the 2016-21 constructed dwellings estimate from the realistic availability from 2016 onwards.
- Determine years of supply

Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply sought by *ShapingSEQ 2017*. The calculations are as follows:

Consolidation

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of consolidation dwellings expected 2016-2031 in order to align to the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

Expansion

For capacity, subtract the 2016-21 constructed dwellings estimate from the identified expansion area capacity from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of expansion dwellings expected 2016-2031 in order to align to the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

For realistic availability, subtract the 2016-21 constructed dwellings estimate from the identified expansion realistic availability from 2016 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark.

- Identify planning scheme amendments

The following list identifies planning and development scheme amendments either recently adopted or in process that may affect the planned dwelling supply in Sunshine Coast:

- Sunshine Coast Council has decided to prepare a new planning scheme (intended to be completed by 2024)
- Amendments to incorporate the Caloundra Centre Masterplan (adopted 9 September 2019)
- Site Specific (Additional South East Queensland Regional Plan 2017 sites and other zoning matters), in process

In addition, Sunshine Coast Council use expert analysis to estimate the dwelling take up to 2041 at an individual lot level. Consequently, the Sunshine Coast Council supplied information did not include data for ultimate development, therefore the 2041 data has been used as ultimate for this analysis.

In the 2019, 2020 and 2021 LSDM reports, an additional 1,240 dwellings from six sites have been included within the Current Intent to Service Layer and the realistic availability scenario for the Sunshine Coast expansion area. This is based on the inclusion of these sites within Sunshine Coast Planning Scheme 2014's Urban Growth Management Boundary and supporting infrastructure investigations provided by Council.

Toowoomba

- Identify parcels within the consolidation and expansion areas.
- Determine capacity

Extract the total number of additional dwellings from 2021 to the identified ultimate dwellings by consolidation and expansion areas.

Note: The method for determining capacity in Toowoomba varies from most other areas because the new Business-as-Usual model planning assumptions data provided by the Council in 2021 has a base date of 2021 rather than 2016.

- Determine realistic availability

Consolidation

No estimate of the consolidation realistic availability has been made. Ongoing research is being undertaken to improve the estimate of realistic availability in consolidation areas.

Expansion

Realistic availability from 2021 onwards is calculated by removing any dwellings assumed unavailable for development to 2041 from the total local government expansion area's capacity. The calculations were different depending on whether an area is within an identified growth area or fragmented area and/or inside or outside the Current Intent to Service Layer as follows:

- For growth areas:

For Mt Kynoch, as it is predominantly included in the Current Intent to Service layer, dwellings were identified as assumed unavailable for development to 2041 using the information in the SGS report, (Appendix C, Table C1), i.e. its 'Base capacity' minus its 'Estimated supply to 2041'.

For Meringandan West-Kleinton, as it is predominantly not within the identified Current Intent to Service layer, for this report its dwelling supply has been assumed unavailable for development (see 'Base capacity' in Table C1 in Appendix C).

- For fragmented areas:

Subject to variations based on the Current Intent to Service Layer below, 2012 BHS rules for calculating expected yield from theoretical yield are used, including identified proportions for selected zones and parcel-size ranges (see Appendix B), as follows:

- Identify parcels greater than 2500 m² (BHS cut-off) and zoned for low density residential purposes (see Appendix B for selected zones), within the expansion area and not within Mount Kynoch and Meringandan West-Kleinton growth areas.
- Using these identified parcels, select parcels where:
 - there is dwelling growth from 2021 to ultimate, and

- the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available).
 - Calculate the capacity of these selected areas by totalling the additional dwellings from 2021 to ultimate.
 - Calculate the realistic availability of the selected areas using the identified proportions (see Appendix B) multiplied by the capacity of those areas.
 - Calculate the assumed unavailable fragmented dwellings as capacity minus realistic availability.
 - For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - For areas outside the Current Intent to Service layer, inside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Identify all parcels where the ultimate dwellings are greater than one (effectively counting all single dwellings developed on vacant lots as realistically available)
 - Calculate the total capacity of these areas by totalling dwellings from 2021 to ultimate and assume all such dwellings are unavailable. Note: It has been considered that areas outside the Current Intent to Service layer and inside the Urban Footprint are not currently realistically available. This is based on the approach that these areas are intended for urban development (requiring trunk infrastructure to service them) but no decisions, agreements or planning are in place to service them.
 - For areas outside the Current Intent to Service layer, outside the Urban Footprint and without a development approval, preliminary approval or infrastructure agreement:
 - Calculate the assumed unavailable fragmented area dwellings as above for fragmented areas generally.
 - Calculate overall expansion realistic availability
 - From 2021 onwards, [Total expansion area capacity minus assumed unavailable dwellings in growth areas minus assumed unavailable dwellings inside and outside the Current Intent to Service layer].
- Determine years of supply

Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply sought by *ShapingSEQ 2017*. The calculations are as follows:

Consolidation

For capacity, take the identified capacity from 2021 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of consolidation dwellings expected 2016-2031 to align to the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

Expansion

For capacity, take the identified expansion area capacity from 2021 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark, i.e. the average annual growth of expansion dwellings expected 2016-2031 to align to the 2041 dwelling supply benchmark (Figure 7 within *ShapingSEQ 2017*).

For realistic availability, take the identified expansion realistic availability from 2021 onwards and divide this by *ShapingSEQ 2017's* adjusted average annual benchmark.

- Identify planning scheme amendments

The following list identifies planning and development scheme amendments either recently adopted or in process that may affect Toowoomba's planned dwelling supply:

- New planning scheme in preparation (undertaking first stage of studies)
- Drayton local plan/land use investigation (investigation commenced late 2017, Council to approve final structure plan).

Data update

Annually.

Reporting units

Capacity, from 2021 onwards, being total growth in dwellings 2021 to ultimate, where available.

An estimate of realistic availability of dwellings from 2021 to 2041 for the region (consolidation and expansion) and each local government area (expansion)

Years of supply in the region and by local government area for consolidation and expansion areas.

Comparison to the 2041 dwelling supply benchmarks of *ShapingSEQ 2017*.

Notes

The 15 years of supply minimum is identified within *ShapingSEQ 2017* (see Chapter 3 page 46).

For growth areas, DSDILGP engaged SGS to provide an update on selected growth areas' realistic land supply take up to 2041. These areas are identified in Appendix C, Table C1.

For the 2021 LSDM Report the growth area of Coomera Town Centre was expanded to the Coomera SA2 area to align with the Gold Coast LGIP planning assumptions used for the LSDM Report, and Worongary and Mt Kynoch were added to the growth areas to provide a more complete coverage of significant growth areas.

For the 2019,2020 and 2021 LSDM Reports the average annual benchmarks were adjusted to take account of the increased rate of dwelling demand estimated by the Queensland Government 2018 edition medium series dwelling projections. The adjustment of the average annual benchmarks assumes the growth expected by *ShapingSEQ 2017* will occur at a somewhat different (in this case slightly faster) rate, but with the same spatial distribution of growth as expected by *ShapingSEQ 2017* (see Appendix G for a detailed explanation of the adjustment).

Approved supply

Description

Approved supply measures either the number of lots that have a development permit for reconfiguring a lot but have not yet been certified (referred to as 'uncompleted lots'), or the number of multiple dwellings that have a material change of use development permit, in the consolidation area, but have not yet been constructed (referred to as 'uncompleted multiple dwellings'), as at the relevant date.

This approved supply section also provides an indication of the number of uncompleted lots that have also obtained an operational works approval.

This measure also reports years of supply for both uncompleted lots and uncomplete multiple dwelling approvals compared to the minimum four years of supply sought by *ShapingSEQ* 2017.

Rationale

This section provides a current status and identifiable trends of the amount of approved supply for the region and each local government area.

It provides an indication of supply that is available to accommodate the region's short-term residential growth.

Limitations

Accurate recording of the number of approved dwellings/lots and operational works is dependent on the complete reporting of associated parent lots in the relevant development permit decision notice.

The uncompleted multiple dwellings approvals data for June 2011 only includes material change of use approvals within the existing urban area boundary as created for the South East Queensland (SEQ) Regional Plan 2009-2031, based on an aggregation of 2006 Census Collection Districts. The current Existing Urban Area (EUA) boundary used to define the consolidation area for *ShapingSEQ* 2017 is a close approximation of that boundary based on 2016 SA2 boundaries. This needs to be recognised when comparing the 2011 uncompleted multiple dwelling data with that for later years.

The 2011 uncompleted multiple dwelling data includes social housing approvals, but the 2018 and 2019 data only includes approvals for social housing if included in local government or Economic Development Queensland (EDQ) development approvals data. As social housing is generally a small proportion of dwellings, years of supply have still been calculated using average annual total building approvals for consolidation attached dwellings for the preceding four years.

While predominantly being attached dwellings, the uncompleted multiple dwelling approvals data includes some developments where more than one self-contained detached dwelling is planned for a parcel, or where there is one dwelling per lot and they are subject to a Community Titles Scheme. Such dwellings do not align with the ABS classification of other (attached) dwellings, even though such building approvals are used to calculate the years of supply of uncompleted multiple dwelling approvals.

The Australian Bureau of Statistics (ABS) from time-to-time updates and adjusts building approvals information to account for errors and new information as it becomes available. Therefore, in future updates of this data, previous years' values may change.

Similarly, the Queensland Treasury, Queensland Government Statisticians Office (QGSO) from time-to-time also updates and adjusts reconfiguring a lot approvals, lot certifications, operational works and material change of use approvals for multiple dwellings information to account for errors and new information as it becomes available. Therefore, in future updates of this data, previous years' values may change.

Data source/custodian

- ABS, Building Approvals (excluding houses), catalogue 8731.0, extracted November 2021 for approvals July 2008 to June 2021.
- Queensland Treasury, QGSO, unsealed (uncompleted) reconfiguring a lot approvals (RaL), as extracted in November 2021, for the year ending 30 June 2021.
- Queensland Treasury, QGSO, lot certifications, as extracted in November 2021, to 30 June 2021.
- Queensland Treasury, QGSO, operational works approvals (uncompleted), as extracted November 2021, for 2011/12 to 30 June 2021.
- Queensland Treasury, Material change of use (MCU) approvals for multiple dwellings (unconstructed), June 2011. This data is based on development approvals data provided by local governments, the then Urban Land Development Authority and Southbank Corporation, and on social housing approvals from the Department of Communities.
- Queensland Treasury, QGSO, MCU approvals for multiple dwellings (unconstructed), June 2018, as provided 30 October 2018. This data is based on development approval data provided by local governments and EDQ.
- Queensland Treasury, QGSO, MCU approvals for multiple dwellings (unconstructed), June 2019, as provided November 2019. This data is based on development approval data provided by local governments and EDQ.
- Queensland Treasury, QGSO, MCU approvals for multiple dwellings (unconstructed), June 2020, as provided November 2020. This data is based on development approval data provided by local governments and EDQ.
- Queensland Treasury, QGSO, MCU approvals for multiple dwellings (unconstructed), June 2021, as provided November 2021. This data is based on development approval data provided by local governments and EDQ.

Source data geography

SEQ region and local government area.

Method

Uncomplete lot approvals (reconfiguring a lot)

- Extract total uncompleted residential lots as at 30 June for each year (2011/12 to 2020/21) for the region and each local government area.

- Determine years of supply by dividing the total number of uncompleted lots as reported by the average annual lot certifications of the previous four years as at each reporting period. For example, for 2017/18 years of supply was calculated as the total number of uncompleted lots as at 30 June 2018 divided by the average annual number of lot certifications from 2014/15 to 2017/18 inclusive.

Uncompleted multiple dwelling approvals (material change of use)

- Extract total number of uncompleted multiple dwellings as at June 2011, June 2018, June 2019, June 2020 and June 2021 for each local government area and the region within consolidation areas.
- Determine years of supply by dividing the total number of uncompleted multiple dwellings by the average annual consolidation attached dwelling building approvals of the previous four years as at each reporting period. Attached dwelling building approvals are used as they best correlate with multiple dwelling approvals.

Operational works approvals

- Extract total uncompleted operational works approvals as at 30 June for each year 2011/12 to 2020/21 for the region and each local government area.

Data update

Annually.

Reporting units

Number of uncompleted lot and multiple dwelling approvals and years of supply for SEQ and local government areas.

Number of lots created (certified) annually for SEQ and local government areas.

Number of uncompleted lots with operational works approval for SEQ and local government areas.

Notes

For further information about consolidation and expansion areas, please see pages 174-175 of *ShapingSEQ 2017*.

For further information on reconfiguring a lot, operational works and MCU approvals see Queensland Treasury, QGSO, Residential Land Development Activity Profiles and Spreadsheet.

The four years of supply minimum for approved supply is identified within *ShapingSEQ 2017* (see Measures that Matter, page 167).

As there are no benchmarks for years of supply for operational works approvals (uncompleted), this value has not been determined.

Dwelling growth

Description

Dwelling growth monitors new residential building approvals in South East Queensland (SEQ) within consolidation and expansion areas, as identified in *ShapingSEQ 2017*.

Rationale

Trends in annual new residential building approvals are compared against adjusted average annual benchmarks, i.e. average annual expected dwelling growth 2016-2031, with such growth aligning to the 2041 dwelling supply benchmarks as outlined on pages 42 and 43 of *ShapingSEQ 2017*. For the 2019, 2020 and 2021 LSDM reports, this rate of growth for SEQ was adjusted to take account of the projected rate of growth from 2016-2031 identified in the Queensland Government's 2018 edition medium series projections (see Appendix G for a detailed explanation of the calculation).

This provides an indication of the progress of development towards realising the actual dwelling growth expected by the dwelling supply benchmarks of *ShapingSEQ 2017*.

Limitations

The ABS from time-to-time updates and adjusts building approvals information to account for errors and new information as it becomes available. Therefore, in future updates of this data, previous years' values may change.

The information used for this measure only reports on building approvals and does not measure net change in dwellings, for example it does not take into consideration approvals not constructed or dwelling demolitions, relocations or conversions to other uses and may include visitor dwellings. For more information on the further research being undertaken to improve the measurement of net change, see the Measuring Development [Best Practice Research](#).

Data source/custodian

- ABS, Building Approvals, catalogue 8731.0, extracted November 2021 for approvals July 2011 to June 2021.
- Department of State Development, Infrastructure, Local Government and Planning (DSDILGP), *ShapingSEQ 2017*, Existing Urban Area (EUA), August 2017
- Queensland Treasury, Projected dwellings to 2041, 2018 edition medium series, 2019
- DSDILGP, *ShapingSEQ 2017*, Dwelling Supply Benchmarks, August 2017
- DSDILGP, local government area boundaries, 2017
- DSDILGP SEQ regional plan boundary, 2017
- Source data geography
- ABS, Statistical Area Level 2 (SA2)

Method

Using Stat Data Explorer on the ABS website extract total new dwelling building approvals for the SEQ region by SA2, filtered by new approvals, both private and public, for:

- houses
- semi-detached, row or terrace houses, townhouses – one storey
- semi-detached, row or terrace houses, townhouses – two or more storeys
- apartments – in a one or two storey block
- apartments – in a three storey block
- apartments – in a four to eight storey block, and
- apartments – in a nine or more storey block.

Align SA2 information to the relevant local government area and EUA, with inside the EUA being consolidation and outside the EUA being expansion.

Data update

Annually.

Reporting units

Total new dwelling building approvals (financial year) are reported at SEQ region and local government area levels against adjusted average annual benchmarks, i.e. average annual expected dwelling growth 2016-2031, by consolidation and expansion areas.

Notes

For further information about consolidation and expansion areas, please see pages 174-175 of *ShapingSEQ 2017*.

For the 2019, 2020 and 2021 LSDM Reports the average annual benchmarks have been adjusted to take account of the increased rate of dwelling demand estimated by the Queensland Government 2018 edition medium series dwelling projections. The adjustment of the average annual benchmarks assumes the growth expected by *ShapingSEQ 2017* will occur at a somewhat different (in this case marginally faster) rate, but with the same spatial distribution of growth as expected by *ShapingSEQ 2017*. See Appendix G for a detailed explanation on the calculation.

Changes in dwelling density

Description

Changes in dwelling density monitors changes in median lot size for new urban lots and mean population-weighted dwelling density to provide an indication of how efficiently land is being utilised in South East Queensland (SEQ).

Rationale

State reporting on median lot sizes, new urban lot registrations and overall dwelling density being delivered, are analysed to measure the changes to dwelling density across the SEQ region, for each local government area and within the Existing Urban Area (consolidation area).

The individual aspects that contribute towards the overall analysis and measurement for the changes in dwelling density for SEQ include:

- median lot size of new lots
- new lot registrations
- mean population-weighted dwelling density.

Further information on each individual change in dwelling density component is provided below.

Median lot size

Rationale

State reporting on median lot size for new urban lots on a region-wide and local government area basis.

Limitations

N/A.

Data source/custodian

- Queensland Treasury, Queensland Government Statistician's Office (QGSO), Residential Land Development Activity Spreadsheet, as provided in July 2021.

Source data geography

SEQ region and local government areas.

Method

Extract median lot sizes for the region and each local government area utilising QGSO Residential Land Development Activity Spreadsheet.

Data update

Annually.

Reporting units

Median lot size (m²) by financial year.

Notes

Median lot size information relates to new standard urban lots of 60m² to < 2500m².

Lot registrations

Rationale

State reporting on urban lot registrations on a region-wide and local government area basis.

Limitations

N/A.

Data source/custodian

- Queensland Treasury, QGSO, Residential Land Development Activity Spreadsheet, as provided in July 2021.

Source data geography

SEQ region and local government areas.

Method

Extract total urban lot registrations for the region and each local government area utilising QGSO Residential Land Development Activity Spreadsheet.

Data update

Annually.

Reporting units

Number of new urban lot registrations by financial year.

Notes

Lot registration information relates to standard urban lots of 60m² to < 2500m².

Mean population-weighted dwelling density

Rationale

The mean population-weighted dwelling density provides a measure of the average density at which the population of the region lives. Changes in dwelling density have been calculated using the mean population-weighted dwelling density for all Census mesh blocks in SEQ, each local government area and the consolidation area.

This measure is more meaningful than a gross density averaged across the whole of an area, as parts of the region comprise large areas without urban settlement which affects a gross density calculation.

The area of non-residential mesh blocks, e.g. commercial, industrial, parkland, transport or water mesh blocks with no dwellings or no population, has no weight in the calculation. This measure is therefore comparable to net residential density as used by *ShapingSEQ* 2017.

Limitations

This measure is based on the boundaries and areas of, and dwelling and population counts reported for, SEQ mesh blocks at each Census. It is therefore an approximation of actual dwelling densities over time.

Data source/custodian

- Australian Bureau of Statistics (ABS), 2074.0 Mesh blocks, 2011, including land areas and dwelling and population counts
- ABS, 2074.0 Mesh blocks, 2016, including land areas and dwelling and population counts
- DSDILGP, local government area boundaries, 2017

- DSDILGP, *ShapingSEQ* 2017, Existing Urban Area, August 2017.
- DSDILGP, SEQ regional plan boundary, 2017
- Source data geography
- ABS, Mesh blocks (SEQ)

Source data geography

ABS, Mesh blocks (SEQ)

Method

- Extract relevant years' ABS mesh blocks for the region, each local government area and consolidation areas.
- Calculate mean population-weighted dwelling density for the region, each local government area and consolidation areas using the following formula:
- [The sum for all mesh blocks of [(mesh block dwelling count / area of mesh block) multiplied by mesh block population count]] divided by the sum of all mesh block population counts for an area.

Data update

Five yearly, to align with the release of ABS Census data.

Reporting units

Dwellings per hectare as at the Census of each reporting year.

Notes

Mesh blocks are the smallest geographical area defined by the ABS and form the building blocks for the larger regions of the Australia Statistical Geography Standard (ASGS). All other statistical areas or regions are built up from or approximated by them. They broadly identify land use such as residential, commercial, primary production, parkland and can be combined to accurately approximate a large range of other statistical regions.

The 2011 Census mesh block data sourced from the ABS was modified to account for an error identified in the allocation of dwellings and population to two adjoining mesh blocks. In the ABS data, mesh block 30178550000 was incorrectly allocated all of the dwellings and population that should have been allocated to the adjoining mesh block 30179712000. The very small size of mesh block 30178550000 meant that this error significantly distorted the calculation of the mean population-weighted dwelling density in the Moreton Bay local government area and SEQ as a whole. The error was verified through review of aerial imagery from close to the 2011 Census date and corrected by reallocating the dwellings and population from mesh block 30178550000 to mesh block 30179712000.

The ABS was notified of and supported the approach to rectifying the error. The ABS acknowledged this was one case among a small number of mesh blocks that were misallocated dwellings and population due to automated coding and imputation processes used for the 2011 Census. A check was undertaken of the 2011 and 2016 mesh block data for each SEQ local government area to

identify any other significant dwelling density outliers in the data (i.e. where the population-weighted dwelling density for any mesh block was more than 10 times that for any other mesh block in that local government area). No other significant outliers were found in the data.

For further information about consolidation and expansion areas, please see pages 174-175 of *ShapingSEQ 2017*.

Changes in housing type

Description

Changes in housing type monitors the different types of new residential buildings being approved across the region as a proportion of total building approvals.

Rationale

The proportionate trends in the diversity of residential buildings are analysed and reported on, by extracting dwelling growth data for three main housing types (as reported in *ShapingSEQ 2017*) for the region and each local government area.

In 2021, the Australian Bureau of Statistics (ABS) updated its classification "Flats, units or apartments - In a block of four or more storeys" to split it into two categories: "Apartments - In a four to eight storey block" and "Apartments - In a nine or more storey block". Data for the "four or more storeys" category continues to be reported in the time series spreadsheets. Data for the two new categories is available from July 2016 onwards.

Limitations

ABS periodically update and adjust building approvals information to account for errors and new information as it becomes available. Therefore, in future updates these data values may change.

Information used for this measure currently only reports on building approvals and does not provide an indication of net change in dwellings. For example, it does not take into consideration approvals not constructed, demolition of buildings or relocations and may include visitor dwellings.

Data source/custodian

- Australian Bureau of Statistics (ABS), Building approvals, catalogue 8731.0, extracted November 2021 for approvals July 2011 to June 2021.
- ABS, Census 2016, Dwelling structure data (dwellings by type), 2016
- Department of State Development, Infrastructure, Local Government and Planning (DSDILGP), local government area boundaries, 2017
- DSDILGP, SEQ regional plan boundary, 2017

Source data geography

ABS, SA2.

Method

Using information extracted for the dwelling growth measure, group ABS reported dwelling types into three main categories:

- Houses: includes detached dwellings
- Middle (attached dwellings one to three storeys) includes:
 - apartments, in a one or two storey block
 - apartments, in a three storey block
 - semi-detached, row or terrace houses, or townhouses of one storey
 - semi-detached, row or terrace houses, or townhouses of two or more storeys
- High-rise (attached dwellings four or more storeys) includes:
 - apartments (in a four to eight storey block)
 - apartments (in a nine or more storey block)

Percentages of dwelling building approvals by type may be compared to the percentages of total existing dwellings by type at the 2016 Census to indicate how approvals, over time, are changing the diversity of housing types overall.

Data update

Annually.

Reporting units

Percentage of total new dwelling building approvals by type for the region and each local government area to 30 June of each reporting year.

Notes

The housing types reported align to those used in *ShapingSEQ 2017* and available through ABS dwelling building approval reporting. As such they relate to houses as detached dwellings, middle as attached dwellings up to three storeys and high-rise as attached four or more storeys.

Housing type data used may not fully align to use definitions in planning schemes. For example, some dual occupancy, auxiliary units and secondary dwellings may be classified by the ABS as Houses. This may impact on the reporting of Houses and Middle housing types compared to the closest equivalent planning scheme classification.

Treatment of housing types may differ across the region. Local governments may categorise medium and high-rise housing types differently, for example high-rise could be considered as buildings above eight storeys. Better categorisation of medium and high-rise dwellings is continuing to be investigated.

Sales and price

Description

Sales and price measures the number of sales and median and lower and upper quartile sales price information for residential development including vacant lots, vacant lots price per m², house and land, houses and attached dwellings, within consolidation and expansion areas.

Rationale

To show trends in the number of sales, and lower quartile, median and upper quartile sales price for developed lots and dwellings for the region and each local government area.

Limitations

Lower quartile, median and upper quartile sales prices cannot represent the full range of sales prices in an area.

There is a potential lag in the reporting of sales information.

Reporting for 2020/21 is to 30 June 2021

Data source/custodian

- Queensland Treasury, Queensland Government Statisticians Office (QGSO), as provided in October/November 2021.

Source data geography

SEQ region and local government area.

Method

Extract QGSO supplied number of sales and lower quartile, median and upper quartile sales price information on vacant lots (per lot and per square metre), house and land, houses and attached dwellings for the period July 2011 to 30 June 2021, within consolidation and expansion areas.

Data update

Annually.

Reporting units

Total number of sales, lower quartile, median and upper quartile sales price (\$), lower quartile, median and upper quartile sales price per m² (for vacant lots) for the year ending 30 June of each reporting year.

Notes

The sales and price data reported in the 2021 LSDM Report is primarily based on sales up to June 2021 as extracted by QGSO in late October 2021. The one exception is the special reporting of vacant land sales in the Redland consolidation area excluding the Southern Moreton Bay Islands (SMBIs), which is based on sales up to June 2021 as recorded up to 17 November 2021. The latter

includes an additional six Redland consolidation areas sales only (0.4 per cent increase) compared to the main data extracted in late October 2021.

Industrial land take-up

Description

Industrial land take-up within the region estimates the amount of take-up of developed industrial land from 2011-2021, recognising that a suite of other land uses could occur on industrial zoned land that are not industrial in nature, e.g. commercial, residential, recreational and community uses.

Rationale

Identification and categorisation of industrial land was based on information available at the time of analysis, which did not include all development approvals that may affect industrial development.

The date and quality of aerial photography used to determine whether an area has been developed varies across the region. Where aerial photography is not available for the current year, aerial photography from the previous year has been used.

Interpretation of relevant zones and planning intent from local government planning schemes, structure, master and precinct plans and Priority Development Area development schemes and context plans may vary across the region.

Developed industrial land areas are based on the total areas of developed land parcels, excluding roads, which for many locations will differ from the land area if identified constraints were excluded, as has been done in determining planned industrial land. This needs to be recognised when comparing developed industrial land take-up to planned industrial land supply.

Areas that may not be fully developed, or are underutilised, are considered taken-up for the purposes of the 2021 LSDM Report.

Data source/custodian

- State government aerial imagery, 2011 (dates vary), 2018 (dates vary from 10 May to 15 July 2018), 2019 (dates vary from 5 May to 4 August 2019) and 2020 (dates vary from May to August).
- Nearmap aerial imagery, 2020 (dates vary from 15 April to 20 November) and 2021 (dates vary from 10 April to 27 June).
- Local government planning schemes zoning, precinct and sub-area data and local and neighbourhood plans, generally as at June 2021
- State Government constraints datasets, generally as at June 2021
- Local government planning scheme overlays, generally as at June 2021
- Zones, precincts, structure plan and context plan areas, generally as at June 2021, for:
 - 2020 Airport Master Plan (Brisbane)
 - Gold Coast Airport 2017 Master Plan
 - Archerfield Airport Master Plan 2017
 - Port of Brisbane Land Use Plan 2020

- All SEQ Priority Development Areas
- Bromelton State Development Area.

Source data geography

SEQ region and local government area.

Method

A review and update of industrial land underutilised/take-up data was undertaken in consultation with, including feedback from, SEQ local governments, on land within a revised planned industrial intent layer in 2021 for the period 2011 to 2021.

A planned industrial intent layer for the 2021 report was identified through a review of currently available and relevant planning schemes, development schemes, structure, master, precinct and context plans and in consultation with SEQ local governments.

Planned industrial intent was identified based on the particular zone and/or precinct having a predominant industrial land use focus or overall industrial purpose.

Vacant land in 2021 and underutilised/take-up 2011 to 2021 were identified on areas with planned industrial intent based on interpretation of state government and Nearmap aerial imagery. This was guided by the SEQ planned industrial land supply – Process, methodology and visual guide – Revised method version 3.0 November 2021.

Values for developed industrial land underutilised/take-up 2011 to 2021 were extracted by identified industrial land types for the 2021 LSDM Report.

Data update

Annually, subject to further work to progress and implement best practice research ([Program Delivery](#)) and feedback from industrial land supply custodians.

Reporting units

Area (hectares) of developed industrial land take-up (2011-2021), by type of industrial land, for the region and each SEQ local government area.

Notes

For the purposes of this report the following industrial land categories, intended to align to relevant zone types in the Planning Regulation 2017, were used:

- Low Impact Industry
- Medium Impact Industry
- High Impact Industry
- Waterfront and Marine Industry
- High Technology Industry
- Airports and air bases
- Industry Investigation Area.

For a concordance of local government zonings to each of the above categories see Table D1 in Appendix D.

Planned industrial land supply

Description

Planned industrial land supply estimates the planned industrial land, by industrial land type, as at mid-2021, for South East Queensland (SEQ) and each local government area.

Rationale

This section provides an indication of the amount of planned industrial land there is within the region and each local government area to potentially accommodate future industrial employment growth.

Limitations

Identification and categorisation of industrial land was based on information available at the time of analysis, which did not include all development approvals or planning scheme changes in process that may affect future industrial development.

Identification and interpretation of vacant and developed industrial land may be subject to varying interpretation of aerial imagery across the region and over time.

The date and quality of aerial photography used to determine whether an area has been developed varies across the region.

Interpretation of relevant zones and planning intent from local government planning schemes, structure, master and precinct plans and Priority Development Area development schemes and context plans may vary across the region.

Changes in land parcel geometry over time have resulted in small 'slivers' of land created by mismatching lot boundaries. Despite cleaning of the data some slivers remain.

Areas identified as vacant and developable may contained serviced and un-serviced industrial land.

Data source/custodian

- DSDILGP, Industrial Land Supply Developable Area, June 2021, which utilised:
 - State government aerial imagery, 2011 (dates vary), 2018 (dates vary from 10 May to 15 July 2018) and 2019 (dates vary from 5 May to 4 August 2019) and 2020 (dates vary from May to August).
 - Nearmap aerial imagery, 2020 (dates vary from 15 April to 20 November) and 2021 (dates vary from 10 April to 27 June). Local government planning schemes zoning, precinct and sub-area data and local and neighbourhood plans, generally as at June 2021
 - State Government constraints datasets, generally as at June 2021
 - Local government planning scheme overlays, generally as at June 2021

- Zones, precincts, structure plan and context plan areas, generally as at June 2021, for:
 - 2020 Airport Master Plan (Brisbane)
 - Gold Coast Airport 2017 Master Plan
 - Archerfield Airport Master Plan 2017
 - Port of Brisbane Land Use Plan 2020
 - All SEQ Priority Development Areas
 - Bromelton State Development Area.

Source data geography

SEQ region and local government area.

Method

Utilising a revised methodology based on previous CDM Smith and RPS work, the LSDM report analyses and reports on the SEQ region's industrial land, including the amount of planned industrial land.

Through consultation with stakeholders, information and data was updated to produce a revised planned industrial intent layer based on a review of relevant planning schemes, development schemes, structure, master, precinct and context plans.

Planned industrial intent was identified based on the particular zone, precinct or the like having a predominant industrial land use focus or overall industrial purpose.

Vacant land in 2021 on areas with planned industrial intent was identified based on interpretation of state government and Nearmap aerial imagery. This was guided by the SEQ planned industrial land supply – Process, methodology and visual guide – Revised method version 3.0 November 2021.

SEQ-wide developability (constraint) rules and local variations of those were generated as follows:

- As reported in the 2019 LSDM Report, in 2018 RPS undertook land suitability best practice research in consultation with the GMP Data and Modelling Working Group (DMWG) to recommend standard developability rules across SEQ
- RPS were then engaged to review the SEQ-wide developability rules in consultation with DSDILGP, to identify potential guidance material on using the rules to identify developable areas.
- DSDILGP sort feedback from local governments on the SEQ-wide developability rules as part of the review of the planned industrial land supply analysis for the 2020 LSDM report to identify any local variations or general changes to those rules.

The resulting developability rules (see Appendix I for Developable area and land supply types) were applied to constraints to vacant planned industrial areas to create an industrial developable area dataset (Planned industrial land). See Table D2 in Appendix D for the actual constraints layers corresponding to the 'common layer names' used by the developability rules.

Where there were overlapping soft constraints as identified by the developability rules, the developable area was calculated as explained in Appendix H.

Values for planned industrial land areas were extracted for SEQ and each local government area, with DSDILGP applying identified industrial land types informed by included zoning and precinct information and the categorisation applied to Planned industrial land for the 2018, 2019 and 2020 LSDM Reports.

Data update

Annually, subject to further work to progress and implement best practice research ([Program Delivery](#)).

Reporting units

Area (in hectares) of planned industrial land, by industrial land type, for SEQ and each local government area.

Notes

The developed industrial land measure identifies the total area of developed parcels (take-up) and is calculated independently of the estimates of planned industrial land supply. Further, Planned industrial land supply is calculated differently from Planned industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

Rural and agricultural industrial and extractive industry zonings are not considered as part of the analysis or reporting.

For the purposes of this report the following industrial land categories, intended to align to relevant zone types in the Planning Regulation 2017, were used:

- Low Impact Industry
- Medium Impact Industry
- High Impact Industry
- Waterfront and Marine Industry
- High Technology Industry
- Airports and air bases
- Industry Investigation Area.

For a concordance of local government zonings to each of the above categories see Table D1 in Appendix D.

Note:

The Helidon explosives area has been removed from inclusion as planned industrial land supply.

Planned industrial employment supply

Description

Planned industrial employment supply estimates the total industrial jobs growth capacity (2016 to ultimate) within the region and for each local government area.

A realistic availability scenario is also estimated to reflect the effect of factors which may constrain the availability of the industrial jobs growth capacity, within some Major Enterprise and Industry Areas (MEIAs), to accommodate industrial employment up to 2041.

The capacity and realistic availability of planned industrial employment supply are compared to the corresponding 2041 industrial employment planning baseline of *ShapingSEQ 2017*.

Rationale

The capacity of planned industrial employment supply provides the basis for assessing the ability, based on current planning intent, to accommodate the 2041 industrial employment planning baselines of *ShapingSEQ 2017*.

The realistic availability scenarios for planned industrial employment supply have been generated to represent the effect of various factors that may constrain the availability to 2041 of the identified industrial employment capacity. Such factors may include:

- infrastructure availability
- the practical staging of and capability for development
- land ownership fragmentation
- landowner intent
- lower employment densities than expected
- accessibility
- constraints affecting the economic feasibility of development.

Consideration of realistic availability as an alternative scenario provides a greater level of confidence about the adequacy of industrial employment supply.

The capacity of planned industrial employment supply is based on information supplied by SEQ local governments and the realistic availability of planned industrial employment supply is informed by a market-based economic assessment by Urban Economics (see Data source/custodian below).

Limitations

There is some inconsistency of the source data across local government areas including timing, outputs and assumptions about densities and developable area. The extent to which the planned industrial employment supply captures all industrial employment potential, e.g. including that not located on land zoned for industry, depends on the approaches of the source data.

Use of different parameters across local government areas in determining industrial employment supply, and the interpretation of what ultimate development is for each area, may impact on the consistency and comparability of reporting across local government areas.

Over time, it is intended to continue to progressively apply a consistent methodology across the region for calculating planned industrial employment supply. This will be informed by ongoing consultation with stakeholders and further work to progress and implement best practice research ([Program Delivery](#)).

The 2041 industrial employment baselines of *ShapingSEQ 2017* provide an approximation only of industrial employment demand based on the ANZSIC 1-digit industry categories from the Queensland Treasury 2015 edition employment projections. As advised by the CDM Smith report (see Data source/custodian below), reflecting different objectives to the 2015 edition projections, a more refined assessment of industrial and other land use employment demand could be based on ANZSIC 2-digit industry categories.

The intent of the planned industrial employment supply measure is to report industrial employment growth that could be accommodated by development that could be approved based on current planning intent. However, the timing of the preparation of available datasets means that the effect of some draft changes to planning schemes may be included in, and the effect of some recently adopted changes may be excluded from, the data. Likewise, the effect of all preliminary approvals overriding the planning scheme may not be reflected in the data.

Industrial employment growth potential identified for MEIAs, based on the Urban Economics report, does not consider growth from more intensive use of existing developed but underutilised sites, e.g. sites that have potential for increased GFA. For those local governments where the assessment of realistic availability is not informed by property-level data (see Method below), this may contribute to underestimation of the realistic availability of planned industrial employment supply. However, this may be offset by the assumption that the growth areas of the MEIAs are developed solely for industrial use, when parts of the land are likely to be developed for other uses, e.g. commercial, community and recreational uses.

The likely availability timeframes identified by the Urban Economics report, for developable land within MEIAs (see Appendix E), were based on information available up to November 2021. The circumstances underpinning that report are subject to change over time, e.g. due to infrastructure and development decisions which may affect land availability and will be reviewed when updates are prepared.

Data source/custodian

- State government aerial imagery, 2011 (dates vary), 2018 (dates vary from 10 May to 15 July 2018) and 2019 (dates vary from 5 May to 4 August 2019) and 2020 (dates vary from May to August).
- Nearmap aerial imagery, 2020 (dates vary from 15 April to 20 November) and 2021 (dates vary from 10 April to 27 June). Local government planning schemes zoning, precinct and sub-area data and local and neighbourhood plans, generally as at June 2021
- State Government constraints datasets, generally as at June 2021
- Local government planning scheme overlays, generally as at June 2021
- Zones, precincts, structure plan and context plan areas, generally as at June 2021, for:
 - 2020 Airport Master Plan (Brisbane)

- Gold Coast Airport 2017 Master Plan
- Archerfield Airport Master Plan 2017
- Port of Brisbane Land Use Plan 2020
- All SEQ Priority Development Areas
- Bromelton State Development Area.
- DSDILGP, *ShapingSEQ 2017*, employment planning baselines (2015/16 to 2040/41), August 2017
- DSDILGP, SEQ regional plan boundary, 2017
- LGIPs and related datasets:
 - Brisbane – NonRes CP2014 dataset as supplied by council to reflect LGIP v1, February 2016 (industrial job field provided in dataset)
 - Gold Coast – LGIP extrinsic material report Planning assumptions, June 2017
 - Ipswich – LGIP NonRes Industrial Interims as supplied by council in 2017 (industrial only dataset)
 - Lockyer Valley – LGIP, June 2018
 - Logan – Logan Growth Model, June 2020 Base, 16 Feb 2021 model run, as supplied by council in July 2021 (industrial fields provided in the dataset)
 - Moreton Bay – MBRC LGIP2 Employment Oct2019 byLGIPcat MB4STVMv5 as supplied by council August 2021 (industrial fields provided in the dataset)
 - Noosa – Unitywater DMaTT demand forecasts, July 2018 as supplied by Unitywater on behalf of Council June 2021 (where GFA type field is limited to industry)
 - Redland – Adopted LGIP sourced August 2018
 - Scenic Rim – LGIP, Attachment 1a, November 2017 (first state interest check)
 - Somerset – Extrinsic Material to the LGIP, May 2016
 - Sunshine Coast – Population and employment figures underpinning the LGIP as supplied by Council in July 2018 (where existing and developed land use fields are limited to industry and 2041 figures are used in the absence of ultimate figures)
 - Toowoomba – Business-as-Usual Model 2021, supplied October 2021, based on identified industrial land use types in the data.
- Urban Economics Realistic Takeup of Industrial Growth Areas in SEQld, Final Report (Urban Economics report – see extracts at Appendix E), November 2021.
- MEIA boundaries as generated by Urban Economics and used for the Urban Economics report, maintaining those used for the 2019 and 2020 LSDM reports.

Source data geography

SEQ region and local government area.

Method

SEQ

Determine the planned industrial employment supply for the region by:

- For capacity— adding each local government’s industrial employment capacity as calculated using the methods outlined in the local government section below.
- For the realistic availability scenario—adding each local government’s industrial employment realistic availability as calculated using the methods outlined in the local government section below.

Local governments

The following provides a summary of the methodology used to calculate each SEQ local government’s planned industrial employment supply. This method utilises the following information for each SEQ local government area:

- Parcel-level or small area information for industrial employment for Brisbane, Ipswich, Logan, Moreton Bay, Noosa, Sunshine Coast and Toowoomba.
- Where parcel-level information was unavailable, summary LGIP documentation for industrial employment was used for the Gold Coast, Lockyer Valley, Redland, Scenic Rim and Somerset.
- Determine capacity
 - Extract the total number of additional industrial employment from 2016 to the identified ultimate for the whole local government area.

Note:

For Logan, the additional employment is actually from June 2020 (the base date of the dataset) to identified ultimate because the June 2020 industrial employment number was only 0.1% higher than that reported for 2016 in the previous dataset supplied by Council (Logan Development Projection Model (LDPM 2016), October 2018 run as supplied by Council in May 2019).

For Noosa, the additional employment is actually from January 2017 to ultimate because that is the base date of the dataset.

For Toowoomba, the additional employment extracted is from 2021 to identified ultimate as that is the base date of the new Business-as-Usual model data provided by the Council. To translate that to the common 2016 base date across the region, the industrial employment growth 2016-21 expected by the *ShapingSEQ 2017* employment planning baselines was added to the extracted figure.

- Determine realistic availability
 - To determine the realistic availability scenario, Brisbane, Gold Coast, Ipswich, Lockyer Valley, Logan, Moreton Bay, Scenic Rim, Sunshine Coast and Toowoomba have significant growth MEIAs. For those selected MEIAs, the Urban Economics report provides employment growth potential by likely availability timeframes, including the period 2021-2041 (Table E1 in Appendix E). That employment growth potential is based on industrial land estimates considered to be available for development to accommodate industrial employment in those MEIAs within the same timeframes.

- In turn those industrial land estimates are informed by the application of a market-based assessment of overarching constraints to development of the planned industrial land identified for those MEIAs. That development constraint assessment (see Table E2 in Appendix E for the combined constraint scores by MEIA) results in the conclusion that some of the subject land will not be available for development that could accommodate industrial employment up to 2041 (see Table E3 in Appendix E for the proportions of developable land by period by MEIA).
- The realistic availability scenarios for Brisbane, Ipswich, Logan, Sunshine Coast and Toowoomba, which have property-level LGIP related datasets, were determined as follows:
 - For each MEIA, use available LGIP datasets to calculate the industrial employment growth from 2021 to ultimate on those parcels that contain developable area (as per the Planned industrial land supply reported in the 2021 LSDM Report plus some additional parcels identified by Urban Economics based on local knowledge) – see the ‘2021 to Ultimate’ column in Table E1 in Appendix E for this figure.
 - Where the 2021 to ultimate employment growth potential identified by the Urban Economics report for a selected MEIA (combining the ‘0-20 years’ and ‘20+ years’ columns of Table E1 in Appendix E) is greater than 1000 and the equivalent 2021-2041 employment growth identified for that MEIA (see the ‘0-20 years’ column in Table E1 in Appendix E) is less than the ‘2021 to Ultimate’ figure calculated above, sum those differences for all such MEIAs in the local government area and subtract that sum from the total capacity figure for the local government area to get the realistic availability scenario for that area.
- For the remaining local government areas which have relevant growth MEIAs, including Gold Coast, Lockyer Valley, Moreton Bay and Scenic Rim, the realistically availability scenarios were determined as follows:
 - For each MEIA, use available LGIP datasets to calculate the industrial employment growth from 2021 to ultimate for the closest geographic area identified in the LGIP datasets (see the ‘2021 to Ultimate’ column in Table E1 in Appendix E).
 - Where:
 - the 2021 to ultimate employment growth potential identified by the Urban Economics report for a selected MEIA (combining the ‘0-20 years’ and ‘20+ years’ columns of Table E1 in Appendix E) is greater than 1000 and more than 75% of the ‘2021 to Ultimate’ figure calculated above from the LGIP datasets, and
 - the 2021-2041 employment growth identified by the Urban Economics report for that MEIA (see the ‘0-20 years’ column in Table E1 in Appendix E) is less than the ‘2021 to Ultimate’ figure calculated from the LGIP datasets,

- sum those differences for all such MEIAs in the local government area and subtract that sum from the total capacity figure for the local government area to get the realistic availability scenario for that area.
- Determine years of supply
 - Determining years of supply provides the basis for assessing whether there is the minimum 15 years of supply as sought by *ShapingSEQ 2017*.
 - Calculate estimates of the years of supply by dividing each of the identified industrial employment capacity and realistic availability by *ShapingSEQ 2017*'s average annual baseline, i.e. the average annual growth of industrial employment expected 2016-2031 in order to align with the 2041 industrial employment planning baseline (Appendix A of *ShapingSEQ 2017*) and subtracting five years to align the information to 2021.

Data update

Annually.

Reporting units

Growth of industrial jobs and years of supply for the region and each local government area.

Notes

Planned industrial land supply is calculated differently from Planning industrial employment supply which reflects total anticipated growth in industrial employment from local land supply databases.

For Gold Coast, Lockyer Valley and Scenic Rim, there were only SA2-level datasets available to calculate the industrial employment capacity for the Yatala-Stapylton, Gatton North and Bromelton MEIAs, respectively. The available figures for the Ormeau-Yatala, Gatton and Beaudesert SA2s, respectively, were therefore used as approximations for those MEIAs.

For Scenic Rim and Sunshine Coast, none of the selected MEIAs had 2021-2041 employment growth potential estimated by the Urban Economics report which was less than the estimated employment growth from 2021 to ultimate from the LGIP datasets. For those areas the realistic availability scenario is therefore the same as the capacity.

For Noosa, Redland and Somerset, there are no MEIAs so the realistic availability scenario for those LGAs is the same as the capacity.

Logan City Council has advised that the new Logan Growth Model (previously the Logan Development Projections Model), which has informed the 2021 LSDM Report, is an improved fit-for-purpose model that reflects best practice growth modelling to predict growth and capacity across the City of Logan. The model includes refined employment assumptions based on consultancy reports, improved developability and constraints analysis, bespoke research and new data layers to inform developability and sequencing.

Moreton Bay Regional Council has advised that the LSDM 2021 is the first report to reflect Council's October 2019 adopted planning assumptions. These planning assumptions do not yet reflect the outcomes of Council's Regional Growth Management Strategy 2041 and current planning for growth areas such as Caboolture West and Morayfield South, which are all in development. Council remains committed to collaborate with all parties involved to achieve a well-planned region.

For Moreton Bay it should also be noted that the Planned industrial employment supply reported in the 2021 LSDM Report is based on the total additional industrial employment from 2016 to ultimate, whereas in previous LSDM reports it was based on additional employment from 2016 to 2041. That is because the previous dataset provided by Council did not have an ultimate industrial employment field.

Planning and development scheme amendments recently adopted or in process which may affect planned industrial employment supply include:

- Brisbane
 - Industry provisions in Brisbane City Plan 2014 Major amendment package E (adopted 8 September 2020)
 - Banyo-Northgate Neighbourhood Plan (adopted 26 November 2019)
 - Eight Mile Plains Gateway Neighbourhood Plan (undergoing public consultation 8 November – 6 December 2021)
 - Sandgate District Neighbourhood Plan (Council reviewing the draft neighbourhood plan following public consultation)
 - Bridgeman Downs Neighbourhood Plan (undergoing first state interest review)
 - Nathan, Salisbury, Moorooka Neighbourhood Plan (preparing draft neighbourhood plan)
 - Bowen Hills PDA development scheme (amended 21 June 2019)
 - Northshore Hamilton PDA development scheme (amendment publicly notified from 22 October to 3 December 2021)
 - Major amendment package C, including changes regarding industrial development and mapping (overlays) (adopted 8 September 2020)
 - Major amendment package E, including changes to Strategic Framework and Emerging community zone code (adopted 8 September 2020)
 - Major amendment package K, including industry changes (underwent public consultation 12 July to 23 August 2021)
- Gold Coast
 - Major Update 2 and 3 (Council finalising review of submissions after second consultation period concluded on 10 June 2020)
- Ipswich
 - New planning scheme in preparation (preparing draft planning scheme)
- Lockyer Valley
 - New planning scheme in preparation (undergoing first state interest review)
- Logan

- Logan City Council has decided to prepare a new planning scheme (intended to be completed by 2025)
- Unlocking Logan's Prosperity (ULP) amendment (adopted 16 September 2020)
- Meadowbrook Local Plan Amendment (expected to be adopted 2022)
- Springwood Local Plan amendment (on hold – under review).
- Moreton Bay
 - Nil
- Noosa
 - Nil
- Redland
 - Major planning scheme amendment package (01/19) (adopted 29 January 2020)
 - Southern Thornlands Potential Future Growth Area (STPFGA) amendment (02/21) (consideration ongoing)
 - Major Amendment – General (02/20) (consideration ongoing)
- Scenic Rim
 - Scenic Rim Planning Scheme 2020 (commenced 20 March 2020)
- Somerset
 - Major amendment – Somerset Regional Planning Scheme version 4 (commenced 2 November 2020)
- Sunshine Coast
 - Sunshine Coast Council has decided to prepare a new planning scheme (intended to be completed by 2024)
 - Site Specific (Additional South East Queensland Regional Plan 2017 sites and other zoning matters), in process.
- Toowoomba
 - Amendment no.17 – Flood Risk Assessment, Planning Evaluation and Scheme Amendment (adopted 21 August 2020)
 - Drayton local plan/land use investigation (investigation commenced late 2017, Council to approve final structure plan)
 - New planning scheme in preparation (undertaking first stage of studies).

Impact of new constraints

Description

An analysis was conducted to provide an indicative estimate of the impact of new constraints on the region's residential (within expansion areas) land supply.

For the purposes of this analysis new constraints are considered as those that have been newly developed or updated and adopted by the state government since the release of *ShapingSEQ* 2017 in August 2017.

Rationale

This information will be used to inform responses on how the addition of these new constraints may affect the ability of the region to accommodate its expected growth to 2041.

As new constraints emerge, and data is made available, their potential impact on developable areas and land supply within the region can be measured.

Limitations

The accuracy of the analysis is limited by:

- the overall accuracy of the constraints mapping used
- the identification of all areas not affected by the constraints, e.g. the accurate identification and location of all relevant and active development approvals
- the timing and use of available region-wide datasets to represent developable areas and land supply, e.g. the 2013 BHS data (updated to June 2021).

At the time of reporting the location and area of all current preliminary approvals and non-residential development permits were not available for consideration in this analysis.

Within the scope of the analysis, for the reasons identified above the estimated impact of the new constraints on the region's land supply is likely to be overstated.

The analysis relates only to the impact on supply within expansion areas.

Data source/custodian

- RPS, Growth Monitoring Program (GMP) Best Practice Research, Land Suitability, 2019
- Queensland Treasury, 2013 BHS, updated to take account of development (parcels < 2500m²) up to June 2016
- Queensland Treasury, Material Change of Use approvals (multiple dwelling), June 2021
- Queensland Treasury, Reconfiguring a lot approvals, June 2021
- Department of Resources (DR), Digital Cadastral Database (DCDB), July 2016.
- DR, DCDB, July 2017
- DR, DCDB, July 2018
- DR, DCDB, July 2019
- DR, DCDB, July 2020
- DR, DCDB, July 2021
- Department of Environment and Science (DES), Vegetation Management Act 1999, Endangered Regional Ecosystems, 2021
- DES, All Matters of State Environmental Significant (MSES), as at June 2021
- DES, Wildlife Habitat (endangered or vulnerable wildlife), as at February 2020
- DES, Wildlife habitat (special least concern animal), as at February 2020
- DES, MSES, Fish Habitat Areas A and B, as at February 2020

- DES, Marine Park, as at February 2020
- DES, Protected Area Estates, as at December 2020
- DES, Protected Area Nature Refuges, as at December 2020
- DES, Legally secured offsets (offset register), as at December 2020
- DES, Legally secured offsets (vegetation offset), as at July 2017
- DES, Essential Habitat, as at April 2020
- DES, Regulated vegetation (category B – endangered or of concern), as at April 2020
- DES, Regulated vegetation (category C – endangered or of concern), as at April 2020
- DES, Regulated vegetation (category R – riverine), as at April 2020
- DES, Regional ecosystems (endangered), as at June 2021
- DES – Koala Priority Area, as at August 2020
- DES – Wildlife habitat (koala habitat areas – core areas), as at August 2020
- DES – Wildlife habitat (koala habitat areas – locally refined area), as at August 2020
- DES, High conservation value wetlands (high environmental significance), as at March 2020
- DES, High conservation value wetlands (high environmental value), as at June 2020.

Source data geography

SEQ region

Method

Constraints used

The following new constraints layers were identified for this analysis:

- Koala Conservation and habitat areas
- Matters of State Environmental Significance (MSES)
- Vegetation Management Act.

In accordance with the land suitability GMP best practice research and SEQ-wide developability rules, new constraints are categorised as either a hard constraint (100 per cent of an area is not considered available for development) or soft constraint (developable percentage as identified in Appendix I: Developable area and land supply types).

For the purposes of the 2021 LSDM Report the following constraints were analysed to determine an estimate of their potential impact on the region's residential developable areas:

- Hard constraints:
 - MSES areas including:
 - Marine Parks
 - Fish habitat areas A and B
 - Wildlife (endangered or vulnerable wildlife and special least concern animal)

- High conservation value wetlands (Environment Protection Act 1994), including high environmental value and high environmental significance
 - Legally secured offsets
 - Protected Areas and Nature Refuges
 - Endangered Regional Ecosystems
 - Regulated vegetation Categories C and B
 - Regulated vegetation Category R
- Core and locally refined koala habitat areas within a Koala Priority Area.
- Soft constraints:
 - All MSES areas not identified as a hard constraint (see above)
 - Regulated vegetation Essential Habitat
 - Regulated vegetation 100m from wetland
 - Core and locally refined koala habitat areas outside a Koala Priority Area.

Note: Other constraints identified in the GMP best practice research (see Appendix I: Developable area and land supply types) did not form part of this analysis as they were not the subject of state-level updates since the development of *ShapingSEQ* 2017.

Developable areas

For the purposes of the analysis the region's developable areas included:

- BHS land (as at June 2021)
- where not captured by the BHS, growth areas within the Urban Footprint as used to assess *ShapingSEQ* 2017's overall land supply to 2041 (as at June 2021).

Excluded areas

The following areas were excluded from the analysis as they were identified as exempt from the impact of the new constraints in relevant legislation:

- SEQ Priority Development Areas, August 2018
- Springfield Structure Plan, August 2013
- Mango Hill Infrastructure Development Control Plan, December 2011
- Kawana Development Control Plan 1, December 2013
- State Planning Policy identified Strategic Airports (including Archerfield, Brisbane, Wellcamp, Gold Coast, Amberley, Sunshine Coast and Toowoomba), August 2018.

Approved/assumed developed areas

The following areas were considered as approved for development and not affected by the new constraints.

- MCU (multiple dwellings) development permits as at June 2021.
- Reconfiguring a lot development permits, as at June 2021

- Property parcels $\leq 2500\text{m}^2$ or identified road casements as at June 2021 (In line with the BHS methodology).

Assessment and analysis

- Determine the total capacity of the expansion area using BHS theoretical dwelling yields (as at 30 June 2016) and total growth area dwellings.
- Union identified constraints (hard and soft), approved/assumed developed areas and excluded areas to each of the BHS and growth area developable areas.
- Calculate the area, in hectares, of land affected by new constraints by:
 - Determine the potential number of dwellings affected by:
 - BHS
 - For hard constraints
 - Selecting areas potentially impacted by hard constraints (not including excluded and approved/assumed developed areas).
 - Multiply the area affected by the identified BHS dwelling density and multiply by 100 per cent (as all of these dwellings are not considered available for development).
 - For soft constraints
 - Selecting areas potentially impacted by soft constraints but not affected by hard constraints (not including excluded areas and approved/assumed developed areas).
 - Multiply the area affected by the identified BHS dwelling density and multiply by the relevant soft constraints developable percentage (as identified in Appendix I: Developable area and land supply types).
 - Growth areas
 - For hard constraints
 - Selecting areas potentially impacted by hard constraints (not including excluded areas and approved/assumed developed areas).
 - Multiply the area potentially affected by the area's dwelling density and multiply by 100 per cent (as all of these dwellings are not considered available for development).
 - For soft constraints
 - Selecting areas potentially affected by soft constraints but not affected by hard constraints (not including excluded areas and approved/assumed developed areas).
 - Multiply the area potentially affected by the area's dwelling density and multiply by the relevant soft constraints developable percentage (as identified in Appendix I: Developable area and land supply types).

- Determine total dwellings potentially affected
 - Add together the number of dwellings potentially affected by hard and soft constraints for both the BHS and growth areas.
 - Calculate the regional proportion of expansion dwellings potentially affected by new constraints by dividing the total number of dwellings potentially affected by new constraints by the total expansion dwelling capacity.

Data update

Annually or as new constraints layers are identified.

Reporting units

Proportion of the region’s expansion area dwelling capacity potentially affected by the new constraints.

Notes

The 2021 analysis only reports at the SEQ level due to the limitations of the data used. Improvements in information supporting this analysis are expected to enable reporting at a local government level in the future.

Appendices

Appendix A: Growth areas

Table A1: List of growth areas used for analysis in the 2021 Land Supply and Development Monitoring (LSDM) Report.

Local government area (LGA)	Growth Area
Brisbane	N/A
Gold Coast	<ul style="list-style-type: none"> • Coomera • Worongary
Ipswich	<ul style="list-style-type: none"> • Ripley Valley Priority Development Area • Springfield
Lockyer Valley	N/A
Logan	<ul style="list-style-type: none"> • Greater Flagstone Priority Development Area (PDA) • Yarrabilba PDA • Flinders
Moreton Bay	<ul style="list-style-type: none"> • Caboolture West • North East Business Park
Noosa	N/A
Redland	<ul style="list-style-type: none"> • Southern Redland Bay

Scenic Rim	N/A
Somerset	N/A
Sunshine Coast	<ul style="list-style-type: none"> • Caloundra South PDA • Palmview
Toowoomba	<ul style="list-style-type: none"> • Meringandan West – Klienton • Mt Kynoch

Note: For the estimated supply to 2041 assumed for these growth areas by the SGS study see Appendix C.

Appendix B: Treatment of fragmented areas

Local government areas with parcel level land supply information (Brisbane, Ipswich, Lockyer Valley, Logan, Moreton Bay, Noosa, Scenic Rim, Somerset, Sunshine Coast and Toowoomba).

Assessment of the realistic availability of fragmented areas was based on an approximation of the 2013 Broadhectare Studies (BHS) rules for calculating expected yield from theoretical yield (2012 BHS rules are used for Toowoomba):

- identified proportions by parcel-size ranges – tables B1, B2 and B3. These proportions are drawn directly from the BHS rules.
- selected residential zones used for the fragmented area analysis – Table B4. The zones in Table B4 were identified from the relevant planning schemes as being intended for low density residential use, predominantly houses. If the relevant land supply databases used for the fragmented area analysis did not include any additional dwelling yields on parcels greater than 2500m² in those zones, then the fragmented area analysis would not affect those areas.
- the BHS rules do not apply to master/structure plan areas or local development areas identified by the South East Queensland Regional Plan 2009-2031—this report’s fragmented area analysis does not apply to the growth areas identified in Appendix A
- the BHS rules do not apply to land with development approvals—this report’s fragmented area analysis does not affect assumed dwelling growth up to 2021, as an allowance for the implementation of development approvals existing at the time of creation of the respective parcel-level land supply information datasets for each relevant local government area. This report’s fragmented area analysis also does not affect areas with a current development approval, preliminary approval or infrastructure agreement as reflected in the Current Intent to Service layer (see the relevant local government Planned dwelling supply section in these Technical notes for full explanation of the method).

Note: Allowance for fragmented areas for Gold Coast and Redland, where parcel-level information was not used, was based solely on BHS theoretical and expected yields as stated in Table B5 below.

Table B1: Brisbane, Ipswich, Lockyer Valley, Logan, Scenic Rim, Somerset and Toowoomba

LGA	Small lot existing house	Small lot vacant	Medium lot	Large lot (2.1-10)	Large lot (10+)
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	Lots less than 1.2 ha with an existing house	Lots less than 1.2 ha that are vacant	Lots greater than 1.2 ha and less than 2.1 ha	Lots greater than 2.1 ha up to 10 ha	Lots greater than 10ha
Brisbane	50%	95%	95%	95%	95%
Ipswich	10%	30%	30%	50%	80%
Lockyer Valley	10%	30%	30%	40%	90%
Logan	10%	30%	30%	50%	80%
Scenic Rim	10%	30%	30%	40%	90%
Somerset	10%	30%	40%	90%	90%
Toowoomba	20%	30%	30%	50%	80%

Table B2: Sunshine Coast

LGA	Small lot existing house Lots less than 1.2 ha with an existing house	Small lot vacant Lots less than 1.2 ha that are vacant	Medium lot Lots greater than 1.2 ha and less than 2.1 ha	Large lot Lots greater than 2.1 ha
Noosa	25%	75%	75%	100%
Caloundra	25%	50%	50%	95%
Maroochydore	25%	60%	60%	95%

Table B3: Moreton Bay

LGA	Small lot existing house Lots less than 1.2 ha with an existing house	Small lot vacant Lots less than 1.2 ha that are vacant	Medium lot Lots greater than 1.2 ha and less than 5 ha	Large lot (5-10) Lots greater than 5 ha up to 10 ha	Large lot (10+) Lots greater than 10ha
Caboolture	40%	60%	60%	70%	80%
Pine Rivers	20%	40%	40%	50%	80%
Redcliffe	90%	100%	100%	100%	100%

Table B4: Selected residential zones used for fragmented area analysis

LGA	Residential zones
Brisbane	<ul style="list-style-type: none"> • Emerging communities • Low density residential • Character residential (character and infill housing) • Rural residential
Ipswich	<ul style="list-style-type: none"> • Large lot residential • Residential low density • Future urban • Bundamba race stables area • Urban investigation • Township residential • Township character housing
Lockyer Valley	<ul style="list-style-type: none"> • Emerging community • Low density residential • Rural residential
Logan	<ul style="list-style-type: none"> • Emerging community • Low density residential • Rural residential
Moreton Bay	<ul style="list-style-type: none"> • Emerging community (interim and transitional) • General residential (suburban neighbourhood and coastal communities precincts) • Rural residential • Township residential precinct
Noosa	<ul style="list-style-type: none"> • Low density residential • Rural residential
Scenic Rim	<ul style="list-style-type: none"> • Emerging community • Low density residential • Rural residential • Township (Township Residential precinct)
Somerset	<ul style="list-style-type: none"> • Emerging community • General residential • Rural residential
Sunshine Coast	<ul style="list-style-type: none"> • Low density residential • Rural residential • Limited development (landscape residential)

	<ul style="list-style-type: none"> Emerging community
Toowoomba	<ul style="list-style-type: none"> Low density residential Rural residential Emerging community

Local government areas without suitable parcel-level land supply information include Gold Coast and Redland.

Assessment of the realistic availability of fragmented areas of these local government areas was based on the difference between 2013 BHS (updated to account for development to June 2021) theoretical and expected dwelling yields.

Table B5: BHS values used to determine realistic availability of expansions areas in the Gold Coast and Redland.

LGA	BHS theoretic yield	BHS expected yield
Gold Coast	2495	1896
Redland	1179	1088

Appendix C: SGS study (greenfield areas)

The figures in table C1 are drawn from the SGS Economics and Planning, SEQ realistic dwelling take up – 2021 update, November 2021.

This information is used to assist in determining realistic availability for selected SEQ major growth areas. The SGS study assumed necessary supporting urban infrastructure would be available over time as required to support the ‘Estimated supply to 2041’. The Current Intent to Service layer (as explained in Appendix F) affects the realistic availability of some growth areas for development up to 2041, as further explained in the relevant local government Planned dwelling supply sections of these Technical notes.

Table C1: Assumed supply to 2041 (selected areas)

The following information was used to assist in determining realistic availability for growth areas.

LGA	Area	Base capacity	Estimated supply to 2041
Gold Coast	Coomera	20,389	10,150
	Worongary	3361	2935
Ipswich	Ripley Valley Priority Development Area (PDA)	48,846	29,725

	Springfield	31,462	18,200
Logan	Greater Flagstone PDA	49,383	21,524
	Yarrabilba PDA	20,502	16,550
	Flinders	9047	4970
Moreton Bay	Caboolture West	26,874	9226
	North East Business Park	986	921
Redland	Southern Redland Bay	3912	2220
Sunshine Coast	Caloundra South PDA	19,000	15,200
	Palmview	7529	6720
Toowoomba	Meringandan West-Klienton	1582	1200
	Mt Kynoch	1827	600

Appendix D: Industrial land and constraint categories

The following categorisation was applied by DSDILGP to the identified planned industrial land supply and take-up data. It outlines the concordance of local government planning scheme and other precincts and zonings to industrial land categories used in the 2021 LSDM Report. It should be noted that due to limitations of the data, there are some identified precincts and zones that may not correctly align to a nominated industrial reporting category. These are considered to affect only a minor proportion of land and are shown here for completeness.

Table D1: Industrial land zonings by category

LGA	Industrial reporting category	Local government precincts and zones
Brisbane	Low impact industry	<ul style="list-style-type: none"> • Elliot Road North C Sub-precinct (NPP-002c) - Banyo-Nudgee Neighbourhood • IN1 – General Industry A • LII – Low Impact Industry • SP4 - Special Purpose • SC5 – Specialised Centre (Mixed Industry and Business)
	Medium impact industry	<ul style="list-style-type: none"> • IN2 – General Industry B • Port of Brisbane Master Plan <ul style="list-style-type: none"> ○ Port Industry ○ Special Industry ○ Motor Vehicle Storage Processing and Distribution

	High impact industry	<ul style="list-style-type: none"> • IN3 – General Industry C • SI – Special Industry
	Waterfront and Marine industry	<ul style="list-style-type: none"> • Port of Brisbane Master Plan <ul style="list-style-type: none"> ○ Port Industry ○ Wharves / Loading / Unloading Facilities ○ Terminals (Bulk, General Purpose) ○ General Industry C (Wharves / Loading / Unloading Facilities) ○ Special Industry (Wharves / Loading / Unloading Facilities) • Dredge Rehandling Area
	High Technology Industry	<ul style="list-style-type: none"> • N/A
	Airports and air bases	<ul style="list-style-type: none"> • Archerfield Airport Master Plan <ul style="list-style-type: none"> ○ General Industry • Brisbane Airport Master Plan <ul style="list-style-type: none"> ○ Industry
	Industry Investigation Area	<ul style="list-style-type: none"> • II – Industry investigation • Industry Investigation Area – Northshore Hamilton PDA (Medium Impact Employment Zone)
Gold Coast	Low impact industry	<ul style="list-style-type: none"> • No Precinct - Low Impact Industry • Future Low Impact Industry Precinct - Low Impact Industry
	Medium impact industry	<ul style="list-style-type: none"> • No Precinct - Medium Impact Industry • Future Medium Impact Industry Precinct - Medium Impact Industry
	High impact industry	<ul style="list-style-type: none"> • No Precinct - High Impact Industry • Future High Impact Industry Precinct - High Impact Industry
	Waterfront and Marine industry	<ul style="list-style-type: none"> • No Precinct - Waterfront and Marine Industry
	High Technology Industry	<ul style="list-style-type: none"> • N/A
	Airports and air bases	<ul style="list-style-type: none"> • N/A
	Industry Investigation Area	<ul style="list-style-type: none"> • N/A

Ipswich	Low impact industry	<ul style="list-style-type: none"> • LB03 - Local Business and Industry • LB04 – Local Business and Industry • LB06 - Local Business and Industry • LB09 - Local Business and Industry • LB10 – Local Business and Industry • LB11 - Local Business and Industry • LB12 - Local Business and Industry • LB13 - Local Business and Industry • LB14 – Local Business and Industry • LB15 - Local Business and Industry • LB16 - Local Business and Industry • LBB – Local Business and Industry • RBB01 – Local Business and Industry • RB01L - Regional Business and Industry - Low Impact • RB02L - Regional Business and Industry - Low Impact • RB03L - Regional Business and Industry - Low Impact • RB04L - Regional Business and Industry - Low Impact • RBB – Regional Business and Industry – Low Impact • RBB01 – Regional Business and Industry – Low Impact • RBB - Regional Business and Industry Buffer • SFTC - SF Town Centre
	Medium impact industry	<ul style="list-style-type: none"> • RB01M - Regional Business and Industry - Medium Impact • RB02M - Regional Business and Industry - Medium Impact • RB03M - Regional Business and Industry - Medium Impact • RB04M - Regional Business and Industry - Medium Impact • RB05L - Regional Business and Industry (Low Impact Sub Area) • RB05M - Regional Business and Industry - Medium Impact • RB05M - Regional Business and Industry (Med Impact Sub Area)
	High impact industry	<ul style="list-style-type: none"> • N/A

	Waterfront and Marine industry	<ul style="list-style-type: none"> • N/A
	High Technology Industry	<ul style="list-style-type: none"> • N/A
	Airports and air bases	<ul style="list-style-type: none"> • N/A
	Industry Investigation Area	<ul style="list-style-type: none"> • LBIA01 - Local Business and Industry Investigation • LBIA02 - Local Business and Industry Investigation • LBIA03 - Local Business and Industry Investigation • RBB01 – Regional Business and Industry Investigation • RBIA01 - Regional Business and Industry Investigation • RBIA02 - Regional Business and Industry Investigation • RBIA03 - Regional Business and Industry Investigation • RBIA04 – Regional Business and Industry Investigation
Lockyer Valley	Low impact industry	<ul style="list-style-type: none"> • No Precinct - Industrial • Gatton South-East Industrial Precinct (G2) – Industrial • Gatton Crescent Street Industrial Precinct (G3) – Industrial • Gatton Eastern Gateway Industrial Precinct (G4) – Industrial • Gatton North Side Industrial Precinct (G5) - Industrial • Grantham Reconstruction Area Development Scheme – Low Impact Industry
	Medium impact industry	<ul style="list-style-type: none"> • Gatton South-West Industrial Precinct (G1) - Industrial • Lawlers Road Precinct (H2) – Industrial
	High impact industry	<ul style="list-style-type: none"> • William (Railway) Street Precinct (H1) - Industrial
	Waterfront and Marine industry	<ul style="list-style-type: none"> • N/A
	High Technology Industry	<ul style="list-style-type: none"> • N/A
	Airports and air bases	<ul style="list-style-type: none"> • N/A

	Industry Investigation Area	<ul style="list-style-type: none"> N/A
Logan	Low impact industry	<ul style="list-style-type: none"> No Precinct - Low Impact Industry
	Medium impact industry	<ul style="list-style-type: none"> No Precinct - Medium Impact Industry Greater Flagstone PDA – Industry and Business Yarrabilba PDA – Business and Industry
	High impact industry	<ul style="list-style-type: none"> N/A
	Waterfront and Marine industry	<ul style="list-style-type: none"> N/A
	High Technology Industry	<ul style="list-style-type: none"> N/A
	Airports and air bases	<ul style="list-style-type: none"> N/A
	Industry Investigation Area	<ul style="list-style-type: none"> N/A
Moreton Bay	Low impact industry	<ul style="list-style-type: none"> Light Industry - Industry Mixed Industry and Business – Industry Township Industry – Township North Lakes Mixed Industry and Business Area (MIBA)
	Medium impact industry	<ul style="list-style-type: none"> General Industry – Industry
	High impact industry	<ul style="list-style-type: none"> Restricted Industry - Industry
	Waterfront and Marine industry	<ul style="list-style-type: none"> Marine Industry - Industry
	High Technology Industry	<ul style="list-style-type: none"> N/A
	Airports and air bases	<ul style="list-style-type: none"> N/A
	Industry Investigation Area	<ul style="list-style-type: none"> Caboolture West – Enterprise and Employment – Emerging Community
Noosa	Low impact industry	<ul style="list-style-type: none"> No Precinct - Low Impact Industry Factory Street Business and Industry Precinct - Low Impact Industry Hofmann Drive Business & Industry Precinct - Low Impact Industry Lionel Donovan Drive Auto Precinct - Low Impact Industry

		<ul style="list-style-type: none"> • Kin Kin Business and Industry Precinct - Low Impact Industry • Gateway Drive West Makers Precinct - Low Impact Industry
	Medium impact industry	<ul style="list-style-type: none"> • No Precinct - Medium Impact Industry • Venture Drive Enterprise Precinct - Medium Impact Industry
	High impact industry	<ul style="list-style-type: none"> • N/A
	Waterfront and Marine industry	<ul style="list-style-type: none"> • N/A
	High Technology Industry	<ul style="list-style-type: none"> • N/A
	Airports and air bases	<ul style="list-style-type: none"> • N/A
	Industry Investigation Area	<ul style="list-style-type: none"> • N/A
Redland	Low impact industry	<ul style="list-style-type: none"> • No Precinct - Low Impact Industry • No Precinct - Mixed use
	Medium impact industry	<ul style="list-style-type: none"> • No Precinct – Medium Impact Industry
	High impact industry	<ul style="list-style-type: none"> • N/A
	Waterfront and Marine industry	<ul style="list-style-type: none"> • No Precinct – Waterfront and Marine Industry
	High Technology Industry	<ul style="list-style-type: none"> • N/A
	Airports and air bases	<ul style="list-style-type: none"> • N/A
	Industry Investigation Area	<ul style="list-style-type: none"> • N/A
Scenic Rim	Low impact industry	<ul style="list-style-type: none"> • Commercial Industry Precinct – Mixed Use
	Medium impact industry	<ul style="list-style-type: none"> • No Precinct – Industry • No Precinct – Rural Industry • Bromelton SDA - Rural Industry Precinct
	High impact industry	<ul style="list-style-type: none"> • Bromelton SDA – Medium-High Impact Industry Precinct • Bromelton SDA – Rail Dependent Industry Precinct • Bromelton SDA – Special Industry Precinct

	Waterfront and Marine industry	<ul style="list-style-type: none"> N/A
	High Technology Industry	<ul style="list-style-type: none"> N/A
	Airports and air bases	<ul style="list-style-type: none"> N/A
	Industry Investigation Area	<ul style="list-style-type: none"> N/A
Somerset	Low impact industry	<ul style="list-style-type: none"> No Precinct - Industry
	Medium impact industry	<ul style="list-style-type: none"> N/A
	High impact industry	<ul style="list-style-type: none"> No Precinct - High Impact Industry
	Waterfront and Marine industry	<ul style="list-style-type: none"> N/A
	High Technology Industry	<ul style="list-style-type: none"> N/A
	Airports and air bases	<ul style="list-style-type: none"> N/A
	Industry Investigation Area	<ul style="list-style-type: none"> N/A
Sunshine Coast	Low impact industry	<ul style="list-style-type: none"> No Precinct - Low Impact Industry
	Medium impact industry	<ul style="list-style-type: none"> No Precinct - Medium Impact Industry Caloundra South PDA – Industry and Business
	High impact industry	<ul style="list-style-type: none"> No Precinct – High Impact Industry No Precinct – Medium Impact Industry - Coolum Local Plan Area
	Waterfront and Marine industry	<ul style="list-style-type: none"> No Precinct – Waterfront and Marine Industry
	High Technology Industry	<ul style="list-style-type: none"> N/A
	Airports and air bases	<ul style="list-style-type: none"> N/A
	Industry Investigation Area	<ul style="list-style-type: none"> N/A
Toowoomba	Low impact industry	<ul style="list-style-type: none"> No Precinct – Low Impact Industry 47 Wellcamp Low Impact Industry - Low Impact Industry

	Medium impact industry	<ul style="list-style-type: none"> No Precinct - Medium Impact Industry 36 Intermodal Facility - Medium Impact Industry 37 Transport and Warehousing - Medium Impact Industry 38 General Industry - Medium Impact Industry.
	High impact industry	<ul style="list-style-type: none"> No Precinct – High Impact Industry 39 Heavy Industry - High Impact Industry 44 Quarry - High Impact Industry
	Waterfront and Marine industry	<ul style="list-style-type: none"> N/A
	High Technology Industry	<ul style="list-style-type: none"> N/A
	Airports and air bases	<ul style="list-style-type: none"> N/A
	Industry Investigation Area	<ul style="list-style-type: none"> N/A

Table D2: Common Layer Names Table (the common layer names are the main sub-headings of the table)

The following explain the actual constraints which the ‘common layer names’ used by the developability rules (see Appendix I: Developable areas and land supply types) represent.

Note:

Available polygon constraints are used in the analysis of planned industrial land supply, therefore any identified line constraint information has not been considered.

Hard constraints

LGA	Scheme	Layer
Hard constraints - Flood (Q100)¹		
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> Flood Hazard Overlay <ul style="list-style-type: none"> Brisbane River Flood Planning Area 1 Creek/Waterway Flood Planning Area 1
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> Data not available
Ipswich	<i>Ipswich Planning Scheme 2006</i>	<ul style="list-style-type: none"> Adopted Flood Regulation Line 1 in 20 Development Line

Lockyer Valley	<i>Temporary Local Planning Instrument 2020 (Flood Regulation)</i>	<ul style="list-style-type: none"> • Flood Overlay <ul style="list-style-type: none"> ○ High ○ Medium
Logan	<i>Logan Planning Scheme 2015</i>	<ul style="list-style-type: none"> • Flood Hazard Overlay <ul style="list-style-type: none"> ○ Flooding and Inundation Area
Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Flood Hazard Overlay <ul style="list-style-type: none"> ○ High Risk Flood Hazard Area
Noosa	<i>Noosa Plan 2020</i>	<ul style="list-style-type: none"> • Flood Hazard Overlay <ul style="list-style-type: none"> ○ Flood and Inundation Extent
Redland	<i>Redland City Plan 2018</i>	<ul style="list-style-type: none"> • Flood Prone Area Overlay <ul style="list-style-type: none"> ○ 2016 Storm Tide Inundation Area <p>Note: Scheme notes confirm this relates to Q100</p>
Scenic Rim	<i>Scenic Rim Planning Scheme 2020</i>	<ul style="list-style-type: none"> • Flood Hazard Category Area <ul style="list-style-type: none"> ○ High
Somerset	<i>Somerset Region Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Flood Overlay <ul style="list-style-type: none"> ○ Extreme Flood Hazard ○ High Flood Hazard ○ Significant Flood Hazard ○ -Potential 1% AEP
Sunshine Coast	<i>Sunshine Coast Planning Scheme 2014</i>	<ul style="list-style-type: none"> • Flood Hazard Overlay
Toowoomba	<i>Toowoomba Regional Planning Scheme</i>	<ul style="list-style-type: none"> • Flood Hazard <ul style="list-style-type: none"> ○ High Flood Hazard
Hard constraint - Slope > 25% / Landslide²		
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> • Landslide Overlay <ul style="list-style-type: none"> ○ Landslide Susceptibility Area
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> • Landslide Hazard Overlay <ul style="list-style-type: none"> ○ Very High
Ipswich	<i>Ipswich Planning Scheme 2006</i>	<ul style="list-style-type: none"> • Difficult Topography Overlay <ul style="list-style-type: none"> ○ Slope > 25%
Lockyer Valley	<i>Gatton Shire Planning Scheme 2007</i> <i>Laidley Shire Planning Scheme 2003</i>	<ul style="list-style-type: none"> • N/A

Logan	<i>Logan Planning Scheme 2015</i>	<ul style="list-style-type: none"> • Steep Slope and Landslide Hazard Area Overlay <ul style="list-style-type: none"> ○ Trigger map
Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Landslide hazard area (>15% Slope)
Noosa	<i>Noosa Plan 2020</i>	<ul style="list-style-type: none"> • Landslide Hazard Overlay <ul style="list-style-type: none"> ○ Very high hazard area ○ High hazard area ○ Moderate hazard area
Redland	<i>Redland City Plan 2018</i>	<ul style="list-style-type: none"> • Landslide Hazard Overlay <ul style="list-style-type: none"> ○ Very High Landslide Hazard
Scenic Rim	<i>Scenic Rim Planning Scheme 2020</i>	<ul style="list-style-type: none"> • Steep Slope Overlay (Steep Land Area) <ul style="list-style-type: none"> ○ >25% slope • Steep Slope Overlay (Landslide Hazard Area) <ul style="list-style-type: none"> ○ Medium ○ High ○ Very High
Somerset	<i>Somerset Region Planning Scheme 2016</i>	<ul style="list-style-type: none"> • N/A
Sunshine Coast	<i>Sunshine Coast Planning Scheme 2014</i>	<ul style="list-style-type: none"> • Landslide Hazard and Steep Land Overlay <ul style="list-style-type: none"> ○ Steep Land - Slope >25%
Toowoomba	<i>Toowoomba Regional Planning Scheme</i>	<ul style="list-style-type: none"> • N/A
Hard constraint - Infrastructure (excl. buffers)		
State	<i>State Data</i>	<ul style="list-style-type: none"> • Future State Controlled Road Corridor • Future Railway Corridor
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> • Regional Infrastructure Overlay <ul style="list-style-type: none"> ○ Major electricity infrastructure high voltage powerline easement ○ Oil Pipeline 15m ○ Gas Pipeline 20m
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> • Regional Infrastructure Overlay <ul style="list-style-type: none"> ○ Major electricity infrastructure (Energex) ○ Major electricity infrastructure (Powerlink) ○ Water supply properties

		<ul style="list-style-type: none"> ○ Water storage
Ipswich	<i>Ipswich Planning Scheme 2006</i>	<ul style="list-style-type: none"> ● High Voltage Electricity Transmission Lines ● High Pressure Pipelines
Lockyer Valley	<i>Gatton Shire Planning Scheme 2007</i> <i>Laidley Shire Planning Scheme 2003</i>	<ul style="list-style-type: none"> ● Refuse Disposal Sites ● Sewage Treatment Plants
Logan	<i>Logan Planning Scheme 2015</i>	<ul style="list-style-type: none"> ● Regional infrastructure corridors and substations overlay <ul style="list-style-type: none"> ○ Powerline corridor 40m buffer ○ Petroleum pipeline corridor ○ Pipeline water corridor ○ Trigger map ○ Greenbank training area ○ Substation ○ Wastewater facility ○ SEQ Water Property
Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> ● Infrastructure Buffers <ul style="list-style-type: none"> ○ Electricity supply substation buffer - 10m ○ High Voltage Electricity Line Buffer ○ Landfill site ○ Wastewater treatment site ○ Property containing bulk water facility
Noosa	<i>Noosa Plan 2020</i>	<ul style="list-style-type: none"> ● Regional infrastructure overlay (electricity) <ul style="list-style-type: none"> ○ Major electricity transmission buffer ● Regional infrastructure overlay (water) <ul style="list-style-type: none"> ○ Pump station facility and reservoir facility ○ Water treatment plant and water quality facility ○ Drinking water supply storage ● Regional infrastructure overlay (gas) <ul style="list-style-type: none"> ○ Gas pipeline corridor buffer
Redland	<i>Redland City Plan 2018</i>	<ul style="list-style-type: none"> ● Regional infrastructure corridors and substations overlay <ul style="list-style-type: none"> ○ Electricity Infrastructure Easement ○ Wastewater

Scenic Rim	<i>Scenic Rim Planning Scheme 2020</i>	<ul style="list-style-type: none"> • Airport Environs and Defence Land Overlay <ul style="list-style-type: none"> ○ Defence land ○ Defence land buffer area • Regional Infrastructure Overlay (Major Electricity, Roads and Rail Infrastructure) <ul style="list-style-type: none"> ○ Electricity substation ○ Road investigation corridor • Regional Infrastructure Overlay (Water and Wastewater Infrastructure) <ul style="list-style-type: none"> ○ Pump station facility (Bulk Water Supply) ○ Bulk water facility ○ Wastewater treatment plant
Somerset	<i>Somerset Region Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Infrastructure Overlay <ul style="list-style-type: none"> ○ Gas Pipeline ○ Sewerage Treatment Plant ○ Waste Stations
Sunshine Coast	<i>Sunshine Coast Planning Scheme 2014</i>	<ul style="list-style-type: none"> • Regional Infrastructure Overlay <ul style="list-style-type: none"> ○ Wastewater treatment plant and buffer
Toowoomba	<i>Toowoomba Regional Planning Scheme</i>	<ul style="list-style-type: none"> • Regional Infrastructure Corridors and Substations Overlay <ul style="list-style-type: none"> ○ Petroleum pipeline: oil and gas
Hard constraint - Extractive Resources		
State	<i>State Data</i>	<ul style="list-style-type: none"> • Key Resource Areas <ul style="list-style-type: none"> ○ Resource/Processing Area
Hard constraint - Built Form (Heritage)³		
State	<i>State Data</i>	<ul style="list-style-type: none"> • State Heritage Place
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> • N/A
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> • Heritage Overlay <ul style="list-style-type: none"> ○ Heritage place ○ State heritage place
Ipswich	<i>Ipswich Planning Scheme 2006</i>	<ul style="list-style-type: none"> • N/A
Lockyer Valley	<i>Gatton Shire Planning Scheme 2007</i> <i>Laidley Shire Planning Scheme 2003</i>	<ul style="list-style-type: none"> • N/A

Logan	<i>Logan Planning Scheme 2015</i>	<ul style="list-style-type: none"> • Heritage Overlay <ul style="list-style-type: none"> ○ Heritage character grave site
Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> • N/A
Noosa	<i>Noosa Plan 2020</i>	<ul style="list-style-type: none"> • N/A
Redland	<i>Redland City Plan 2018</i>	<ul style="list-style-type: none"> • N/A
Scenic Rim	<i>Scenic Rim Planning Scheme 2020</i>	<ul style="list-style-type: none"> • N/A
Somerset	<i>Somerset Region Planning Scheme 2016</i>	<ul style="list-style-type: none"> • N/A
Sunshine Coast	<i>Sunshine Coast Planning Scheme 2014</i>	<ul style="list-style-type: none"> • N/A
Toowoomba	<i>Toowoomba Regional Planning Scheme</i>	<ul style="list-style-type: none"> • N/A
Hard constraint - Environment (High value)⁴		
State Data	<i>State Data</i>	<ul style="list-style-type: none"> • Category A and B Endangered Regional Ecosystems v11 • Category A Regulated Vegetation, v4.13 • Marine Parks • Fish Habitat A and B • Protected Areas (estates and nature refuges) • High ecological significance wetlands • High conversation value wetlands • Legally secured offset areas • Wildlife habitat endangered and vulnerable • Wildlife habitat species least concern • Koala habitat (core v1.0 and local refined habitat v1.1) within a Koala Priority Area v1.0
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> • Biodiversity Area Overlay <ul style="list-style-type: none"> ○ High ecological significance ○ High ecological significance strategic
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> • Environment Significance Overlay <ul style="list-style-type: none"> ○ Local significance species
Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Environmental Area Overlay <ul style="list-style-type: none"> ○ Matters of local environmental significance

Hard constraint - waterways / wetlands (excl. buffers)		
State	<i>QGSO</i>	<ul style="list-style-type: none"> • QGSO waterway and wetlands
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> • Waterway Corridor Overlay • Wetlands Overlay
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> • Environment Significance Overlay <ul style="list-style-type: none"> ○ Wetlands and Waterways ○ Local significant wetlands ○ Waterways
Ipswich	<i>Ipswich Planning Scheme 2006</i>	<ul style="list-style-type: none"> • N/A
Lockyer Valley	<i>Gatton Shire Planning Scheme 2007</i> <i>Laidley Shire Planning Scheme 2003</i>	<ul style="list-style-type: none"> • Wetlands (Laidley)
Logan	<i>Logan Planning Scheme 2015</i>	<ul style="list-style-type: none"> • Waterway Corridors and Wetlands Overlay <ul style="list-style-type: none"> ○ Waterway corridor trigger ○ Waterway stream order 1 to 5
Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Riparian and Wetland Setback Overlay <ul style="list-style-type: none"> ○ Wetland ○ Riparian and Wetland Setback Area • Environmental Areas Overlay <ul style="list-style-type: none"> ○ MLES - Wetlands
Noosa	<i>Noosa Plan 2020</i>	<ul style="list-style-type: none"> • Area subject to riparian buffer overlay <ul style="list-style-type: none"> ○ MSES regulated vegetation – category R riverine ○ Fish habitat area
Redland	<i>Redland City Plan 2018</i>	<ul style="list-style-type: none"> • Waterway corridors and wetlands overlay <ul style="list-style-type: none"> ○ Waterway Corridor - MLES and MNES
Scenic Rim	<i>Scenic Rim Planning Scheme 2020</i>	<ul style="list-style-type: none"> • Environmental Significance Overlay: Wetlands and Waterways <ul style="list-style-type: none"> ○ High ecological value waters (wetlands) ○ High ecological significance wetlands ○ Waterways and wetland buffer area • Environmental Significance Overlay: Local Watercourses <ul style="list-style-type: none"> ○ Watercourse buffer areas A-C

Somerset	<i>Somerset Region Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Biodiversity Overlay <ul style="list-style-type: none"> ○ High Ecological Significance Wetlands ○ High Ecological Value Waters (wetlands)
Sunshine Coast	<i>Sunshine Coast Planning Scheme 2014</i>	<ul style="list-style-type: none"> • Biodiversity, waterways and wetlands overlay <ul style="list-style-type: none"> ○ Waterway corridors ○ Wetlands ○ Riparian Protection Area ○ Ramsar Wetlands ○ Waterbodies
Toowoomba	<i>Toowoomba Regional Planning Scheme</i>	<ul style="list-style-type: none"> • Environmental Significance Overlay <ul style="list-style-type: none"> ○ Waterways and Wetlands ○ Wetlands (Category 2)
Hard constraint - Location specific / Enterprise Amenity / Safety Buffers		
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> • Airport Environs Overlay <ul style="list-style-type: none"> ○ Airport Boundary ○ Public Safety Area ○ Airport Runway ○ Airport Runway Centreline
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> • N/A
Ipswich	<i>Ipswich Planning Scheme 2006</i>	<ul style="list-style-type: none"> • Explosive Storage Safeguard, Public Safety Areas and Purga Rifle Range <ul style="list-style-type: none"> ○ Explosive Storage Safeguard Buffer ○ Public Safety Area ○ Purga Rifle Range
Lockyer Valley	<i>Gatton Shire Planning Scheme 2007</i> <i>Laidley Shire Planning Scheme 2003</i>	<ul style="list-style-type: none"> • Agricultural Land Classification (Class A and B) (urban mask) • Helidon Magazine Safety Zone • Salinity Areas
Logan	<i>Logan Planning Scheme 2015</i>	<ul style="list-style-type: none"> • Greenbank military training buffer area
Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> • N/A
Noosa	<i>Noosa Plan 2020</i>	<ul style="list-style-type: none"> • N/A
Redland	<i>Redland City Plan 2018</i>	<ul style="list-style-type: none"> • Airport environs overlay <ul style="list-style-type: none"> ○ Birkdale Area A ○ Mt Hardgrave Zone A

Scenic Rim	<i>Scenic Rim Planning Scheme 2020</i>	<ul style="list-style-type: none"> • Agricultural Land Overlay <ul style="list-style-type: none"> ○ Agricultural land classification ○ Agricultural land buffer area
Somerset	<i>Somerset Region Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Agricultural Land Overlay <ul style="list-style-type: none"> ○ Important Agricultural Area ○ Agricultural Land Classification (Class A and B) • Air transport overlay <ul style="list-style-type: none"> ○ Zone A 0-100 metres ○ Zone A 0-60 metres ○ Zone A/B 60-300 metres • Scenic amenity overlay <ul style="list-style-type: none"> ○ High scenic amenity area
Sunshine Coast	<i>Sunshine Coast Planning Scheme 2014</i>	<ul style="list-style-type: none"> • Airport environs overlay <ul style="list-style-type: none"> ○ Zone A 0-100 metres ○ Zone A 0-60 metres • Scenic amenity overlay
Toowoomba	<i>Toowoomba Regional Planning Scheme</i>	<ul style="list-style-type: none"> • Agricultural Land Overlay <ul style="list-style-type: none"> ○ Airport Environs ○ Light Restriction Zone A ○ Height Restriction Zone (All Structures) ○ Public Safety ○ Runway • Scenic Amenity Overlay
Hard constraint - Local variation		
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> • Gold Coast Foreshore seawall line setback 8m⁵ • Lot 50 SP170649 for future recreation park

Soft constraints

LGA	Scheme	Layer
Soft constraints - Overland flow		
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> • Flood Overlay <ul style="list-style-type: none"> ○ Overland flow flood planning area
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> • N/A

Ipswich	<i>Ipswich Planning Scheme 2006</i>	<ul style="list-style-type: none"> • Development Constraints Overlay <ul style="list-style-type: none"> ○ Urban Catchment Flow Paths
Lockyer Valley	<i>Temporary Local Planning Instrument 2020 (Flood Regulation)</i>	<ul style="list-style-type: none"> • Overland Flow (10 m setback buffer)
Logan	<i>Logan Planning Scheme 2015</i>	<ul style="list-style-type: none"> • N/A
Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Flood Overlay <ul style="list-style-type: none"> ○ Overland Flow Path
Noosa	<i>Noosa Plan 2020</i>	<ul style="list-style-type: none"> • N/A
Redland	<i>Redland City Plan 2018</i>	<ul style="list-style-type: none"> • N/A
Scenic Rim	<i>Scenic Rim Planning Scheme 2020</i>	<ul style="list-style-type: none"> • N/A
Somerset	<i>Somerset Region Planning Scheme 2016</i>	<ul style="list-style-type: none"> • N/A
Sunshine Coast	<i>Sunshine Coast Planning Scheme 2014</i>	<ul style="list-style-type: none"> • N/A
Toowoomba	<i>Toowoomba Regional Planning Scheme</i>	<ul style="list-style-type: none"> • Flood Hazard Overlay: <ul style="list-style-type: none"> ○ Low risk ○ Medium risk ○ Overland flow low ○ Overland flow high
Soft constraints - Slope 15-25%⁶		
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> • N/A
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> • Landslide hazard overlay <ul style="list-style-type: none"> ○ High ○ Moderate
Ipswich	<i>Ipswich Planning Scheme 2006</i>	<ul style="list-style-type: none"> • Difficult Topography Overlay <ul style="list-style-type: none"> ○ 15% to 20% ○ 20% to 25%
Lockyer Valley	<i>Gatton Shire Planning Scheme 2007</i> <i>Laidley Shire Planning Scheme 2003</i>	<ul style="list-style-type: none"> • Steep Land <ul style="list-style-type: none"> ○ >=15% <20% ○ >=20%
Logan	<i>Logan Planning Scheme 2015</i>	<ul style="list-style-type: none"> • N/A

Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> • N/A
Noosa	<i>Noosa Plan 2020</i>	<ul style="list-style-type: none"> • N/A
Redland	<i>Redland City Plan 2018</i>	<ul style="list-style-type: none"> • Landslide Hazard Overlay <ul style="list-style-type: none"> ○ High Landslide Hazard ○ Medium Landslide Hazard
Scenic Rim	<i>Scenic Rim Planning Scheme 2020</i>	<ul style="list-style-type: none"> • Steep Slope Overlay: Steep Slope Area <ul style="list-style-type: none"> ○ 15.1% to 20% ○ 20.1% to 25%
Somerset	<i>Somerset Region Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Landslide Hazard Overlay <ul style="list-style-type: none"> ○ Slope is equal to or greater than 15%
Sunshine Coast	<i>Sunshine Coast Planning Scheme 2014</i>	<ul style="list-style-type: none"> • Landslide hazard and steep land overlay <ul style="list-style-type: none"> ○ Steep Land - Slope 15-20% ○ Steep Land - Slope 20-25%
Toowoomba	<i>Toowoomba Regional Planning Scheme</i>	<ul style="list-style-type: none"> • Landslide Hazard
Soft constraints - Environment (high value)⁷		
State	<i>State mapping</i>	<ul style="list-style-type: none"> • Koala Habitat (core v1.0 and locally refined v1.1) outside a Koala Priority Area v1.0
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> • N/A
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> • Environment Significance Overlay <ul style="list-style-type: none"> ○ State Significant Species ○ Regulated vegetation ○ High priority vegetation
Ipswich	<i>Ipswich Planning Scheme 2006</i>	<ul style="list-style-type: none"> • N/A
Lockyer Valley	<i>Gatton Shire Planning Scheme 2007</i> <i>Laidley Shire Planning Scheme 2003</i>	<ul style="list-style-type: none"> • Biodiversity Overlay <ul style="list-style-type: none"> ○ Significant Habitat Areas • Areas of Natural and Environmental Significance Overlay <ul style="list-style-type: none"> ○ High Ecological Significance ○ Very High Ecological Significance
Logan	<i>Logan Planning Scheme 2015</i>	<ul style="list-style-type: none"> • Biodiversity Areas Overlay <ul style="list-style-type: none"> ○ Koala corridor ○ Environmental management and conservation area

		<ul style="list-style-type: none"> ○ Significant remnant vegetation (locally endangered remnant) ○ Locally significant vegetation ○ Locally significant vine forest area ○ Locally significant Gossia gonoclada area ○ Locally significant Melaleuca
Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> ● N/A
Noosa	<i>Noosa Plan 2020</i>	<ul style="list-style-type: none"> ● Area subject to biodiversity overlay <ul style="list-style-type: none"> ○ MSES environmental values ○ Area of biodiversity significance
Redland	<i>Redland City Plan 2018</i>	<ul style="list-style-type: none"> ● Environmental Significance Overlay <ul style="list-style-type: none"> ○ MSES
Scenic Rim	<i>Scenic Rim Planning Scheme 2020</i>	<ul style="list-style-type: none"> ● Environmental Significance Overlay <ul style="list-style-type: none"> ○ MSES protected areas ○ MSES regulated vegetation ○ MSES state significance species ○ MLES core corridors, node corridors, stepping stones and critical linkages
Somerset	<i>Somerset Region Planning Scheme 2016</i>	<ul style="list-style-type: none"> ● Biodiversity Overlay <ul style="list-style-type: none"> ○ Protected Area ○ Wildlife Habitat ○ Regulated Vegetation ○ Legally Secured Offset Areas
Sunshine Coast	<i>Sunshine Coast Planning Scheme 2014</i>	<ul style="list-style-type: none"> ● Biodiversity, waterways and wetlands overlay <ul style="list-style-type: none"> ○ High value bushland habitat (Koala habitat value)
Toowoomba	<i>Toowoomba Regional Planning Scheme</i>	<ul style="list-style-type: none"> ● N/A
Soft constraints - Environment (low-medium value)		
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> ● Biodiversity Areas Overlay <ul style="list-style-type: none"> ○ Koala habitat area ○ General ecological significance ○ General ecological significance strategic

Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> • Environment Significance Overlay <ul style="list-style-type: none"> ○ MLES – Hinterland to coast critical corridors category B and C vegetation ○ MLES – General priority vegetation ○ MLES – Medium priority vegetation
Ipswich	<i>Ipswich Planning Scheme 2006</i>	<ul style="list-style-type: none"> • N/A
Lockyer Valley	<i>Gatton Shire Planning Scheme 2007</i> <i>Laidley Shire Planning Scheme 2003</i>	<ul style="list-style-type: none"> • Areas of Natural and Environmental Significance Overlay <ul style="list-style-type: none"> ○ Moderate Ecological Significance
Logan	<i>Logan Planning Scheme 2015</i>	<ul style="list-style-type: none"> • Biodiversity Areas Overlay <ul style="list-style-type: none"> ○ Matters of Local Significance ○ Vegetation management areas ○ Biodiversity corridor
Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Environmental Areas <ul style="list-style-type: none"> ○ Offset receiving areas
Noosa	<i>Noosa Plan 2020</i>	<ul style="list-style-type: none"> • Area subject to riparian buffer overlay <ul style="list-style-type: none"> ○ Riparian Buffer Areas <p>Note: Koala habitat (included as State dataset)</p>
Redland	<i>Redland City Plan 2018</i>	<ul style="list-style-type: none"> • Environmental Significance Overlay <ul style="list-style-type: none"> ○ MLES
Scenic Rim	<i>Scenic Rim Planning Scheme 2020</i>	<ul style="list-style-type: none"> • Environmental Significance Overlay <ul style="list-style-type: none"> ○ Vegetation management area
Somerset	<i>Somerset Region Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Biodiversity Overlay <ul style="list-style-type: none"> ○ Bushland Koala Habitat – Primary Habitat Areas ○ Bushland Koala Habitat – Secondary Habitat Areas
Sunshine Coast	<i>Sunshine Coast Planning Scheme 2014</i>	<ul style="list-style-type: none"> • Biodiversity, waterways and wetlands overlay <ul style="list-style-type: none"> ○ Native vegetation area
Toowoomba	<i>Toowoomba Regional Planning Scheme</i>	<ul style="list-style-type: none"> • Environmental Significance Overlay <ul style="list-style-type: none"> ○ Biodiversity Corridors ○ Areas of Ecological Significance
Soft constraints - Coastal Hazard: Erosion Prone Area		

State	<i>State mapping</i>	<ul style="list-style-type: none"> • Erosion Prone Area – coastal management district, used for: <ul style="list-style-type: none"> ○ Gold Coast ○ Ipswich ○ Logan
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> • Coastal Hazard Overlay <ul style="list-style-type: none"> ○ Erosion prone area – coastal erosion ○ Erosion prone area – permanent inundation due to sea level rise at 2100
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> • N/A
Ipswich	<i>Ipswich Planning Scheme 2006</i>	<ul style="list-style-type: none"> • N/A
Lockyer Valley	<i>Gatton Shire Planning Scheme 2007</i> <i>Laidley Shire Planning Scheme 2003</i>	<ul style="list-style-type: none"> • N/A
Logan	<i>Logan Planning Scheme 2015</i>	<ul style="list-style-type: none"> • Waterway corridors and wetlands trigger <ul style="list-style-type: none"> ○ Erosion Prone Area Trigger
Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> • Coastal Hazard Overlay (Erosion Prone Area)
Noosa	<i>Noosa Plan 2020</i>	<ul style="list-style-type: none"> • Coastal protection overlay <ul style="list-style-type: none"> ○ Coastal protection and scenic amenity
Redland	<i>Redland City Plan 2018</i>	<ul style="list-style-type: none"> • Coastal Protection (Erosion prone areas) Overlay
Scenic Rim	<i>Scenic Rim Planning Scheme 2020</i>	<ul style="list-style-type: none"> • N/A
Somerset	<i>Somerset Region Planning Scheme 2016</i>	<ul style="list-style-type: none"> • N/A
Sunshine Coast	<i>Sunshine Coast Planning Scheme 2014</i>	<ul style="list-style-type: none"> • Coastal Protection Area Overlay
Toowoomba	<i>Toowoomba Regional Planning Scheme</i>	<ul style="list-style-type: none"> • N/A
Soft constraints - Coastal Hazard: high storm tide		
State	<i>State mapping</i>	<ul style="list-style-type: none"> • High storm tide hazard, used for: <ul style="list-style-type: none"> ○ Gold Coast ○ Ipswich ○ Logan

		<ul style="list-style-type: none"> ○ Noosa ○ Redland ○ Sunshine Coast
Brisbane	<i>Brisbane City Plan 2014</i>	<ul style="list-style-type: none"> ● Coastal Hazard Overlay ○ High Storm Tide Inundation Area
Gold Coast	<i>Gold Coast City Plan 2016</i>	<ul style="list-style-type: none"> ● N/A
Ipswich	<i>Ipswich Planning Scheme 2006</i>	<ul style="list-style-type: none"> ● N/A
Lockyer Valley	<i>Gatton Shire Planning Scheme 2007</i> <i>Laidley Shire Planning Scheme 2003</i>	<ul style="list-style-type: none"> ● N/A
Logan	<i>Logan Planning Scheme 2015</i>	<ul style="list-style-type: none"> ● N/A
Moreton Bay	<i>Moreton Bay Planning Scheme 2016</i>	<ul style="list-style-type: none"> ● Coastal Hazard Overlay (Storm Tide) ○ High Risk Storm Tide Inundation Area
Noosa	<i>Noosa Plan 2020</i>	<ul style="list-style-type: none"> ● N/A
Redland	<i>Redland City Plan 2018</i>	<ul style="list-style-type: none"> ● N/A
Scenic Rim	<i>Scenic Rim Planning Scheme 2020</i>	<ul style="list-style-type: none"> ● N/A
Somerset	<i>Somerset Region Planning Scheme 2016</i>	<ul style="list-style-type: none"> ● N/A
Sunshine Coast	<i>Sunshine Coast Planning Scheme 2014</i>	<ul style="list-style-type: none"> ● N/A
Toowoomba	<i>Toowoomba Regional Planning Scheme</i>	<ul style="list-style-type: none"> ● N/A
Soft constraints - Location Specific		
Lockyer Valley	<i>Temporary Local Planning Instrument 2020 (Flood Regulation)</i>	<ul style="list-style-type: none"> ● Flood Overlay ○ Flood investigation⁸

Notes (the following notes are drawn from the 2019 RPS report to provide more detailed explanation of the use of constraints)

1. Q100 has been selected as a benchmark flood layer owing to its prominence and accepted use amongst the industry. However:

- Where a single flood layer exists in a planning scheme and there is no confirmation as to its relationship to Q100, it is not used as a hard constraint (it will be covered as a soft constraint); and

- Where multiple flood layers exist in a planning scheme and there is no confirmation as to their relationship to Q100, only those labelled high or above are used as a hard constraint. In Lockyer Valley the 'Medium' category of the Flood Overlay is included as a Hard constraint due to its treatment by the Temporary Local Planning Instrument 2020 (Flood Regulation) (adopted July 2020).

This methodology has been adopted on the basis that Q100 is the most widely used and recognised flood constraint. Whilst both higher (e.g. post climate change) and lower (more frequent) flood immunities are often mapped or otherwise recognised, Q100 represents a reasonable balance: e.g. whilst post climate change flood levels may be required for new development, there are also a variety of circumstances where land subject to more frequent flooding may be developed via appropriate mitigation methods.

Where required, a review of Council's flood overlay code or administrative sections was undertaken to confirm whether a flood category applied to Q100 or the like.

2. To be considered a hard constraint slope must exceed a grade of 25%. Where a slope layer overlaps each of these % categories - for example a layer including land with a slope of greater than 15% or between 20 – 30%, the layer has been treated as a soft constraint. If a slope category is described as high, medium or low (i.e. no % allocated), only the high category is included as a hard constraint. Where a Council has a Landslide overlay but not a slope overlay (e.g. Gold Coast) this is considered a hard constraint, due to the greater risk associated with landslide than slope.

3. The Heritage hard constraint includes mapping which relates to the curtilage of the heritage matter, not the cadastral boundary of the land containing the heritage matter. For industry, this constraint was assessed as 0% owing to the typically small extent of the heritage feature/s compared to the large land holdings used for industrial land supply. To reflect the reduced scope for development in association with heritage places on small sites, such places are also treated as a hard constraint on sites less than 1200 m² where the curtilage of the heritage matter is not defined. Outside those circumstances, heritage is a soft constraint on the balance of the property.

4. Pursuant to an exemption for such clearing work under Schedule 21 of the Planning Regulation 2017, regulated regrowth vegetation under the Vegetation Management Act 1999 (including categories C and R), and category B vegetation that is an of concern or least concern regional ecosystem, are not constraints for development for urban purposes in an urban area. However, that exemption does not apply to rural residential development.

5. Gold Coast Local Variation - for new development in the beachfront precinct where protected by a seawall. In this area the only constraint excluded will be the 8m setback zone.

6. The slope 15-25% layers include:

- a. Slope layers of between a 15-25% grade
- b. If the layer is nominated as low, medium and high, then only the low and medium layers have been included
- c. If no % differentiation is provided and the council has no other information available, then the layer has been included as a soft constraint.

7. A High Value soft constraint is required to have strong planning scheme provisions which do not readily permit flexible arrangements for clearing. To be included in this category the relevant code provisions generally include a Performance Outcome not permitting clearing.

8. The Flood investigation area in Lockyer Valley is treated as a 50% soft constraint given the uncertain outcome of any investigation.

Appendix E: Urban Economics Realistic Availability of Planned Industrial Employment Supply

Tables E1, E2 and E3 below are based on the Urban Economics report. Table E1 derives employment potential by timeframe utilising the percentages from Table E3, land area to employment conversion factors adopted by the Urban Economics report and the updated and refined planned industrial land supply developable areas within selected MEIAs. Table 2 includes the scores from the development constraints assessment which informs the percentages in Table 3.

The employment potential derived by Urban Economics in Table E1 is compared to the equivalent ‘2021 to Ultimate’ industrial employment capacity from the relevant Council planning assumptions dataset. For those local government areas with property-level employment planning assumptions, i.e. Brisbane, Ipswich, Logan, Sunshine Coast and Toowoomba, the ‘2021 to Ultimate’ industrial employment capacity includes only that capacity of the properties within that MEIA that contain developable area, as used by Urban Economics to estimate employment potential (using the Planned industrial land supply identified in the 2021 LSDM Report plus some additional parcels identified by Urban Economics based on local knowledge). For the other local government areas, the ‘2021 to Ultimate’ includes the industrial employment capacity of the whole MEIA.

Table E1: Estimated employment potential by likely availability timeframe, selected MEIAs

LGA	MEIA	Employment potential		
		2021 to Ultimate (from Council planning assumptions)	0-20 years (2021-41) (from Urban Economics Report)	0-20 years (2021-41) (from Urban Economics Report)
Brisbane	Lytton (M4)	335	3241	0
	Murarrie/Colmslie (M5)	1688	1703	0
	Pinkenba/Bulwer Island (M7)	4328	2516	629
	Archerfield (M9)	77	742	494
	Richlands (M17)	1788	1441	0
	Wacol (M21)	2548	1916	0
Gold Coast	Yatala-Stapylton (M24)	6888	4285	4285

Ipswich	Bundamba / Riverview (M11)	12,091	1313	3064
	New Chum (M15)	4614	107	2026
	Redbank (M16)	6841	978	244
	Swanbank (M20)	12,857	1907	10,806
	Wulkaraka/Karrabin (M28)	8055	315	1785
	Ebenezer (M29)	52,352	1837	44,100
Lockyer Valley	Gatton North (M34)	641	189	1698
Logan	Crestmead/Berrinba (M33)	5996	2681	0
	Park Ridge (M40)	5536	1247	312
Moreton Bay	Brendale (M23)	2976	2403	801
	Narangba (M25)	781	2009	0
	Morayfield (M31)	2453	2810	2810
	Elimbah East (M35)	6633	2137	4987
Scenic Rim	Bromelton SDA (M38)	2330	9918	14,877
Sunshine Coast	Caloundra (M32)	295	4989	554
	Coolum (M36)	114	167	0
Toowoomba	Toowoomba Enterprise Hub (Charlton / Wellcamp) (M26)	25,706	2222	16,291

Table E2: Development constraint assessment

LGA	MEIA	Key Enabling Infrastructure	Competitive Advantage	Shovel Readiness	Sum Score
Brisbane	Lytton (M4)	1	1	1	3
	Murarrie/Colmslie (M5)	1	1	1	3
	Pinkenba/Bulwer Island (M7)	1	1	2	4
	Archerfield (M9)	1	1	1	3
	Richlands (M17)	1	1	1	3
	Wacol (M21)	1	1	1	3
Gold Coast	Yatala-Stapylton (M24)	1	1	2	4

Ipswich	Bundamba / Riverview (M11)	2	2	2	6
	New Chum (M15)	2	3	3	8
	Redbank (M16)	1	1	1	3
	Swanbank (M20)	2	2	2	6
	Wulkaraka/Karrabin (M28)	3	3	1	7
	Ebenezer (M29)	3	3	2	8
Lockyer Valley	Gatton North (M34)	2	2	2	6
Logan	Crestmead/Berrinba (M33)	2	1	1	4
	Park Ridge (M40)	3	1	1	5
Moreton Bay	Brendale (M23)	1	1	1	3
	Narangba (M25)	2	2	1	5
	Morayfield (M31)	2	1	1	4
	Elimbah East (M35)	2	1	1	4
Scenic Rim	Bromelton SDA (M38)	2	1	2	5
Sunshine Coast	Caloundra (M32)	1	1	1	3
	Coolum (M36)	2	1	1	4
Toowoomba	Toowoomba Enterprise Hub (Charlton / Wellcamp) (M26)	1	1	1	3

Table E3: Developable land by period

LGA	MEIA	0-5 years (%)	5-20 years (%)	20+ years (%)
Brisbane	Lytton (M4)	25	75	0
	Murarrie/Colmslie (M5)	40	60	0
	Pinkenba/Bulwer Island (M7)	20	60	20
	Archerfield (M9)	20	40	40
	Richlands (M17)	30	70	0
	Wacol (M21)	30	70	0

Gold Coast	Yatala-Stapylton (M24)	20	30	50
Ipswich	Bundamba / Riverview (M11)	10	20	70
	New Chum (M15)	0	5	95
	Redbank (M16)	40	40	20
	Swanbank (M20)	2	13	85
	Wulkaraka/Karrabin (M28)	0	15	85
	Ebenezer (M29)	0	4	96
Lockyer Valley	Gatton North (M34)	0	10	90
Logan	Crestmead/Berrinba (M33)	60	40	0
	Park Ridge (M40)	40	40	20
Moreton Bay	Brendale (M23)	25	50	25
	Narangba (M25)	35	65	0
	Morayfield (M31)	10	40	50
	Elimbah East (M35)	0	30	70
Scenic Rim	Bromelton SDA (M38)	0	40	60
Sunshine Coast	Caloundra (M32)	25	65	10
	Coolum (M36)	90	10	0
Toowoomba	Toowoomba Enterprise Hub (Charlton / Wellcamp) (M26)	2	10	88

Appendix F: Current Intent to Service layer creation and integration with realistic availability calculations

The Current Intent to Service layer creation is summarised below with further detail provided in the Ability to service Best practice research section of the 2019 LSDM Report. The Current Intent to Service layer is used to refine realistic availability calculations as detailed in the 'Integration with realistic availability calculations' sub-section of the Ability to service Best practice research section of the 2019 LSDM Report and in the local government Planned dwelling supply sections of the Technical notes.

A range of indicators were identified in the Ability to Service best practice research in 2018 and applied in the 2019 LSDM Report utilising boundary, zoning and statutory approval type indicators only. The layers that make up the Current Intent to Service layer are identified below and have been updated, where data was available, to inform the 2021 LSDM Report (see the 'Data source/custodian' sub-section of the Planned dwelling supply section of these Technical notes for data currency).

Other indicators related to proximity and capacity were not readily available for incorporation into the 2021 LSDM Report. No method is currently available that would enable proximity and/or capacity indicators to be used for the identification of land with the ability to service. Current Ability to Service research is considering other ways to identify the Ability to Service in consolidation areas, including exploring the usefulness of a simpler, strategic level land use and infrastructure planning tool.

The Current Intent to Service layer is made up of the following six indicators:

- priority infrastructure area,
- existing and future sewerage connection area,
- priority development area,
- infrastructure agreements,
- residential reconfiguring a lot and material change of use preliminary approvals, and
- residential reconfiguring a lot and material change of use development permits.

The preliminary approvals and development permit indicators do not include operational works permits as these can be for bulk earthworks and other civil works that are not related to servicing a property with infrastructure. The ability to service subprogram continues to progress data collection and preparation to explore the use of other indicators in future years.

Data Collection and preparation

Table F1 below provides a summary of the information collected and processed by DSDILGP. The notes section of the Table illustrates the variance among datasets and future work to be undertaken to update and expand these indicator data inputs. Changes are constantly occurring to all datasets, some more frequently than others. However, for this year’s LSDM Report, DSDILGP was able to prepare and combine the data included in Table F1 to create the Current Intent to Service layer. Where possible, complete datasets have been built for this year’s report and to be able to build upon these complete datasets for future LSDM reporting enhancements. For example, work is continuing (see Ability to Service (consolidation) [Best practice research](#)) to explore the development of an Ability to Service layer for consolidation areas.

Table F1: Indicator Datasets used for Current Intent to Service layer creation for each local government area

Local government area	Priority Infrastructure Area	Development Permit	Preliminary Approval	Infrastructure Agreement	Existing and Future Sewerage	Priority Development Area
Brisbane	✓	✓	✓~	✓	✓	✓
Gold Coast	✓	✓	✓	✓	✓	✓
Ipswich	✓	✓	✓"	✓	✓	✓

Lockyer Valley	✓	✓	✓	✓#	✓	N/A
Logan	✓	✓	✓	^	✓	✓
Moreton Bay	✓	✓	✓	✓	✓	✓
Noosa	✓	✓	>	✓	✓	N/A
Redland	✓*	✓	^	✓	✓	✓
Scenic Rim	✓	✓	=	+	✓	N/A
Somerset	✓	✓	-	<	✓	N/A
Sunshine Coast	✓!	✓	✓	✓	✓	✓
Toowoomba	✓	✓	✓	✓	✓	✓

Notes: Refer to Planned dwelling supply Technical notes for a detailed description of each dataset’s inclusion and exclusion rationale, data availability and processing undertaken.

~ Outside PIA only;

^ None provided

* PIA in parts covers large areas not included with sewerage connection areas (existing and future)

Infrastructure agreements that relate to preliminary approvals;

+ No Infrastructure agreements not connected to DAs and none issued between July 2018 to June 2021;

- Only one non-residential preliminary approval issued 2014-2020;

" From 2014-2021;

= No Preliminary Approvals Issued between July 2018 to June 2021.

> no residential preliminary approvals extracted from the development approvals dataset supplied by Council and processed by Unitywater

! Based on additional infrastructure investigations for sites outside the PIA but within the planning scheme’s Urban Growth Management Boundary, an additional 1240 dwellings have been included within the Current Intent to Service Layer.

Further detailed explanation on creation of the Current Intent to Service layer including, data collection, preparation and processing is provided in the [Best practice research](#) section of the 2019 LSDM.

Appendix G: Adjustment to average annual dwelling supply benchmarks

The average annual benchmarks are used to measure years of Planned dwelling supply, and to provide a corresponding comparison for the Dwelling growth measure. In accordance with

ShapingSEQ 2017 (see page 173), years of supply are intended to be measured by the average annual expected demand over the next 15 years, based on the small area growth assumptions (SAGA). The SAGA are meant to align with each new round of state government projections, commencing with the 2018 edition (see page 163 of *ShapingSEQ* 2017). In the absence of the SAGA, for the 2019 LSDM Report the 2016-2031 growth figures of *ShapingSEQ* 2017 were adjusted to align with the overall SEQ rate of dwelling growth 2016-2031 of the new 2018 edition projections (released in early 2019). This calculation has been retained for the 2020 and 2021 LSDM Reports.

The actual revised calculation of the average annual benchmarks is: (A divided by 15 years) multiplied by (B divided by C), where:

A = Expected dwelling growth 2016-2031 – from Figure 7 in *ShapingSEQ* 2017 (for the relevant consolidation/expansion area by LGA)

B = The 2018 projected total dwelling growth 2016-2031 for SEQ = 479,683

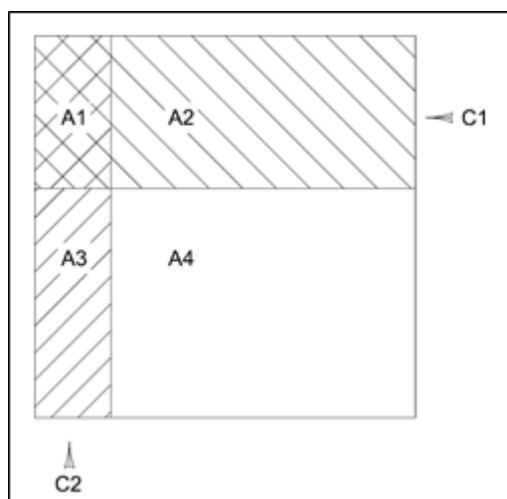
C = The expected total dwelling growth 2016-2031 for SEQ (from Figure 7 in *ShapingSEQ* 2017) = 452,900

Appendix H: Calculation of developable area where soft constraints overlap (drawn from RPS report)

There are many situations where multiple soft constraints impact the same portions of land. For example, vegetated areas on steep slopes or coastal hazard areas. Typically, the presence of multiple constraints will reduce the likelihood of development. The following explains the methodology adopted to determine developable land where this occurs.

In the below example, we have a portion of land, with an area of 10,000m². It is impacted by two constraints, C1, allowing 50% of land to be developable; and C2, allowing 25% of land to be developable (i.e. 75% constrained). The portion of land has four distinct areas, as shown on the diagram below:

- A1 – constrained by both C1 and C2
- A2 – constrained by only C1
- A3 – constrained by only C2
- A4 – no constraints



The general formula for calculation of developable area is as follows:

$$\text{Developable Area} = \text{Portion Area} \times \text{C1 Multiplication Factor} \times \text{C2 Multiplication Factor}$$

where the Multiplication factors are the percentages of each applicable constraint that are assumed developable. The following table provides the overall calculation of developable area for the example land parcel:

Land portion	Area	Constraints	Multiple	Calculated Developable Land
A1	800m ²	C1 + C2	50% x 25%	100m ²
A2	3200m ²	C1	50%	1600m ²
A3	1200m ²	C2	25%	300m ²
A4	4800m ²	Nil		4800m ²
			Total Developable Land	6800m ²

Where the combined multiplication factors result in less than 12.5% remaining developable, that area is considered fully constrained and not developable. Where the result is 12.5% or greater this is still treated as developable and included in the land supply calculations.

Appendix I: Developable area and land supply types

The SEQ-wide developability rules and land supply types are summarised below with further detail provided in the Developable area and land supply types Best practice research section of the 2020 LSDM Report. The developability rules and land supply types are used as a basis to inform a more consistent and comparable measurement of developable area across the region.

Identifying land supply types

Land supply types are a key element of the method for identifying developable area because the developability rules vary by land supply type. The following sub-sections outline the approach to identify land supply types to support consistent measurement for the purpose of informing land supply and infrastructure planning assumptions databases and models.

Land previously used for an urban purpose

The key distinction between the Broadhectare and Redevelopment land supply types is whether or not the land has been ‘previously used for an urban purpose’. Land identified as ‘previously used for an urban purpose’, and therefore a Redevelopment land supply type, is based on the combination of the following indicators:

- the land is in an existing sewerage connection area, and/or
- the land parcel is 2500 m² or less and is located in an area equivalent to one of the following types of zones as defined in Schedule 2 of the Planning Regulation 2017 (excluding any precincts that are for future urban development and subject to the provision of supporting infrastructure, including sewerage):
 - Residential zones
 - Centre zones
 - Mixed use zone
 - Specialised centre zone
 - Township zone

Treatment of mixed and supporting uses

Retail, commercial and community uses are treated the same as urban residential uses for the purpose of identifying developable areas, i.e. they are treated as part of the equivalent Broadhectare and Redevelopment land use types.

For mixed use zones there is a need to assess the extent to which the zone is likely to support the respective uses, i.e. by percentage of land area, to support the application of the developability rules. Given the approach of treating other non-residential uses the same as residential, only where industrial uses are expected to predominate, i.e. on half or more of the land, should mixed use zones be treated as the Industrial land supply type for assessing developable area.

The following table provides the land supply types to accommodate the above approach. Any additional subtypes identified through local circumstances would need to align to the overall SEQ land supply types.

Table I1: Land supply types by broad category

Broad category	Land supply type	Identification	Local variation
Broadhectare ¹	Planned	Contiguous areas of land, including areas intended for supporting uses ² : <ul style="list-style-type: none"> • Identified as a master planned area that generally expects over 500 new dwellings or over 500 ha in area (e.g. Priority Development Areas); and • Intended for urban purposes³; and 	Expertise of local government planners, and utility providers for servicing status, would be required to determine appropriate areas.

		<ul style="list-style-type: none"> Not previously used for an urban purpose. 	
	Fragmented	<p>Contiguous areas of land, including areas intended for supporting uses²:</p> <ul style="list-style-type: none"> Comprising existing lots generally less than around 2 ha where urban development is expected to require a coordinated servicing strategy for the contiguous areas of such lots; and Intended for urban purposes³; and Not previously used for an urban purpose. 	<p>Expertise of local government planners, and utility providers for servicing status, would be required to determine appropriate areas and can include Underutilised Urban Footprint.</p>
	Balance	<p>Where not identified as Broadhectare (Planned) or Broadhectare (Fragmented):</p> <ul style="list-style-type: none"> Intended for urban purposes³, and areas intended for supporting uses²; and Not previously used for an urban purpose. 	
Redevelopment	Major	<p>Larger scale development (medium to high density⁴), including supporting uses²:</p> <ul style="list-style-type: none"> Exceeding three (3) storeys in height; or Up to three (3) storeys in height and greater than one (1) hectare land holding area⁵; and Intended for urban purposes³; and Previously used for an urban purpose. 	<p>Sub-types may provide for more refined density ranges to suit local circumstances.</p>
	Minor	<p>Smaller scale development (low to medium density⁴), including supporting uses²:</p> <ul style="list-style-type: none"> Up to three (3) storeys in height; and 	<p>Sub-types may provide for more refined density ranges to suit local circumstances.</p>

		<ul style="list-style-type: none"> Up to one (1) hectare land holding area⁵; and Intended for urban purposes³; and Previously used for an urban purpose. 	
Rural residential		<p>Large lot, unsewered development areas:</p> <ul style="list-style-type: none"> Proposed lots greater than 2500 m²; and Intended, fully or partly, for rural residential/low density⁶ purposes. 	Allotment sizes may be adjusted based on the local circumstances and planning experience.
Industrial		Industrial development within identified industrial zones/precincts (excluding extractive industry) ⁷ and supporting uses ²	Industrial sub-types can be included based on local circumstances and planning experience ⁸ .

Notes:

- In line with the state government’s Broadhectare study, these areas generally relate to existing lots greater than 2500 m².
- Supporting uses may include: open space, recreation, community purpose, office, commercial, business, etc.
- Urban purposes include: all residential, centre, township and emerging community zones as identified in Schedule 2 of the Planning Regulation 2017 and mixed-use zones where not predominantly industrial in nature.
- Low, medium and high density are consistent with the planning intent identified within a local planning instrument.
- Based on known property holdings or development proposals at the time of land supply measurement.
- Rural residential, low density or equivalent are consistent with the planning intent identified within a local planning instrument
- Industrial zones/precincts includes mixed-use zones where they are predominantly industrial in nature.
- It is expected that reporting will be based on summary types including low impact, medium impact, high impact, investigation, etc., generally as informed by the Planning Regulation 2017.

Developability rules

Key defining parameters for the developability rules include:

- In determining developable areas, the following should be used where applicable, in order of preference, instead of applying the developability rules:
 - Vacant recently subdivided lots
 - As approved by current development permit
 - As approved by current preliminary approval
 - As master planned
 - As structure planned
 - As per a strategic assessment of environmental constraints

The developability rules:

- Provide guidance on a consistent region-wide interpretation of varying constraints across the region, whilst noting that there may be local differences in the current application of constraints at the local level
- Are meant to be applied in any future assessments of developable area in SEQ to inform a shared understanding and consistent measurement of land supply
- Vary with the land supply type, e.g. urban/residential vs industrial, its location, density and value of development, and the accuracy of the associated mapping
- Are subject to regular update and refinement, through consultation between the GMP and stakeholders, based on better information and as new or amended constraints or new and more accurate mapping of constraints are introduced over time
- Hard constraints - are those respected at least 90% of the time. It is generally acknowledged that land affected by a hard constraint has limited development potential.
- Soft constraints - are those that have the potential to impact on developable land but will not necessarily prevent development from occurring. A soft constraint may be able to be managed or mitigated to some degree and therefore only a percentage of land encumbered by a soft constraint is deemed affected.
- To reflect a practical level of accuracy and judgement in representing the variability of outcomes within a rules-based constraints assessment, the percentage scale used for constraints is: No (significant) constraint – 0%; limited constraint – 25%; moderate constraint – 50%; High constraint – 75%; and Hard constraint – 100%.
- The names of the constraints included in the tables are ‘common layer names’ that have been adopted for simplicity in reporting. They represent a range of locally-described constraints as identified in the Common Layer Names Table in Appendix D.

Table 12: Hard constraints developability rules

Hard constraints	Land supply type					
	Broadhectare (planned)	Broadhectare (fragmented or balance)	Redevelopment (major)	Redevelopment (minor)	Rural residential	Industrial
Flood	100%	100%	50%	75%	75%	75%

Slope > 25% / landslide	75%	100%	25%	75%	75%	100%
Infrastructure	100%	100%	100%	100%	100%	100%
Extractive resources	100%	100%	100%	100%	100%	100%
Built Form - Heritage ¹	100%	100%	100%	100%	100%	100%
Environment (High value) ²	100%	100%	100%	100%	100%	100%
Waterways / wetlands (excluding buffers)	100%	100%	100%	100%	100%	100%
Planning exclusions ³ (e.g. Rural conservation zones)	100%	100%	100%	100%	100%	100%
Location specific / enterprise amenity / safety buffers ⁴	100%	100%	100%	100%	100%	100%

Notes:

1. Heritage – the percentage adopted regards the curtilage of the heritage matter, or where the site is less than 1200 m² and the curtilage of the heritage matter is not defined.
2. Environment (High value) (see Table D2 in Appendix D) – This refers to state layers of: Endangered Regional Ecosystems, Category A Regulated Vegetation, Marine Parks, Fish Habitat A+B, core and locally refined koala habitat areas within an identified Koala Priority Area, Protected Areas and Threatened species (Nature Conservation Act 1992), high conversation value wetlands (Environment Protection Act 1994) and legally secured offset areas. It also includes limited local government environment layers as identified in Table D2: Common Layer Names Table in Appendix D.
3. Includes areas not intended for urban/residential or industrial development, as applicable in the circumstances. Excluded zones from all land supply types listed include: Community Facilities, Environmental Management and Conservation, Limited Development, Open Space, Rural and Sport and Recreation (except where particular precincts in those zones support urban/residential or industrial development).

4. Location Specific / Enterprise Amenity / Safety Buffers – a full list of applicable constraints is contained in Table D2: Common Layer Names Table in Appendix D.

Table 13: Soft constraints developability rules

Soft constraint s	Land supply type					
	Broadhect are (planned)	Broadhect are (fragmented or balance)	Redevelopm ent (major)	Redevelopm ent (minor)	Rural residential	Industrial
Overland flow	25%	25%	25%	25%	25%	25%
Slope 15-25%	25%	25%	25%	25%	50%	75%
Extractive resource separation / buffers	75%	100%	100%	100%	75%	0%
Infrastruct ure buffers	75%	75%	50%	75%	50%	0%
Environme nt (High value) ¹	75%	75%	50%	75%	75%	75%
Environme nt (Low-medium value) ²	50%	50%	25%	50%	50%	50%
Coastal hazard: Erosion Prone	75%	75%	0%	0%	75%	75%
Coastal hazard: High storm tide	100%	100%	75%	75%	75%	75%
Heritage - cadastral mapping	25%	25%	50%	75%	25%	0%
Location specific	Determine d through	Determine d through	Determined through	Determined through	Determine d through	Determine d through

	local circumstan ces and experience	local circumstan ces and experience	local circumstanc es and experience	local circumstanc es and experience	local circumstan ces and experience	local circumstan ces and experience
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Notes:

1. Environment (High Value) - represents the environmental layers not adopted as hard constraints but contain strong planning scheme provisions which would limit development (e.g. core and locally refined koala habitat areas outside an identified Koala Priority Area).
2. Environment (Low-Medium Value) – represents remaining environmental layers.

Program Delivery

Introduction

The department, through the Growth Monitoring Program (GMP), monitors development activity and land supply for South East Queensland (SEQ). In recognition of the scale and local complexities of this task, the department works closely with key stakeholders in this field, including the Australian Bureau of Statistics, state agencies, the Queensland Government Statistician's Office (QGSO), local governments, utility providers and the development industry.

The GMP is a long-term program of government, that capitalises on the research and work undertaken by key stakeholders each year to create a shared understanding of development activity and land supply across SEQ. In particular, this involves using, improving and reporting local government and utility provider planning assumptions, rather than creating new and varied land supply estimates.

Moving towards a shared understanding of land supply and development activity in SEQ is a core objective of the GMP. Now in its fourth year and with the impact of COVID-19 and government stimulus on the region's land supply and development, the GMP provides a robust and transparent evidence-base for decision making by the state and local governments, utility providers and the development industry, as well as informing future reviews of the SEQ Regional Plan and local government planning schemes.

Governance framework / collaboration

The Growth Monitoring Program (GMP) is supported through a robust governance framework for collaboration with local governments, utility providers, other state agencies, the development industry and peak organisations to inform the GMP. This governance framework consists of a Reference Group (RG), a Data and Modelling Working Group (DMWG), a State Agency Working Group (SAWG), the Housing Supply Expert Panel (HSEP), a Local Government Working Group (LGWG) and the South East Queensland (SEQ) Regional Planning Committee (RPC).

- The RG is made up of senior representatives from local governments, utility providers, the development industry and peak bodies, and provides oversight and input into the GMP.
- The DMWG is attended by technical officers from local governments and utility providers who maintain land supply databases that feed into the LSDM Report. This group provides key technical input and oversight regarding data compilation, analysis and interpretation.
- The SAWG includes officers from across the department and numerous state agencies including Department of Education, Department of Transport and Main Roads, Department of Environment and Science and Department of Communities, Housing and Digital Economy (DCHDE). This group reinforces connections across the state government and optimises use of existing state resources, data and knowledge.
- The HSEP is comprised of local and national experts from a range of fields, including planning, property, economics and demography. The HSEP was established to oversee the GMP and provide independent advice on how to appropriately manage land supply and development and associated housing affordability issues in SEQ.

- The LGWG is made up of senior officers from local governments in South East Queensland. The LGWG supports the SEQ RPC by exploring and then reporting issues, opportunities, and solutions for *ShapingSEQ* 2017 implementation to the RPC for their consideration.
- The SEQ RPC is chaired by the Minister for Planning, with membership including the Minister for Transport and Main Roads, the Minister for Housing, the Minister for Public Works and the Minister for Environment and all SEQ Mayors. The SEQ RPC advise the Queensland Government, through the Minister, on the development and implementation of *ShapingSEQ* 2017. In 2021, the SEQ RPC had a focus on improving collaboration across state and local government to understand challenges facing the region and work together towards a future review of the Regional Plan.

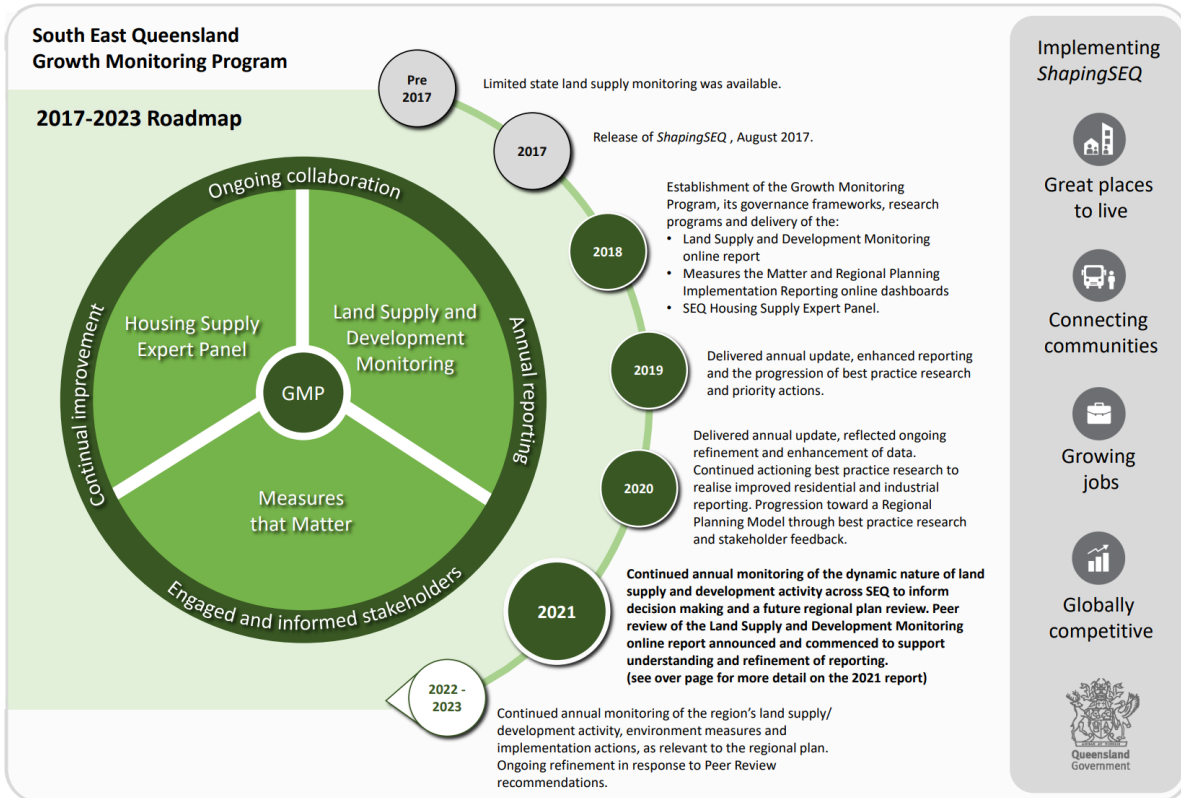
The 2021 formal meeting schedule for the various groups was as follows:

- RG – three meetings
- DMWG – four meetings
- SAWG – three meetings
- HSEP – six meetings, including three formal meetings, one extraordinary meeting, one working session and one out-of-session meeting with officers from DCHDE
- LGWG – two meetings
- SEQ RPC – two meetings, including one formal meeting and one workshop (Community Awareness Education Project)
- Individual stakeholder meetings – the department has held a series of individual meetings throughout 2021 to support continued engagement with stakeholders, including local governments, state agencies, utility providers, development industry and peak organisations.
- Stakeholder presentations and discussions – further to the above, the department has held a detailed presentation on the ongoing research and thoughts associated with the development of a Financial Feasibility Model and discussions on the use of data, methodologies and best practice research (e.g. industrial land supply and treatment of constraints).

Through this collaboration, the department continues to advance the GMP to deliver best practice approaches for understanding land supply and development activity. In 2021, the GMP team sought feedback from the GMP RG, DMWG and SAWG on the effectiveness and practical operation of the GMP. This survey aimed to identify future improvements to meet the needs of stakeholders and will inform future engagement activities of the GMP team.

Growth Monitoring Program Roadmap

The department has continued to work with the Housing Supply Expert Panel, Reference Group and Data and Modelling Working Group to revise and update a roadmap that articulates the GMP's ongoing program of works up to 2023. In 2021, the GMP roadmap has been revised to illustrate the advancements of the GMP. The GMP roadmap reinforces the GMP's commitment to long-term progressive improvement to build a shared understanding of land supply and development activity as we progress towards the next regional plan review.



Pre 2017
Prior to the development and release of *ShapingSEQ* there was limited monitoring of land supply across the SEQ region.

2017
ShapingSEQ, released in August 2017, included clear direction and actions for:

- establishing a Growth Monitoring Program (GMP)
- monitoring the region's land supply and development activity
- monitoring aspects of the natural, economic and social environment in the SEQ region compared with an identified overall preferred regional future for 15 key measures
- ongoing reporting on the plan's key implementation actions.

2018
The GMP prepared and released its three core deliverables being the:

- Housing Supply Expert Panel (HSEP)
- Measures that Matter online dashboard
- Land Supply and Development Monitoring (LSDM) online report (focusing on residential and industrial activity and supply).

All projects were delivered in close consultation and collaboration with state and SEQ local governments, industry representatives (including UDIA and PCA) and utility providers.

2019
The GMP built on and refined its reporting, including an annual data update and the progression of best practice research and priority actions in close collaboration with stakeholders.

2020
The GMP continued to refine annual reporting through enhancement and improvement of data collection and analysis. Progressed best practice research and actioning findings to realise improved residential and industrial reporting. The GMP continued to work with stakeholders toward a Regional Planning Model informed by best practice research findings.

2021
In addition to building on previous reporting, the GMP team and key stakeholders are considering how the GMP may inform a future regional plan review. Peer review of the Land Supply and Development Monitoring online report announced and commenced to support understanding and refinement of reporting.

2022 - 2023
The GMP expects to continue to report, review and refine ongoing annual monitoring of the region's key land supply and development activity, environment measures and any identified implementation actions, as relevant to the regional plan. Further, ongoing refinement in response to Peer Review recommendations.

The Growth Monitoring Program is demonstrating continuous improvement in data collection, analysis and reporting whilst working toward increased transparency and a regionally-consistent best practice approach applied to available local information.

The **2021 Land Supply and Development Monitoring online report** reflects a number of ongoing program improvements designed to:

- update existing data and inclusion of COVID-19 related data
- enhance data accuracy
- action best practice research
- inform better decision-making
- continue to collaborate with stakeholders
- produce more refined reporting.

These improvements/updates include:

- **Residential**
 - Updating building approvals to 30 June 2021
 - Updating approved and planned supply figures for residential land, including land supply, material change of use, reconfiguration of a lot and operational works approvals to 30 June 2021
 - Providing finer grained reporting of housing diversity, including proportion of approvals across consolidation and expansion areas
 - Annual update on market factors affecting the region's ongoing development, including consideration of impacts of a COVID-19 on the housing market in SEQ
 - Consultation with key stakeholders, including SEQ local government, utility providers and industry, on development of a Financial Feasibility Model to further Best Practice Research into Realistic Availability (consolidation areas)
 - Update on progress to develop a Regional Planning Model
 - Collaborating with academia on new approaches to understand Ability to Service (consolidation areas)
 - Furthered research into Measuring Development for an improved and more consistent measurement of development over time.
- **Industrial**
 - Updating the take-up of planned industrial land figures to 30 June 2021
 - Updating planned industrial employment supply figures to 30 June 2021
 - Continued application of SEQ wide constraint and developability rules to refine planned industrial land supply figures (and ultimately for planned residential land).

Work program and key achievements for 2021

Since establishment of the Growth Monitoring Program (GMP), the department has commissioned independent experts to identify and advance ‘best practice’ methods for calculating land supply, considering SEQ, Australian and international examples. The department has used best practice research recommendations, as well as feedback from GMP stakeholders, to develop a Work Program that consists of subprograms that provide meaningful innovation and improvements to land supply and development monitoring in successive Land Supply and Development Monitoring (LSDM) reporting, consistent with the GMP’s long-term objective. The subprograms are an important contribution in the move towards a shared understanding of data.

In 2021, the Work Program continued to be progressed and has resulted in several key achievements for the department, the GMP and stakeholders. These achievements are summarised in the below table and detailed in the linked best practice research.

GMP Work Program		
Subprogram	Achievements in 2021	Further information
Realistic Availability	<p>In 2021 the focus of Best practice research was on a better understanding of realistic availability of planned dwelling supply in the consolidation area.</p> <p>Part of this work focused on how to gauge the financial feasibility of planned dwelling supply in the consolidation area. This work included the investigation and development of a financial feasibility model with input from GMP stakeholders.</p> <p>Further, the GMP continued to apply best practice research from 2019 and 2020 to the calculation of the realistic availability of planned dwelling supply in expansion areas utilising the current intent to service approach. The figures are incorporated within results of the Planned dwelling supply sections of the 2021 LSDM Report and outlined in the Technical notes.</p>	<p>For further information, see the Best practice research and the Technical notes.</p>
Ability to Service - consolidation	<p>Building on work undertaken since 2018, the GMP, in collaboration with a PhD program of studies, explored the usefulness of a simpler, more strategic level, land use and infrastructure planning tool.</p> <p>In 2021, feedback was sought from utility providers on key questions (e.g. infrastructure related barriers to servicing planned dwelling supply and defined levels of ability to service planned dwelling supply) which will assist the formation of the land use and infrastructure planning tool.</p>	<p>For further information, see the Best practice research and the Technical notes.</p>

<p>Developable area and land supply types</p>	<p>The application of the SEQ-wide developability rules to the Planned industrial land supply/take-up analysis elicited feedback from stakeholders that has clarified the need for continued future improvements to the process and supporting information for identifying developable areas</p>	<p>For further information, see the Best practice research and the Technical notes.</p>
<p>Measuring Development</p>	<p>Built on the Best practice research of 2019 and 2020, this work provides additional detail to explain and inform approaches to property-based measurements to estimate dwellings and growth.</p> <p>As part of the draft 2021 LSDM Report, feedback was sought from stakeholders on the rationale for and suitability of the following proposed approaches to property-level measurement of dwellings and a possible consistent basis for measurement of non-residential uses and associated employment:</p> <ul style="list-style-type: none"> • to account for visitor dwellings, for the purpose of comparison to the <i>ShapingSEQ</i> 2017 dwelling supply benchmarks, dwelling counts should exclude properties identified as tourist accommodation in available registers but include all other specified dwelling uses • homes within relocatable home parks should be counted as dwellings even though the Census counts most as dwellings in retirement villages • 12 non-residential use categories and their alignment to Planning Regulation 2017 uses are proposed together with: • the estimated relationship of the proposed use categories to the ANZSIC two-digit industry classes for employment (varying by LGA) • suggested floor space to employment conversion rates of the proposed use categories (varying by LGA). <p>This work is being progressed to provide land supply custodians with suggested guidance material and the ability to incorporate the findings within the development of their land supply databases and assumptions. While the Measuring development Best practice research of 2021 does provide useful guidance for both dwelling and non-residential use/employment measurement, feedback in 2021 has indicated the appropriateness of further research</p>	<p>For further information, see the Best practice research.</p>

	into and refinement of the non-residential use to employment relationships.	
Small Area Growth Assumptions - a Regional Planning Model	<p>In 2020 a due diligence process was completed to identify a list of preferred urban modelling packages that are best practice and can best support future regional plan reviews and region-wide infrastructure decision-making.</p> <p>In 2021, the GMP has progressed investigations to understand the requirements for progressing a Regional Planning Model as well as elements where synergies exist with other work programs to potentially streamline any future processes (e.g. investigate potential use of outputs from financial feasibility model as part of the Realistic Availability Best practice research).</p> <p>The GMP continues to collaborate with state agencies, such as the Department of Transport and Main Roads, to understand strategic alignment of the Regional Planning Model with other government initiatives and objectives.</p>	For further information, see the Best practice research .
Planned Industrial Land Supply/Take-up	In 2021 the GMP continued to apply the consistent and readily repeatable process for producing planned industrial land supply information across SEQ. Building on the previous work undertaken for the 2020 LSDM report this has now been further advanced to provide industrial land supply and take-up aligned to the reporting period of the 2021 LSDM Report, i.e. to 30 June 2021.	For further information, see the Technical notes .
Data Sharing	<p>In 2021 the GMP continued to utilise a consolidated data request for GMP stakeholders with a centralised online platform for the easier upload and sharing of data where appropriate and continued to work toward a framework that facilitates the sharing of data and information across key stakeholders in SEQ.</p> <p>In 2021 the department prepared a draft long-term reciprocal data sharing licence agreement for stakeholders to review and provide feedback on. While the majority of the feedback received to date supports such an agreement in principle, further refinements still need to be made as a part of an updated draft long-term reciprocal data sharing licence agreement for further review and ultimately endorsement by GMP data custodian stakeholders.</p>	For an overview of the subprogram, see the Best practice research .
Market Factors	In 2021 the GMP prepared an annual update to the Market factors section of the 2021 LSDM Report to continue to provide independent and expert commentary about factors	For further information, see the Market factors section.

	<p>that can affect demand for housing and development activity at a regional level.</p> <p>In 2021 the Market Factors Report provides ongoing context to the economic impacts of COVID-19 on the housing market in SEQ.</p>	
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Limitations

The department acknowledges its unique position in accessing and using data prepared by local governments, utility providers, the Queensland Government Statisticians Office (QGSO) and the Australian Bureau of Statistics (ABS). Without this data, the department could not prepare a Land Supply and Development Monitoring (LSDM) report.

The department also recognises that in delivering a best practice and region-wide understanding of development activity and land supply, there are limitations and areas for improvement. The department notes the limitations of the available data and the methods, and in the interest of transparency, has detailed these in the Technical notes and Best practice research.

Through the Growth Monitoring Program (GMP), the department is committed to continuous improvement of the LSDM Report. A program of continued research and collaboration through the subprograms and best practice research undertaken over the past four years has seen improvements in the approach and methodology used for the LSDM Report since its inception in 2018. Moving forward, the department is committed to ongoing improvement to address identified limitations.

Realistic availability

The department recognises it is difficult to accurately estimate and compare the realistic availability of planned supply for the purposes of *ShapingSEQ* 2017 and the GMP. In addition, local governments and utility providers already consider realistic availability to varying extents in their land supply databases, particularly for consolidation areas. The department is also mindful that land supply databases are typically built and used to prepare Local Government Infrastructure Plans or Netserv Plans in accordance with relevant legislation and guidelines.

For detail about calculating realistic availability scenarios for both planned dwelling supply and planned industrial employment supply, see the [Technical notes](#).

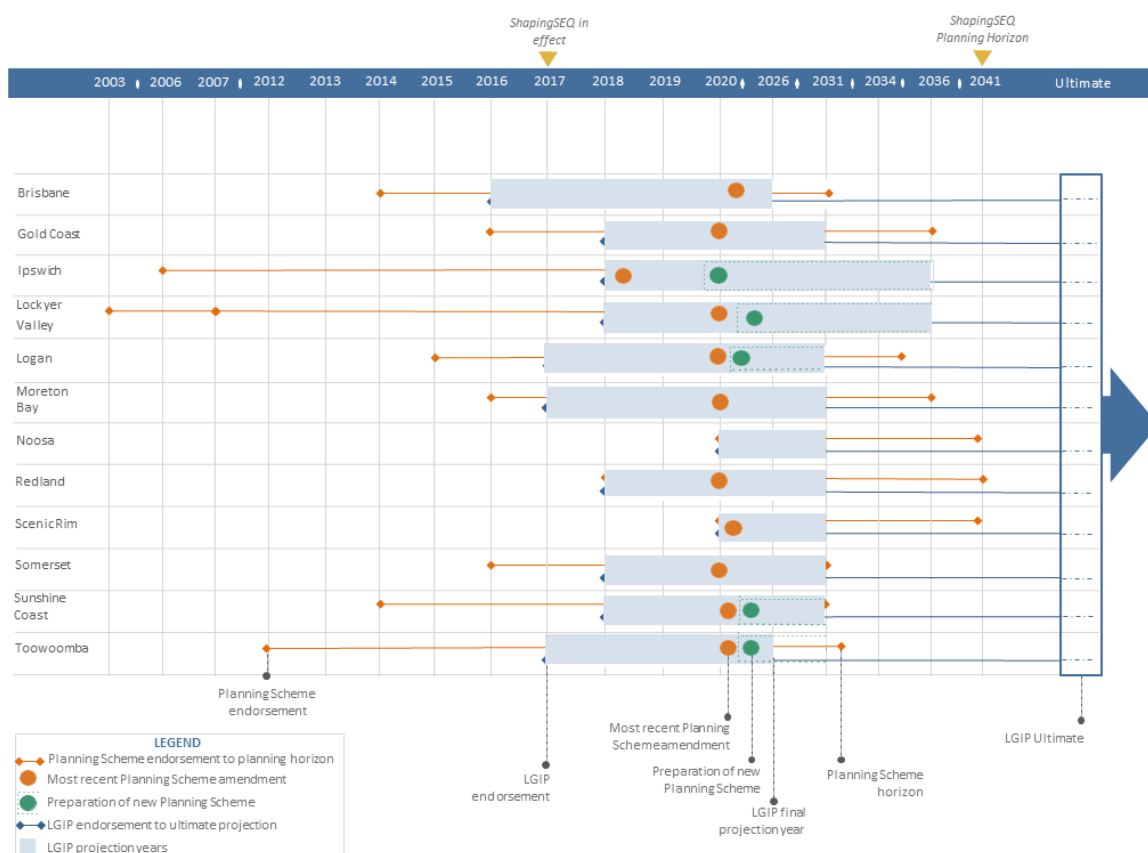
The department intends to continue to refine and improve the method of estimating the realistic availability scenarios for the purposes of the GMP and *ShapingSEQ* 2017, in collaboration with stakeholders through the established stakeholder governance frameworks.

For details of progress in 2021 towards better estimating realistic availability, including the pilot application of the Financial Feasibility Model, see the Realistic availability [Best practice research](#). This year, recognising changing economic and development circumstances, including due to COVID-19, there have also been updates of the 2019 assessments of the realistic take-up of major residential and industrial growth areas. Those updates have informed the estimates of the realistic availability of planned dwelling supply and planned industrial employment supply in this report.

Land supply data bases

The department acknowledges variations between the methods and assumptions of local government land supply data used by the LSDM Report. Updates to those data bases, to reflect relevant changes to planning intent, constraints and approved development, are also not regularly available. Planning scheme endorsement dates and planning horizons differ across SEQ (see figure below). Local Government Infrastructure Plan endorsement dates and projection periods and estimates on ultimate development also differ across SEQ (see figure below). These factors need to be considered, particularly when comparing reporting across local government areas. Over time, the GMP best practice research aims to inform, improve and enhance the measurement of land supply across the region.

The below figure has been prepared to illustrate the variation of planning schemes and Local Government Infrastructure Plans across the region, as well as the planning horizon of *ShapingSEQ* 2017.



For more detail about the source data that informs each section of the LSDM Report, see the [Technical notes](#).

Measuring development activity

The department acknowledges that building approvals overestimate net dwelling growth and are an approximate measure of changing dwelling type. Actual dwelling construction lags behind building approvals, a generally small percentage of approvals are never constructed, and demolitions and conversions are not accounted for. Recognising these limitations, stakeholder feedback and

recommendations from the best practice research from 2018, the department prioritised researching improved methods for measuring dwellings and net growth in 2019 as part of the Measuring Development subprogram. Further progress has been made in measuring both residential and non-residential development in 2020 and 2021.

The ABS has also made continued progress towards quarterly reporting of dwelling stock at the SA2 level, for release in 2022. This may support improved measurement of dwelling growth in future LSDM reports.

For more information about the Measuring Development subprogram and its achievements, see the Measuring Development [Best practice research](#).

Years of supply

The department recognises that estimating the number of years it will take for dwelling or employment supply to be consumed is inherently difficult. Results vary depending on the annual demand figure used. The department also recognises the difference between projected demand, realised market demand and latent demand. Recognising this limitation, the department has tailored its estimate of annual demand for each years of supply calculation to the growth expectations of *ShapingSEQ 2017* and available recent demand information.

For example, annual demand for planned dwelling supply is based on the dwelling growth expected by *ShapingSEQ 2017* to align with the dwelling supply benchmarks, with adjustment to reflect the overall growth rate for SEQ from the Queensland Government's latest dwelling projections. Given there is no corresponding demand projection, annual demand for approved supply is based on recent trends in building approvals or lot certifications.

The department will continue to work with stakeholders to improve the years of supply measure as part of the GMP. For more detail about the annual demand figures used in each years of supply calculation, see the [Technical notes](#).

Land suitability and developable area

A key step for measuring land supply is to estimate the developable area of land that is planned for residential or other purposes by removing areas that are affected by constraints like flooding risk or protected vegetation. The department acknowledges this process will not always be accurate, particularly at the lot level, and there is scope for varied interpretation of the impact of constraints on developable area.

Recognising this limitation, the department is seeking to improve the understanding and application of constraints, and to incorporate more accurate information in determining developable area, as part of the Developable Area and Land Supply Types subprogram. The SEQ-wide developability rules generated through that subprogram have been used in the estimation of the planned industrial land supply since 2019.

For more detail about the subprogram's research and recommendations, and continuing improvements and updates, see the Developable Area and Land Supply Types [Best practice research](#).

Data availability and timing

The data used for the LSDM Report is subject to various time lags for compilation and reporting, such that by the time it is released in each annual report it generally relates to a time/period at least six months earlier. Some datasets such as local government land supply/planning assumptions databases may not be updated or available to the department for a number of years due to the long lead times and significant resources required for their preparation and any subsequent organisational endorsement. This is a limitation on the scope for those databases to reflect the current status of planning schemes, constraints and development completed and approved.

In future years, release of a mid-year LSDM Addendum can be considered to improve the currency of a number of short-term metrics of the LSDM Report, such as dwelling growth, approved supply and sales and price, in between annual publications. Updated planning assumptions datasets have also been made available for four local government areas in 2021. The department will continue to work with stakeholders to improve the timeliness and currency of reported data.

Ongoing land supply improvement

Commitment to continual improvement

The Growth Monitoring Program (GMP) is a nation-leading program and continues to deliver on requests from stakeholders for robust and transparent information to support evidence-based decision-making. The GMP's monitoring of land supply and development activity continues to build a solid evidence base for local and state government to make better decisions on expected growth in SEQ and the distribution of available land and types of housing. The GMP is committed to undertaking this monitoring in collaboration with all stakeholders, as well as the ground truthing of data and improving the understanding of emerging trends.

Since the GMP's inception in 2018, the department has continually sought feedback and input from stakeholders, including local governments, utility providers and key industry groups, as to the effectiveness of monitoring and reporting activities - including the annual Land Supply and Development Monitoring (LSDM) online report. Matters regarding accuracy and currency of land supply and development data, raised by stakeholders, continue to be acknowledged in this report. Ongoing collaboration with regional planning stakeholders is essential for the GMP to best capture land supply and monitor development. Improvements to data collection processes and continual enhancements of its analyses is fundamental to the GMP's success.

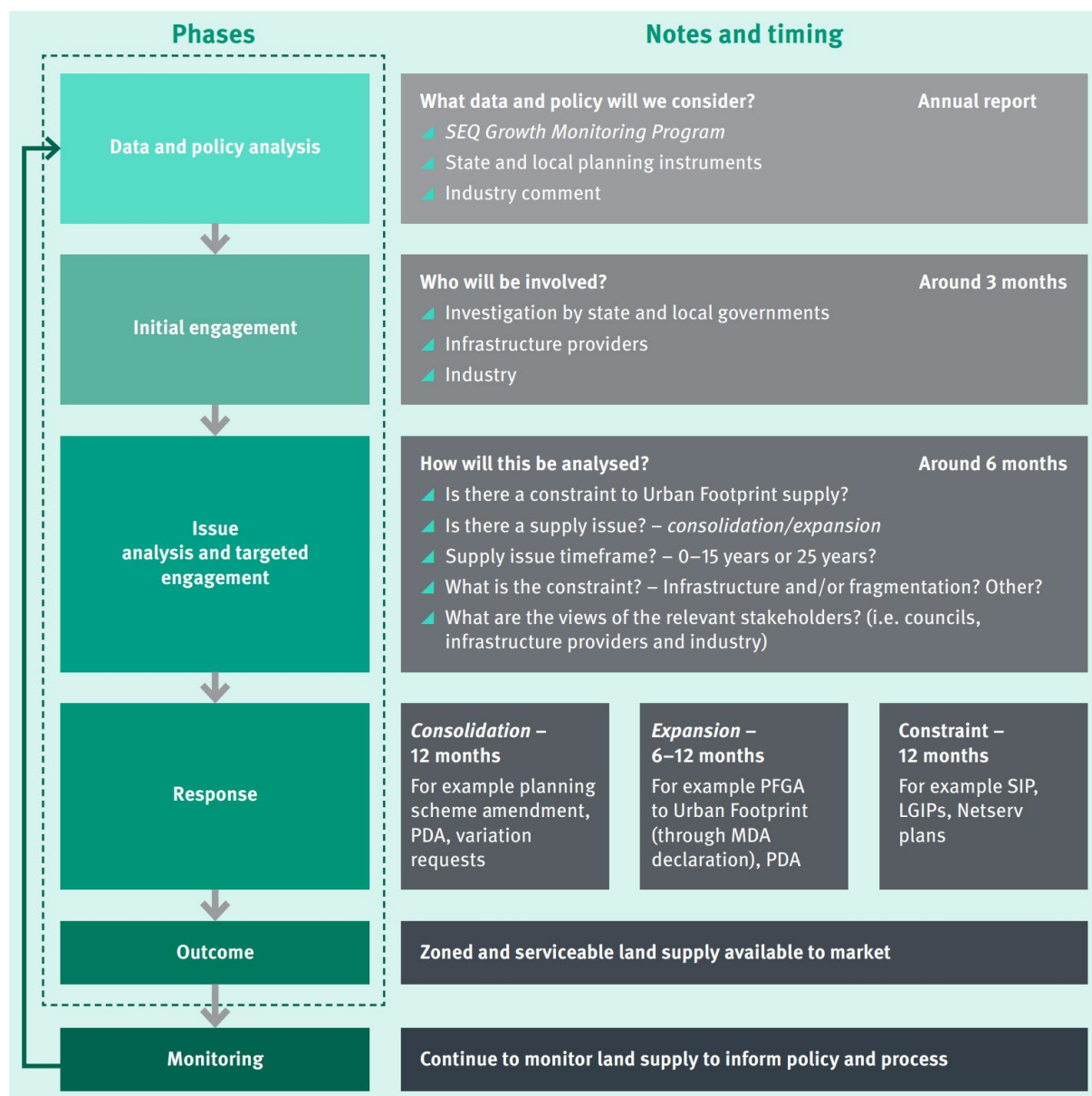
Land supply framework and solutions

ShapingSEQ 2017 details how the department will monitor land supply annually to track performance against the dwelling supply benchmarks and employment planning baselines to ensure at least 15 years of planned residential and employment land is maintained amongst other measures. To ensure short-term land supply of all types and to avoid placing upward pressure on house prices, the preferred future identified in *ShapingSEQ 2017* is a minimum of four years approved supply across the region.

The land supply framework established in *ShapingSEQ 2017* (see Figure at right) provides the foundation and outlines the approach for addressing performance against the dwelling supply benchmarks and employment planning baselines. It is recognised that where 15 years of planned supply is not provided in line with the *ShapingSEQ 2017* preferred future, and no actions have been

taken to address any shortfall, the government will initiate a range of solutions to avoid constraining land supply and placing upward pressure on land and housing prices.

Whilst the 2020 LSDM report showed there was more than 15 years of planning dwelling supply and four years of approved land supply across the region, there were five target SEQ local governments (including Brisbane, Gold Coast, Moreton Bay, Redland and Sunshine Coast (as identified through the 2020 LSDM Report) recording less than four years of approved supply. In response to these challenges, a Growth Areas Team (GAT) was announced by the Deputy Premier and as Minister for State Development, Infrastructure, Local Government and Planning on 3 March 2021. The GAT and the GMP are part of a broader Growth Areas Program that will assist in addressing land supply challenges.



Land supply framework (ShapingSEQ 2017)

Source: The South East Queensland Regional Plan 2017, ShapingSEQ 2017 (Figure 11 on p.47).

Data and information sources

The LSDM Report has been prepared with a wide range of land supply and development activity data provided by local government and utility providers under data sharing agreements and information from the Australian Bureau of Statistics and the Queensland Government Statistician's Office within Queensland Treasury. Accessing data from a range of robust sources through pre-established measures and benchmarks assists to provide a shared and regionally consistent understanding of the information in one location.

However, it is acknowledged that this approach to data sourcing has its limitations, as outlined in the Limitations section. GMP data is derived from differing planning assumptions methods, planning scheme horizons and policy tools used by individual local governments. This presents an inherent challenge in finding currency and accuracy in the data that provides for consistent reporting at a regional level. The GMP recognised this challenge from its inception with a commitment to Best Practice Research (BPR). The BPR program of work is addressing this challenge through a commitment to ongoing improvement in the collection, analysis and presentation of data as the GMP progresses toward best practice reporting. In addition, the inclusion of annually updated Market Factors reporting, is an acknowledgement of broader measures and data which informs policy decisions.

There is further opportunity to improve understanding of market-based drivers by considering information sources outside of the traditional land supply databases, such as industry-led reporting and analysis. It is acknowledged that there is significant data and knowledge maintained by stakeholders outside of local government, such as industry groups. The department will seek to establish clear criteria and ensure where stakeholders want to provide data and reporting for consideration by the GMP there is a framework in which to prepare the material to enable consideration and comparison. This is consistent with the commitment to expand the scope of data sources used to inform the GMP and reflects the best practice outcomes sought for land supply and development monitoring in SEQ.

The GMP Roadmap charts progress of the GMP and highlights the focus on refinement and enhancement leading into a future regional plan review. In addition, work is being undertaken towards the development of a Regional Planning Model (RPM), informed by best practice research progressed through LSDM reports. Further information on the RPM can be found within [Best practice research](#).

As the key agencies that collect, prepare, process, analyse and curate land supply data, local governments and utility providers play an important role on behalf of the community in the collection and analysis of data used to inform the LSDM Report. Local governments and utility providers, to varying degrees, face a range of challenges associated with the development and maintenance of land supply databases such as resourcing, funding and access to best practice tools.

Local government planning horizons

For local governments in preparing Planning Schemes, Local Government Infrastructure Plans (LGIPs) and supporting growth projections and land supply models, the reality is that these plans are resourced and prepared at a point in time. However, the variables which impact on land supply, including changing constraint layers, development approvals, growth projections and changes in planning schemes, are constantly progressing.

The involvement of utility providers and the development industry in the GMP is also a key component in data review and update as it provides additional perspectives of land supply. Recognising the role of utility providers and industry in delivering essential infrastructure and building homes in itself is a critical element of the ongoing improvement to land supply data and its interpretation.

The table below provides an overview of the status of the data programs for local governments and identifies the current horizons and projection years for key land use and infrastructure tools. This table should be read in conjunction with the following table which highlights the data improvement and policy work currently being undertaken by SEQ local governments.

Table: Timeframes for local government planning schemes and LGIPs

Local Government	Current Planning Scheme		Local Government Infrastructure Plan		Recent amendment and / or growth management project
	Commencement	Horizon	Commencement	Projection	
Noosa	2020	2040	2020	2031	<ul style="list-style-type: none"> New scheme commenced July 2020
Scenic Rim	2020	2040	2020	2031	<ul style="list-style-type: none"> New scheme commenced March 2020 Preparation of Growth Management Strategy - commenced 2020 Minor Amendment No. 1 (April 2021)
Redland	2018	2041	2018	2031	<ul style="list-style-type: none"> Major Amendment Version 4 (February 2020)
Somerset	2016	2031	2018	2031	<ul style="list-style-type: none"> Major Amendment Version 4 (November 2020)
Moreton Bay	2016	2036	2017	2031	<ul style="list-style-type: none"> Major Amendment Version 4 (January 2020) Neighbourhood Development Plan Area No. 1 Caboolture West Local Plan Morayfield South Emerging Community Area TLPI No. 2 of 2021 (September 2021) Preparation of Regional Growth Management Strategy – commenced 2019

					<ul style="list-style-type: none"> Industry engagement and independent review of planning assumptions – completed 2021
Gold Coast	2016	2036	2018	2031	<ul style="list-style-type: none"> Major Amendment (City Plan) Version 8 (December 2020) Preparation of draft planning assumptions model (PUG) - commenced 2017
Logan	2015	2035	2017	2031	<ul style="list-style-type: none"> Major Amendment Version 8 (November 2020) Preparation of new planning scheme underway - intended to be completed by 2025
Sunshine Coast	2014	2031	2018	2031	<ul style="list-style-type: none"> Preparation of new planning scheme underway - intended to be completed by 2024
Brisbane	2014	2031	2016	2026	<ul style="list-style-type: none"> Current City Plan Amendment v23.00/2021 (December 2021) Statutory review of LGIP commenced 2021
Toowoomba	2012	2032	2017	2031	<ul style="list-style-type: none"> Version 26 (April 2021) Preparation of Toowoomba Region Growth Plan – commenced 2021 Preparation of new planning scheme - intended to be completed in 2024
Ipswich	2006	2021	2018	2036	<ul style="list-style-type: none"> Preparation of new planning scheme underway – commenced 2019
Lockyer Valley (Gatton) (Laidley)	2007	2022	2018	2036	<ul style="list-style-type: none"> Preparation of new planning scheme – commenced 2015
	2003	2018	2018	2036	

Data and policy commitments

The preferred approach to achieving improvements to data is through collaborative partnership with local governments, utility providers and the development industry, rather than direct policy intervention. The department is committed to promoting data improvement activities from a foundation of shared interest and commitment to achieving best practice. However, in certain circumstances the State may lead direct policy action. For example, the department’s Growth Areas Team is a pro-active response to land supply challenges which utilises the information collected and analysed through the Growth Monitoring Program.

The department is in regular contact with all Councils through the GMP working groups, the SEQ Local Government Working Group, a range of *ShapingSEQ* 2017 implementation projects (e.g. Caboolture West Emerging Community Area, Beerwah East Major Development Area), planning schemes and LGIP amendments and development assessment processes.

The government also has access to a wide variety of perspectives, skills, expertise and knowledge through the Housing Supply Expert Panel (HSEP). The HSEP was formulated with a broad membership which includes individuals with extensive experience in the industry in advising and supporting development. The views of all stakeholders are considered by the HSEP, who continue to engage with local governments at the officer level, and other GMP stakeholders, to discuss opportunities for land supply data improvement and policy challenges.

Data improvement and policy responses are informed by all GMP stakeholders. Based on differing stakeholder roles in the planning system, their expertise and perspectives, all can play a key role in the improvement of data or advancement of policy responses. Examples of how this has been progressed by different stakeholder groups are shown in the table below.

As shown below, there are some local governments, including Brisbane, Moreton Bay, Scenic Rim and Toowoomba, actively working to prepare strategies, including for growth management, housing and/or industrial. Gold Coast, Moreton Bay, Logan and Redland are also working on improving their land supply databases. It is understood that all local governments and utility providers have programs for review and update of the land supply data at different intervals. Intervals vary dependent on data sources and relative levels of growth and resourcing provided at a local government level.

The following table highlights the data improvement and policy work currently being undertaken by local governments across SEQ.

Stakeholder	Current commitments and future action referenced in 2021 LSDM	
	Data Improvement	Policy action
Brisbane	<ul style="list-style-type: none"> Commissioned a new growth model 	<ul style="list-style-type: none"> Preparing a Housing Strategy Consulted on the Brisbane Industrial Strategy; Our Productive City: Brisbane's Industrial Future

Gold Coast	<ul style="list-style-type: none"> • Draft planning assumption model (PUG) 	
Ipswich		<ul style="list-style-type: none"> • Development of a new Planning Scheme
Lockyer Valley		<ul style="list-style-type: none"> • Development of a new Planning Scheme
Logan	<ul style="list-style-type: none"> • Establishment of new team to collect, capture, prepare and analyse land supply data • Updated development projections model output provided to the GMP 	<ul style="list-style-type: none"> • Housing Strategy • Planning scheme amendments •
Moreton Bay	<ul style="list-style-type: none"> • Preparing an Urban Area Employment Land Investigation • Base planning assumptions review • Updated residential and industrial employment figures through the provision of LGIP2 outputs 	<ul style="list-style-type: none"> • Regional Growth Management Strategy • Progressing <i>ShapingSEQ</i> 2017 implementation action - Caboolture West Emerging Community Area
Noosa	<ul style="list-style-type: none"> • Updated planning assumptions to align with the new planning scheme provided to the GMP 	
Redland	<ul style="list-style-type: none"> • New planning assumptions model in preparation 	<ul style="list-style-type: none"> • Southern Thornlands Ministerial Direction • Victoria Point Amendment
Scenic Rim	<ul style="list-style-type: none"> • Undertaking a Growth Management Strategy 	
Somerset		
Sunshine Coast		<ul style="list-style-type: none"> • Planning Scheme Amendment – Additional SEQRP Sites and Other Zoning Matters • Potential future amendments to facilitate consolidation in the Enterprise Corridor • Advancing investigations of the Beerwah East Major Development Area in collaboration with the state
Toowoomba	<ul style="list-style-type: none"> • Growth Plan and Infrastructure Plan, including a new planning assumptions model with outputs provided to the GMP. 	<ul style="list-style-type: none"> • Development of a new Planning Scheme

Best practice research

Undertaking best practice research as part of the GMP is central to identifying best practice methods for calculating, informing and understanding land supply across the SEQ region. The best practice research for the 2021 LSDM Report can be accessed [here](#).

The purpose of best practice research is to identify and document methods that can be considered as input into local government and utility provider land supply databases. The aim is to provide a regionally consistent understanding of the region’s land supply and development activity.

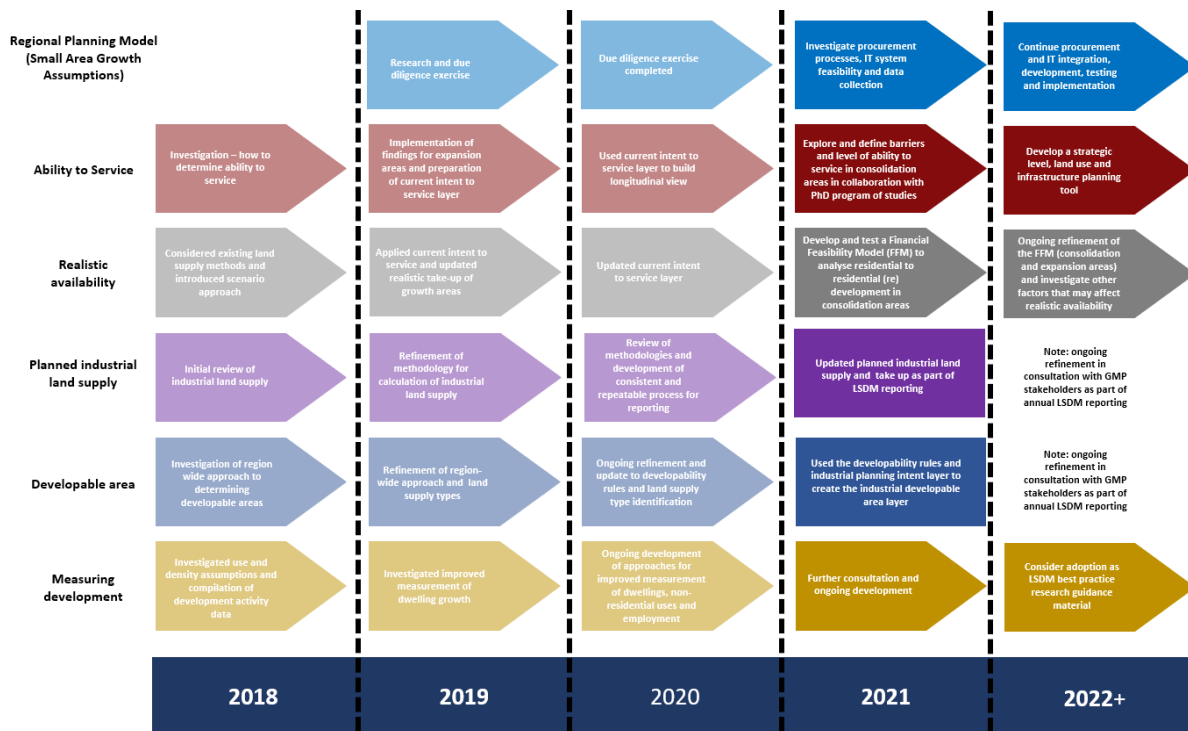


Figure: Program of best practice research

Note: This diagram shows the best practice research being undertaken or considered since 2018.

Progress to date, combined with the forward program of best practice research, will culminate in material that can guide and support future updates to land supply databases as the core input to land supply and development monitoring in SEQ over time.

Future policy responses

The 2021 GMP Roadmap illustrates the department’s commitment to a program of regular annual reporting and improvement through the GMP to 2023 and beyond. It is acknowledged that delivering on this commitment requires ongoing innovation and improvement in data collection, analysis and reporting and policy responses by the State and SEQ local governments to implement *ShapingSEQ 2017*. In addition to the policy drivers in *ShapingSEQ 2017*, the unprecedented impacts of COVID-19 have resulted in definitive and direct response from the Queensland government, which needs to be considered in the context of future policy responses.

The GMP plays an important role in supporting the long-term strategies that guide future growth through clear regional policy direction provided in *ShapingSEQ 2017*. It is important that any policy

responses as a result of COVID-19, or land supply generally, lead to actions that support industry and align with the sustainable growth management framework that was established through *ShapingSEQ* 2017 in consultation with local government and the community.

Identification and implementation of policy responses involve a process of investigation and engagement that is designed to ensure due process but can be time and resource intensive. This means that in some instances there is a lag between the need for a policy intervention being identified and a direct policy response being implemented. The department will follow the land supply framework identified in *ShapingSEQ* 2017 (see Figure 11 in *ShapingSEQ* 2017), which encourages local government led policy responses, through access to accelerated processes or other support, and also provides a pathway for State government led policy responses.

Current policy response

The establishment of the GAT in 2021 is a key response of the state government to accelerate short-term land supply in SEQ. The basic remit of the GAT is to improve partnerships and work collaboratively with local governments, utility providers and the development industry to facilitate delivery of land and affordable and diverse housing supply. In addition, priority growth areas of Caboolture West and Southern Redland Bay have been granted loan funding through the Building Acceleration Fund to assist in providing critical infrastructure which will support development in these areas.

Off-the-plan sales and impact on land supply

Overview of identified issue

The SEQ region has experienced some significant short-term challenges with respect to housing supply. These challenges have been amplified by the continued impact COVID-19 is having, combined with other factors. These factors include continued low interest rates, increased net internal migration and government economic responses all stimulating demand for housing.

Also as highlighted by the development industry, there are currently elevated levels of demand for residential lots in SEQ influenced by government stimulus measures such as Homebuilder and increased interstate migration reflecting Queensland's position as a more affordable and possibly safer location in the context of the COVID-19 pandemic. Feedback from industry has indicated that this has led to unprecedented land sales across the region including the forward selling of lots which will not settle for another 18 months.

This section aims to discuss how off-the-plan sales are incorporated into the current reporting and if there is data readily available to capture the proportion of planned dwelling supply that is approved and sold off-the-plan.

Based on the information used to inform the current LSDM reporting, these off-the-plan sales are part of the currently reported Approved supply. However, these will not appear in the data for lot certifications/sealing or registrations, vacant land sales or building approvals for some time. It is considered by industry that this is potentially 1) underrepresenting the current level of demand, and 2) also reducing the short-term level of land supply available for the industry to sell without being reflected as a reduction to the Approved supply figures.

An examination of Queensland residential sales data for Stockland Group and Peet Limited for the 2021 financial year indicate that land sale deposits have been higher than land sale settlements. For Stockland this has been quite significant with the volume of deposits 33.7 per cent higher than settlements for 2021 compared to an average of 14.3 per cent lower over the three previous years. For Peet the volume of deposits for residential lots in 2021 has been 9.9 per cent higher than settlements. It is noted however, that deposits are not as secure as unconditional/exchanged contracts and as such carry the potential risk of contract fall over/cancellation (see [Market Factors](#)).

The Queensland residential sales data tends to support the view of the development industry that demand for residential lots is greater than currently being recorded and that future supply may be taken up at a rate faster than suggested by currently available data. A short-term rise in demand could reflect a market fluctuation which should be expected as part of economic and residential development cycles. However, it could also be the early signs of a medium – long term shift in demand which may alter the underlying demand that is used to update projected population. Whether this is a significantly abnormal rise, and for how long it will last, will depend on a range of factors that are indeterminant at this point (see [Market Factors](#)).

What is the relationship of off-the-plan sales to the LSDM reporting?

Off-the-plan sales are represented broadly through elements of several LSDM preferred performance measures and monitored metrics as these flow through the land supply and development pipeline as illustrated in the figure below and described in further detail as follows:

- They are part of Planned dwelling supply and Approved supply. Predominantly they are proposed new lots/dwellings that have development (and in most cases operational works) approvals which may include off-the-plan lots that have been released by a developer to the market for sale under the relevant disclosure requirements of the Land Sales Act 1984.
- Lot certification (sealing) and registrations, as lots which may have been sold off-the-plan are formally certified/sealed by the relevant planning authority, they are removed from the Approved supply of uncompleted lots in the LSDM's reporting and subsequently registered with the Department of Resources.
- Vacant land sales for lots which may have been sold as off-the-plan sales, contracts proceed to settlement following the plan sealing and title registration process.
- Building (dwelling) approvals which may include lots sold off-the-plan progress through the dwelling approvals process and are ultimately constructed ready for use/occupation, at which time they are no longer part of the Planned dwelling supply. As provided in the LSDM reporting, it is considered that an estimate for the construction of a dwelling, overall, (for both detached and attached product) is about 12 months.

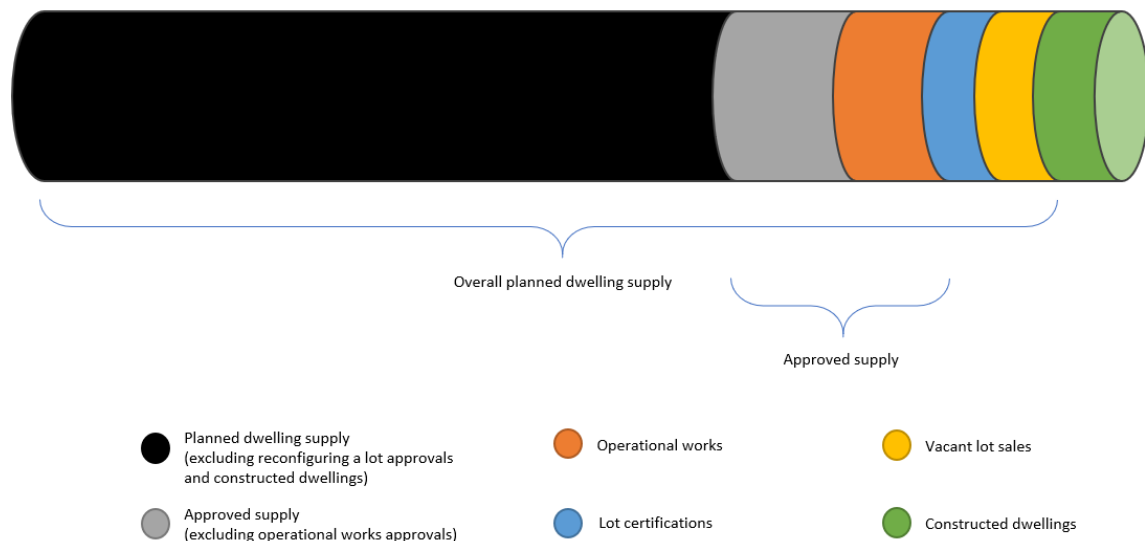


Figure: Example LSDM land supply and development pipeline monitoring

Whilst off-the-plan sales are broadly represented in LSDM reporting performance measures and metrics, it is acknowledged that these are not readily identifiable in the datasets currently available. This is largely due to data availability and timing as described further below:

- Lot certifications that may flow from off-the-plan sales are removed from Approved supply of uncompleted lots in the LSDM reporting. Subsequent lot registrations are typically lodged with the Titles office for a whole development stage, which may include lots sold off the plan and lots not yet sold (at the time of registration).
- Vacant land sales that may have resulted from off-the-plan sales only flow through to the Queensland Government Statistician’s Office’s land sales data and subsequently the LSDM reporting once sales contracts have settled. This can only occur following the lot registration process and as a result lots that were sold off-the-plan (prior to registration) are not readily identifiable.

Significance of off-the-plan sales and potential impact on LSDM reporting

The issue raised by industry in recent times is that the current LSDM reporting is not breaking down the Approved supply further to capture off-the-plan sales. Therefore, the current LSDM reporting is not monitoring any early fluctuations in demand from off-the-plan-sales which are effectively taking up approved supply before being captured by the LSDM report and removed from approved supply. The LSDM current reporting points through the development pipeline therefore is not capturing the early signs of increased demand and increased take up of supply which is challenging in a market moving as quickly as the current one. As an example, this year’s LSDM Report does not reflect the large number of lots that have been sold but will not be registered until the next 12 to 18 months.

The concern from industry is that these lots, which are in effect sold, are not removed from the available pipeline of supply, and as a result the LSDM is showing a larger supply of land available across the region than what is available on the ground at any one time. The figure below provides an illustrated example of this where the separate reporting of off-the-plan sales would identify that part of the Approved supply that is no longer available for sale.

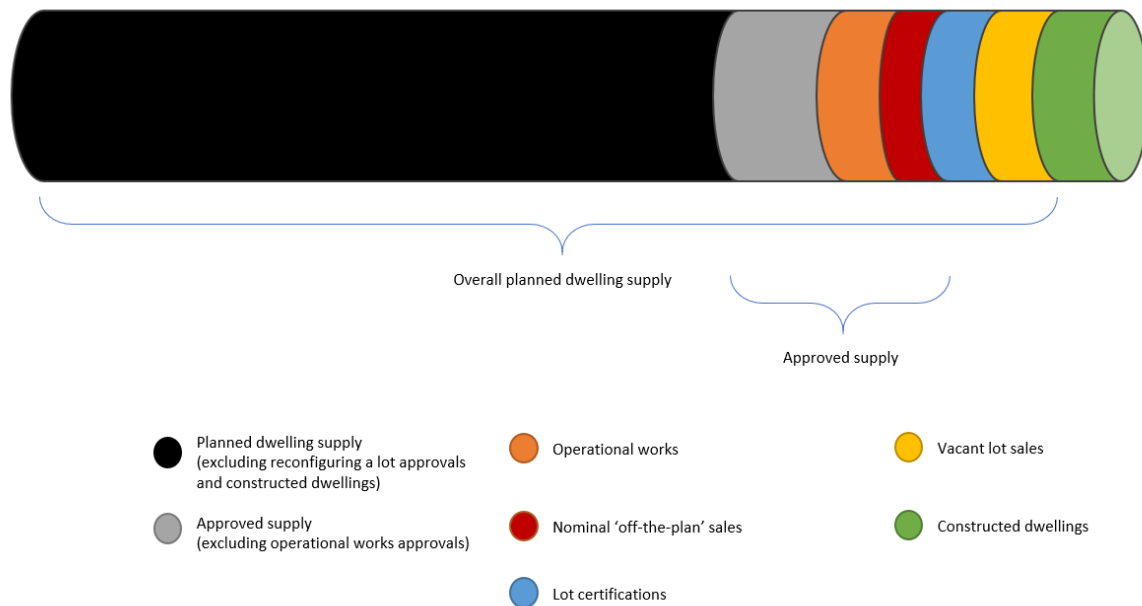


Figure: Example LSDM land supply and development pipeline monitoring including potential reporting of off-the-plan sales

Considering the full dwelling supply pipeline and data limitations

Whilst this and the usefulness of having another point of measurement in dwelling supply pipeline are acknowledged, it is important to reiterate that residential lots alone and more specifically off-the-plan sales cannot immediately be considered as taken up in the context of land supply and development monitoring. This is due to the following:

- For the purposes of *ShapingSEQ* 2017 dwelling supply benchmarks, it is not until a dwelling is constructed that the lot can meet the needs for growth. Purchasers of off-the-plan sales have entered into the arrangement in full recognition of the delays involved and will have other living arrangements pending the lot and dwelling construction.
- The rate at which sales off-the-plan occur does not necessarily translate directly to the rate at which lots and dwellings are constructed, depending on industry capacity. Even when there is a sufficient stock of approved supply or developed (registered) lots, there can still be a housing supply shortage in the short-term if construction cannot keep pace with demand.

Some limitations to data availability, certainty and timing, are set out as follows:

- At present, there are limits to the data available on off-the-plan sales, including data collection using a consistent and repeatable methodology and which could be monitored and analysed to inform land supply across the whole region (e.g. proprietary research, sample surveys).
- The nature of off-the-plan sales contracts and the time required for contracts to convert through the contractual process from ‘unsecured’ sales (e.g. deposit and/or conditional contracts) to ‘secured’ sales (e.g. exchanged and/or unconditional contracts) carries an inherent risk of contract fall overs/cancellations. While lots can be sold 18 months ahead of lot registrations, these can remain as conditional contracts until such time that the

conditions of the contract (e.g. finance clauses, soil tests, etc.) are satisfied, which can be a significant period. In the event that either party may not satisfy the conditions of the contract and the contract is cancelled, the lots will be returned to the market for sale.

In light of the above, further investigations are needed to better understand data availability and consistency if separate reporting of off-the-plan sales is to be undertaken to provide a better understanding of the overall supply pipeline.

How can the LSDM be improved to recognise these?

Despite the current limitations on data availability and timing, it is acknowledged that the LSDM reporting can be improved to better recognise current on-ground experience, including the potential reporting of off-the-plan sales to provide further insights into the level of market activity and its potential impact on short-term land supply.

Outlined below are the next steps for further investigations to assist in addressing this matter and improve the reporting of market-based drivers:

- Undertake further targeted engagement activities with industry to understand the breadth of industry-led reporting and analysis which could be used in the LSDM reporting. An example of this is the land supply reporting undertaken by Western Australia's Department of Planning, Lands and Heritage which utilises UDIA's Western Australia's quarterly Urban Development Index. This provides the Western Australian government an invaluable barometer of market demand (sales number and prices) and supply (lots on the market and in production). It is noted the UDIA Queensland is developing similar data.
- Review other market-based proprietary data sources and analysis that can provide an indication of the current levels of off-the-plan sales, including the methodology and potential limitations.

These next steps will be undertaken in the context of the following research questions:

- How could 'off the plan' sales be integrated with current LSDM approaches to usefully inform our assessment of the adequacy of land supply?
- How does the current situation compare to market circumstances of the past?
- How frequently would information about such sales need to be reported to be beneficial?
- How can the LSDM Report visually display these elements in the context of the overall development pipeline?
- How could the current LSDM reporting data and performance measures be expanded to monitor off-the-plan sales?
- How can reporting address issues including data source, availability, costs and frequency, accounting for sales that fall over and data comparability over time using a consistent and repeatable method?

Impact of new constraints on land supply

In keeping with the objectives of the Growth Monitoring Program (GMP), the department continues to estimate the impact of region-wide planning regulations or policies adopted since the release of

ShapingSEQ 2017 (August 2017) in the Land Supply and Development Monitoring (LSDM) Report each year.

The department's region-wide analysis contained within this section is separate from the capacity of planned dwelling supply and planned industrial employment supply figures in the 2021 LSDM Report which are sourced directly from local government and utility provider land supply databases. However, it is expected that the impact of any adopted regulations or policies, such as those related to the SEQ koala conservation strategy, will feed into the capacity figures in the LSDM Report as land supply databases are updated by the relevant data custodians over time.

Preliminary analysis of impacts

This preliminary analysis considers the impact of changes (as at June 2021) to the vegetation mapping under the Vegetation Management Act 1999, matters of state environmental significance (MSES) mapping under the State Planning Policy and koala habitat mapping and regulations, as updated from time to time, since the adoption of *ShapingSEQ* 2017.

To provide a more consistent region-wide basis for comparison and analysis, these mapping layers were analysed against developable areas identified for:

- the 2013 broadhectare study updated to remove subdivision (parcels less than 2500m²) to June 2021 (noting that the 2013 broadhectare study was used to inform the development of *ShapingSEQ* 2017)
- new growth areas not captured by the 2013 broadhectare study updated to remove subdivision (parcels less than 2500m²) to June 2021.

It should be noted that the developable industrial land reported for SEQ and each SEQ local government utilises constraints current as at June 2021 in accordance with the SEQ-wide developability constraint rules (See the Developable area and land supply types [Best Practice Research](#) and the [Technical notes](#)).

Data limitations mean the findings of the 2021 analysis are likely to be an overstatement of the actual impact on developable areas and dwelling yields. In particular, although detailed information about lot (to June 2021) and multiple dwelling development permits (to June 2021) was available from the Queensland Government Statistician's Office, the department did not have access to comprehensive property-level information about non-residential development permits or any preliminary approvals. Further factors are the unknown extent to which the new state mapping layers overlap with recent changes to local constraints mapping or with areas already excluded from development by some structure plans. There may also be significant scope for provision of offsets to minimise loss of developable area.

The analysis undertaken for the 2021 LSDM Report has identified a potential impact of up to 4.5 per cent of the dwelling capacity in the expansion area of *ShapingSEQ* 2017.

In considering the potential impact on dwelling capacity, as well as the fact these percentages may overstate the impact on capacity, it is important to recognise that *ShapingSEQ* 2017 assumed only about 70 per cent of the total expansion dwelling capacity would be taken up by 2041. To the extent growth areas may still achieve their expected rate of take-up in areas outside any additional constrained land, that is a factor ameliorating the impact on planned dwelling supply.

The supply reported for planned dwelling and planned industrial employment indicate there is sufficient time to undertake a more detail assessment of the impact of constraints before considering a need to increase supply.

In undertaking this analysis, the department has not considered other matters that may affect the developable area and land supply adequacy.

Ongoing approach to assessing impact of new constraints

The SEQ-wide developability rules are annually reviewed in consultation with SEQ local governments and shared with local governments and infrastructure agencies for their planning purposes through this report. The department continues to advocate for the more regular update and provision of local land supply databases that incorporate any changes in state and local constraints and other changes to planning schemes and development approvals.

Developable area assessments using the region-wide developability rules can support integrated, up-to-date consideration of all state and local constraints as a basis for assessing the impact of any proposed new constraints on the region's land supply. Associated improvements over time in the capture of property-level development and preliminary approval information (e.g. residential and industrial), structure plans and existing land use would also support more accurate assessments of impacts on developable areas over time.

Underutilised Urban Footprint

ShapingSEQ 2017 designates land within the Urban Footprint to accommodate South East Queensland's (SEQ) urban development needs to 2041. However, some areas in the Urban Footprint are considered underutilised due to issues such as land fragmentation or incomplete infrastructure planning and delivery. Unlocking Underutilised Urban Footprint (UUF) is a key implementation action of *ShapingSEQ 2017*.

Throughout 2018 and 2019, the department worked closely with SEQ local governments, industry representatives and utility providers to identify and investigate constraints that have impeded the timely development of long standing, underutilised areas of the regional plan's Urban Footprint.

In early 2020, to advance this implementation action, the department developed a model to quantitatively examine and compare characteristics of case study areas which had been identified as underutilised through previous investigations and consultation with GMP stakeholders.

Next steps

The department continues to advance its work to develop and implement responses that address key issues which have impeded development in the UUF areas across the SEQ region. Information collected, research undertaken, and responses identified through the GMP on issues related to UUF are informing these ongoing investigations.

The Growth Areas Team, with advice from the Growth Areas Advisory Group, are progressing detailed evaluations of all UUF areas identified in SEQ with a view to identify potential projects where the State could expand its involvement to unlock development potential. This may include site specific planning projects or the development of new policy tools, development practices or guidance materials which could be applied across UUF areas with similar constraints.

The department will use this work to determine where it can assist development of underutilised areas within the Urban Footprint, with actions, policies, programs and/or responses. It is anticipated that the outcomes from this work will also inform the future review of *ShapingSEQ 2017*.

Housing Supply Expert Panel

Introduction

In 2018, the Queensland Government established the Housing Supply Expert Panel (HSEP) to oversee the Growth Monitoring Program (GMP) and provide independent expert advice about how to appropriately manage land supply and associated issues in South East Queensland (SEQ).

In 2021, the HSEP continued to engage with key stakeholders and provide oversight of the GMP. The HSEP supported the release of the annual LSDM Reports and reaffirmed these as nation-leading work integral to SEQ's regional planning framework.

Throughout 2021 the HSEP provided advice and guidance to the following initiatives: updated land supply and development activity data and information updating the Market Factors Report for SEQ, and updated reporting on social housing stock. The 2021 Market Factors Report for SEQ provides independent commentary on the factors that may affect short and medium-term demand for housing, and commentary related to existing and potential impacts resulting from COVID-19. The report draws upon publicly available and regularly updated information to highlight trends in residential demand for housing at the SEQ scale. It also provides detail about broader regional and national factors affecting the development activity observed in the LSDM Report, with some commentary about the outlook for SEQ. To access the report, see the [Market factors](#) section.

The HSEP continues to recognise reporting on social housing stock that serves vulnerable people and households, as an important element of overall housing stock. An update on 2021 reporting is provided in more detail in the Social housing section below.

Note, in 2022 the Government announced the Housing Supply Expert Panel would be updated and expanded.

Communiqués

In addition to providing advice to government, the Housing Supply Expert Panel provides oversight of the Growth Monitoring Program through regular meetings and working sessions.

- 4 July 2018
- 16 October 2018
- 27 March 2019
- 18 July 2019
- 3 October 2019
- 8 April 2020
- 13 and 21 May 2020
- 1 October 2020
- 7 December 2020
- 16 March 2021
- 26 August and 7 September 2021
- 7 October 2021

- 6 April 2022
- 2 June 2022
- 30 September 2022
- 14 November 2022
- 1 March 2023 (QHSEP)

Social housing

The Housing Supply Expert Panel (HSEP) resolved to report on social housing stock over time, as an important element of overall housing stock that serves vulnerable people and households. In 2021, HSEP and the department has continued to work with the Department of Communities, Housing and Digital Economy (DCHDE) to investigate and update reporting on social housing.

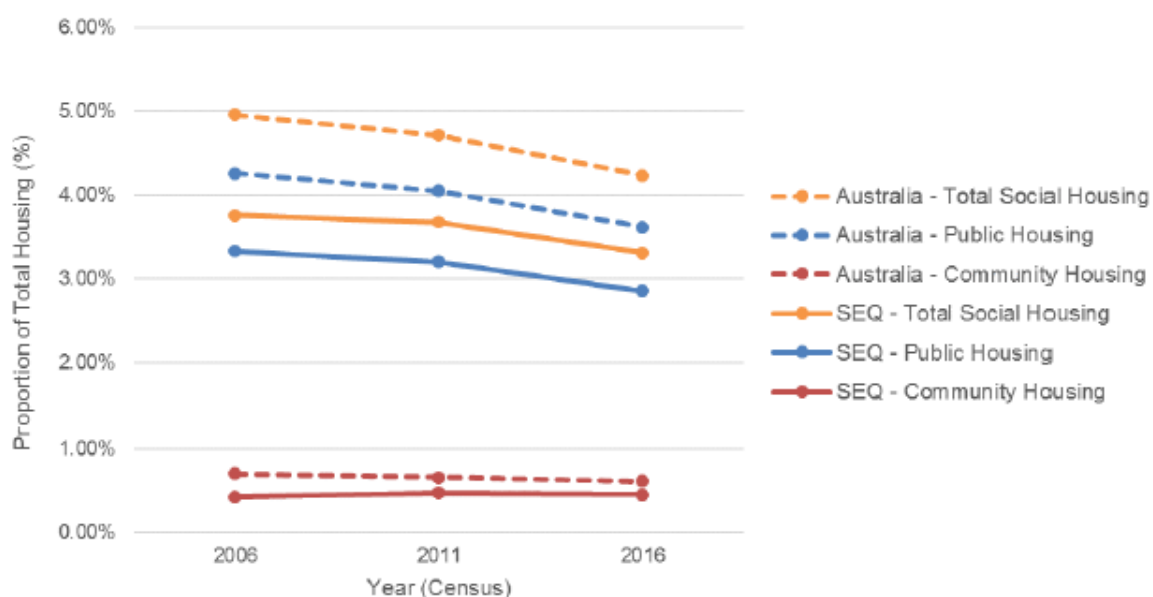
Social housing is critical social infrastructure, providing shelter for vulnerable people and families and forms an important part of overall dwelling supply in the region. The Queensland Government owns a diverse property portfolio of more than 61,465 government-owned social and affordable housing dwellings, dispersed across the state with a total value in excess of \$15.2 billion. This portfolio includes a variety of housing types including apartments, townhouses and detached houses either owned and managed by DCHDE or used for the delivery of a suite of housing services by Community Housing and Specialist Homelessness Service providers.

In 2019, HSEP used landlord type information from the Census to report social housing stock from 2006 to 2016 in South East Queensland (SEQ). This method has previously been employed by the Australian Housing and Urban Research Institute at a national level. The results of this analysis, which exclude visitor only and non-classifiable households, are given in the table below.

Table 1: Social housing households SEQ and Australia 2006 to 2016

		2006	2011	2016	Change from 2006 to 2016
Australia	Public Housing	304,422	314,692	299,953	-4,469
	Community Housing	50,160	51,375	51,069	+909
	Total Social Housing	354,582	366,067	351,022	-3,560
	Total Housing	7,144,096	7,760,322	8,286,073	+1,141,977
South East Queensland	Public Housing	32,223	34,821	33,606	+1,383
	Community Housing	4,168	5,131	5,337	+1,169
	Total Social Housing	36,391	39,952	38,943	+2,552
	Total Housing	966,784	1,086,501	1,175,651	+208,867

Note: Total Social Housing is the sum of Public Housing and Community Housing



The data illustrates that the number of households in social housing in Australia decreased by about 3500 from 2006 to 2016. Over the same period, the total number of all households increased by about 1.15 million, resulting in the proportion of households in social housing decreasing from about 5 per cent to 4.2 per cent.

In contrast, the number of households in social housing has increased by about 2500 households in SEQ from 2006 to 2016. Despite this increase in social housing, the proportion of households in social housing decreased from 3.7 per cent to 3.3 per cent in SEQ, similar to the trend observed across Australia. This decrease in the proportion of social housing indicates that the growth in new social housing stock has not kept pace with the growth in the total number of households in SEQ.

This data uses the self-reported landlord type from the ABS Census, which can undercount social housing due to its reliance on self-identification. For example, the DCHDE figures indicate there were 44,504 social housing dwellings in SEQ in 2016, which is 5561 higher than the 2016 Census figure of 38,943 total social housing households.

The panel is continuing to explore these findings and ways of better understanding social housing supply and the need for improved affordability and diversity of housing options in SEQ with DCHDE and other key stakeholders.

DCHDE response:

DCHDE welcomes the continued interest of HSEP members on Social Housing and the panel’s recognition of the important role social housing and other forms of housing assistance plays in the SEQ region. The pandemic has seen demand for housing assistance increase, impacted by market forces including high interstate migration, record low interest rates, rising property and private rental prices in housing markets across the state.

In 2017 the Queensland Housing Strategy 2017 – 2027 (QHS), was released as a long-term reform agenda to improve housing outcomes for Queenslanders, with ambitious growth targets for delivering new social and affordable housing. From the launch of the QHS to 30 June 2021, construction commenced on 2480 social housing homes and 692 affordable homes, supporting more

than 2200 jobs in the construction industry. On 15 June 2021, the Queensland Government launched the Queensland Housing and Homelessness Action Plan 2021-2025 (Action Plan 2021-25) in response to unprecedented housing market conditions, to accelerate and expand social housing supply commitments and housing and homelessness support with a \$1.908 billion investment over four years. This includes annual returns from the new \$1 billion Housing Investment Fund that has been established to support housing supply on an ongoing basis.

This record investment will see 7,400 new social and affordable homes commence over the next four years as part of a total supply injection of around 10,000 social and affordable homes over the first eight years of the Housing Strategy. It expands capital growth into regions not in scope of the 2017-2020 capital program, realigns the portfolio to the changing needs of the customer base, delivers specific products for target cohort groups, and leverages state capital and land to draw in investment and contributions from delivery partners such as Community Housing Providers, and the private sector.

DCHDE also provides a broader suite of housing assistance responses beyond social housing to help low to moderate income households find and secure homes in the private market. This includes subsidies, grants, loans and tailored assistance which are effective in helping Queenslanders find, secure and sustain a home in the private market. Department historical records indicate in 2016 it assisted households in SEQ with provision of 44,504 social housing dwellings while an additional 30,850 dwelling outcomes were delivered through a range of these complimentary housing assistance measures.

On this basis the total number of households assisted by social housing dwellings or complimentary housing assistance measures increased from 49,797 in 2006 to 59,170 in 2011. By 2016 that total number assisted with dwellings had grown to 75,354.

Responding to the long-term quantum of demand will require us to consider new approaches, informed by best practice, to provide a more predictable pipeline of land for future social and affordable housing. In support of the State's social and affordable housing objectives the Department of State Development, Infrastructure, Local Government and Planning (DSDILGP) will lead an investigation under the Action Plan (2021 - 2025) on how the state's planning and economic development tools can be harnessed to deliver supply opportunities in consolidation and expansion locations. The HSEP are considered well positioned to contribute to the progression of this important work, given the expertise and broad industry representation of its members.

Housing affordability

The Housing Supply Expert Panel (HSEP) has identified that supporting housing affordability and stability through market monitoring and advice was a priority for the panel. A key purpose of the Growth Monitoring Program (GMP) is to monitor and assess if there is adequate planned dwelling supply relative to dwelling demand in South East Queensland (SEQ). The GMP's findings may be used in combination with available data from across federal, state and local government to inform decision making regarding public policies to address housing affordability.

ShapingSEQ 2017 established a policy for at least 15 years of planned dwelling supply, at any point in time, that is appropriately zoned and able to be serviced. The 2021 Land Supply and Development

Monitoring Report confirmed SEQ has more than 15 years of planned dwelling supply that is appropriately zoned.

The 15 years of supply policy provides an indicator for when the state and local governments should initiate a range of solutions in response to potential shortages in planned dwelling supply, including identifying new land for urban purposes or investigating additional infrastructure opportunities. In doing this, both the state and local governments should ensure they are increasing supply in a way that is affordable to governments and the community, especially in terms of the quality, timing and cost of any required infrastructure.

It is important to recognise that ensuring adequate planned dwelling supply is only one contributing element to addressing housing affordability. Housing demand and affordability are subject to many influences beyond population and household growth and the basic need for shelter. Taxation arrangements, financial incentives or disincentives, broader economic influences such as interest rates, income growth, employment and foreign exchange rates, all have major influences on housing demand, price and affordability over time. Additionally, new dwellings take time to plan, approve and construct, so in the short-term, growth in actual housing supply may be slow to respond to increases in demand.

Best practice research

Introduction

Since the launch of the Growth Monitoring Program (GMP) in 2018, the department has worked with independent experts to research and recommend best practice methods for land supply and development monitoring in South East Queensland (SEQ). The research outcomes were discussed in the best practice research sections of the annual Land Supply and Development Monitoring (LSDM) Reports.

In 2021, the department has furthered Best practice research, continuing to work off the recommendations from previous reports and the priorities identified by the GMP Data and Modelling Working Group. The research outcomes for 2021 are detailed below and include:

- Realistic availability
- Ability to service – consolidation
- Measuring development
- Small area growth assumptions – a Regional Planning Model
- Data sharing.

The below Venn diagram has been prepared by the GMP team to illustrate the strategic context of the LSDM Report and the inter-relationships of data and analysis within the LSDM Report. This diagram will be progressively updated to illustrate advancements of concepts and development of the identified tools, such as the Regional Planning Model, which remain under investigation as part of best practice research.



Figure: Best practice research subprogram venn diagram

Application of Best practice research

Progressive implementation of the LSDM Report’s best practice research findings, undertaken in collaboration with local governments, industry and utility providers, will help inform and improve future annual LSDM Reports and assist in continuing to create a transparent and robust platform for ongoing land supply and development monitoring in SEQ. Actioning best practice research has realised improved residential and industrial reporting, as well as assisted with information and practices that will enhance the regional plan review process.

The best practice research of the LSDM Report also provides a valuable resource for key stakeholders, such as local governments, state agencies, industry and utility providers. GMP stakeholders have advised that best practice research informs activities such as improvement of infrastructure planning and to understanding industrial land supply. The department has also referenced the work of the GMP through plan drafting guidance for local infrastructure planning.

The department will continue to progress best practice research to enhance data accuracy within the LSDM report, as well as continue to provide a resource for stakeholders to utilise for their unique purposes.

The best practice research program has and will provide opportunities for ongoing engagement with local governments, utility providers, state government agencies, industry and academia through

research partnerships, meetings and workshops. This will facilitate sharing knowledge, experiences, and perspectives to promote a shared understanding of how land supply and development monitoring occurs in SEQ.

Industry engagement to support best practice methods

Industry stakeholders have identified a need for more effective engagement to accurately reflect the industry's on the ground experience to inform the development of land supply information and particularly potential dwelling outcomes. This is in relation to issues raised including:

- assessment of dwelling yields, including distinguishing between and reporting separately on detached and attached dwellings to better understand alignment to market demand
- the likely take-up of fragmented land
- assumptions for constraints
- the need for engagement to be supported by mapping including developable areas, development approvals, the existing urban area boundary, current intent to service layer and new cadastral lots at a more usable scale.

To consider these matters, consultation is proposed to be undertaken with the industry, local governments, utility providers and the Queensland Government Statistician's Office (QGSO) about practical approaches to ongoing engagement in relation to these issues.

Other relevant research

The department understands that significant research is being undertaken on land supply, housing and property matters by a wide range of research organisations such as the Grattan Institute, the Australian Housing and Urban Research Institute, and various universities. The department recognises the value of drawing on relevant research findings and is committed to working with research organisations as part of the ongoing best practice research program. An example of this is the collaboration between a PhD program of studies at Griffith University and the GMP as part of the Ability to Service subprogram.

The industrial land supply and take-up investigations in 2020 recognised the need to investigate the ability to identify serviced and un-serviced industrial land supply across the region. This is again acknowledged here to inform next steps for future Best practice research.

Based on stakeholder feedback, further consideration will be given to the use of Planned industrial employment supply in comparison to the industrial employment planning baselines of *ShapingSEQ* 2017 as the basis for measuring industrial land supply adequacy. The alternative of using Planned industrial land supply, i.e. actual developable land areas, has been suggested as more appropriate, particularly where the land use demand is for land extensive industrial uses with low employment densities. Future research in this regard would support consideration of any new performance measures in the framing of the next regional plan for SEQ.

Realistic availability

The Realistic Availability subprogram is designed to develop methods through best practice research to better estimate the portion of the capacity of planned dwelling supply that is realistically available by 2041. As part of the Best Practice Research (BPR) subprograms, enabling practices and methods

are developed to assist in achieving the strategic goals of the Growth Monitoring Program (GMP), which takes into account and addresses factors identified by LSDM reporting that may constrain/delay the development of planned dwelling supply, including:

- infrastructure availability
- the practical staging of and capability for development
- fragmented land ownership and varying landowner intent
- insufficient demand for the planned scale/density in some areas up to 2041
- existing versus planned density (or low value of planned development vs existing development)
- the age of existing development
- accessibility
- constraints affecting the financial feasibility of development.

This subprogram is related to and complements previous Ability to Service BPR, which included the development of a 'Current Intent to Service' layer that assists in estimating the realistic availability of planned dwelling supply in the region's expansion areas.

Financial Feasibility Model

Financial feasibility is a key overarching factor influencing the realistic availability of planned supply and, hence, is the focus of the Realistic Availability subprogram this year. To analyse the financial feasibility of planned supply, a Financial Feasibility Model (FFM) is being developed with input from key stakeholders of the GMP. In 2021, the FFM scope includes the analysis of developments with existing and future residential land use only (i.e. 'residential-to-residential developments') yielding dwelling growth in consolidation areas. As part of an incremental approach, the FFM application will be investigated for potential expansion to include additional areas (e.g. expansion area) and other development types (e.g. mixed-use and non-residential developments) in future years' BPR initiatives.

The Financial Feasibility Model November 2021 report (the FFM Report) provides details of the framework for the development of the FFM and its application to a pilot study area.

The FFM conceptual framework was developed based on three steps, which provide an informed and structured approach to the FFM development, namely:

1. a review of the literature;
2. Data and Modelling Working Group (DMWG) meetings and workshops and one-on-one discussions with key GMP stakeholders, including industry representatives; and
3. an online survey, on the FFM inputs and processes, for GMP stakeholders.

Step 1 – First, the literature review provided an appreciation of the body of work undertaken inside and outside the South East Queensland (SEQ) region. It provided the basis for developing the guiding principles, identification of the modelling approach and potential application.

Step 2 – the literature review findings were presented at DMWG meetings and working group sessions, as well as one-on-one discussions with local governments, utility providers, and industry

groups. Questions from these interactions were captured and responded to as part of this process, as well as notes from the one-on-one discussions.

Step 3 – it provided the opportunity for GMP stakeholder groups to confirm or propose alternative inputs and values for the FFM to provide additional consultation and consolidate the findings from Steps 1 and 2 through a targeted survey. This approach provided the opportunity to integrate working knowledge in practice to define the model inputs and processes for a consensus-building approach.

In 2021, the FFM focused on vacant and developed properties (i.e. those with expected res-to-res dwelling growth) in consolidation areas, which are equivalent to approximately 89 per cent of properties in consolidation areas. The identified properties encompass about 325,000 out of 530,000 dwellings of the overall growth, or 61 per cent of the planned dwelling supply in consolidation areas, across seven out of twelve local government areas in the SEQ region.

The planned dwelling supply product mix for each property was determined based on the highest and best use at a property level within existing planning scheme controls and according to local government growth assumptions for each studied jurisdiction across the SEQ region.

A pilot case study was undertaken to inform the development and calibration of the FFM. The aim of this pilot study was to apply the conceptual FFM to a de-identified local government area within SEQ for further development and testing and to provide insights to its integration with the LSDM reporting on planned dwelling supply. For the pilot study, the FFM used inputs and processes derived from the literature review, working group, one-on-one discussions and guided by the results of the stakeholder online survey.

A pilot study analysis of planned dwelling supply was undertaken by estimating the cost and development return. The valuation of sites and new dwellings was defined in the pilot study using Artificial Intelligence (AI) predictive modelling based on site-specific attributes (e.g. street view image, aerial image, property area, etc.) for detached dwellings and median average valuation at an SA2 level for existing attached dwellings.

As part of the pilot study, the cost analysis of properties was undertaken considering different cost components during the development lifecycle, including: land and acquisition costs, demolition, site preparation, building and civil construction costs, statutory fees, project management and professional fees, development contingency, marketing and sales, GST and finance. Costs and revenue were then integrated into a development cashflow for current (2021) and future five-year cohort development periods (to 2031, 2036 and 2041) with an appropriate escalation of costs and revenue into the future. That discounted cashflow enabled all the inputs and processes of the FFM to be summarised into a standard measure to provide a common basis of comparison of financial feasibility among properties over time, namely: the Internal Rate of Return (IRR).

The financial feasibility component of the realistic availability of planned dwelling supply at a property level was analysed considering target IRR thresholds of 7 per cent (i.e., lower bound threshold) and 13 per cent (i.e., hurdle rate), which were used to determine what developments are and are not taken to be feasible.

Developments were then classified into the following categories:

- Not feasible (IRR < 7%)
- Marginally feasible (IRR ≥ 7% and <13%)
- Feasible (IRR ≥ 13%).

Further testing, analysis and consultation of the results will then be undertaken for further refinement and upscaling across the SEQ region with the intent to inform the calculation of planned dwelling supply that is realistically availability of planned dwelling supply. An example of how the FFM results may inform the calculation of realistic availability for consolidation planned dwelling supply is included in the FFM Report.

Other factors

A number of factors other than financial feasibility, as represented by the FFM, also influence the realistic availability of planned dwelling supply. These include practical staging and capability for development, landowner intent and the related fragmentation of ownership, insufficient demand for particular dwelling types in some areas, constraints affecting the feasibility of development and existing non-residential uses. These factors will be addressed in future years as part of the incremental improvement of the Realistic Availability subprogram. The progression and prioritisation of future initiatives as part of the BPR will be informed by the proportion of planned dwelling supply affected (consolidation area and expansion area), the ability to readily identify affected land and stakeholder consultation about potential approaches to representing these factors, including the scope for integration into the FFM.

How this work informs future LSDM reporting will be undertaken in consultation with the GMP stakeholders.

Next steps

Based on the findings of the FFM pilot study (see the FFM Report), the following are proposed as next steps for the development and refinement of the FFM itself:

- Further development and testing of the FFM to facilitate its application across the SEQ region
- Further detailed consultation regarding model inputs and processes
- Application of the FFM to all consolidation areas in SEQ
- SEQ-wide results review and validation in consultation with stakeholders.

In general, stakeholder submissions in 2021 have reinforced that the assessment of the realistic availability of planned supply is a priority area for future best practice research. In addition to progressing the FFM, of the other factors affecting realistic availability, further research into landowner intent and associated land ownership fragmentation issues has been recommended to better inform the overall assessment of realistic availability.

Ability to service - consolidation

ShapingSEQ 2017 establishes an objective that there always be at least 15 years supply of land that is appropriately zoned and able to be serviced with infrastructure. The primary objective of the

Ability to Service Subprogram is to inform whether this policy objective is being met by factoring in, to the extent practical, the following:

- infrastructure already in place
- decisions already made about infrastructure or development, and
- agreements, planning and/or funding in place for future infrastructure.

Achievements 2018-2020

In 2018, Best practice research was undertaken to explore how an ability to service could be best represented. Concepts of boundary, proximity, accessibility, available land and capacity were introduced among others to characterise different aspects of representing an ability to service. The 2018 Best practice research set out indicators across these concepts to represent an ability to service planned dwelling supply.

In 2019, six boundary indicators were selected to represent a current intent to service (CITS) layer and calculate the realistic availability of planned dwelling supply for expansion areas. Realistic availability of planned dwelling supply, using the CITS approach, continues to be annually updated and is used in the 2021 LSDM Report.

In 2020, the subprogram progressed the consolidation area component of ability to service by exploring methods to better understand the land use type and location; and proximity, accessibility and capacity concepts of infrastructure within consolidation areas. The subprogram completed two pilot studies to strengthen a land use and infrastructure planning nexus; and contribute to our understanding of ways to support accommodation of *ShapingSEQ 2017* consolidation area dwelling supply benchmarks.

Focus for 2021

In collaboration with a PhD program of studies, the focus for 2021 has been to explore the usefulness of a simpler, more strategic level, land use and infrastructure planning tool. The aim of such a tool would be to explore land use change and the impacts to infrastructure more dynamically to facilitate the timelier feedback required to best support integrated land use – infrastructure decision making. The tool would aim to function effectively at a region-wide and local government infrastructure catchment scale for planned dwelling supply (re)development within consolidation and expansion areas and its ability to be serviced out to longer term forecasts, including ultimate.

The Figure below illustrates the connection between the ability to service subprogram and the realistic availability subprogram, including their connectivity to Land Supply and Development Monitoring (LSDM). Research completed and implemented across these subprograms contributes to the iterative and continuous improvement of the annual LSDM reporting. This year, the ability to service subprogram focus provides continuous improvement to the work already undertaken and used in the LSDM annual reporting (i.e. CITS). A land use and infrastructure planning tool would provide the means to continually improve upon the calculation of realistic availability of current planned dwelling supply, particularly in consolidation areas, and inform existing and future regional and local planning decision making.



Figure: Ability to service best practice research subprogram interrelations within the growth monitoring program

- Infrastructure related barriers to servicing planned supply: A key component of the tool is to be able to identify a set of barriers to (re)development from the perspective of providing infrastructure to service planned dwelling supply. Stakeholders were asked:
From your experience, please provide a list of barriers and provide an explanation for each.
- Defined levels of ability to service planned supply: This topic follows stakeholder input to the 2020 LSDM report which suggested exploring the usefulness of having levels of ability to service. For example, Level 1 – able to be serviced without any upgrades; Level 2 – able to be serviced with minimal network upgrades; Level 3 – able to be serviced with considerable network upgrades; Level 4 – not able or practical to be serviced. Stakeholders were asked:
Based on your experience - how would properties (i.e., parcels, lot plans) be categorised into these levels.

Stakeholder experiences in relation to the two key topics described above will contribute to the research and development of a land use and infrastructure planning tool. and of in the interim capture industry experiences to progress the subprogram generally. The below summary of stakeholder experiences is intended as a ‘starting point’ for further exploration and stakeholder engagement as the subprogram progresses. Water and wastewater utility provider responses were gained to focus on trunk infrastructure items that often limit the ability to service planned dwelling

supply. Other infrastructure types, such as transport, are understood to have similar impacts, and other infrastructure types to a lesser extent and frequency (open space, stormwater etc). Being closed networks, water and wastewater are the initial focus with any findings to be examined for their applicability to other infrastructure types. The intent is for the strategic level land use and infrastructure planning tool to be compatible with all key infrastructure types impacting the ability to service planned dwelling supply.

Many of the summarised points derived from the stakeholder responses are directly and indirectly interrelated. All relate back to the findings in a 2018 ability to service report that all properties have an ability to service – but it is the cost to service that is the key impediment. The points raised below provide some insights into the depth of complexity around the barriers which are potentially exacerbating the cost to service, and therefore affecting the ability to service planned dwelling supply. The points vary across substantially diverse attributes – all potentially contributing to increased cost to service. For example, some barriers relate to the policy and statutory setting, natural physical barriers, tenure and landownership, future infrastructure design specifics, existing infrastructure characteristics, growth forecasts including sequencing, and statutory boundaries.

Infrastructure related barriers to servicing planned dwelling supply

A summary of water and wastewater utility provider stakeholder responses is as follows:

- **Cost Recovery** - Insufficient funding for infrastructure as infrastructure adopted charges often cannot cover the full cost of trunk growth infrastructure. Development which cannot be funded under adopted charges, or does not have an infrastructure agreement in place, poses a significant encumbrance to an ability to service planned dwelling supply as it poses significant financial risk to utility providers. In addition, if the costs to the developer are too high and the development becomes unfeasible, then this is also a barrier.
- **Planning Frameworks** - Constrained ability to recover extra payment conditions due to misalignment between Netserv Plan and Local Government Infrastructure Plan planning assumptions.
- **Capital Expenditure Timing and Sizing** – Misalignment between forecast demand and actual utilisation of infrastructure. Investing in upgrades or augmentations too early or too big can be a barrier.
- **Standard of Service** - Compliance with fire flow capacity can be a key impediment to service growth. The ability to ensure adequate fire flows to existing and future developments may be limited if development densities increase. Notwithstanding the capacity of existing infrastructure in terms of daily consumption patterns, in some consolidation areas to provide services to a higher urban development density may require upgrades due to higher fire flow requirements.
- **Jurisdictional** - Local government area interface and cross jurisdictional agreements can be the source of servicing challenges.
- **Demand** - Uncertainties around network demand may also limit the ability to service. The revenue-expenditure balance and the related cash flow to capital works plans may be impacted if infrastructure provision costs are not recovered within expected timeframes due to low demand or unfavourable market conditions. Moreover, investing in upgrades or augmentations which do not reflect realistic demand forecast will lead to sub-optimal

operational performance (e.g., higher energy intensity and costs to provide water and sewerage services per dwelling, water quality issues, etc.).

- Environment - Environmental protection requirements (i.e., environmental constraints) may also limit the ability to service developments. Environmental impacts may be mitigated by using different technologies; however, it is usually associated with higher costs that may limit infrastructure provision and/or operation. In other areas, infrastructure construction may be limited by a hard environmental constraint (e.g., protected vegetation, waterways buffers, etc.) or environmental license conditions (e.g., nitrogen and phosphorus discharge, wet weather flow, etc.).
- Alignment - Optimal alignments for new pipelines and other infrastructure items may not be achieved depending on the land ownership intent.
- Proximity and Access - Proximity to connecting infrastructure (i.e., water or sewer mains). This includes matters such as available trunk infrastructure easements/corridors and the availability of a legal point of connection from the property to the network (to a road corridor, through another property) having regard to environmental and topographical constraints (e.g., waterway separating a property from the network or property is at a lower elevation than the sewer network requiring rising mains and pump stations). Issues with access to the existing infrastructure (e.g. seeking permission to construct on others land, etc.) can be a barrier.
- Sequence of Growth - Lots closest to the existing network do not always develop first causing inefficiencies and challenges to service.
- Capacity - The infrastructure not having existing capacity or cost accessible (as opposed to cost prohibitive) future capacity for extra growth due to different infrastructure component limits (e.g., mains, pump stations, treatment plants, etc.). The capacity may be almost always increased, yet at a cost. However, strategic infrastructure planning seeks to overcome such limitations. For instance, a major capital expenditure item (e.g., treatment plant upgrade) to service many developments is most likely scheduled in the capital works plan to ensure development is not constrained. Nonetheless, suboptimal coordination among stakeholders may lead to limited strategic infrastructure planning and inadequate service provision.
- Planning assumptions and modelling - Quality planning assumptions on the type, location and timing of development at a property level. The model needs to be dynamic to include an ability to capture growth and its associated demand on the network and any changes to the network model.
- Allocation of capacity - Capacity of infrastructure being shared across all properties with forecast growth within its service catchment (e.g., a pump station services a specific catchment and has a specific capacity, or a trunk water main that services a number of properties). For example, challenges arise when capacity allocated to one property is transferred to another if it develops beforehand. As planned, infrastructure is usually built and paid for to service nominated properties according to growth assumptions, and changes to allocations can be a barrier to servicing planned supply.
- Fragmentation and small scale - Fragmentation of land and small-scale development is a challenge when significant infrastructure is required to service development. Whilst

development of the whole area may be economically viable, it may not be financially viable for a single developer to deliver the initial infrastructure required. This may require a single developer acquiring more parcels, or some collaboration between developers or the developers will wait for the water service provider to put in catalyst infrastructure, which may not be a high priority for the water service provider.

Levels of ability to service planned dwelling supply

This section is based on stakeholder input to the 2020 LSDM Report, which suggested exploring the usefulness of having levels of ability to service (report accessible via the link above). This includes four levels of ability to service as follows:

- Level 1 – able to be serviced without any upgrades
- Level 2 – able to be serviced with minimal network upgrades
- Level 3 – able to be serviced with considerable network upgrades
- Level 4 – not able or practical to be serviced.

The aforementioned levels are directly proportional to the infrastructure provision cost. Despite the potential for infrastructure provision in almost all conditions in the urban environment, capital cost impediments increase with an increase in the scale of infrastructure upgrades. Infrastructure capital costs increase from minimal to considerable upgrade levels, reaching a not practical to be serviced level in areas where costs are higher than the available revenue to provide infrastructure services.

Stakeholder responses provided insights into how the levels of ability to service planned dwelling supply could be defined. Provided below is an example.

Level 1 – able to be serviced without any upgrades:

- Within Priority Infrastructure Area (PIA)
- Within Existing and Future connection areas (water and sewer)
- Zone is serviced under NetServ Plan (NSP) / Local Government Infrastructure Plan (LGIP)
- Assign levels for lots within sewer pump stations (not individual lots)
- No upgrades required for any of the different network components

Level 2 – able to be serviced with minimal network upgrades:

- Within PIA
- Within Existing and Future connection areas (water and sewer)
- Zone is serviced under NSP/ LGIP
- Cost \$/EP range
- Assign levels for lots within sewer pump stations (not individual lots)
- Analyse infrastructure costs required for different network components
- Within low impact barriers

Level 3 – able to be serviced with considerable network upgrades;

- Within PIA

- Within Future connection areas (water and sewer)
- Zone is serviced under NSP/ LGIP
- Cost \$/EP range
- Assign levels for lots within sewer pump stations (not individual lots)
- Analyse infrastructure costs required for different network components
- Within Medium impact barriers

Level 4 – not practical to be serviced.

- Not in PIA
- No plans for service
- Not in Future connection areas (water and sewer)
- Zone is considered not serviced under NSP/ LGIP
- Within high impact barriers

Further research and consultation will be undertaken to test and refine this initial position. A key aspect for further investigation is whether each property (i.e., land parcel, lot plan) is classified or whether the classification is done by grouping parcels within these levels. Consideration must be given to the catchment capacity and allocations so that an understanding of ability to service can be ascertained across all properties, as opposed to individually assessing a property in isolation.

Consideration is to be given to the barriers identified such as catchment capacities, sequencing, allocated demand, take up of development, etc. The second key aspect for further investigation is the classification of barriers, or elements within the barriers identified, into high, medium and low impact categories.

Further steps

The PhD program seeks to further research and prepare a land use-infrastructure nexus tool that will dynamically assess the ability to provide water and sewerage services in concert with land use change. It aims to encompass high-level hydraulic capacity assessment for different infrastructure items, future infrastructure requirements and associated costs. This information can underpin the analysis of urban growth scenarios and provide a classification of lots in accordance with the levels of ability to service described in the previous section or an equivalent/refined classification system. Moreover, other infrastructure provision barriers can also be addressed as part of the assessment framework.

A pilot study is being conducted, which seeks to develop a tool prototype using artificial intelligence (AI) algorithms to optimise infrastructure capacity analysis. This will reduce work-intensive and time-consuming processes from traditional methods based on the manual iteration, using a more dynamic approach to undertake water and sewerage network modelling at a strategic level.

Key milestones for the PhD program include:

- A systematic literature review on water and sewerage network modelling and AI algorithms
- Exploring capacity assessment using hydraulic models for pilot study areas

- Testing AI techniques on selected components for the development of a land use and infrastructure nexus assessment tool using hydraulic model results or actual network capacity information.

Developable area and land supply types

In 2021, the developability rules as reported in the Best Practice Research section of the 2020 LSDM Report were applied to the generation of the Planned industrial land supply data as reported in the 2021 LSDM Report.

Any detailed feedback on the results of the Planned industrial land supply analysis, and future use of the developability rules, will annually inform any potential changes to those developability rules and the applicable constraints layers identified in the Common Layer Names Table (see Appendix D of the [Technical notes](#)).

This guidance material on the annually reviewed region-wide developability rules can be used to inform the development, or ongoing updates of land supply databases and practices across the SEQ region, and is available for reference and use in the [Technical notes](#).

Next steps

Feedback in 2021 has informed the following next steps for future Developable area and land supply types Best practice research:

- Continuing on from updates made in 2021 and previously in response to specific stakeholder submissions, it is proposed to more comprehensively review and update the Common Layer Names Table (see Appendix D in the [Technical notes](#)) to address the following:
 - The need to provide accurate descriptions and dates for all constraints layers to better support stakeholder verification of the analyses used to derive Planned industrial land supply data and inform application of the developability rules to planning assumptions database updates
 - Review the identification and appropriateness of constraint layers.
- Investigating a detailed method to better reflect vacant recently subdivided lots in the measurement of developable area.

This is consistent with the hierarchy for the identification of developable areas as explained in Appendix I of the [Technical notes](#), with vacant recently subdivided lots at the top of the hierarchy for measuring developable area, in preference to the application of the developability rules. Currently the developability rules may be applied differently for some vacant recently subdivided lots as part of the Planned industrial land supply analysis.

In association with this, consideration should also be given to more comprehensive identification of the likes of road reserves, drainage areas, parks, utility sites/corridors and the like that are not developable land or take-up, but may be captured as such currently in the Planned industrial land supply/take-up analysis.

Measuring development

The Measuring development Best practice research 2021 report progressed the next steps related to Measuring development identified in the 2020 LSDM Report, including providing the vehicle for stakeholder consultation to consider proposed approaches to property-based measurements for:

- visitor dwellings and relocatable home parks, for the purpose of dwelling counts in comparison the *ShapingSEQ 2017* dwelling supply benchmarks, and
- non-residential uses and their relationship to employment by type and employment densities.

Based on the detailed analyses contained in the report, a number of approaches were identified in relation to property-level land use and infrastructure planning databases / models. Key benefits of the proposed approaches to property-level measurement of dwellings and non-residential floor space and employment include:

- Providing a more equivalent ‘apples with apples’ basis for comparison between:
 - property-based measurements,
 - the *ShapingSEQ 2017* dwelling supply benchmarks and employment planning baselines, and
 - the state government’s projections.
- In the major tourist areas, it is expected that it will result in more dwellings being counted as dwellings, rather than appearing as short-term accommodation based on a council tourist levy, temporary accommodation rates code or the like. This is only appropriate because it is consistent with the measurement approach of the state government’s projections and therefore the *ShapingSEQ 2017* benchmarks.
- The standardised basis for measuring non-residential uses and conversion to employment would enable more comparable analyses of employment supply across the region.
- Both the dwelling and non-residential approaches will better support alignment to, and the preparation of, dwelling and employment projections, i.e. informing them with available supply and take-up information over time.

The proposed approaches are summarised below, with further detail provided in the Measuring development Best practice research 2021 report:

- For the purpose of comparison to the *ShapingSEQ 2017* dwelling supply benchmarks, the state government’s projections and the Census, the respective base-year dwelling counts of the property-level land use and infrastructure planning databases / models:
 - should exclude those dwellings that are identified as tourist accommodation in available property-level tourist accommodation registers, but include all other uses that are identified by the Planning Regulation 2017 as any of: Dual occupancy, Dwelling house, Multiple dwelling, Party house, Relocatable home park, Retirement village
 - should include relocatable homes within relocatable home parks even though the Census counts most of them as dwellings in retirement villages.

- For non-residential uses, subject to periodic review and update over time as economic and social drivers change land use to employment relationships and employment densities and subject to identified refinements and improvements (see Next steps):
 - a standard set of 12 non-residential use categories and description of how those use categories align to Planning Regulation 2017 use terms and the current standard minimum use categories of the Minister’s Guidelines and Rules (for Local Government Infrastructure Plan (LGIP) planning assumptions)
 - separately for each local government area:
 - the percentage of each two-digit ANZSIC (Australian and New Zealand Standard Industrial Classification) category of employment that is estimated to align to each of the standard 12 non-residential use categories
 - the assumed floor space to employment conversion rates, i.e. employment densities, for each of the 12 standard non-residential use categories.

Next steps

Feedback from GMP stakeholders on the rationale for and suitability for adoption, across SEQ, of the proposed approaches that are identified in the Measuring development Best practice research 2021 report, has informed the following next steps for the Measuring development sub-program of Best practice research:

- Refinement of, and expanding on the method for, the allocation of employment categories to land uses (as described in Appendix A of the Measuring development Best practice research 2021 report) informed by local circumstances and available studies
- Further research of actual employment densities to inform updates of floor space to employment conversion rates (as described in Appendix B of the Measuring development Best practice research 2021 report)
- Consideration of how changes over time in both employment to land use relationships and employment densities can be reflected in improved guidance for planning assumptions databases.

Status update on ABS dwelling stock measurements

The 2019 and 2020 LSDM reports noted the work by the ABS to prepare quarterly dwelling stock measurements at the SA2 level. The availability of such consistent data across SEQ would support a significant improvement to the measurement of Dwelling growth, and the estimated take-up of Planned dwelling supply, compared to the current building approvals data.

The ABS has made continued progress towards the production of quarterly dwelling stock estimates for release in 2022. Most recently, in November 2021 the following were released:

- quarterly LGA and SA2 level data for dwelling demolition approvals for the July 2016 to June 2021 period. This will now be an ongoing quarterly release, with monthly revisions, and
- experimental SA2 level estimates of quarterly dwelling completions for the July 2016 to June 2021 period.

The progress of this work will continue to be monitored with the objective, if practical given actual ABS release timing, to inform the measurement of Dwelling growth and Planned dwelling supply in the 2022 LSDM Report.

Small area growth assumptions - a Regional Planning Model

The Small Area Growth Assumptions (SAGA) subprogram is designed to implement a Regional Planning Model (RPM) to produce a region-wide set of growth assumptions at a small area level of detail (e.g. property level).

An integrated set of assumptions are required, in a modelling package, to meet the purposes of SAGA by:

1. exploring regional growth planning scenarios for future regional plan reviews; and
2. assist ongoing region-wide infrastructure decision making.

The RPM would provide a regional planning tool to explore preferred land use patterns and dwelling supply scenarios at a small area level of detail. Having a RPM will assist regional planning across the following key areas:

Growth and change

- Model the take up of projected growth and the impacts of different projection scenarios on region-wide consolidation and expansion area dwelling supply; and
- Monitor, plan and analyse planned dwelling supply scenarios with projected housing demand.

Infrastructure and coordination

- Develop land use scenarios that could integrate and assist with other planning and infrastructure modelling (e.g. Department of Transport and Main Road's (DTMR) state traffic and transport modelling);
- Maximise the benefits of identified region-shaping infrastructure (e.g. SEQ City Deal and Brisbane 2032 Olympic and Paralympic games) that support expected growth and development (e.g. bulk water, public transport and freight)
- Analyse and test the impact of targeted policy initiatives (e.g. fragmented land within the Urban Footprint); and
- Assist in planning for community services (e.g. education and hospitals).

Planning and regulatory framework

- Analyse, test and inform the preparation of policy by assisting in assessing any potential impacts across the region
- Understand the impact of disruptive changes where and when it occurs (economic, social, health, environmental, technological); and
- Model the impact of natural disasters and help plan for a resilient and adaptive settlement pattern.

Land supply data

- Bring together an integrated SEQ-wide view of existing and planned growth, within and across local government boundaries.

Current status

The department, as part of the 2019 and 2020 LSDM reporting, undertook a comprehensive due diligence process, in collaboration with Growth Monitoring Program stakeholders, on the requirements for potential modelling packages for a RPM.

The department has, in 2021, continued to progress elements where synergies exist with other work programs to potentially streamline any future processes, including:

- Integration of planning assumptions for SEQ local governments as part of the Realistic Availability Best practice research. This will be a fundamental input for the RPM to provide a regional view of existing and planned growth, within and across SEQ local government boundaries
- Investigate the use of outputs from the Financial Feasibility Model as part of the Realistic Availability Best practice research to inform ongoing scenario development
- Continuing to collaborate with key stakeholders in developing and using consistent growth assumptions at the local government area level (e.g. DTMR on the state traffic and transport modelling, Queensland Treasury on population and employment projections).

It should be noted that in March 2021, the Deputy Premier and Minister for State Development, Infrastructure, Local Government and Planning committed to undertaking a peer review of the LSDM data and methods in 2021 (the [LSDM Peer Review](#)). The RPM is a key component of a future review of *ShapingSEQ 2017* and the LSDM's forward program, and therefore the RPM's ongoing development and implementation will be influenced by the findings and recommendations of the LSDM Peer Review and future funding decisions.

Data sharing

Throughout the development of the Land Supply and Development Monitoring (LSDM) Reports the Growth Monitoring Program (GMP) has utilised a variety of land supply and development activity data, and data sources, to inform annual reporting and elements of the program's ongoing best practice research.

Since the establishment of the GMP the department has continued to work with data custodians and stakeholders to foster and develop long-term data sharing arrangements across state agencies, local governments and utility providers. The advancement of data sharing arrangements can provide for consistency and understanding across stakeholders in monitoring data associated with the region's land supply and development activity.

Data sharing has been previously identified by the Data and Modelling Working Group (DMWG) as one of the priorities for the GMP. The DMWG provided in-principal support for the development of a draft reciprocal data sharing agreement for review and execution by key stakeholders. Any proposed agreement, once actioned, could facilitate sharing of data between local governments, utility providers, and key state departments who participate in the GMP.

Further, there is also scope to consider, in consultation with data custodians, the inclusion of universities, and other research organisations within an agreement (in full or in part). This could provide an ability to utilise the skills, expertise and research capabilities these organisations may offer to the program and its stakeholders.

The benefits of a broader, long-term agreement would:

- reduce the administrative burden by eliminating multiple requests for the same data by multiple agencies
- allow state and local governments and utility providers to have access to the best available information that they, or other agencies, have or can share
- increase efficiencies and minimise duplication of effort in producing, collecting and processing data
- provide confidence that legal requirements (e.g. confidentiality, intellectual property, privacy, copyright and disclaimers) have been appropriately dealt with, and
- allow state and local governments and/or utility providers the flexibility to add or remove their own data from the data sharing agreement as needed.

These agreements would allow each party to the agreement to share a pre-defined list of land supply, development activity and infrastructure-related data with any other party to the agreement and enhance the overall understanding and use of SEQ land supply and development activity data.

In 2021, the department provided a draft long-term agreement to data custodian stakeholders for their review and comment. Feedback was received from nine of the fifteen data custodians with the majority providing their in-principle support for the use of the draft-long term data sharing licence as the basis to enable a long-term data sharing arrangement, subject to further refinements. Key feedback included:

- Inclusion of utility providers (e.g. Unity Water, Queensland Urban Utilities, etc.) as parties to the agreement given their role in network modelling
- Clarification of how the licensed data will be used (e.g. amendments to better clarify the purposes / projects that the data can be used for)
- Consideration of intellectual property rights, notably where data 'form' is changed including reformatting or derivatives (augmentation / incorporation)
- Liabilities including loss / damage as a result of a breach of the agreement
- Refinement of clauses around the supply of licensed data to third parties
- Minor administrative amendments to clarify terminology (definitions), data transfer processes, data format and relevant contacts.

The department is looking to advance the use of the long-term data sharing licence and sharing of nominated information and will seek to address the feedback received as part of ongoing consultation and preparing an updated draft long-term agreement for data custodian stakeholders review.

COVID-19 impacts and recovery

Economic impact of COVID-19

The 2020 LSDM Report was prepared during the initial phases of the COVID-19 pandemic, in a period where there were high levels of uncertainty as to the economic outlook and any associated recovery.

In 2021, COVID-19 has continued to impact our lives, particularly with the emergence of new variants causing widespread disruption to economic activity across the world. In this regard, forecasting the magnitude and length of the economic impact of the pandemic will continue to be an ongoing challenge as responses evolve, such as the COVID-19 vaccine rollout.

With every changing data, the benefit of the Land Supply and Development Monitoring (LSDM) Report, now in its fourth year, is in the consistent reporting of data across standardised metrics which identify trends over the short, medium and long term. For continuity between LSDM reporting years, the 2021 LSDM Report aligns to the standard structure and metrics used in the 2018, 2019 and 2020 reports.

The availability of data and information for the 2020/21 period has therefore become critical in providing the basis to explore, and better understand the impacts of COVID-19, including the effects of government recovery and stimulus measures (e.g. Queensland Government's COVID-19 Economic Recovery Plan as well as the Federal Government's HomeBuilder grant, JobKeeper and JobSeeker programs).

The following provides further detail on these observed impacts as they relate to development and the housing market in SEQ, and as identified in the [2021 Market Factors Report](#).

State Final Demand

State Final Demand (SFD) provides a measure of consumer consumption, investment and expenditure across Queensland. For the 2021 SEQ Market Factors Report, SFD has replaced reporting of Gross State Product (GSP) principally due to the timing and frequency of when the GSP data is published. The GSP data is released on an annual basis, whilst SFD data is available on a quarterly basis, providing the most current direct measure for state economic growth and also the benefit of showing growth variations across the reporting year.

The 2021 Market Factors Report identifies that SFD for Queensland recorded a strong return to growth of 3.69 per cent when compared to the previous year (-0.18 per cent)¹. This was well up on the ten-, five- and three-year averages and was achieved through strong June 2021 quarter growth.

This growth has largely been driven by elevated consumer spending and housing sector activity, supported by timely and targeted government stimulus.

Population growth

Queensland's population grew by 45,925 people to 30 June 2021, or a 0.89 per cent increase when compared to the previous year². Net internal migration (NIM) was the highest contributing factor with 30,939 people moving to Queensland from other states, up 22 per cent on the previous year and the highest level since 2004. This was followed by 29,352 through natural increase (NI) and -

14,366 in net overseas migration (NOM)². Whilst this was the lowest net increase in population in over a decade, growth in Queensland was the highest nationwide.

Estimated resident population data to 30 June 2021 for SEQ (Statistical Area Level 4) is not available, however to provide guidance on SEQ's share of population growth, it is noted that based on population figures from 2016/17 to 2019/20, SEQ accounted for an average of 91 per cent of Queensland's total population growth which is on average comprised of 34 per cent NOM, 37 per cent NIM and 29 per cent NI².

The Federal Government's Population Statement (Centre for Population December 2021) anticipates that net overseas migration will remain negative in 2021-22, but return to significant positive figures in 2022-23 and be the largest component of growth from 2024-25 to 2031-32, averaging 28,500 per year. Queensland is expected to continue to experience the largest share nationally of net internal migration gains for the next 10 years, peaking in 2021-22 (40,800), and being the largest component of Queensland's growth until 2022-23, but then averaging about 19,700 per year over the 2023-32 period.³

[The 2021 Market Factors Report](#) notes that the short-term changes in Queensland's population components may represent a structural shift in population growth which is different to normal trends and may be leading to differences in dwelling demand. For example, the loss of NOM may lead to a weakening of demand for high-rise living in the short term. This is based on the housing preferences of overseas migrants and students who are generally centred around the CBD, and precincts close to the CBD, where high density housing options are common, and to a lesser extent, middle ring suburbs close to educational precincts or transport hubs (CoreLogic, Sept 2020). These preferences will be clearer over time as more data becomes available.

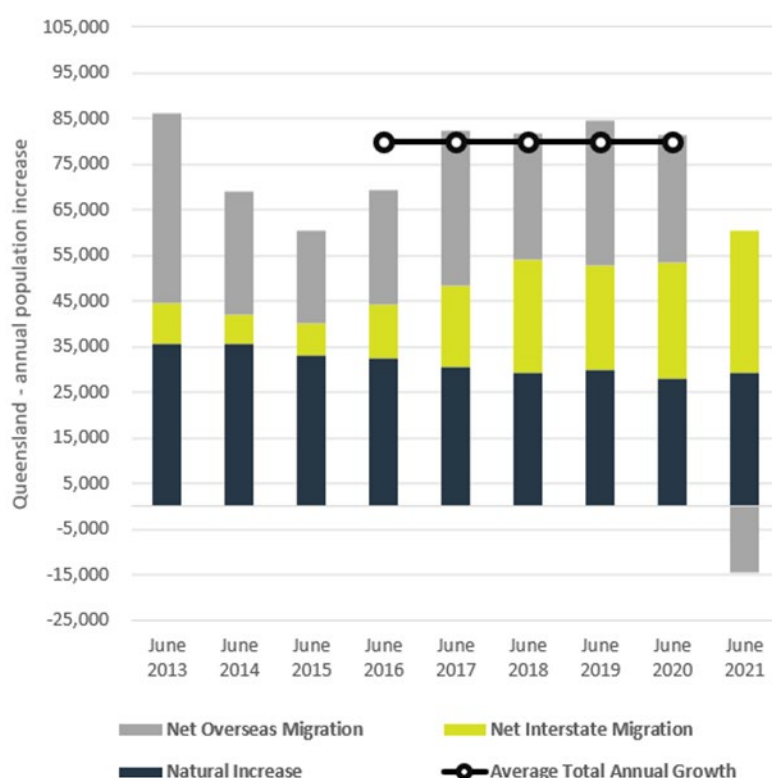


Figure: Queensland Population 2016 to 2021

HomeBuilder and dwelling activity

The 2020 Market Factors Report indicated that the residential market in SEQ was slowing due to the impact of COVID-19 and the associated measures taken to suppress the spread of the virus. This included an estimated fall of approximately 13,450 dwellings in 2020/21 compared to pre-crisis levels – equating to around 35 – 40 per cent in market demand. This was based purely on the forecast drop in population growth in 2018/21 and Queensland’s percentage of national dwelling approvals⁴.

However, this slowdown appears to have been short lived, driven by the Federal Government’s \$1.6 billion HomeBuilder program and the Queensland Government’s \$100 million housing construction ‘Works for Tradies’ program and the \$200 million Building Acceleration Fund. These stimulus packages have not only had the desired effect of assisting to manage the impacts of the pandemic, but have in fact, exceeded most expectations by generating unprecedented levels of confidence, which resulted in increased development and housing activity in 2020/21.

In Queensland, approximately 28,810 preliminary HomeBuilder applications were received from 4 June 2020 to 25 June 2021, representing 21 per cent of the share nationally and second only to Victoria. Of these applications, 83 per cent were for new builds and 17 per cent for renovations⁵.

The level of demand generated by the HomeBuilder grant is evident in the Housing Industry Association June 2021 report. This report showed new house sales in 2020/21 rising 9.4 per cent higher than the same time in the previous year, and 4.4 per cent higher than the same period in 2018/19 which is considered a ‘typical’ year⁶.

This demand is also further reflected in the residential building approvals in SEQ with all forms of dwelling approvals significantly up from the previous year. As noted in the 2021 Market Factors Report, strong growth in House approvals in 2020/21, up 36 per cent to 22,223 approvals, saw them exceed their ten-, five- and three-year averages and reach their highest level in a decade. Similarly, High-rise approvals also increased significantly, up 47 per cent to 6883 approvals in 2020/21, recording its highest level since 2017/18¹.

An examination of quarterly lot registrations also indicates high levels of activity across the region over the September and December quarters of 2020. This short-term increase is likely to be a representation of the market’s response to relevant government incentives, as this increase in activity was almost purely in standard lot registrations which reflects the targeted nature of the HomeBuilder program.

It should be noted that the positive impact of these stimulus packages on the housing market reinforces the important role that governments, at all levels, play in creating an environment of business confidence.

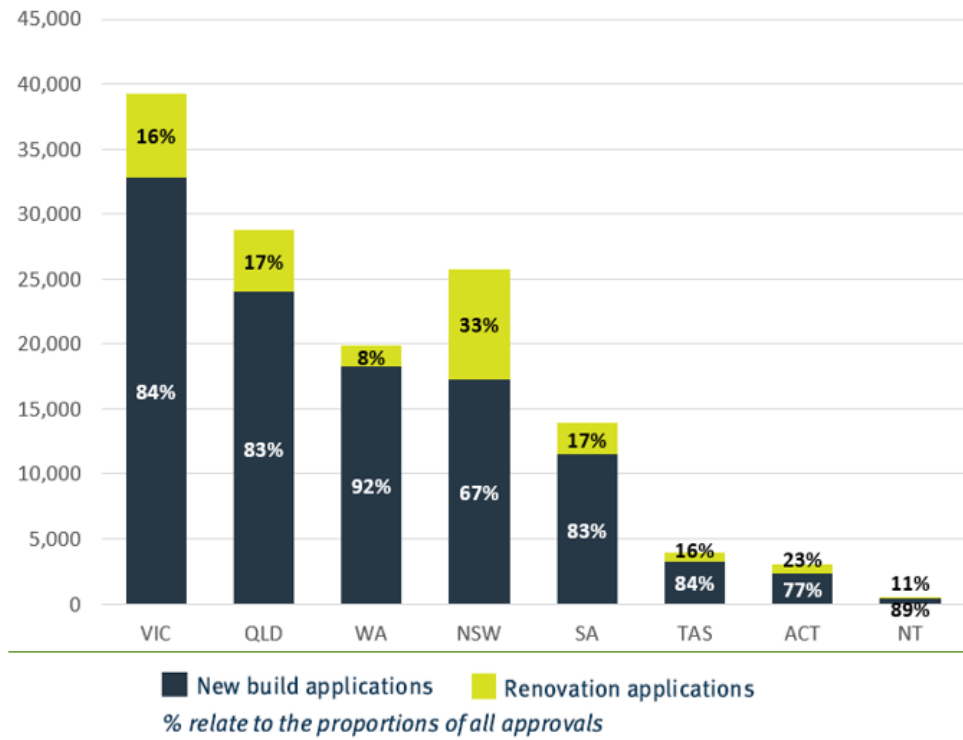


Figure: Preliminary HomeBuilder applications – by state

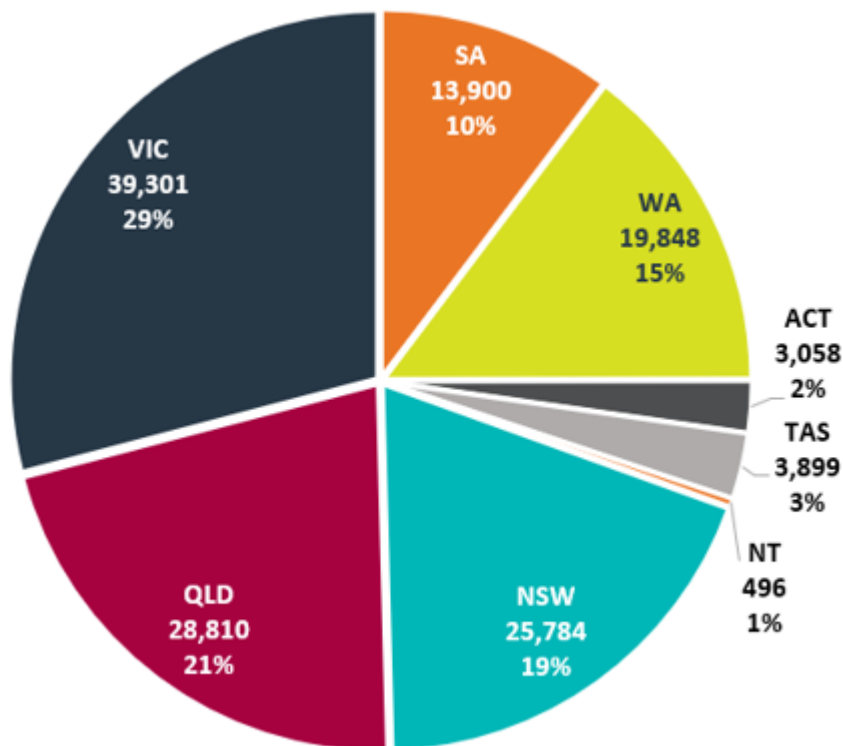


Figure: Share of HomeBuilder preliminary applications by state

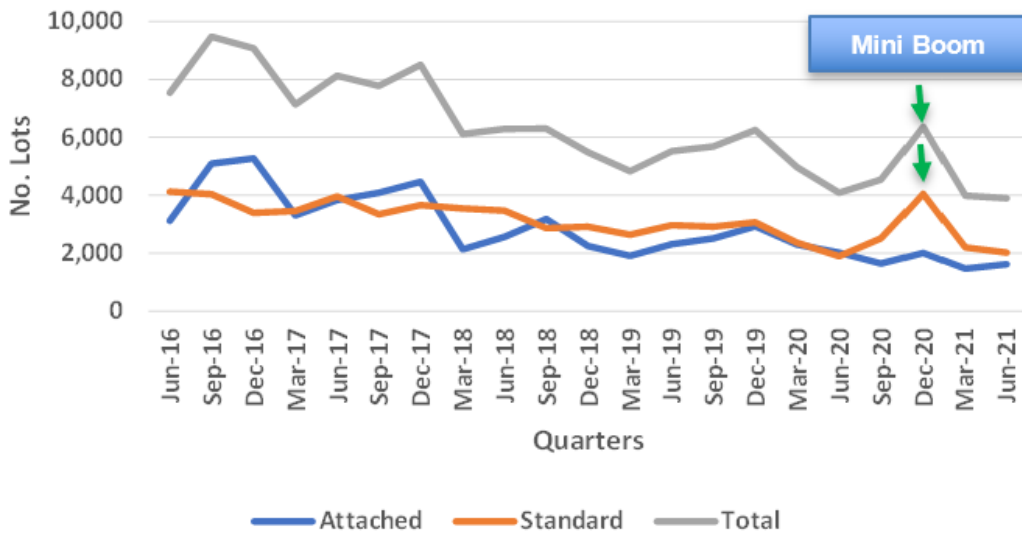


Figure: SEQ – Lot registrations (all)

Employment growth

The 2021 Market Factors Report notes the year to June 2020 saw possibly the largest drop in employed persons in SEQ in the region’s history, falling by 4.6 per cent from the previous year. This reflected the significant impact from the economic fall-out from COVID-19. However, as rapidly as total employment fell, it recovered almost as quickly and stronger. The year to June 2021 saw total employed persons in SEQ grow by 11.9 per cent to 1.98 million workers. This represented an increase in total employed persons over the year of over 211,000 workers¹.

The employment rebound has been driven by Federal, State and Local Government stimuli such as COVID-19 Jobs Support Loan scheme and Small Business COVID-19 Adaption Grants program, electricity bill rebates for small and medium businesses, payroll tax relief, and JobKeeper and JobSeeker payments.

It appears that the recovery in employment has provided the confidence for SEQ residents to take advantage of government incentives and low interest rates to purchase new and existing dwellings.

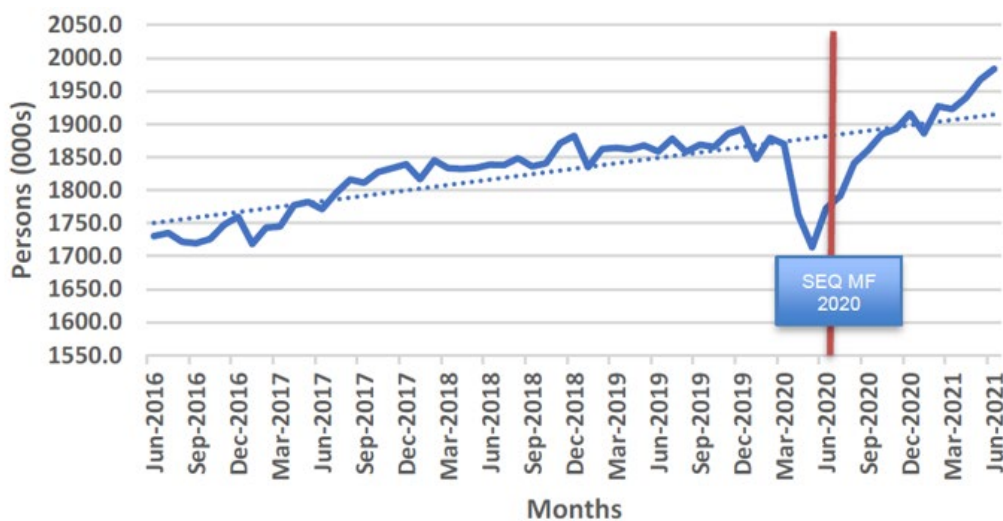


Figure: SEQ employed persons – 201/21 (June)

Consumer confidence

Consumer confidence fell to a record low of 75.6 in March 2020 before recovering to near pre-pandemic levels by June 2020. The Federal Government's budget papers noted that consumer sentiment recovered substantially to its highest level in 11 years in April 2021, with household consumption rebounding at record rates over the second half of 2020⁷.

In August 2021, the Westpac-Melbourne Institute consumer sentiment index is sitting at 104.1, its lowest point in a year but still above the negative lows seen in the national lockdown during 2020⁸. This reflects the ever changing nature of the pandemic and emerging challenges, such as new lockdown measures imposed in most capital cities, as well as the vaccine rollout.

Recovery

As recognised in Queensland's Economic Recovery Plan released in 2020, recovery from COVID-19 is a long-term challenge that requires a long-term response. As the COVID-19 pandemic evolves it is clear that economic recovery will go through a number of stages as the broader outlook remains uncertain and highly dependent on recovery measures. This uncertainty extends to the property industry in SEQ.

In 2020, the Queensland Government responded to the COVID-19 pandemic with a package, totalling over \$7 billion, to support businesses, workers and families. This immediate stimulus is strengthened by the planned investment in sustained and staged measures, and the Queensland government's commitment to work in partnership with industry in economic recovery while positioning Queensland for the 'next normal'.

In 2021, Queensland's Economic Recovery Plan was updated as part of the 2021/22 Queensland Budget. The Queensland Government has responded to the COVID-19 pandemic through providing a continued pipeline of support, focused on safeguarding the health of Queenslanders and building community resilience in response to the COVID-19 health and economic crisis.

Building Queensland is a key focus of the 2021/22 Queensland Budget which seeks to drive investment in the infrastructure that supports recovery, resilience and future prosperity. Infrastructure investment remains a key driver of economic growth and job creation. Key measures to support housing supply and infrastructure investment in Queensland include:

- Continued \$52.2 billion capital works program to create employment and support infrastructure projects
- Investment of \$1.8 billion in social housing which will deliver 6365 new dwellings over four years across Queensland
- Establishment of \$1 billion Housing Investment Fund to drive new supply to support current and future housing need.

The importance of the property industry has been recognised with initiatives already put in place by all levels of government to lessen the impact of the pandemic, such as increased grants for first home buyers and the HomeBuilder scheme. The positive impact of stimulus on the housing market reinforces the important role the government plays in creating an environment of business confidence - with greater certainty, simplified processes, and more collaborative arrangements.

The 'next' normal

Australia's success in containing the health crisis to date has underpinned the economic recovery, but continued growth will rely on the effective containment of any COVID-19 outbreaks, including those that may arise from any new strains of the virus. The Federal Government's Economic Outlook notes however, that whilst the economic outlook remains positive, considerable risks remain.

The COVID-19 impact analysis undertaken in the 2020 Market Factors Report indicated two broad scenarios that SEQ could follow during recovery:

- The first was a relatively swift recovery, with economic activity estimated to improve from early 2021. If this was to happen, dwelling development activity may follow shortly after the broader economy begins its recovery. Employment would likely be an important barometer of this recovery with dwelling investment generally underpinned by stable employment⁴.
- The alternative scenario identified a more protracted recovery, driven by persistent outbreaks of the virus, higher levels of business insolvencies, and suppressed levels of population growth. It was considered that Queensland may be at a higher vulnerability should there be further outbreaks, given the state's reliance on Net Overseas Migration to support population growth, and the importance of Queensland's Tourism and Hospitality sector. Economic recovery in this scenario could be supported by sectors that are less reliant on population growth, for example the mining sector which is currently showing signs of increased growth⁴.

Based on data available for 2020/21, as at November 2021, it would appear as though the V-shaped recession / recovery in accordance with the first scenario presented by the 2020 Market Factors Report, as well as the Reserve Bank of Australia and International Monetary Fund's baseline scenario, has occurred. This is evident with most factors not only regaining the economic loss sustained during the COVID-19 downturn but exceeding pre-COVID-19 levels.

This everchanging and evolving nature of the COVID-19 pandemic is particularly evident with persistent outbreaks from new variants across most capital cities nationwide, including the SEQ region and the subsequent disruptions to economic activity. This suggests that the alternative scenario of a more protracted recovery may still play out despite the initial recovery in 2020/21.

The focus now turns to the COVID-19 vaccination strategy under the National Cabinet's agreed in-principle updated four-step National Plan. This plan aims to transition Australia's National COVID-19 Response (National Plan) to the post-vaccination settings focused on prevention of serious illness and fatalities, whereby the public health management of COVID-19 is consistent with other infectious diseases⁸. This also includes decisions by the Queensland Government to ease border restrictions once certain vaccination levels are reached.

In regard to the SEQ residential development market, the 2021 Market Factors Report provides the following outlook:

- Residential development, particularly for houses, will remain strong through the next 6-12 months as the forward bookings of dwelling construction and financing flow through. This could be affected if indications of construction material shortages and labour capacity are realised and sustained.

- Population growth has been impacted by the lack of net overseas migration with this impact being partially mitigated by an increase in net internal migration. This along with government stimulus has led to a change towards households demanding houses more so than attached dwellings. Whether this is a long-term change or temporary shift is unknown at this point. Internal migration has increased and may represent a longer-term shift if Queensland is seen to be a long term safe and affordable location.
- Future population growth and consequently dwelling demand will be significantly impacted if net overseas migration does not return to normal levels in the short term. If net overseas migration takes longer to recover (3-5 years), then this is likely to initially impact the higher density rental market and then flow through to the detached housing market which has historically been the dwelling pattern of overseas migrants.
- On the other hand, it is quite possible that the favourable residential development conditions created by government incentives and low interest rates have brought forward demand rather than created significant amounts of new demand. If this is the case, then it would be expected that over the next 12 months the residential development market in SEQ would slow. This could be starting to play out as reflected in the slowdown in lot registrations in SEQ in the March and June quarters of 2021.

As another future scenario, it should also be noted that the most recent Centre for Population projections expect net overseas migration to bounce back strongly in the next couple of years and the scale of net internal migration to decline from a peak in 2021-22.³

References:

1. Innovociti, 2021 SEQ Market Factors Report, Version 6, November 2021
2. Australian Bureau of Statistics (ABS), National state and territory population June 2021, December 2021
3. Centre for Population, Population Statement, Australian Government, December 2021
4. Innovociti, SEQ Market Factors Report, Version 3, December 2020
5. Department of the Treasury (Commonwealth), HomeBuilder, October 2021
6. Housing Industry Association, HIA New Home Sales, June 2021
7. The Commonwealth of Australia, Budget 2021-22 Budget Paper No.1 Budget Strategy and Outlook – Statement 2: Economic Outlook, May 2021
8. National Cabinet Statement, National Cabinet Statement 10, 30 July 2021
9. Queensland Treasury, Lot Registrations SEQ, October 2021
10. ABS, 6291.0.55.001 Labour Force, Australia, Detailed, Table 16, October 2021

Market factors

The 2021 LSDM Report focuses on medium and long-term supply metrics as they relate to the policy objectives and identified dwelling supply benchmarks and employment planning baselines of *ShapingSEQ 2017*, but it also tracks recent development activity through dwelling growth, sales volume and price and changes in housing type and density. Development activity can be influenced by numerous macro and micro-economic factors which are not considered by this monitoring.

Since the release of the 2019 report, the department has continued to commission periodic reviews and updates of the region’s market factors reporting (as prepared by Innovociti Pty Ltd).

This reporting provides contextual information for the annual LSDM Report and provides insights into housing market demand including current demand positions at the smaller (regional) area level. This is particularly important given the dynamic state of the SEQ housing market through the COVID-19 pandemic. Previous Market Factors reports are listed as follows:

- 2019 Market Factors Report
- 2020 Market Factors Report

Similar to previous reports, the 2021 Market Factors Report:

- discusses factors that may affect short-medium term demand for housing
- is evidence based and draws upon metrics in the public realm
- uses regularly updated metrics
- highlights trends in development activity and residential demand
- provides independent expert commentary at a whole of SEQ scale
- provides insight into how broader macroeconomic forces are influencing development approval, construction and short and long-term supply, and
- includes specialist commentary regarding any identifiable implications.

For this year’s reporting rental growth (3-bedroom house) and dwelling vacancy have been added as reported factors to provide a complete picture of the SEQ housing market including the significant demand in the rental market due to the impact of COVID-19. Further, this year’s report also includes commentary on the recent levels of elevated demand (off-the-plan sales) for residential lots in SEQ due to HomeBuilder and increased interstate migration into Queensland.

A summary of the 2021 Market Factors compared to 2020 can be seen in the table below:

Factors		Measures		Change
		2020	2021	
Underlying	State Final Demand*	1.21%	3.96%	Strongly up
	Interest Rates	0.25%	0.1%	Down
	Population Growth	1.62%	0.89%	Slowing
	Employment Growth	-5.39%	11.9%	Rapid growth

	Wage Price Growth	1.75%	1.72%	Stable
Effective	Building Approvals	26,022	34,473	Strongly up
	House Prices	2.32%	14.63%	Strongly up
	Rental Growth (3 bedroom house) (new)	N/A	10.4%	
	Housing Finance	\$37.2b	\$58.2b	Strongly up
	Dwelling Vacancy (new)	2.65%	1.16%	Strongly down
	Lot registrations**	20,995	18,945	Down
	Residential Construction Sentiment	23.5	68	Strongly up

*State Final Demand replaces Gross State Product (GSP) principally due to the timing of when GSP data is published. The more regular publication of State Final Demand data provides more timely insights into the current economic position of Queensland, noting that GSP data is not available until 19 November 2021 for the year to June 2021. State Final Demand also provides the benefit of producing quarterly results thereby showing economic growth variations across the reporting year.

* Total lot registration fell in 2021 due to a significant drop in Attached lot registrations. Standard lot registrations increased by 5.2% over this period from 10,226 to 10,758 registrations.

Analysis of the core market factors presented in the 2021 Market Factors report show the majority of factors are experiencing strong movements that favour the development of housing and take up of residential land. Employment has bounced back, as has economic growth. Dwelling development activity has taken off, as has housing finance, followed by house prices and rents, and vacancy levels have tightened. A further reduction in interest rates has added to the incentive for the population to buy houses.

Factors that reflect a different perspective include the Underlying demand factors of Population growth, and Wage Price growth. Population growth has been impacted by the lack of Net Overseas Migration with this impact being partially mitigated by an increase in Net Internal Migration. Wage Price growth has resumed positive growth since zero growth in the June 2020 quarter but is being constrained by the ongoing impacts from the COVID-19 pandemic.

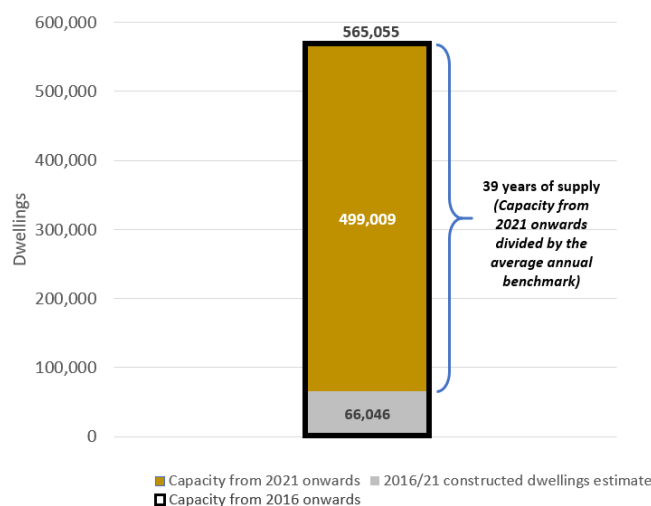
In general it would appear that the residential development market, particularly for houses, will remain strong through the next 6-12 months as the forward bookings of dwelling construction and financing flow through. This could be affected if indications of construction material shortages and labour capacity are realised and sustained.

The review and update of Market Factors reporting will continue to be a part of the overall ongoing LSDM reporting. As part of this, there are opportunities for further industry engagement to inform future years of Market Factors reporting.

Fact sheets

1: Planned dwelling supply in 2021

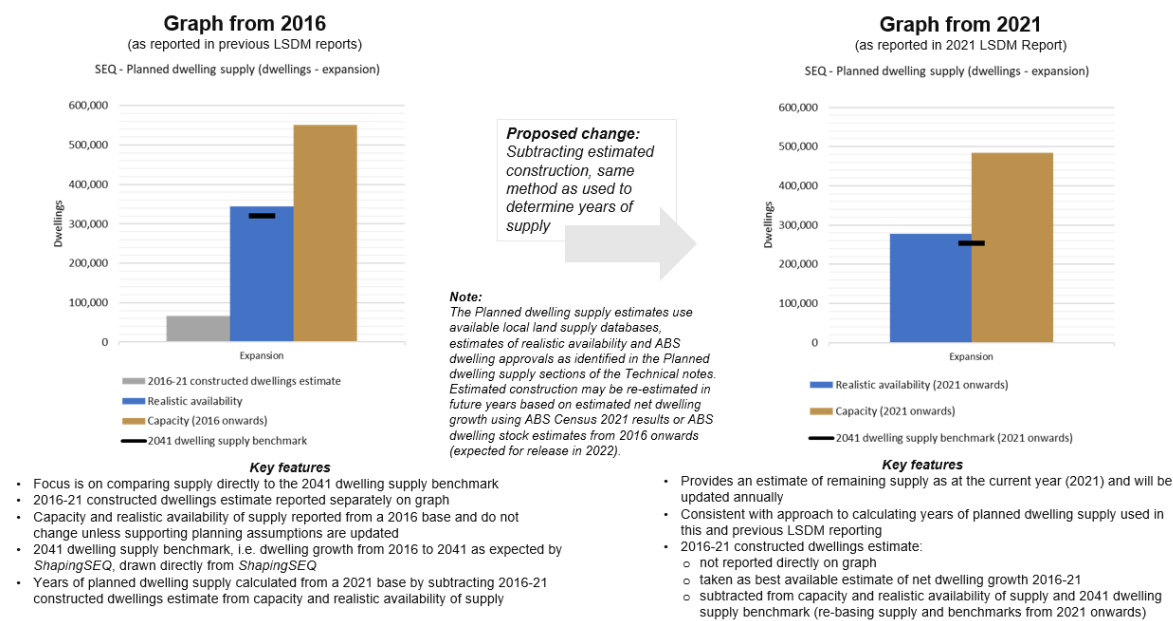
In 2021, the Growth Monitoring Program (GMP) has reported dwellings in the Planned dwelling supply section within the Land Supply and Development Monitoring (LSDM) Report from 2021, rather than 2016. This has been done to reflect and align to the years of supply reporting. This approach displays an estimate of remaining planned dwelling supply from 2021 onwards, as seen in the figure opposite.



This change is intended to ensure the Planned dwelling supply section better reflects current circumstances. This change involves subtracting estimated construction figures from capacity and realistic availability figures and *ShapingSEQ* 2017 benchmarks to better reflect what supply is remaining. This change does not impact the dwelling supply benchmarks or affect the key parameter of years of supply, as the capacity reflects the reduced supply based on estimated construction (the 2016/21 constructed dwellings estimate is building approvals 2015/20).

Example for South East Queensland (SEQ) results:

Factsheet: Planned Dwelling Supply from 2021



2: Realistic availability concept

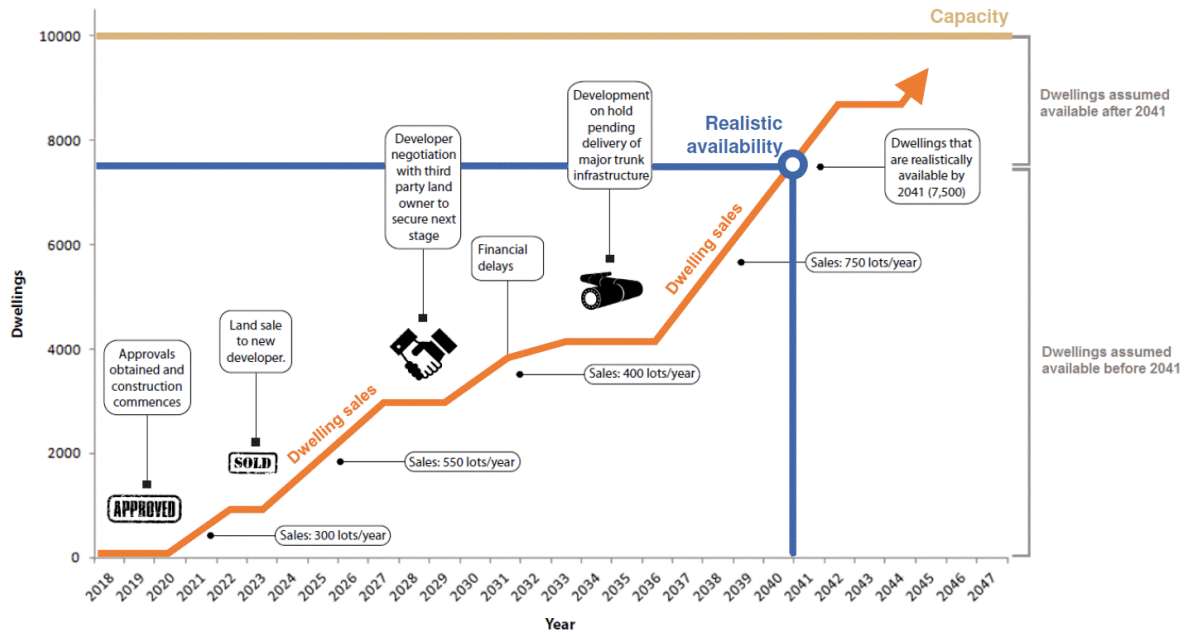
ShapingSEQ 2017 proposes that the Growth Monitoring Program monitor land supply in terms of its realistic availability, rather than its capacity. Each Land Supply and Development Monitoring Report applies scenarios which assume not all of the planned capacity will be realistically available by 2041.

The capacity of planned dwelling supply (illustrated in gold) is an estimate of the number of dwellings that current planning instruments make available for development, to an unlimited time horizon, after considering what portion of land is developable, and the likely density of development on that land.

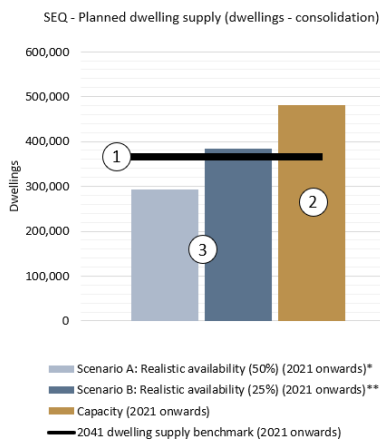
The realistic availability of planned dwelling supply (illustrated in blue) is an estimate of the portion of the capacity of planned dwelling supply (in terms of dwellings) that is expected to be available by 2041, after considering how the following may constrain/delay development:

- infrastructure availability
- the practical staging of development
- fragmented land ownership and varying landowner intent
- insufficient demand for the planned density in some areas up to 2041
- existing versus planned density (or low value of planned development vs existing development)
- the age of existing development
- accessibility
- constraints affecting the economic feasibility of development

Major expansion area example



3: Realistic availability scenarios



- 1 The **2041 dwelling supply benchmark** (black line) shows how many dwellings are required to accommodate expected growth in the South East Queensland (SEQ) consolidation area to 2041.
- 2 The **capacity** (gold bar) indicates how much growth has been planned for (e.g. by local governments) in the SEQ consolidation area.
- 3 The **realistic availability scenarios** (blue bars) are indicative of how much capacity may be available for development up to 2041. These scenarios illustrate the potential effect of factors (e.g. infrastructure availability, fragmented land ownership, etc.) that may delay/constrain the amount of dwellings that are available for development by 2041.

The department has identified two realistic availability scenarios for the consolidation area, for SEQ only. As some of the local land supply information used to inform the Land Supply and Development Monitoring (LSDM) Report already has varying assumptions about realistic availability, no scenarios are identified for local government consolidation areas. The two indicative scenarios for the SEQ consolidation area are:

- **Scenario A** - assumes that 50 per cent of the **capacity**, that is not yet built or approved, is not available for development by 2041
- **Scenario B** - assumes that 25 per cent of the **capacity**, that is not yet built or approved, is not available for development by 2041.

Note: For expansion areas, the LSDM Report identifies one realistic availability scenario for each local government area and SEQ, based on the consistent approach and findings of previous regional studies about the effects of fragmented land ownership, infrastructure availability and the practical staging of development through the use of the current intent to service layer.

4: Ability to service

ShapingSEQ 2017 establishes a policy objective that there will always be at least 15 years' supply of land that is appropriately zoned and able to be serviced (*ShapingSEQ 2017*, p.46). This 15-year policy objective is a rolling assessment of supply each year which takes into account recent growth, remaining supply, and the expected rate at which supply will be consumed.

The primary objective of the Growth Monitoring Program (GMP) Ability to Service subprogram is to provide an indication of whether this policy objective is being met. To inform this assessment, the department undertook Best practice research in 2018 in consultation with the GMP Data and

Modelling Working Group to identify methods for mapping areas that have the ability to be serviced with infrastructure, focusing on indicators that related to:

- infrastructure already in place,
- decisions already made about infrastructure or development, and
- agreements, planning or funding in place for future infrastructure.

The best practice research explored numerous indicators/datasets that could indicate an area as having the ability to be serviced. The research acknowledged that the ability to service concept is seeking to assess the feasibility of urban development being provided with necessary supporting infrastructure within the subject planning horizon, not just the potential for an area to be serviced through an 'engineering solution', however costly, financially, socially or environmentally. The research shortlisted several boundary type indicators which showed a current intent to service, noting that this intent to service also indicates an 'ability to service' in accordance with the subprogram's objectives.

Since 2019, the department has used six shortlisted indicators to prepare a Current Intent to Service layer, consisting of:

- residential development approvals,
- residential preliminary approvals,
- priority infrastructure areas,
- existing and future sewer connection areas,
- infrastructure agreements, and
- priority development areas.

The department has used an annually updated Current Intent to Service layer in the LSDM Reports to inform the 'realistic availability of planned dwelling supply' scenario in the expansion area and compared this assessment of supply to *ShapingSEQ 2017's* rolling 15-years of supply policy objective. The department has not compared this realistic availability scenario to *ShapingSEQ 2017's* 2041 dwelling supply benchmarks in acknowledgement of the fact that the indicators used in the Current Intent to Service layer may have a planning horizon earlier than 2041.

The department will continue to improve the Ability to Service subprogram in partnership with GMP stakeholders, for example, exploring other boundary, capacity and proximity indicators of an areas ability to be serviced as recommended by the 2018 best practice research. These improvements will support the GMP's role as a long-term program of government, that will capitalise on research and work undertaken by key stakeholders each year to create a shared understanding of development land supply across SEQ.

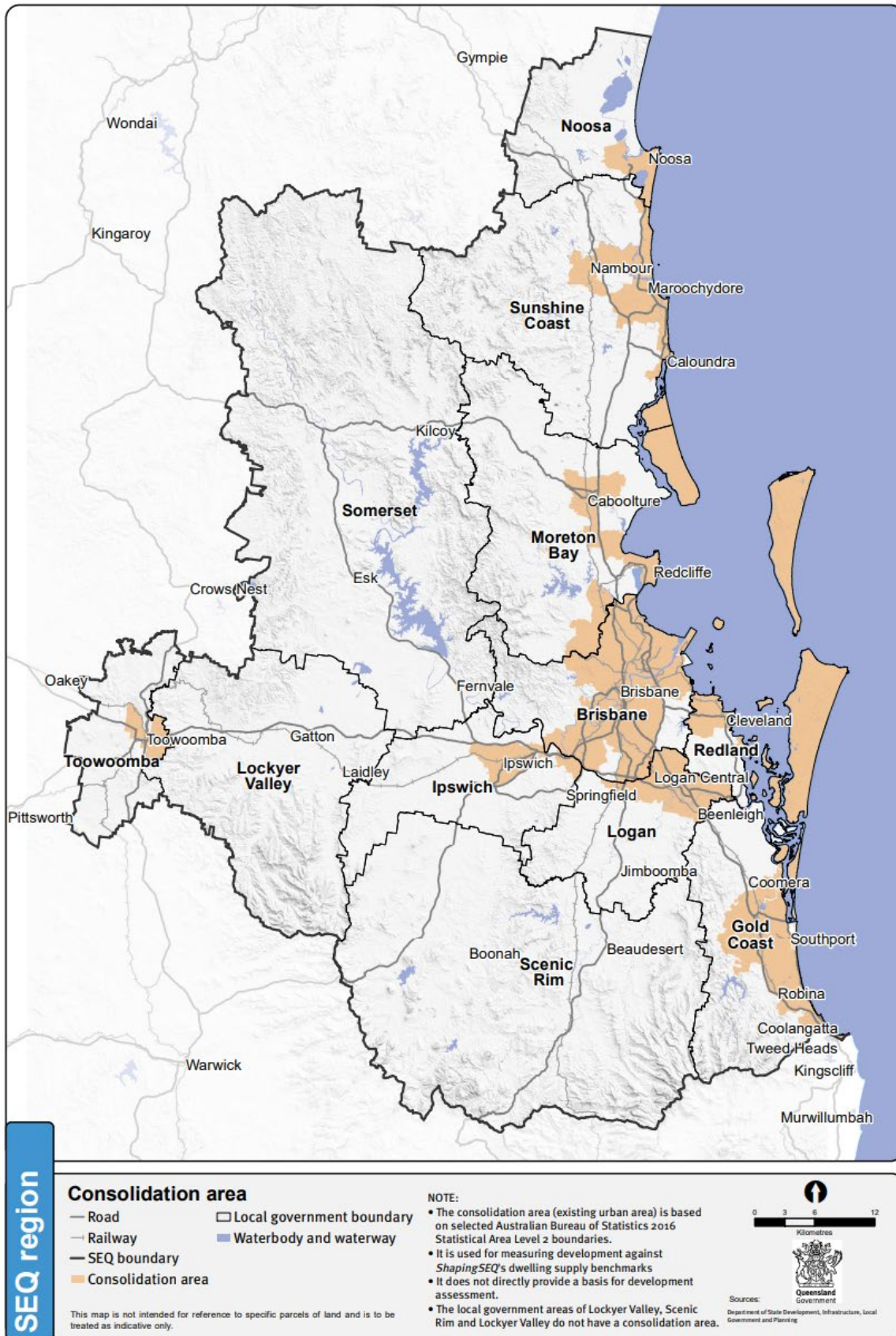
Selected land supply and development mapping

Introduction

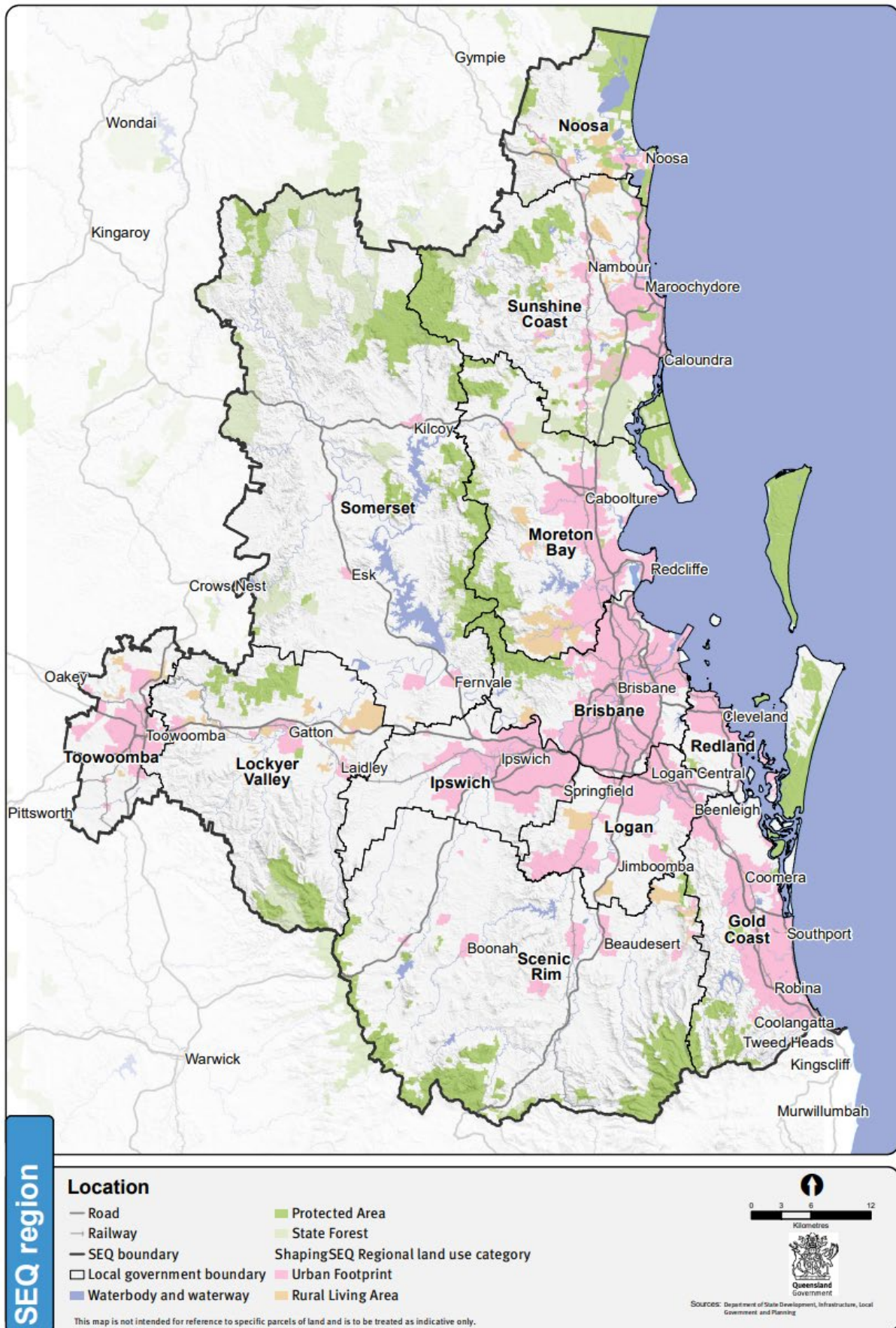
This section provides access to all the mapping products produced in support of the report. These maps have been developed to display and help visually explain a number of reporting outputs and concepts including; dwelling growth, planned dwelling supply, planned industrial land supply, housing type, the existing urban area, broadhectare land and the Urban Footprint.

General

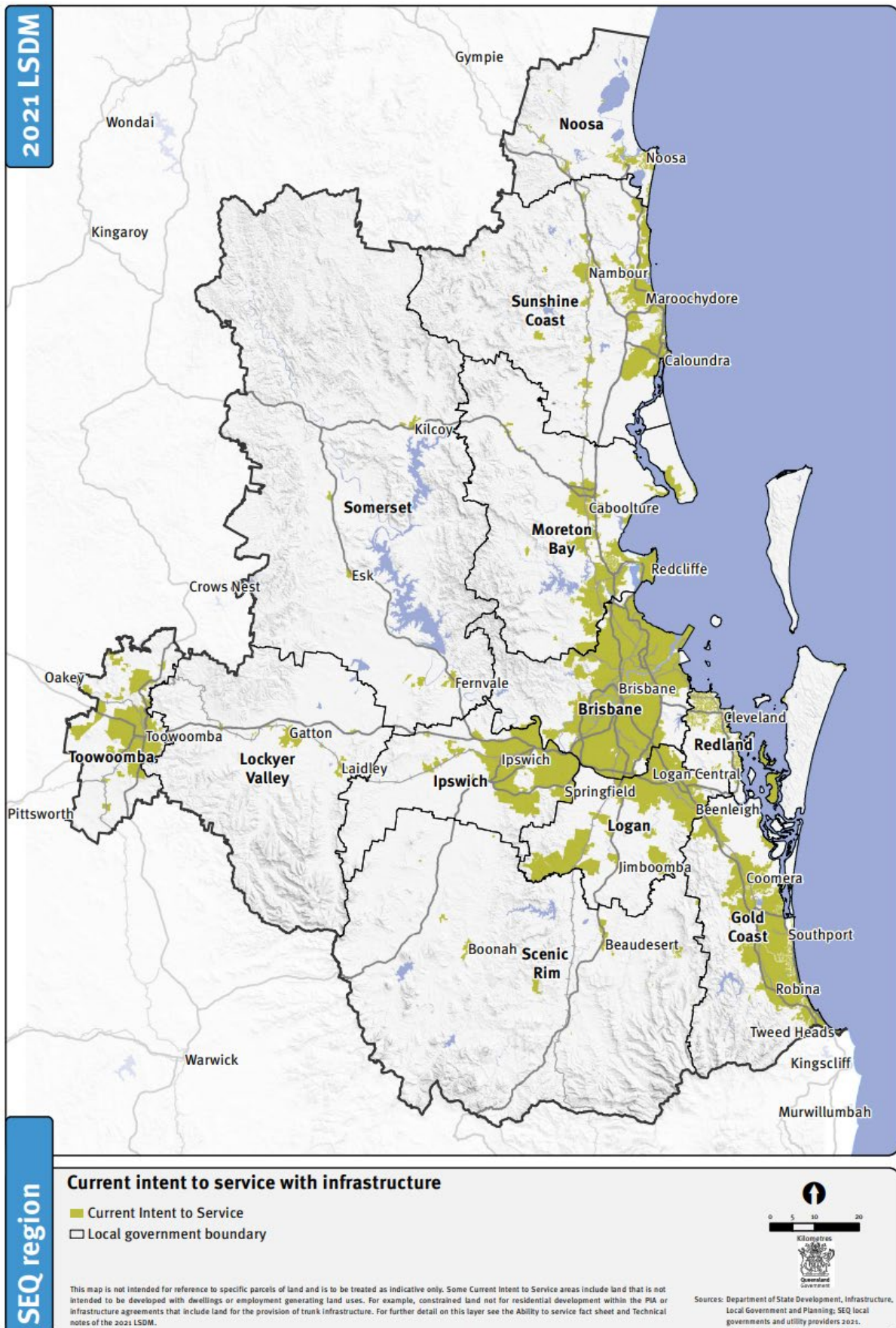
Consolidation Area (SEQ)



SEQ regional land use categories

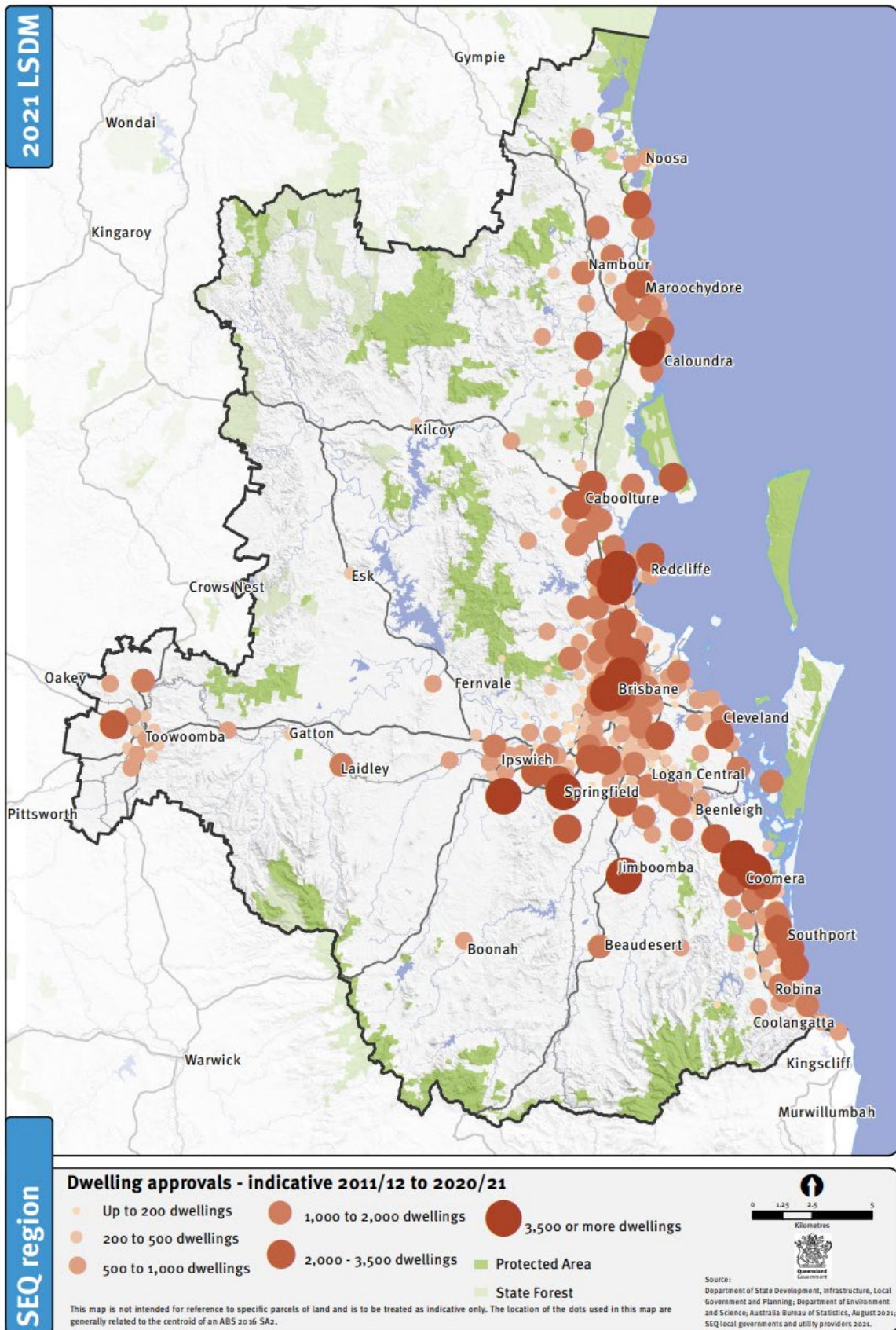


Current intent to be serviced (SEQ)

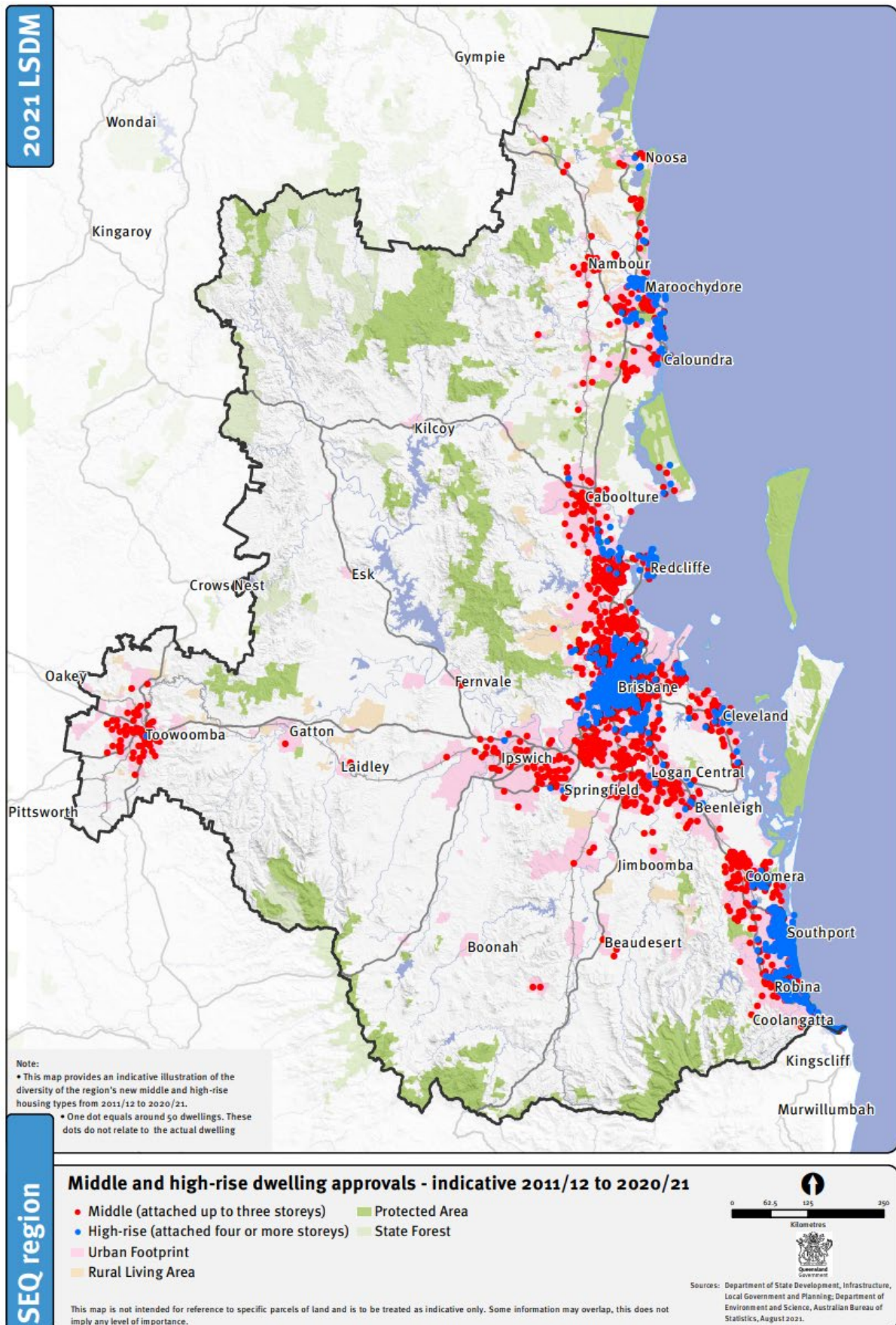


SEQ

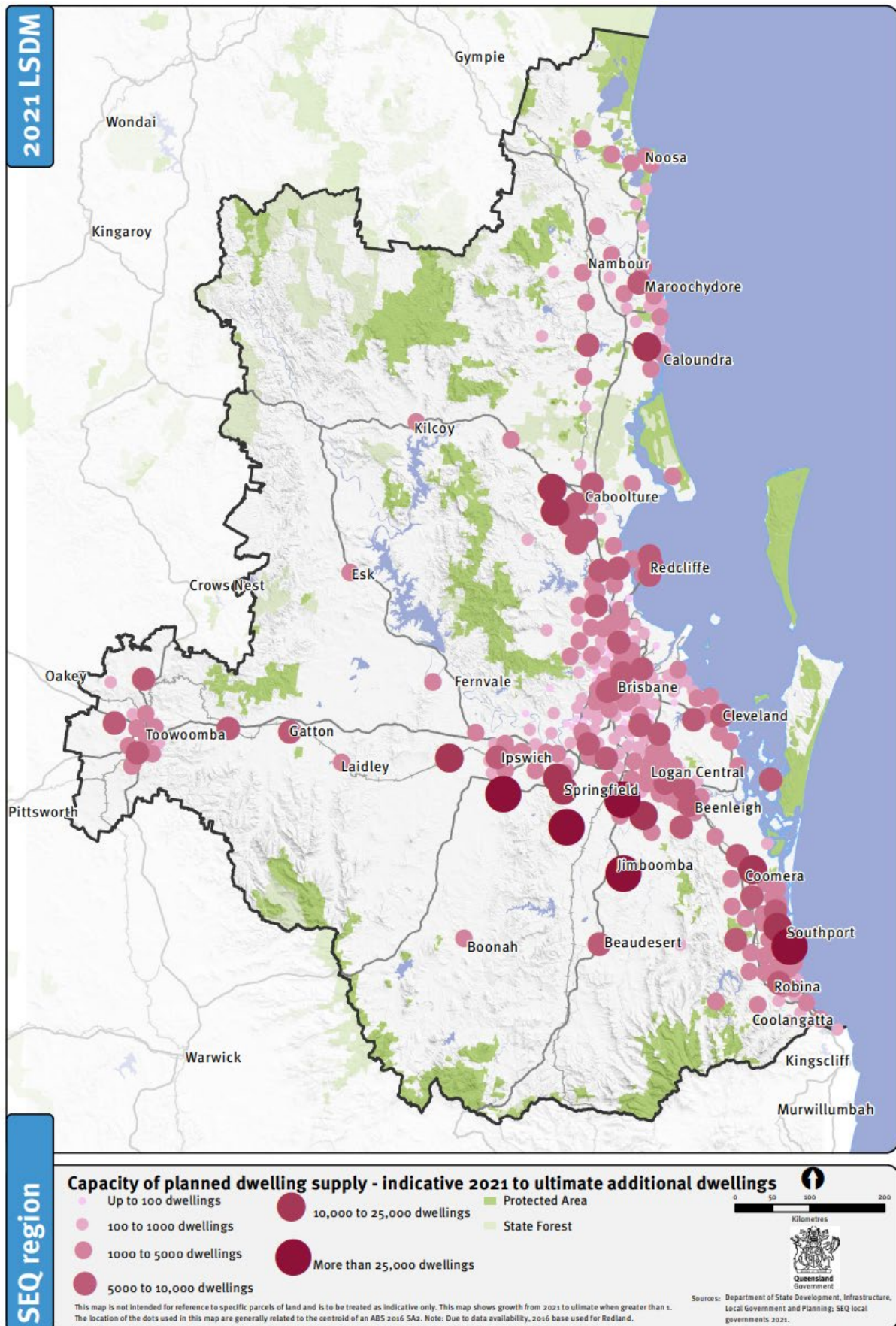
SEQ - Dwelling approvals



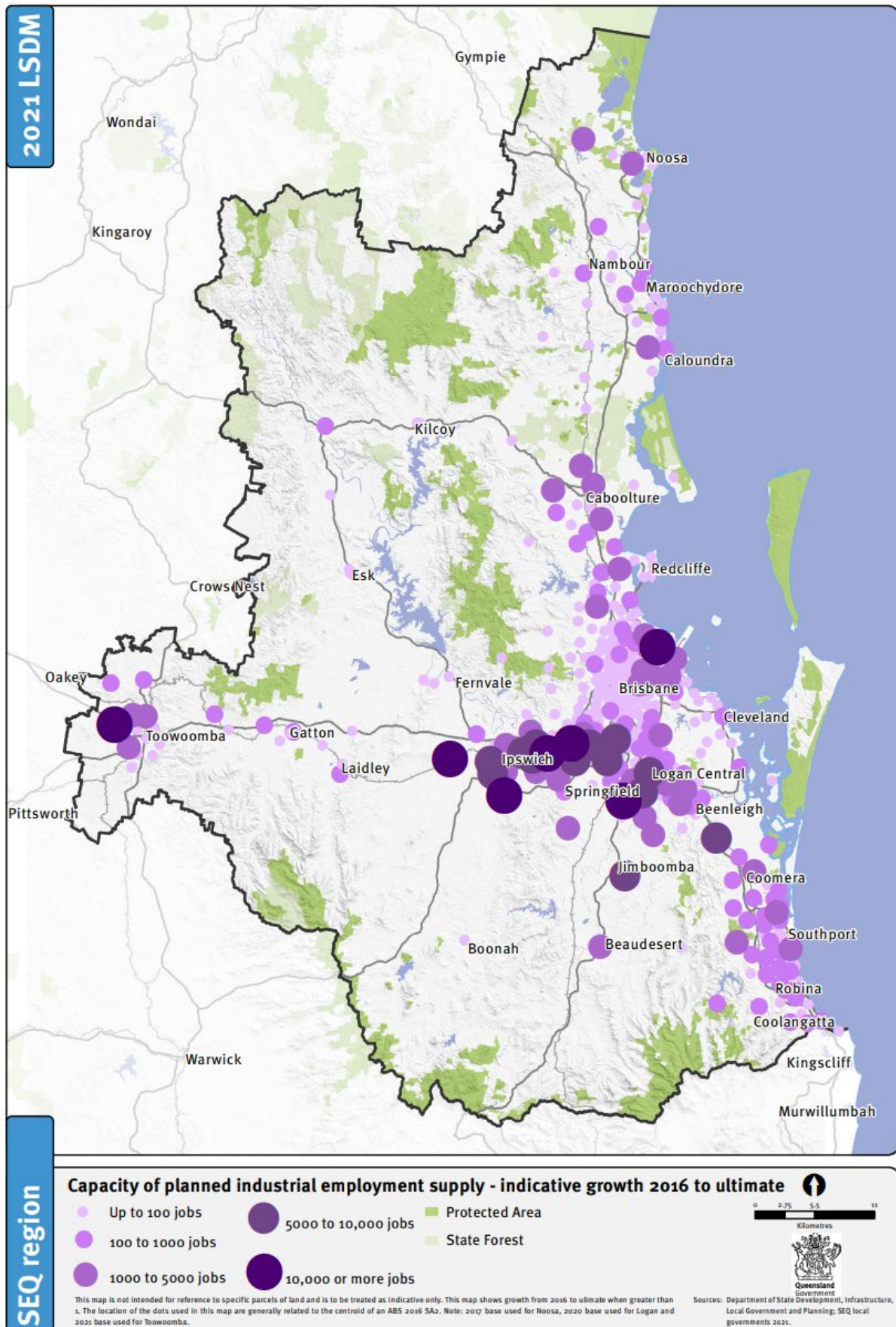
SEQ - Housing type



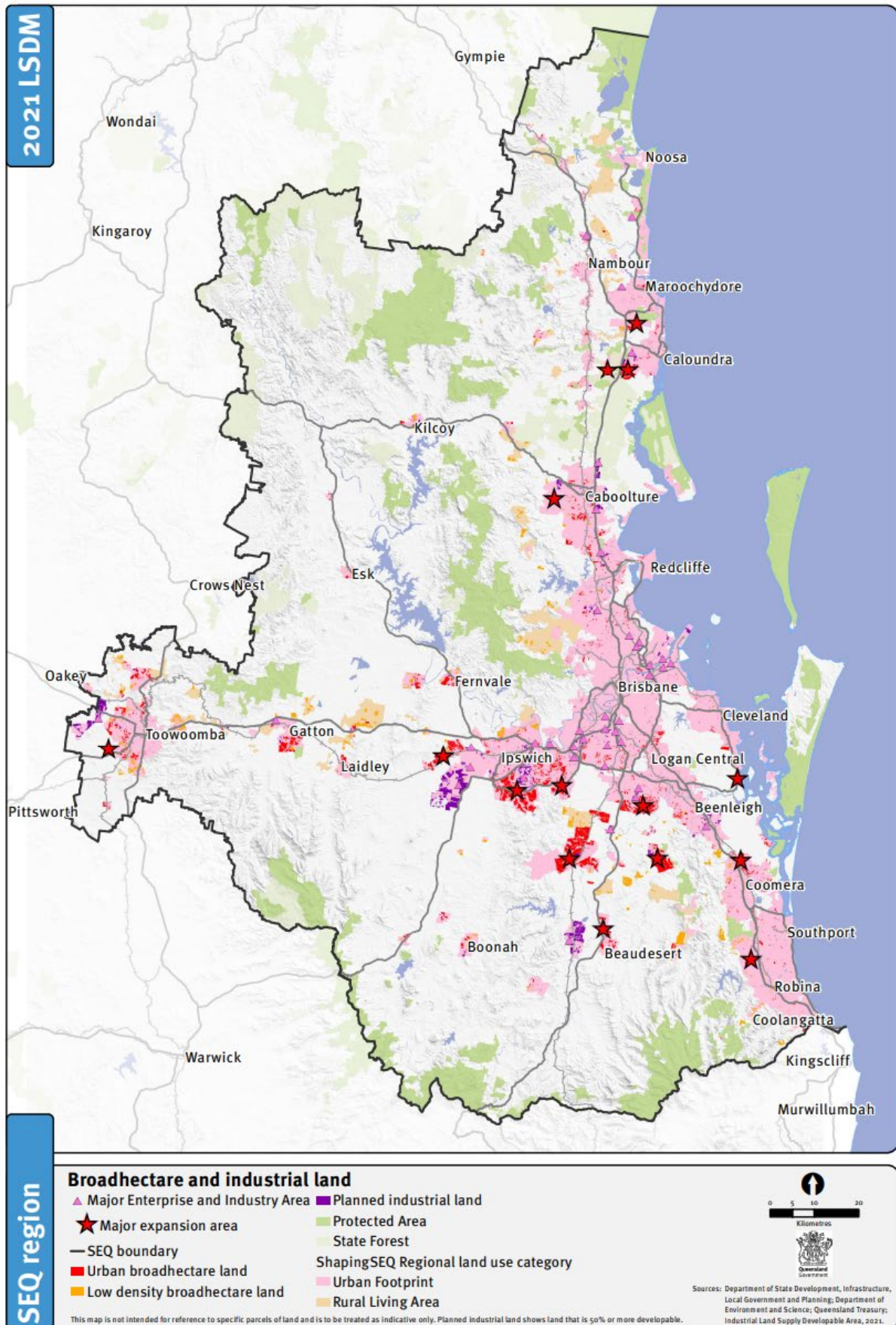
SEQ - Planned dwelling supply



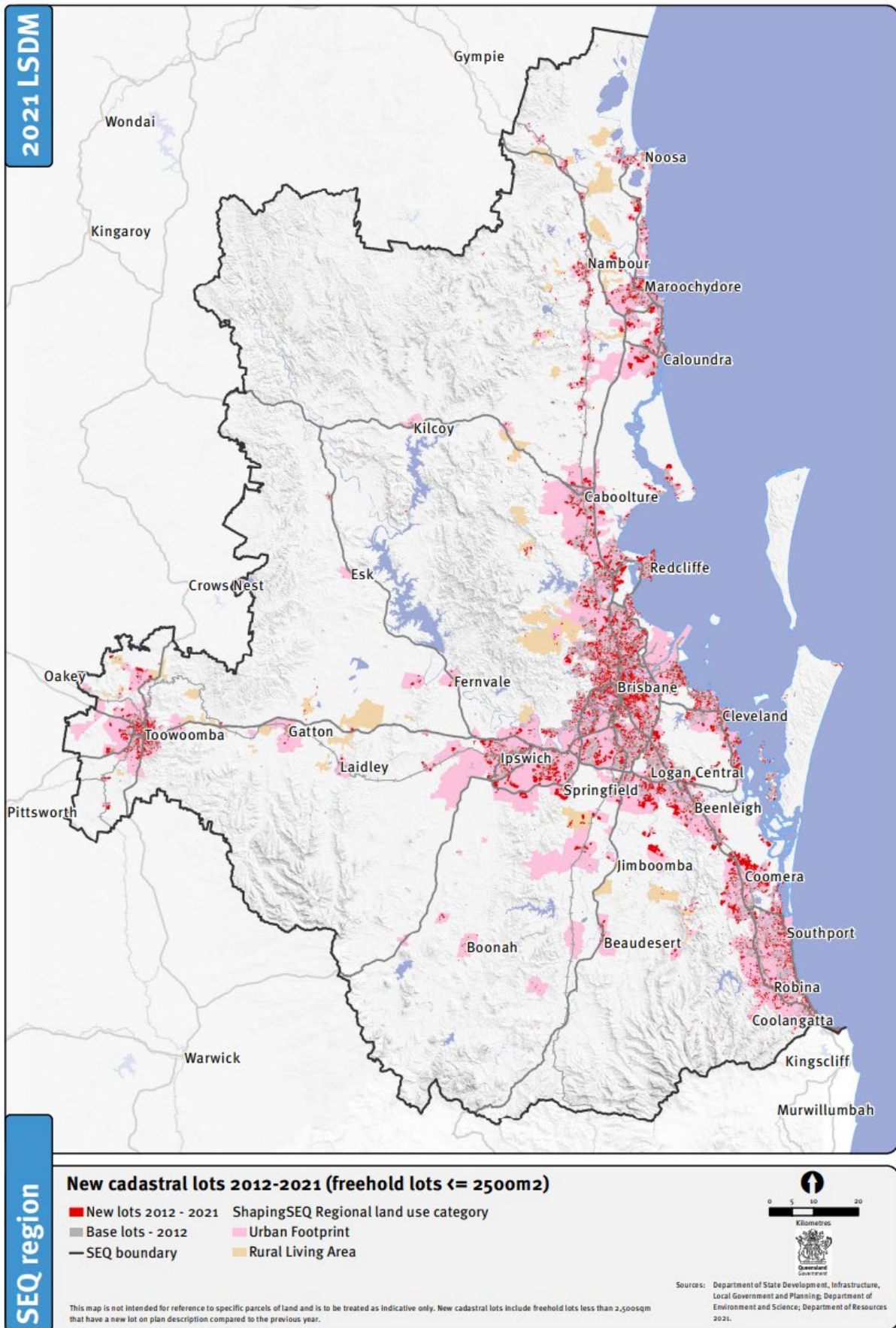
SEQ - Planned industrial employment supply



SEQ - Broadhectare and industrial lands



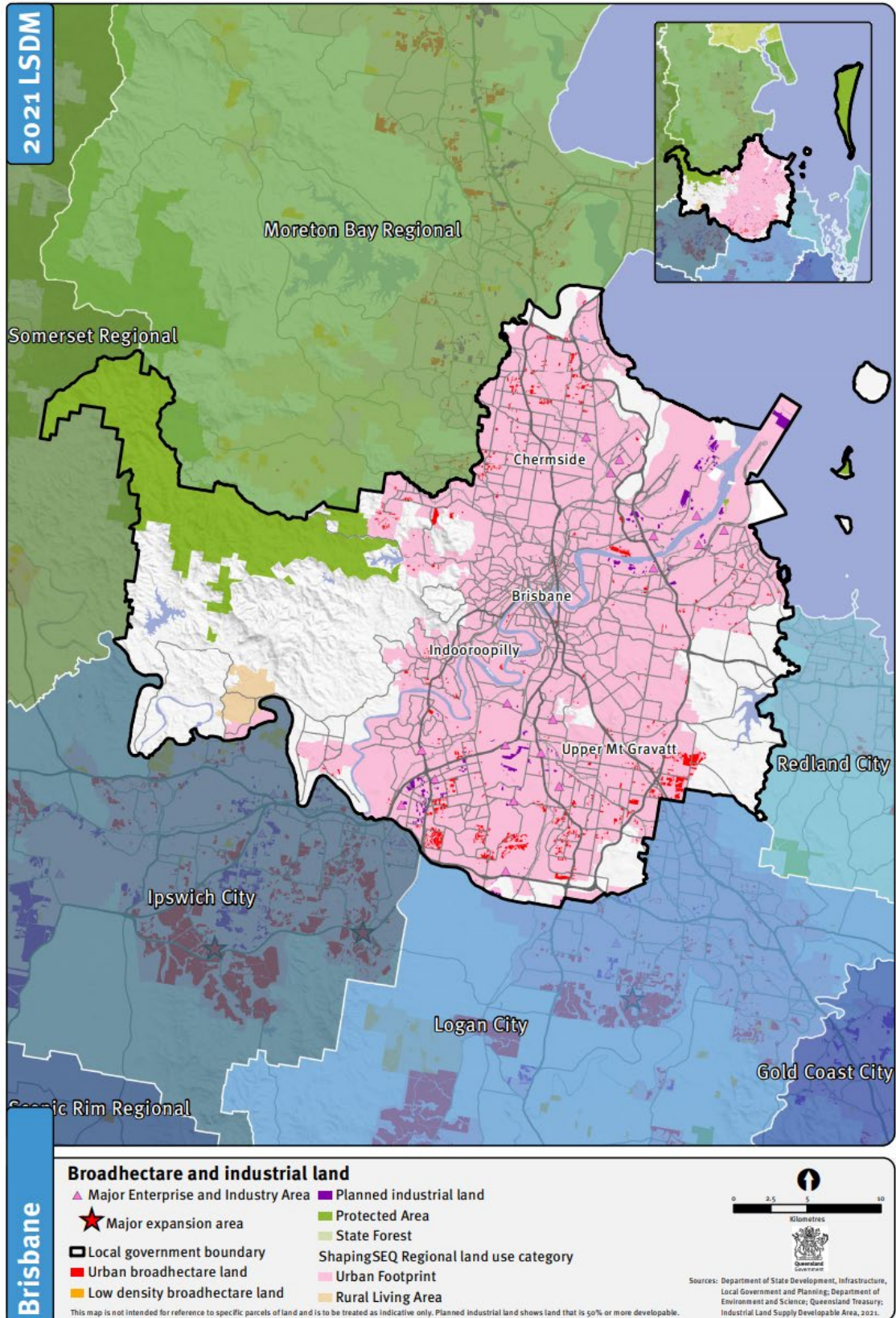
SEQ - New cadastral lots (freehold <= 2500m²)



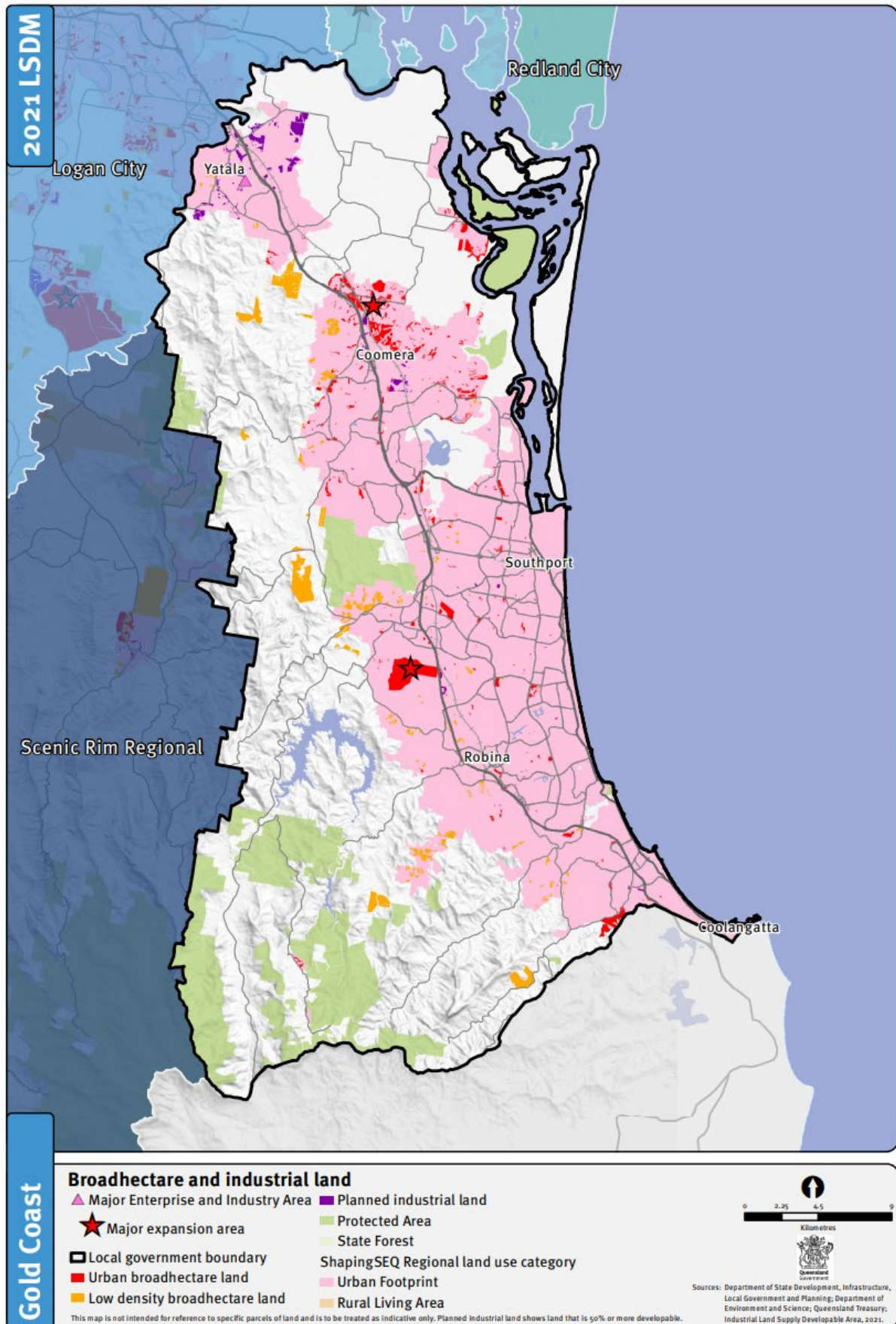
Local government

Broadhectare and industrial lands (as at June 2021)

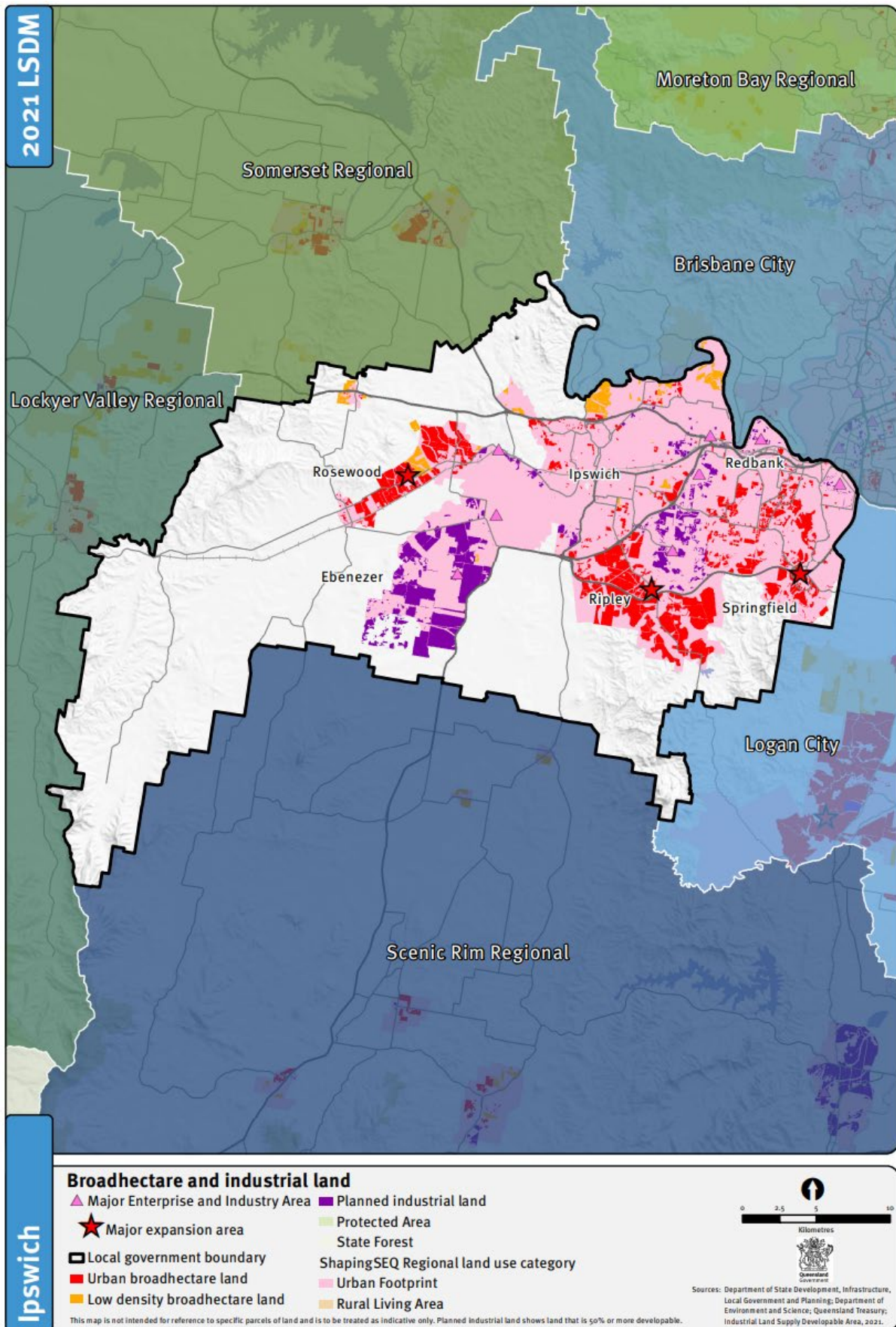
Brisbane - Broadhectare and industrial lands



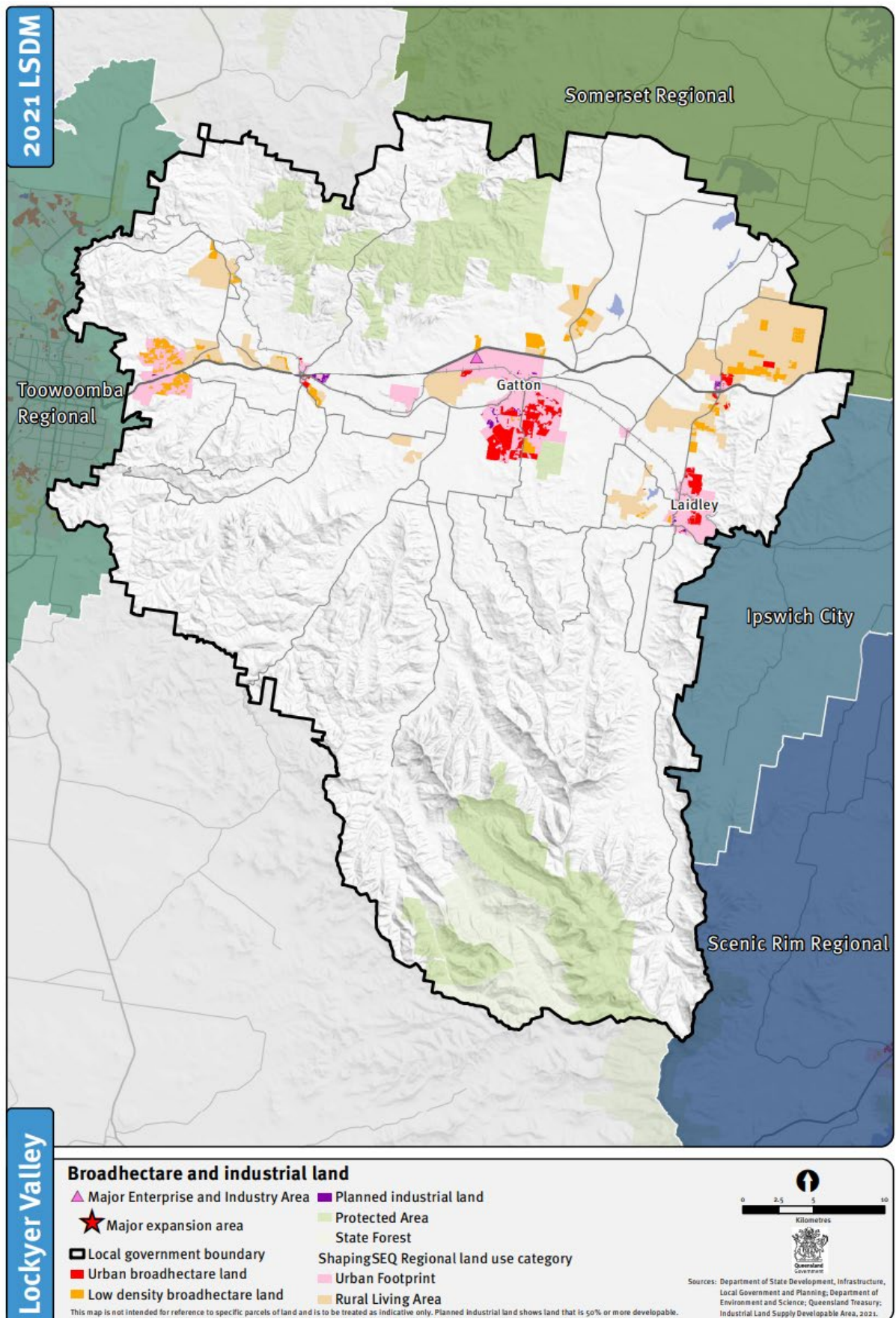
Gold Coast - Broadhectare and industrial lands



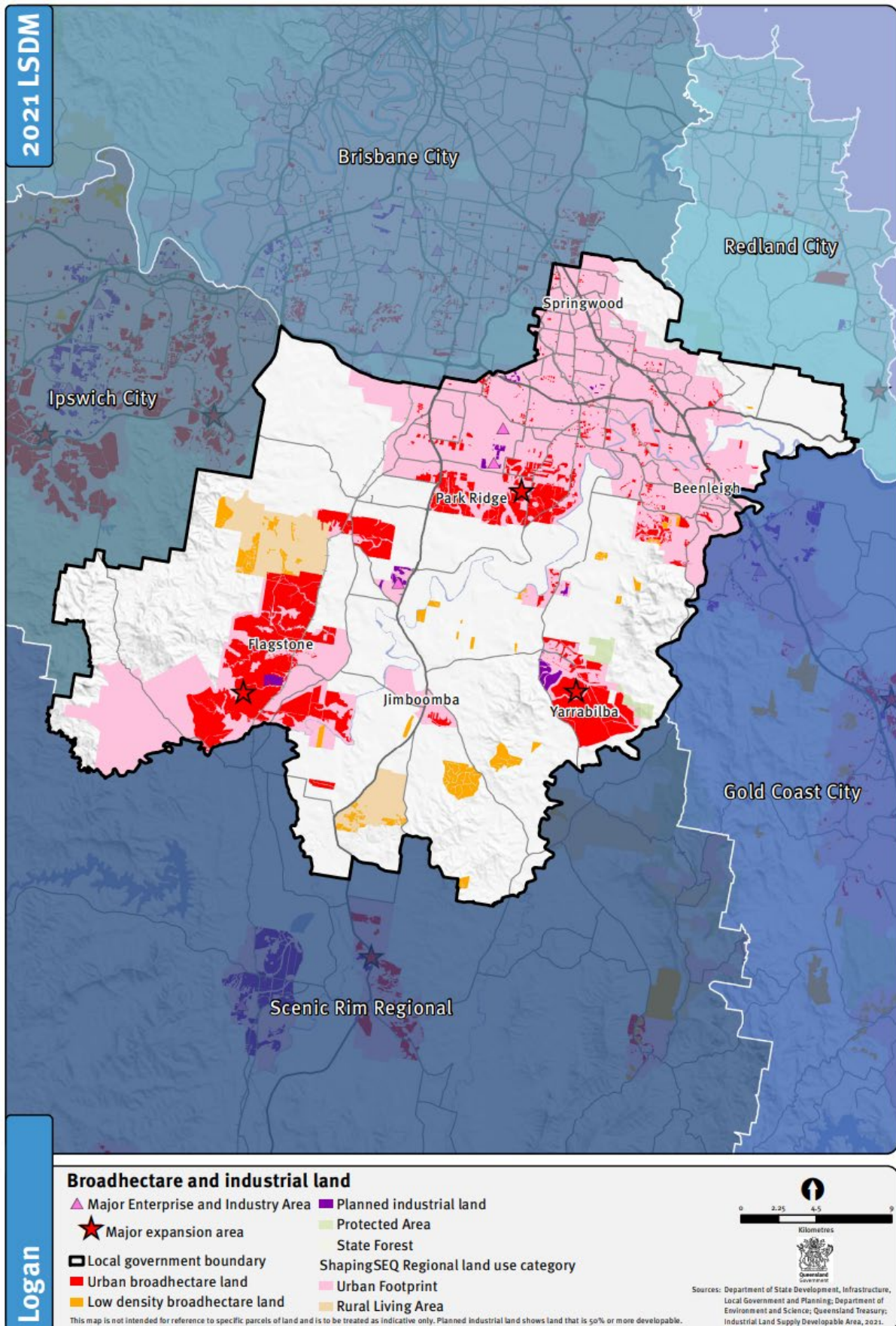
Ipswich - Broadhectare and industrial lands



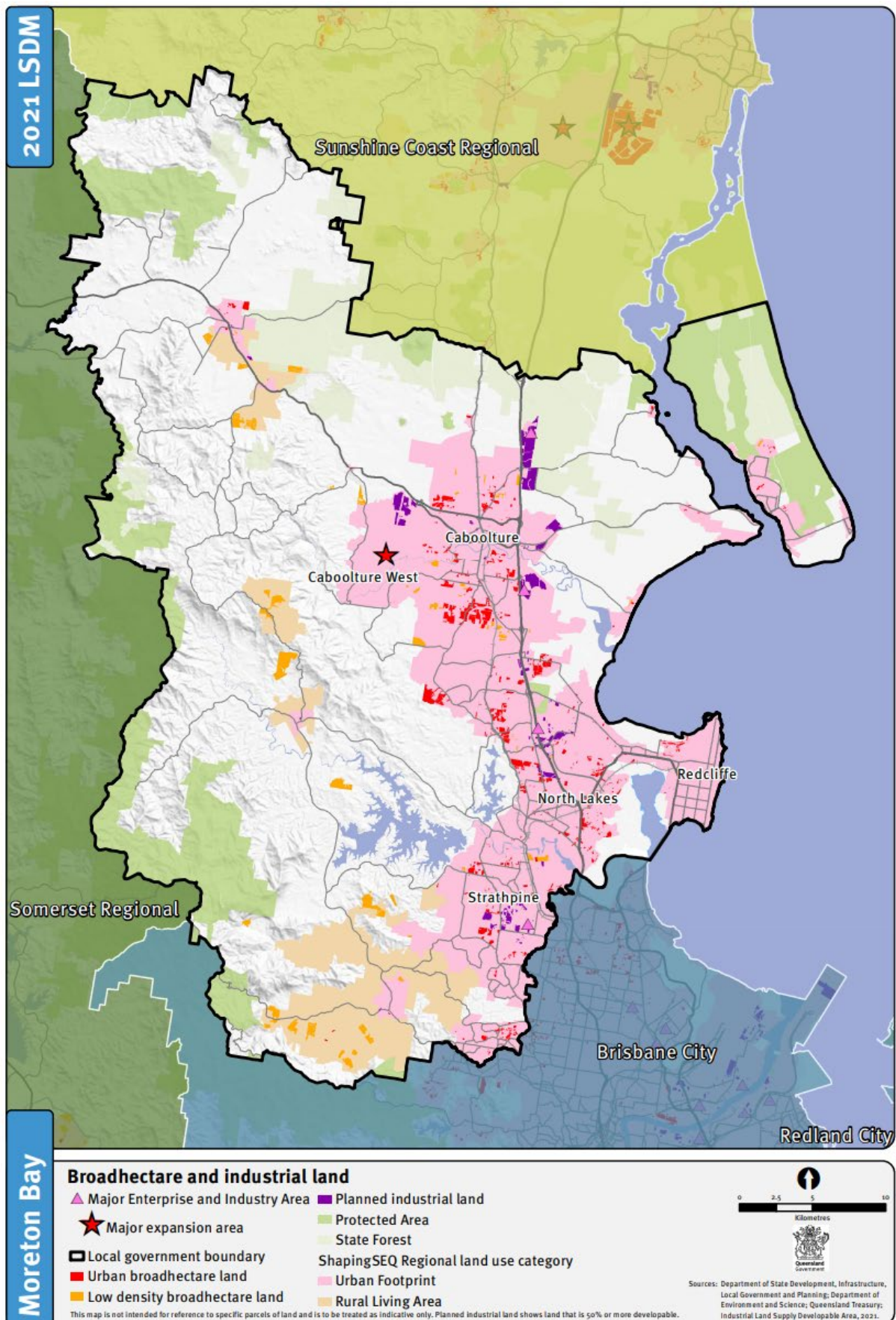
Lockyer Valley - Broadhectare and industrial lands



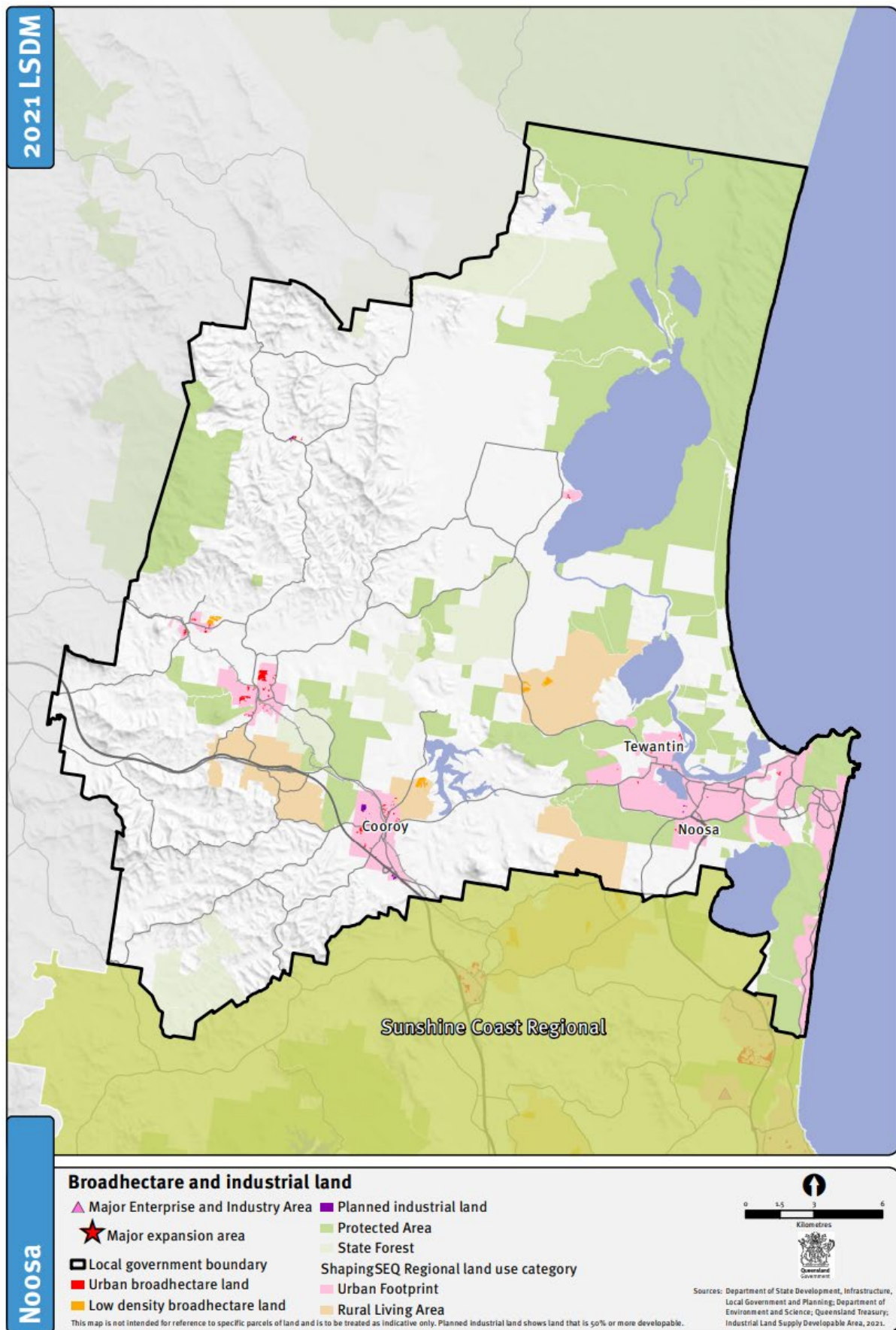
Logan - Broadhectare and industrial lands



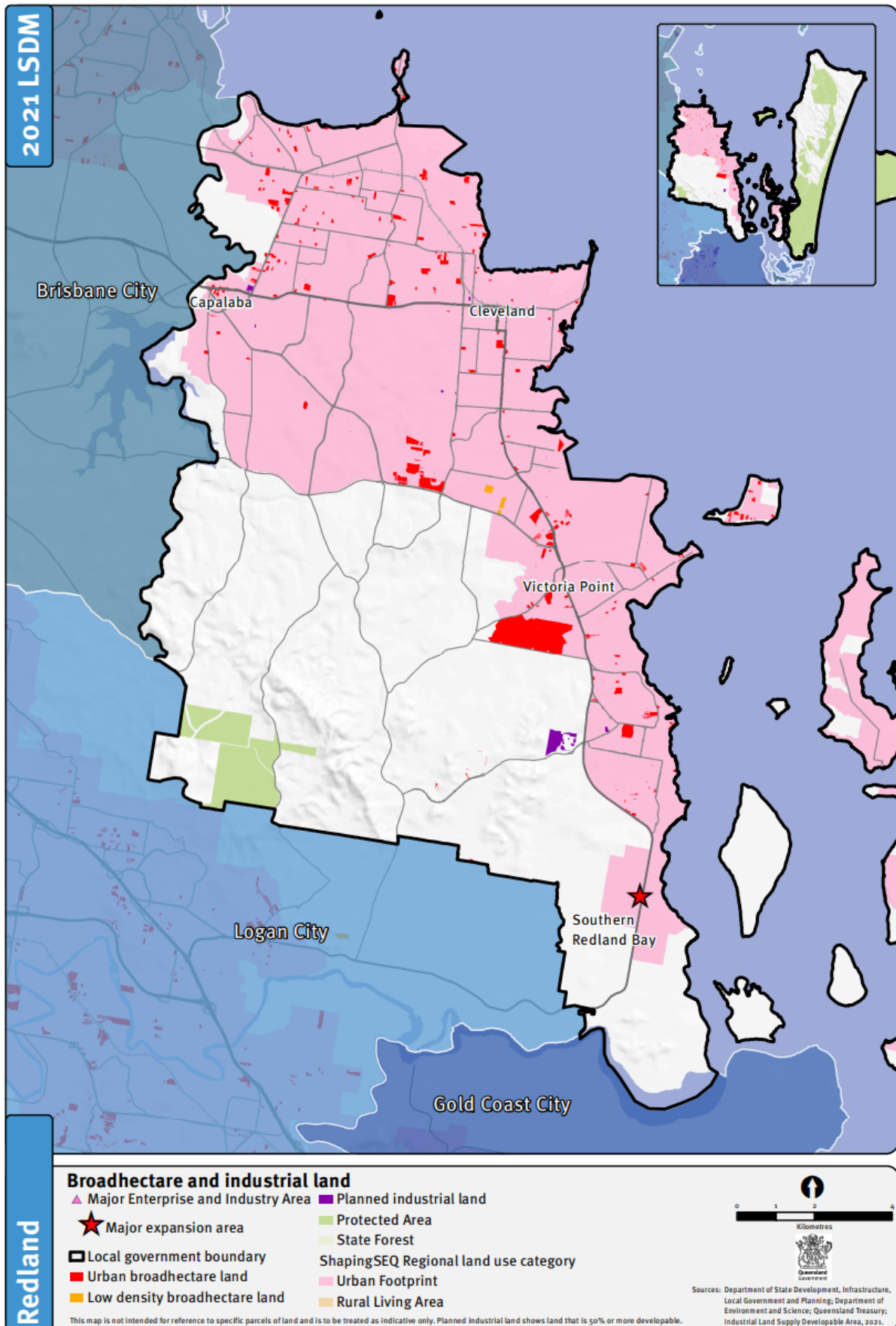
Moreton Bay - Broadhectare and industrial lands



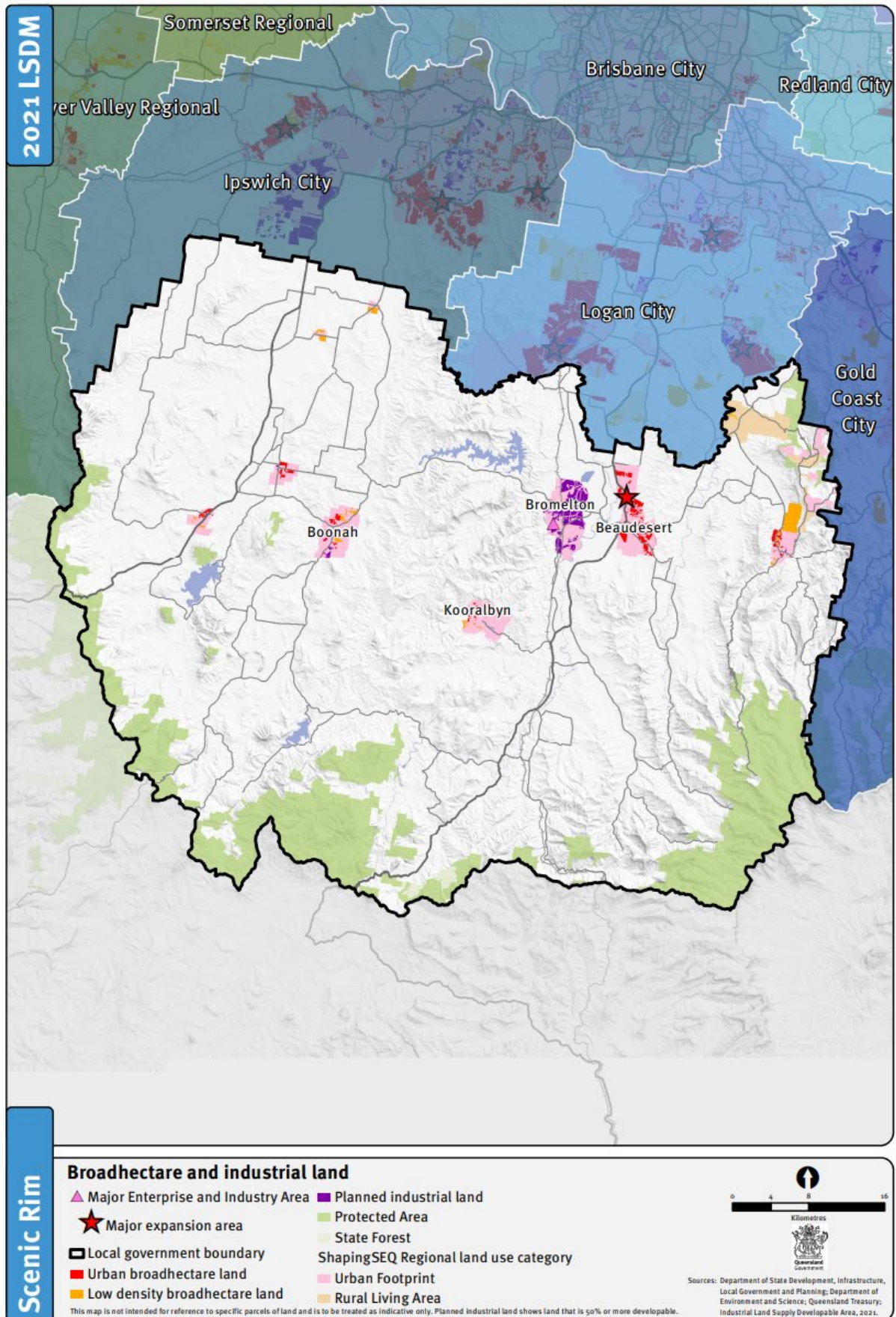
Noosa - Broadhectare and industrial lands



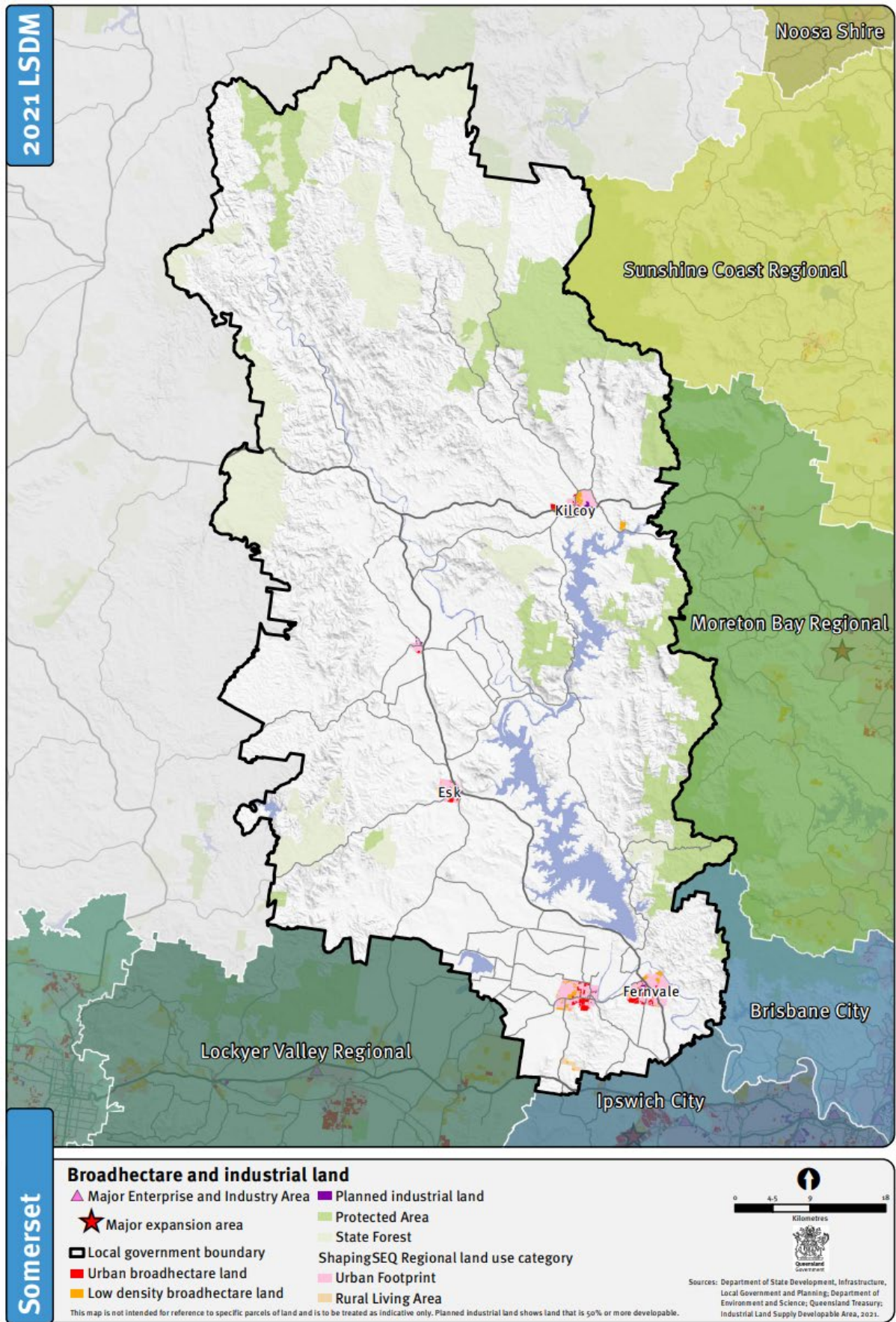
Redland - Broadhectare and industrial lands



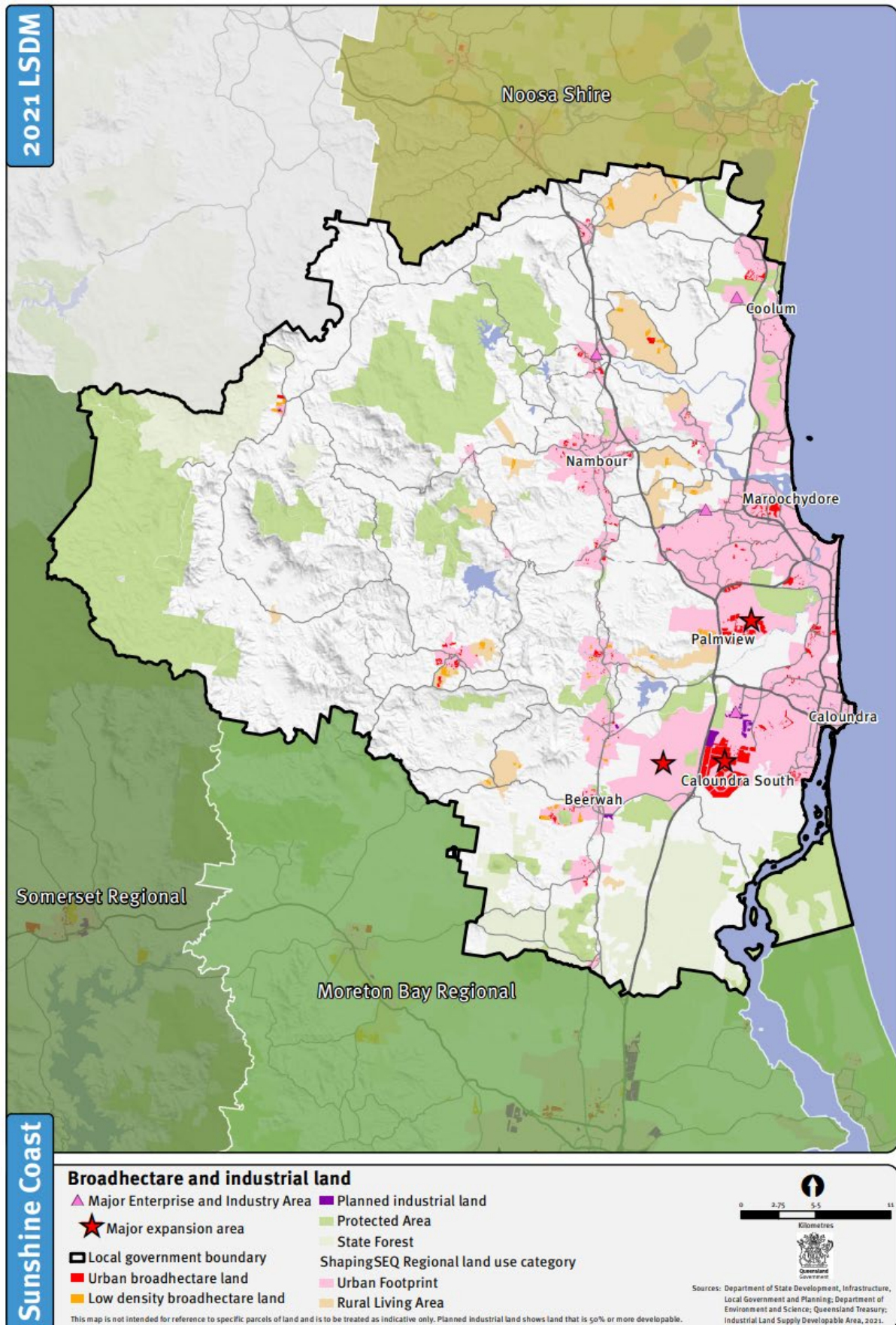
Scenic Rim - Broadhectare and industrial lands



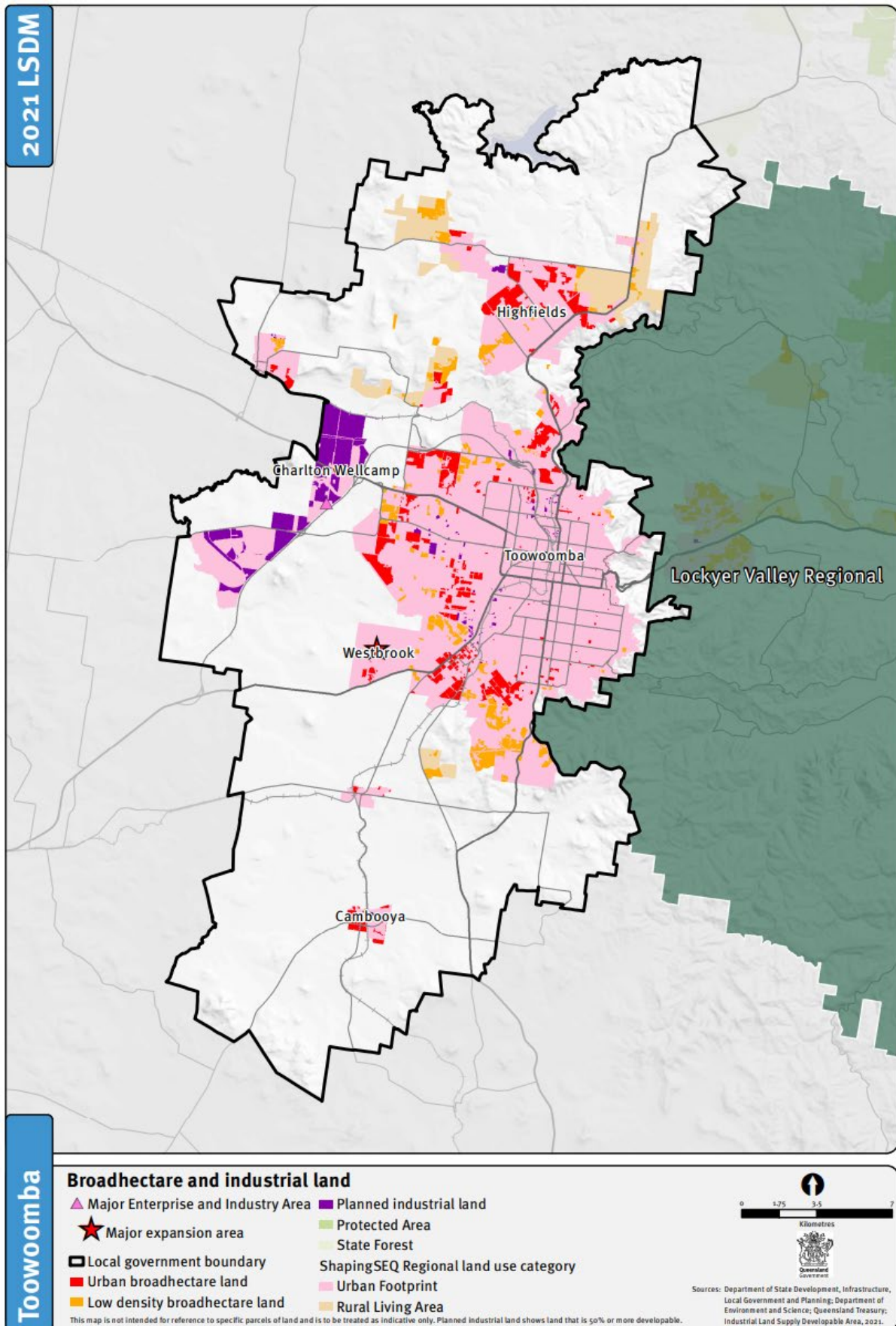
Somerset - Broadhectare and industrial lands



Sunshine Coast - Broadhectare and industrial lands

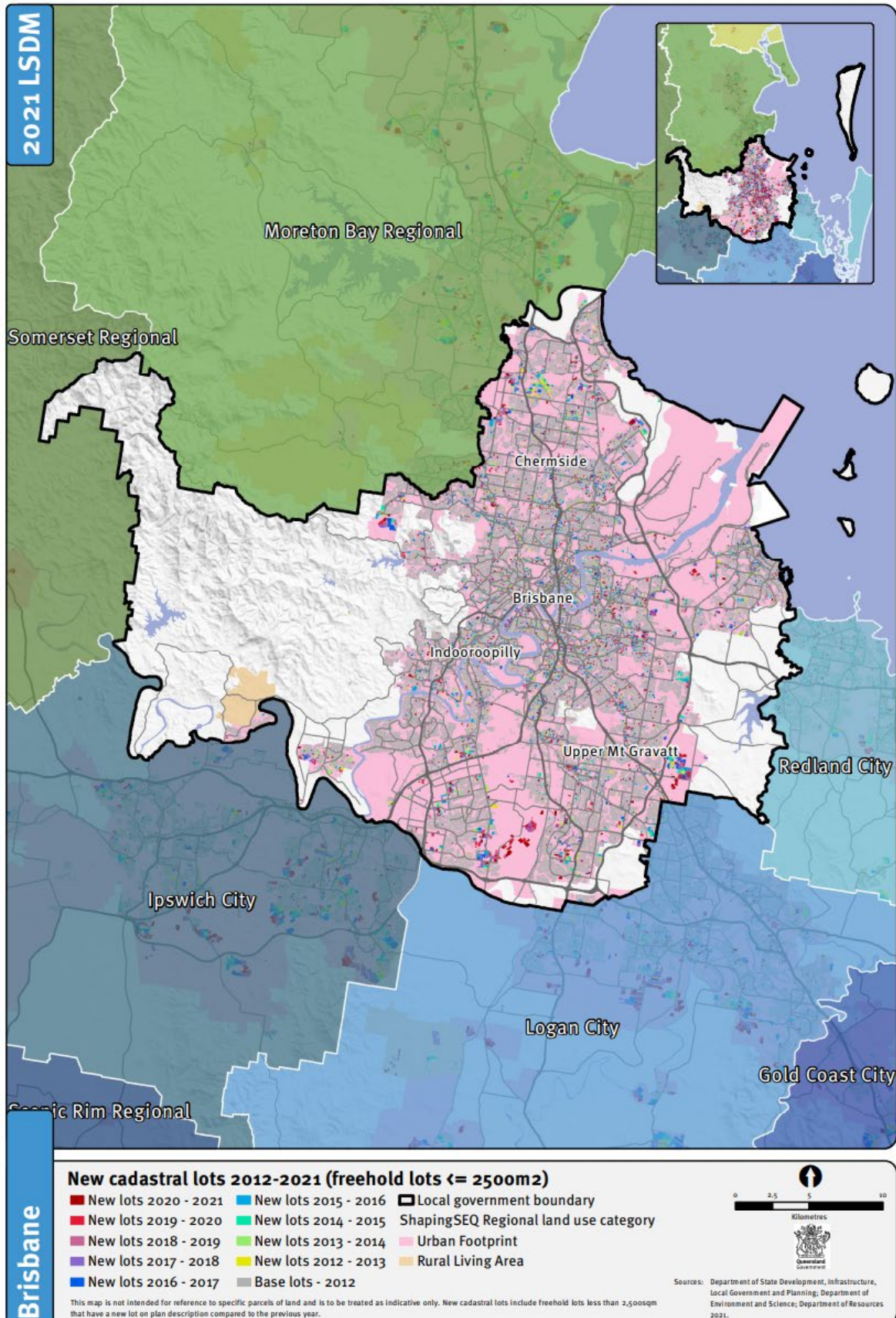


Toowoomba - Broadhectare and industrial lands

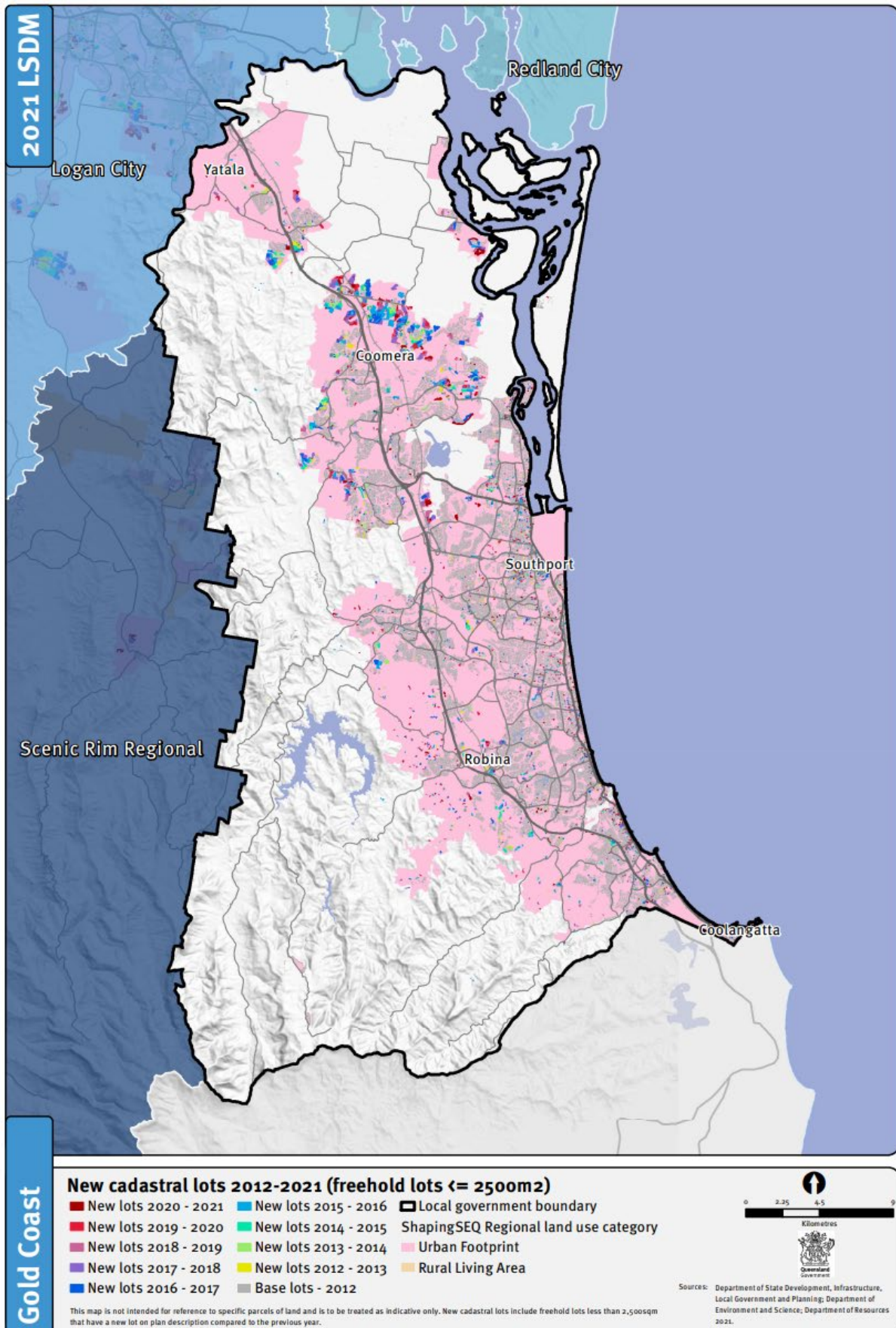


New freehold cadastral parcels (less than 2500m²) from 2011/12 to 2020/21

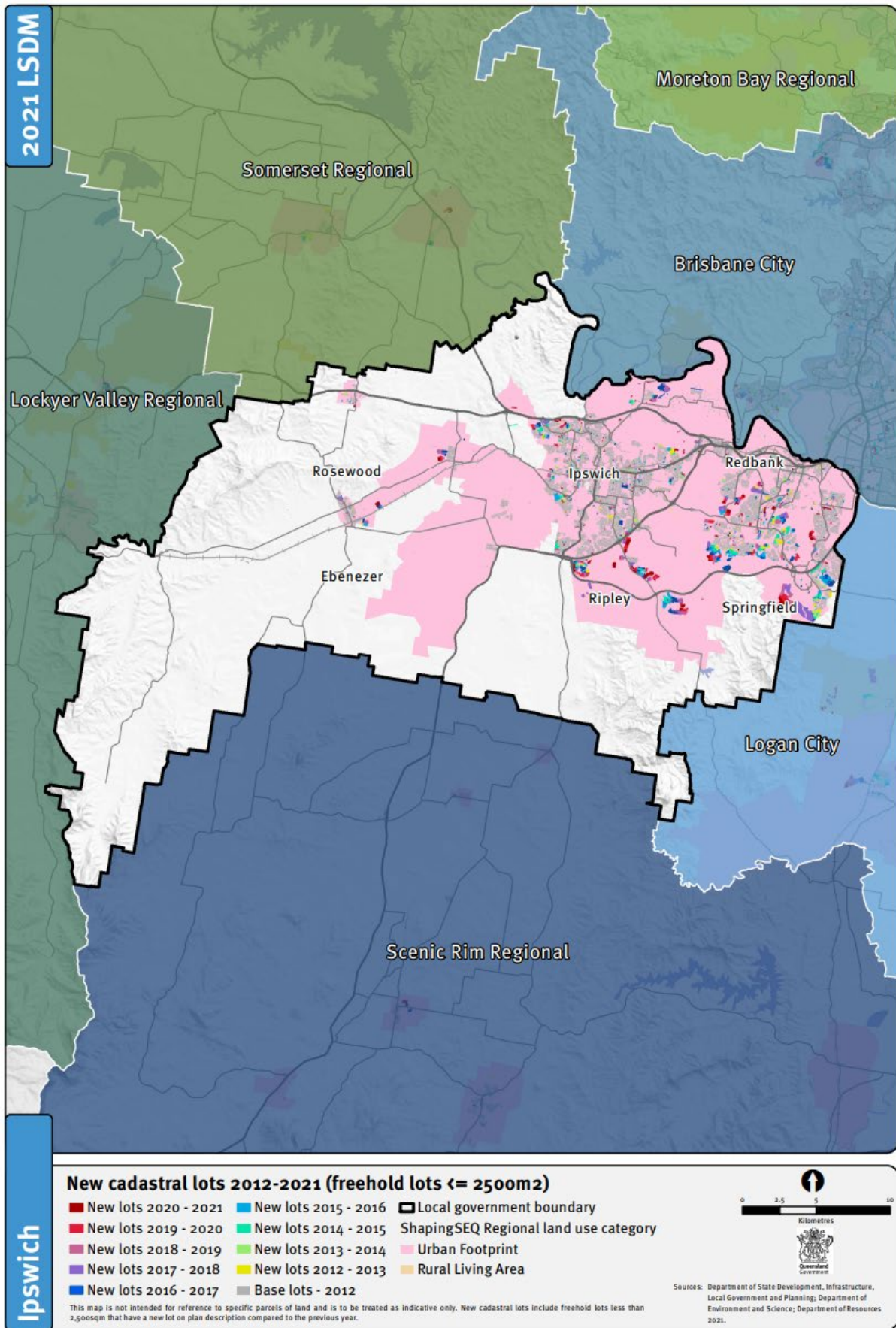
Brisbane - New cadastral lots (freehold <= 2500m²)



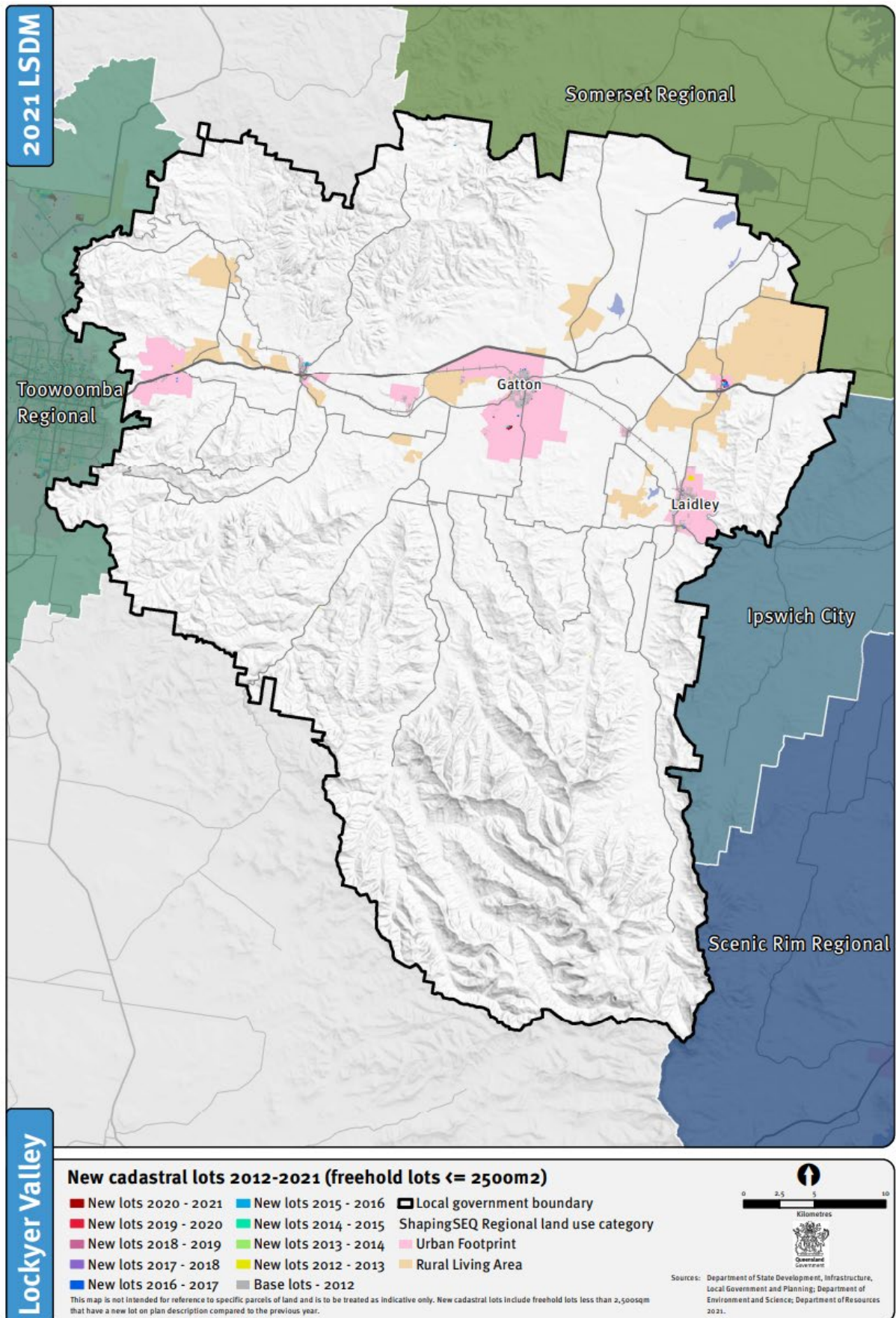
Gold Coast - New cadastral lots (freehold <= 2500m²)



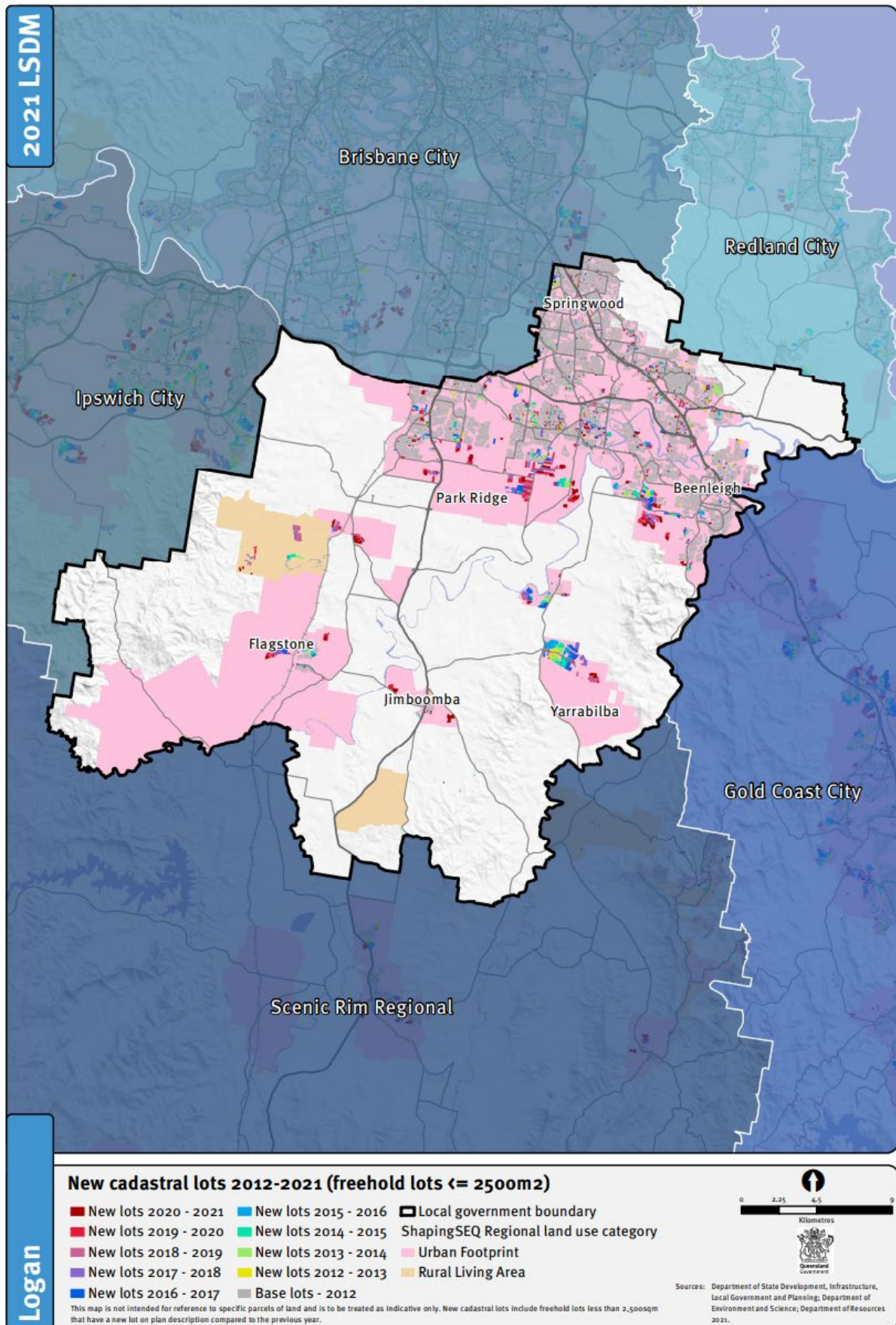
Ipswich - New cadastral lots (freehold <= 2500m²)



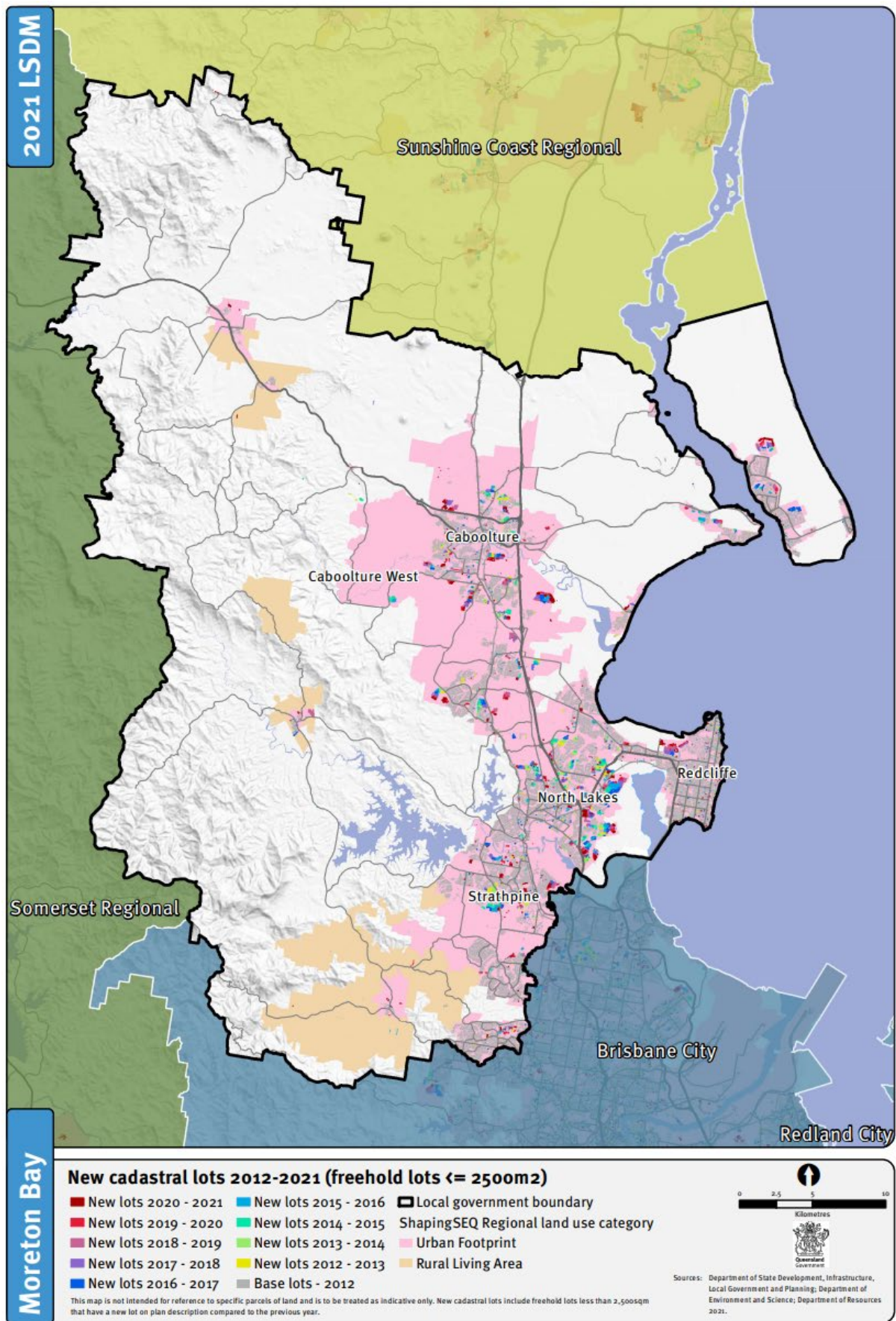
Lockyer Valley - New cadastral lots (freehold <= 2500m²)



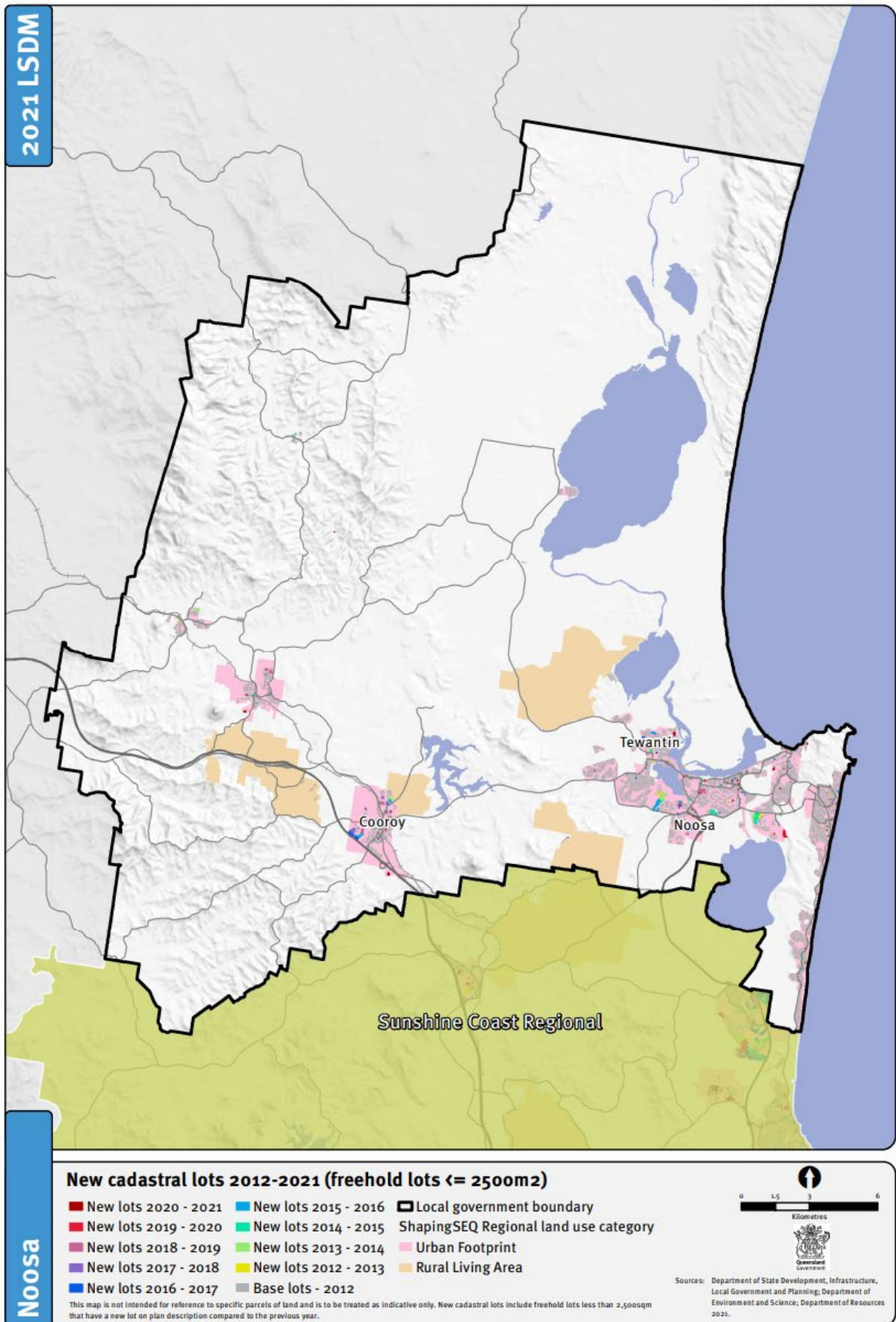
Logan - New cadastral lots (freehold <= 2500m²)



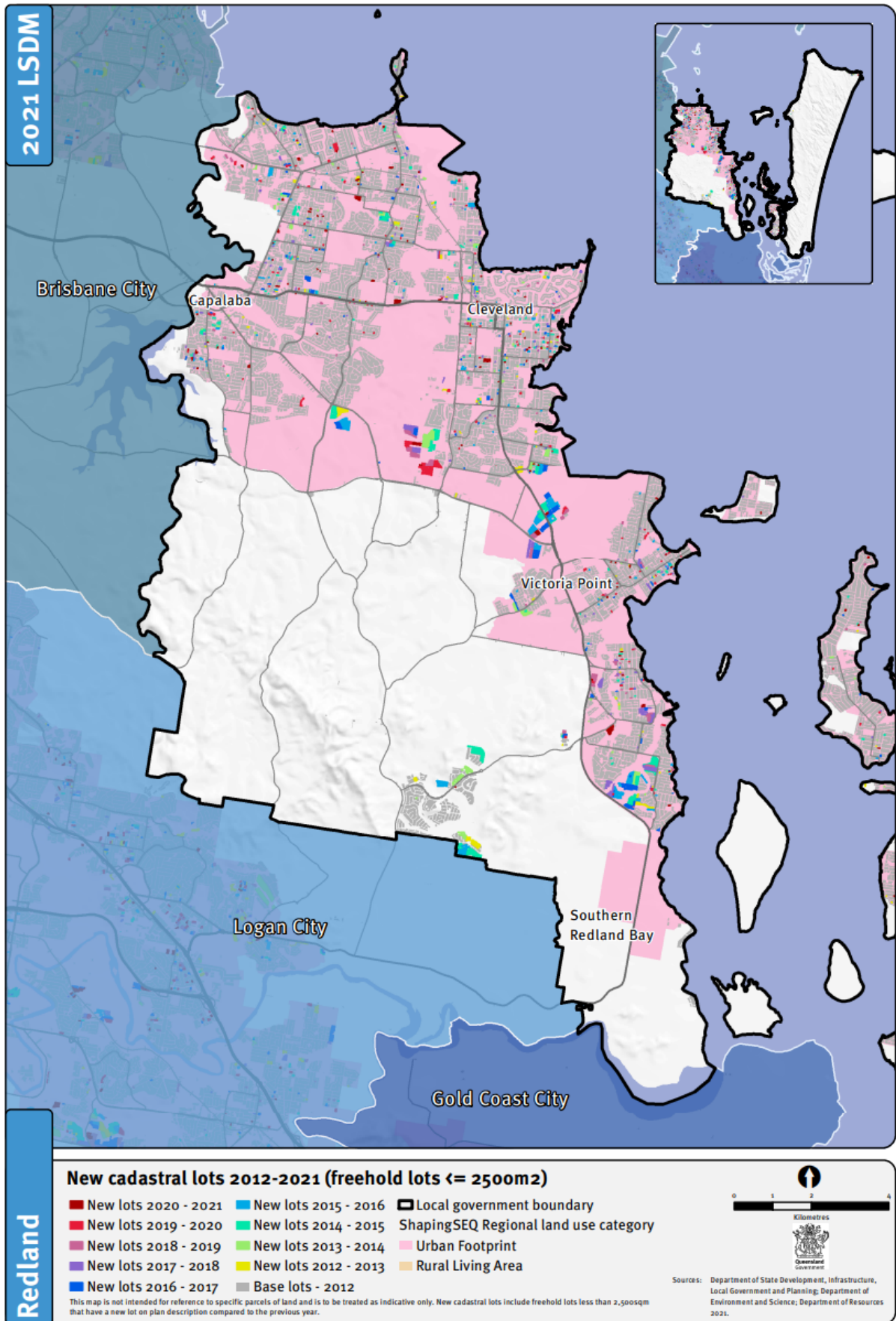
Moreton Bay - New cadastral lots (freehold <= 2500m²)



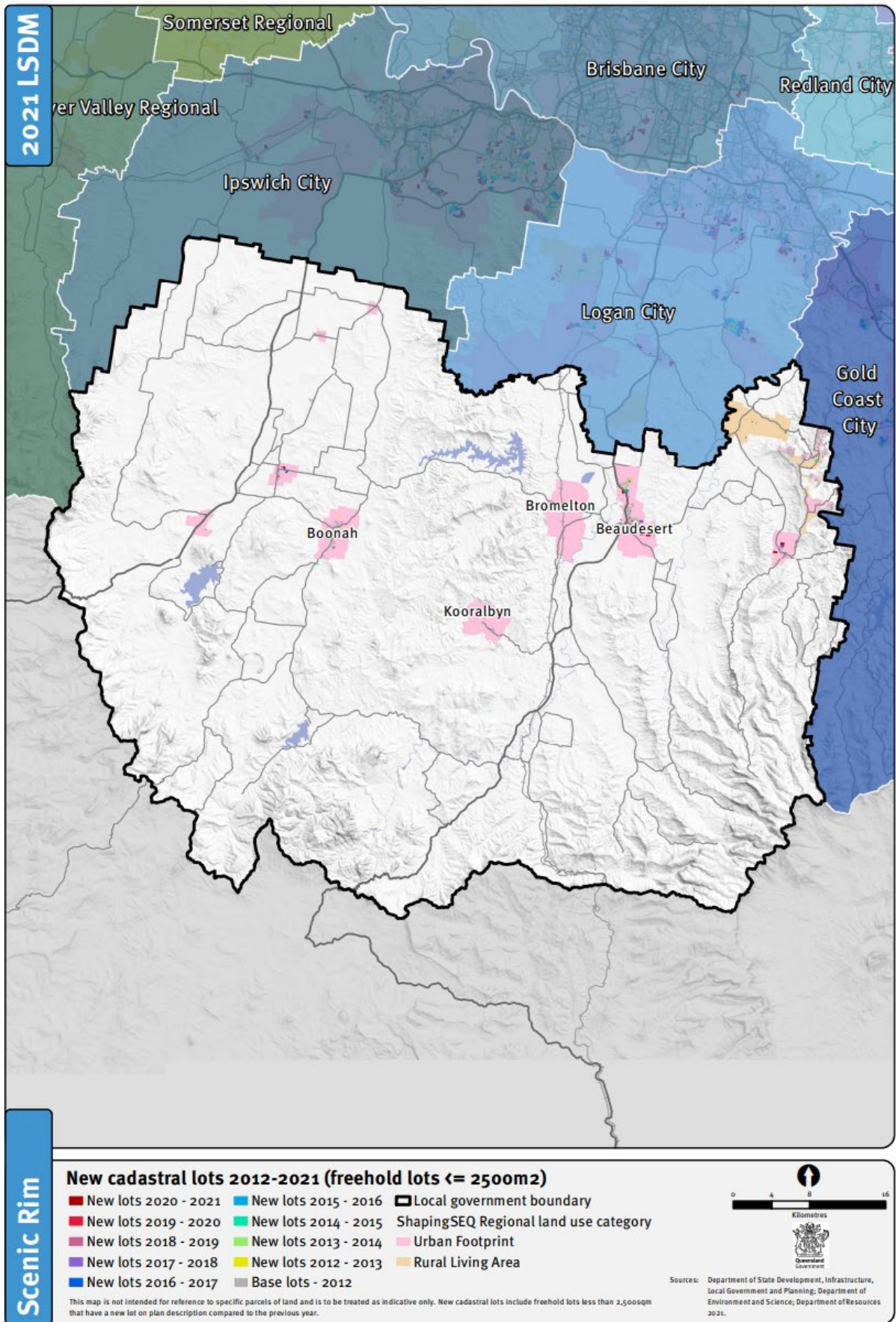
Noosa - New cadastral lots (freehold <= 2500m²)



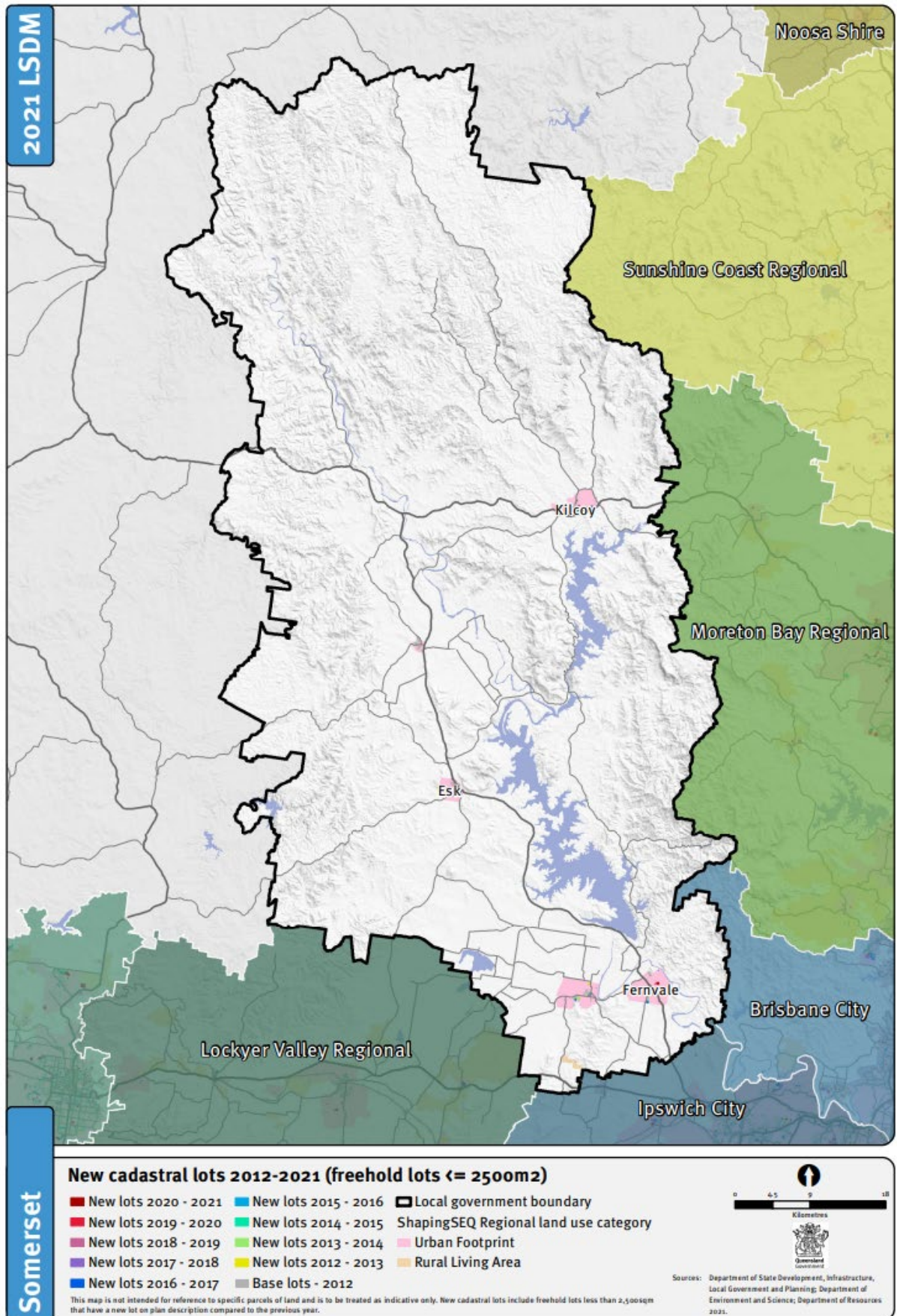
Redland - New cadastral lots (freehold <= 2500m²)



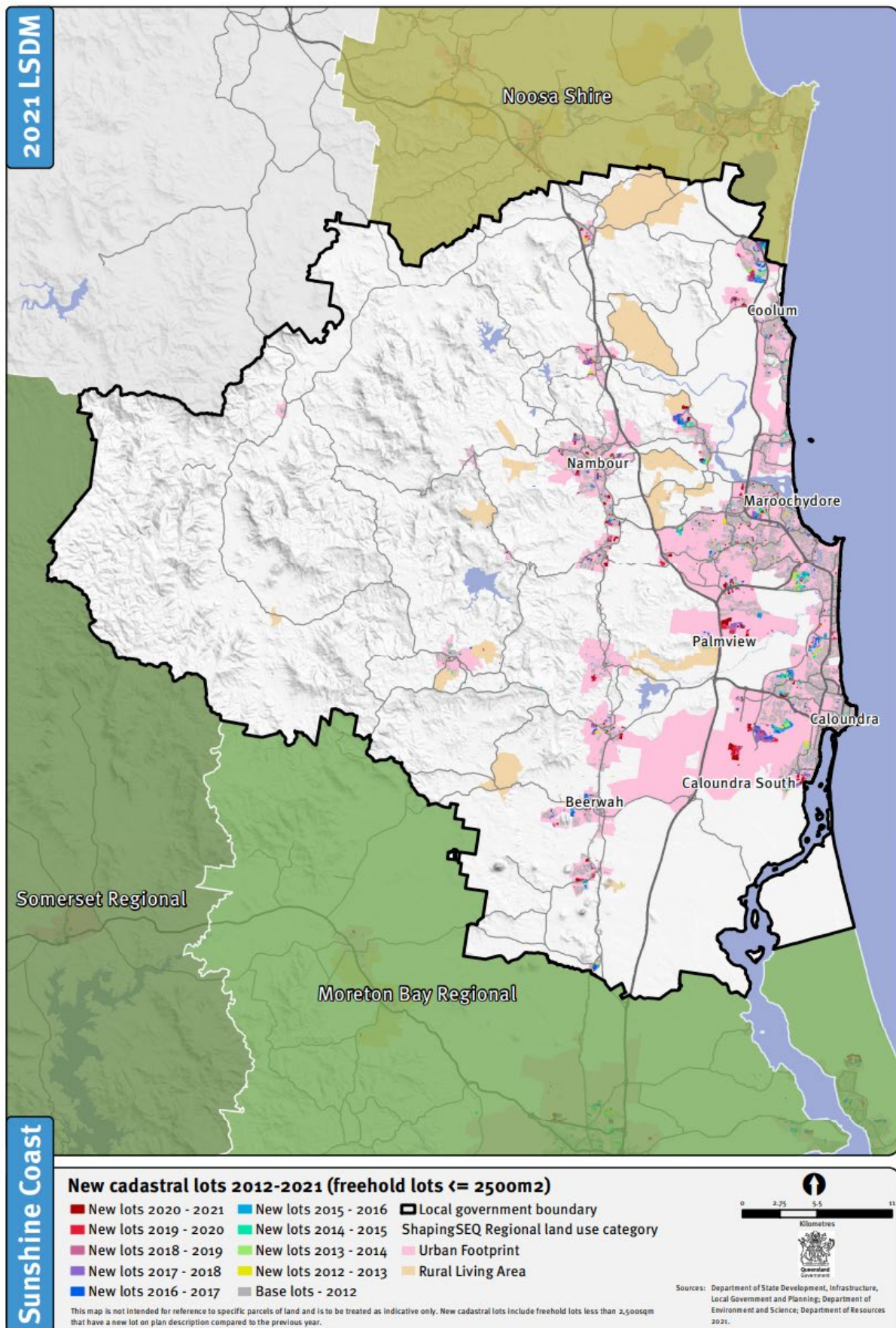
Scenic Rim - New cadastral lots (freehold <= 2500m²)



Somerset - New cadastral lots (freehold <= 2500m²)



Sunshine Coast - New cadastral lots (freehold <= 2500m²)



Toowoomba - New cadastral lots (freehold <= 2500m²)

