

# CHAPTER 10

## IMPLICATIONS OF GROWTH AND CONCLUSION





## Key points

- SEQ is expected to reach 5.41 million population by 2041, which is a 44 per cent increase on 2020. This growth is expected to be concentrated in the Ipswich and Gold Coast LGAs, which will each add over 300,000 new residents.
- This population growth will have significant implications for housing, jobs and skills, transport and connectivity, and liveability in SEQ over the coming decades.
- SEQ is projected to add more than 800,000 new dwellings between 2016 and 2041, with the Brisbane, Ipswich and Gold Coast LGAs each projected to add between 146,000 and 156,000 new dwellings.
- Some of the housing implications of accommodating population growth in the way envisaged by the *ShapingSEQ* strategic plan include 60 per cent of new dwellings being located in the existing urban area (consolidation), a shift to more medium and higher density forms of housing, and an ongoing trend towards smaller lot sizes.
- Much of SEQ's future population growth is expected to be concentrated in outer suburban areas that currently offer relatively poor access to services and low walkability to local residents.
- Consolidation growth has far more positive outcomes than expansion growth for resident's level of access to services, access to public open space and walkability. However, housing affordability tends to be better in non-coastal outer-suburban expansion areas.
- The population growth anticipated for SEQ through to 2041 means SEQ will need around one million new jobs. The main industry sources of employment growth are expected to be Health care and social assistance (227,300) and Professional, scientific and technical services (160,000).
- The Brisbane LGA is expected to accommodate 45 per cent of employment growth (on a place of work basis), despite contributing only 19 per cent of SEQ's population growth between 2016 and 2041. The Moreton Bay, Logan and Ipswich LGAs are expected to contribute a much smaller share of SEQ's jobs growth than its population growth.
- This imbalance suggests that many of the future residents of these three outer LGAs will need to spend significant time commuting into the Brisbane LGA to access jobs. The results highlight the importance of initiatives to improve transport connections and facilitate the development of employment precincts in these suburban growth areas.
- In the short term, Professionals are expected to show the most employment growth of all occupations and strong growth is also expected in employed persons with bachelor degrees and higher qualifications. With a more educated and higher-skilled workforce, SEQ will be better prepared to adopt technological advancements.
- Commuter travel in SEQ is currently very car dependent, with the areas that are projected to grow most strongly over the next two decades typically having very low public transport use. Significant and timely investment in public transport will help reduce congestion and manage the impacts of growth on the existing road network.
- The areas that are projected to experience the largest increases in population from 2020 to 2041 (such as Ripley, Greenbank and Coomera) are all located relatively close to at least one of the Queensland Government's five key economic corridors. These corridors contain SEQ's major employment precincts.

## 10.1 Introduction

This study aims to pull together the evidence on how jobs, connectivity and liveability are functioning in the SEQ region, and by doing so, assist in identifying areas where more focus is needed to improve outcomes. To do this the chapter aims to link the findings of the individual chapters and understand their connections.

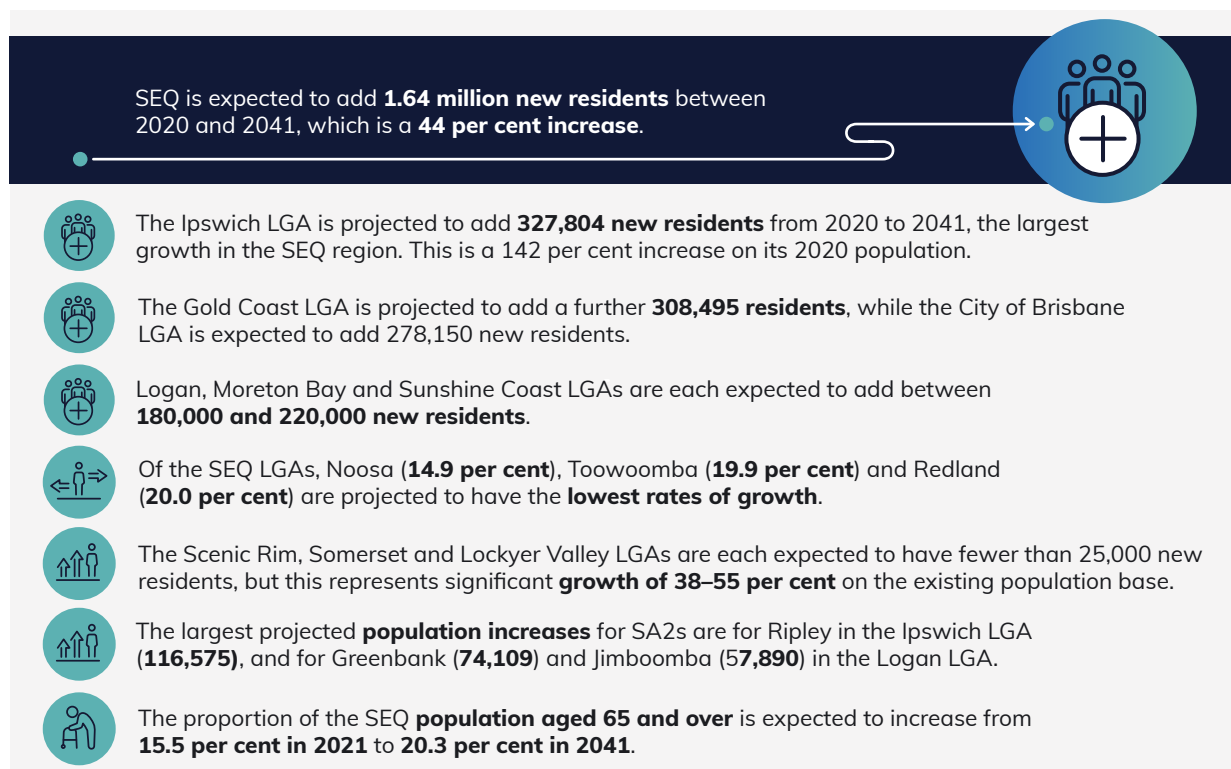
Queensland Government projections show that the population of SEQ is anticipated to grow to 5.41 million people by 2041, requiring more than 800,000 new dwellings and around 1 million new jobs (Queensland Government 2017, 2018a, 2019). This chapter discusses some of the implications of this future population growth in SEQ. It draws together the evidence on current and future focal points for population growth in SEQ, and explores consequences for housing, housing affordability, jobs, skills, liveability, transport and commuter flows.

## 10.2 Population growth in SEQ

Between 2016 and 2020, the SEQ region added more than 300,000 new residents, with the main growth LGAs being Brisbane (88,247), Gold Coast (59,888) and Moreton Bay (40,347). However, the Ipswich LGA had the highest rate of population growth, averaging 3.5 per cent growth per annum, compared to 2.1 per cent growth for SEQ as a whole.

SEQ's recent strong growth is expected to continue over coming decades. According to the latest Queensland Government projections, SEQ is expected to add 1.64 million new residents between 2020 and 2041, and reach 5.41 million population (Queensland Government 2018a). Figure 10.1 provides further detail on the composition and location of that projected population growth.

**Figure 10.1: Projected population growth of SEQ from 2020 to 2041**



Source: BCARR analysis of Queensland Government population projections (medium series), 2018.

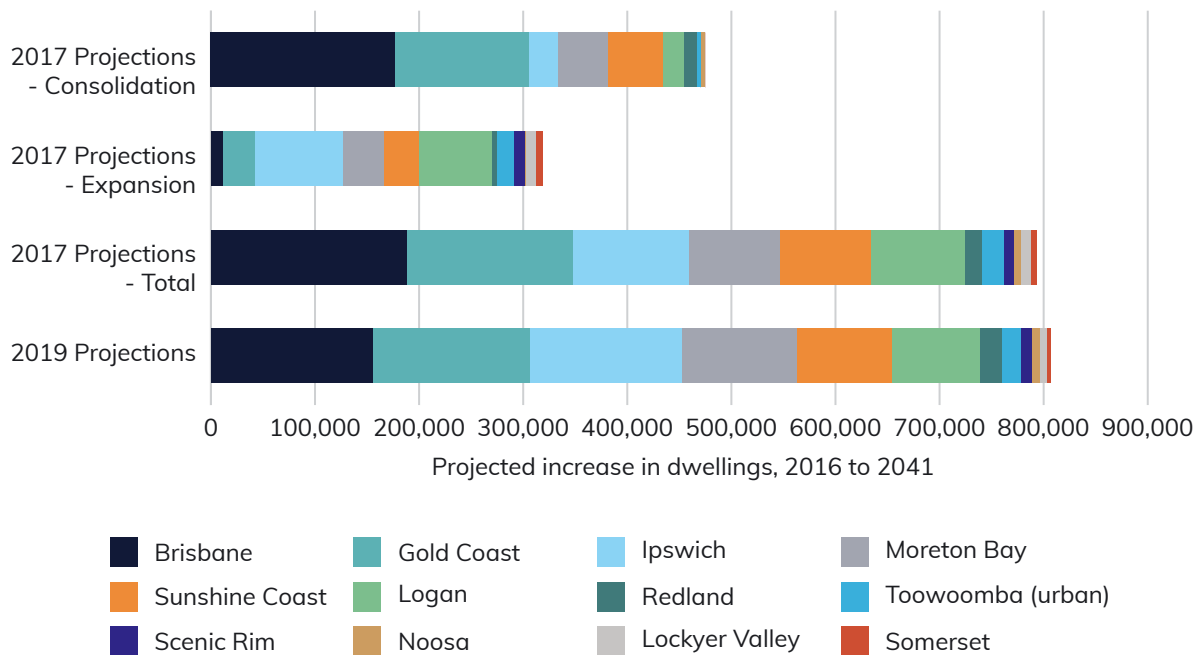
## 10.3 Implications of population growth for housing

The demand for new housing is primarily driven by new household formation, which is loosely connected to population growth. The source of population growth (i.e. migration or births) is key to whether new housing will be required, while life course changes and second home construction are other important contributors. Nevertheless, over the long-term, the locations in which population growth is expected to occur in SEQ should be quite closely connected to the locations in which dwellings growth occurs.

According to the latest Queensland Government housing projections, more than 800,000 new dwellings will be required in SEQ to accommodate its population growth between 2016 and 2041 (Queensland Government 2019). Figure 10.2 illustrates how these extra dwellings are projected to be distributed across the 12 LGAs. It presents the Queensland Government’s 2019 projections alongside the 2017 projections from *ShapingSEQ*, as only the latter include a split between consolidation and expansion areas.

According to the latest (2019) projections, the Brisbane LGA is expected to add the most new dwellings (155,200), closely followed by the Gold Coast LGA (150,900) and the Ipswich LGA (146,000). Note that this is a different order to the population projections summarised in Figure 10.1, but that simply reflects the longer time period, with the dwelling projections having a 2016 baseline.

**Figure 10.2: Projected growth in dwellings for SEQ LGAs from 2016 to 2041**



Note: In the 2019 projections, the projections for Toowoomba relate to the entire LGA, not just its urban extent. The 2019 projections do not distinguish between consolidation and expansion areas.

Sources: Queensland Government (2019, 2017).

While Figure 10.2 shows that the projected increase in dwellings for SEQ was revised slightly upwards by the Queensland Government between 2017 and 2019, there are some notable differences in the two sets of projections with respect to where the new dwellings will be located. Specifically, in the 2019 projections (relative to the 2017 projections), the Brisbane LGA is projected to accommodate around 33,000 fewer dwellings, while the Ipswich and Moreton Bay LGAs are now expected to accommodate a larger proportion of dwellings growth.

From 2016 to 2021, 59 per cent of SEQ's residential building approvals were within the existing urban area boundary, and thus reflect consolidation rather than expansion growth. This suggests that the *ShapingSEQ* consolidation target of 60 per cent is feasible in the short term. However, ongoing achievement of this consolidation target is likely to become more challenging over time as pre-identified infill opportunities are completed.

Some further implications of accommodating population growth in the way envisaged by the *ShapingSEQ* strategic plan include a shift towards more medium and higher density forms of housing and a continuation of the ongoing trend towards smaller lot sizes.

Figure 10.2 shows that consolidation development is expected to be concentrated in the Brisbane and Gold Coast LGAs. With respect to consolidation development, *ShapingSEQ* aims to focus new housing development in and around activity centres and to achieve increased residential densities in SEQ's centres (Queensland Government 2017). It also aims to deliver a greater range of 'missing middle' forms of housing, which would boost overall densities.<sup>30</sup>

In contrast, SEQ's expansion development is expected to be concentrated in the Ipswich and Logan LGAs (see Figure 10.2). Figure 10.3 presents a map of projected increases in population between 2020 and 2041, which is overlaid with the major expansion areas identified by the Queensland Government in *ShapingSEQ*. The major expansion areas are the main areas in which the Queensland Government plans to accommodate expansion (i.e. greenfields) housing development in SEQ in the period to 2041. The major expansion areas include:

- Ipswich: Springfield, Ripley, Walloon/Rosewood
- Logan: Flagstone/Flinders, Park Ridge, Yarrabilba
- Moreton Bay: Caboolture West
- Redland: Southern Redland Bay
- Sunshine Coast: Caloundra South, Beerwah East, Palmview
- Gold Coast: Coomera, Ormeau.

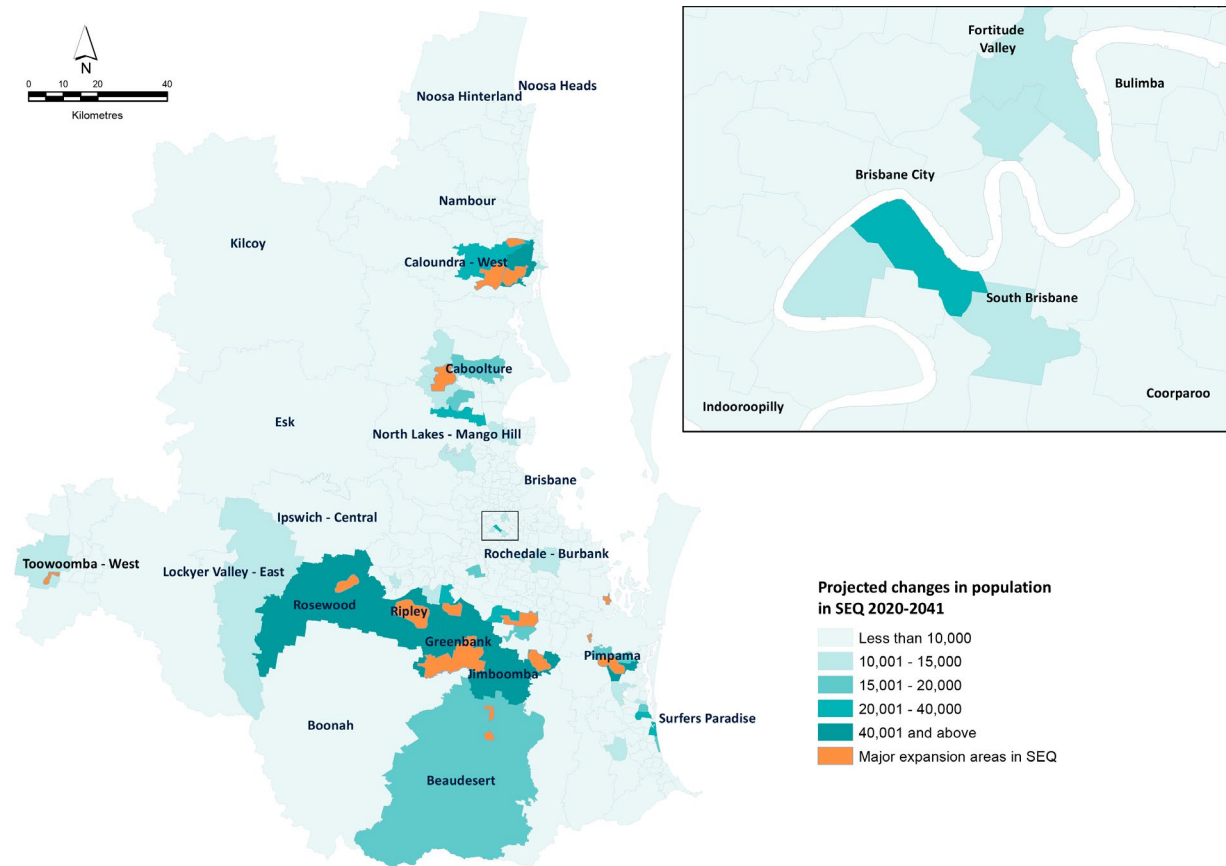
Not surprisingly, the map shows a close connection between the areas that are expected to accommodate the largest population increases to 2041 and the areas that are being planned to accommodate new greenfields housing development. However, some of these major expansion areas are expected to still have a lot of remaining capacity in 2041, particularly the Ripley Valley (30,000 extra dwellings) and Greater Flagstone (19,000 extra dwellings).

There are some supply-side risks that have recently emerged that could impact the construction of new housing in SEQ and how that aligns with targets. Rising material and labour costs and supply difficulties have created challenges across the country, with a number of significant housing construction firms ceasing operations over the last year (Raphael 2022). Skill shortages are also an issue for the industry nationally, with Labourers and Technicians and trades workers having the lowest proportion of advertised vacancies filled across all occupations (National Skills Commission 2022b). Building firms may choose to manage those risks by pivoting to smaller scale residential developments.

The SEQ population is expected to age significantly in coming decades. This ageing of the population will lead to changes in housing preferences and may result in a need for new, more diverse forms of housing. While older Australians generally prefer to age in place in the family home, some may be seeking affordable options for downsizing (Productivity Commission 2015).

30 "Missing middle' is a form of housing that offers greater density and diversity in a manner compatible with surrounding lower density residential environments. Most 'missing middle' housing is oriented toward the street or laneway. It covers housing types between detached houses and high-rise, and may include 'Fonzie' flats (a small, self-contained apartment on the same land as a house), 'plexes' (duplexes, triplexes, quadplexes etc), row/terrace housing and medium-rise apartments." (Queensland Government 2017 p44).

**Figure 10.3: Projected population increase from 2020 to 2041 and major expansion areas**



Sources: Queensland Government (2018) population projections – medium series and Queensland Government (2017).

## 10.4 Implications of population growth for liveability

This section discusses the implication of population growth for liveability. Here liveability includes access to services, as discussed in chapter 9 and housing affordability, as discussed in chapter 4.

### Access to services

Since SEQ’s future population growth is expected to be concentrated in the Ipswich, Gold Coast and Brisbane LGAs, the level of access to services experienced by existing residents of these LGAs is pertinent.

The Brisbane LGA scored highest of the 12 SEQ LGAs on the 4 access to services metrics (health, education, community and sports, and arts and culture) and the walkability metric, but was outperformed by several LGAs on access to public open space. Therefore, the liveability implications of future growth in the Brisbane LGA appear fairly positive, so long as expansion of service provision keeps pace with the growing population. It does however, highlight a need for future infill development in the Brisbane LGA not to occur at the expense of existing public open space.

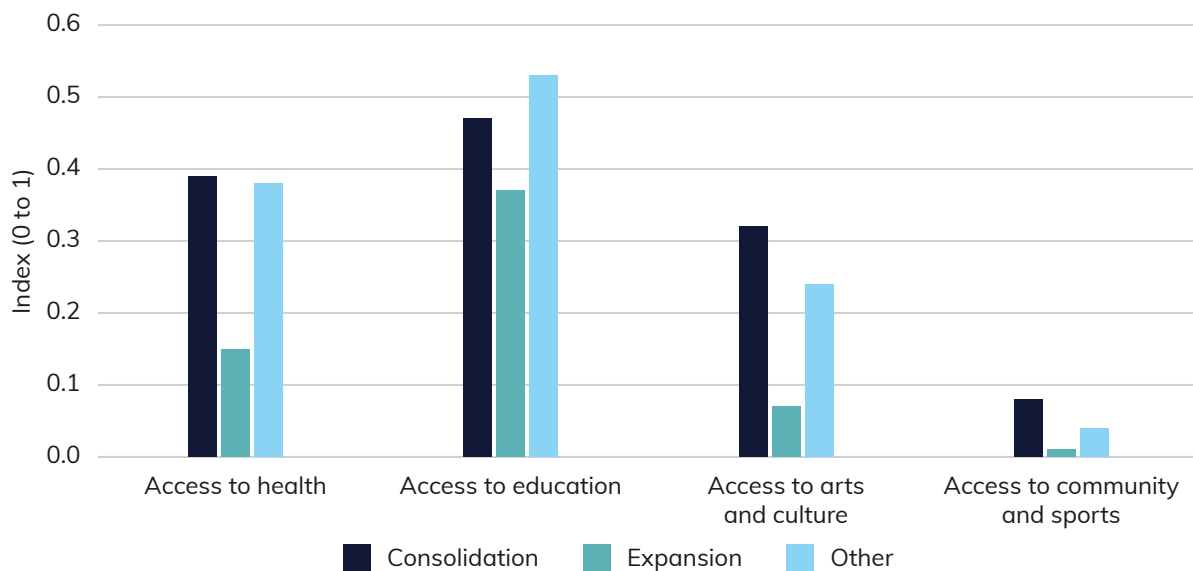
The Gold Coast LGA was ranked below Brisbane on all the metrics apart from access to public open space. However, the Gold Coast LGA typically outranked the Ipswich LGA, and ranked relatively

highly on walkability (2nd), access to public open space (3rd) and access to health services (4th). The Ipswich LGA ranked in the bottom half of the SEQ LGAs for 4 of the 6 measures, but performed relatively strongly with respect to access to education services (for which it was ranked 4th, compared to 7th for Gold Coast). The Ipswich results highlight how a significant proportion of SEQ's future population growth will be concentrated in outer suburban areas that currently offer relatively poor access to services and low walkability to local residents. This would be expected to negatively impact the quality of life of residents.

For this study, BCARR identified a set of growth SA2s that added significant population between 2016 and 2020, and categorised them as consolidation growth areas if they were within the existing urban area boundary and expansion growth areas if they were outside it. Figure 10.4 shows that the expansion growth areas scored lower than consolidation growth areas for all of the access to services indicators, reflecting a limited range of services being established in these newly developing suburbs in their early stages of development. There is less of a gap between the expansion and consolidation areas for education services than for the other types of services, reflecting the relatively early establishment of primary schools in many greenfields developments. The expansion areas also scored lower than the consolidation areas on walkability and access to public open space.

Clearly, consolidation growth has more positive outcomes than expansion growth for resident's level of access to services, access to public open space and walkability. However, this higher level of access does come at a cost, which will be discussed in the upcoming section on housing affordability.

**Figure 10.4: Access to services metrics for expansion and consolidation growth areas**



Note: Consolidation and expansion growth areas were identified at SA2 scale, based on population growth between 2016 and 2020, and using the Queensland Government's existing urban area boundary.

Source: BCARR analysis of data from the Australian Urban Observatory, Queensland Government (2017) and ABS Cat. 3218.0 (March 2021 release).

Table 10.1 presents the access to services, access to public open space and walkability metrics for the SA2s that are projected to have the largest population increases between 2020 and 2041. The consolidation growth area of Surfers Paradise performs most strongly on walkability, access to health services and access to arts and culture. The expansion areas tend to perform poorly on walkability and access to community and sports infrastructure, but have varying scores across the other metrics. Many of the expansion areas score relatively well on the access to education metric, with the SA2s that are at an earlier stage of development (i.e. Ripley, Greenbank) having a lower score than more progressed developments.

Springfield Lakes is a standout in Table 10.1, scoring higher than the other expansion areas on access to education, access to arts and culture, and walkability. Many of the other expansion areas are at an earlier stage of development, and the availability of services in these areas is likely to increase over time as the area's population expands. However, the initial residents of expansion areas will generally experience quite limited access to services, and improved alignment of growth with the establishment of services will deliver better outcomes for residents.

**Table 10.1: Access to services metrics for SA2s with top projected population increase between 2020 and 2041**

SA2	Access to health services	Access to education services	Access to arts and culture	Access to community and sports	Walkability index	Access to public open space (per cent)
Ripley	0.00	0.17	0.00	0.00	-4.18	21.71
Greenbank	0.00	0.02	0.00	0.00	-6.95	14.13
Jimboomba	0.04	0.27	0.07	0.00	-4.57	25.96
Coomera	0.15	0.41	0.08	0.00	-0.81	72.46
Rosewood	0.25	0.50	0.00	0.05	-4.03	25.49
Caloundra – West	0.19	0.20	0.16	0.00	-0.08	51.08
Springfield Lakes	0.18	0.60	0.24	0.00	0.98	80.83
Bellbird Park – Brookwater	0.11	0.42	0.21	0.00	-1.05	49.62
Surfers Paradise	0.49	0.18	0.66	0.00	5.76	76.84

Note: The four access to services metrics are an index, with values lying between 0 and 1, with higher values representing better access. In the walkability index 0 represents the mean. Growth areas identified based on Table 3.22, but the Landsborough SA2 is omitted from the table because it was not captured in the AUO dataset.

Source: BCARR analysis of data from the Australian Urban Observatory and Queensland Government (2019).

## Housing affordability

Housing affordability is considered part of liveability for this study, and incorporates rental affordability as well as home ownership/mortgage affordability.

Rental affordability is an issue that impacts a significant proportion of SEQ households, more so than home ownership affordability. Within SEQ, rental affordability issues are particularly pronounced on the Gold Coast. The Gold Coast LGA is expected to experience the second largest population increase in SEQ between 2020 and 2041, after Ipswich.

The dwelling price to income ratio provides a guide to affordability for prospective home owners. The Noosa, Sunshine Coast, Middle South and Gold Coast sub-regions have the highest dwelling price-to-income ratios and are the least affordable. The Ipswich LGA has the lowest dwelling price-to-income ratio and is more affordable. Its current affordability to prospective home owners is relevant given that the Ipswich LGA is projected to contribute the largest share of SEQ's population increase through to 2041. The key future growth areas of Ripley and Springfield have some of the lowest dwelling price-to-income ratios in SEQ.



Higher levels of amenity and better access to services will tend to be reflected in higher land and house prices. Land is priced more highly around the city centre and declines with distance from the CBD (Kulish, Richards and Gillitzer 2011). The inner and middle rings of Brisbane have the best access to services and walkability in SEQ, while access to services is lower in Brisbane's outer ring and the Rest of SEQ.

Housing affordability, and rental affordability in particular, is a problem impacting many SEQ residents. Interest rate increases in 2022 have created some uncertainty around the longer-term impacts on housing affordability. For SEQ, the underlying drivers of housing demand remain strong, with no sign of migration flows from the southern states abating.

## 10.5 Implications of growth for employment and skills

### Where in SEQ will those jobs be located?

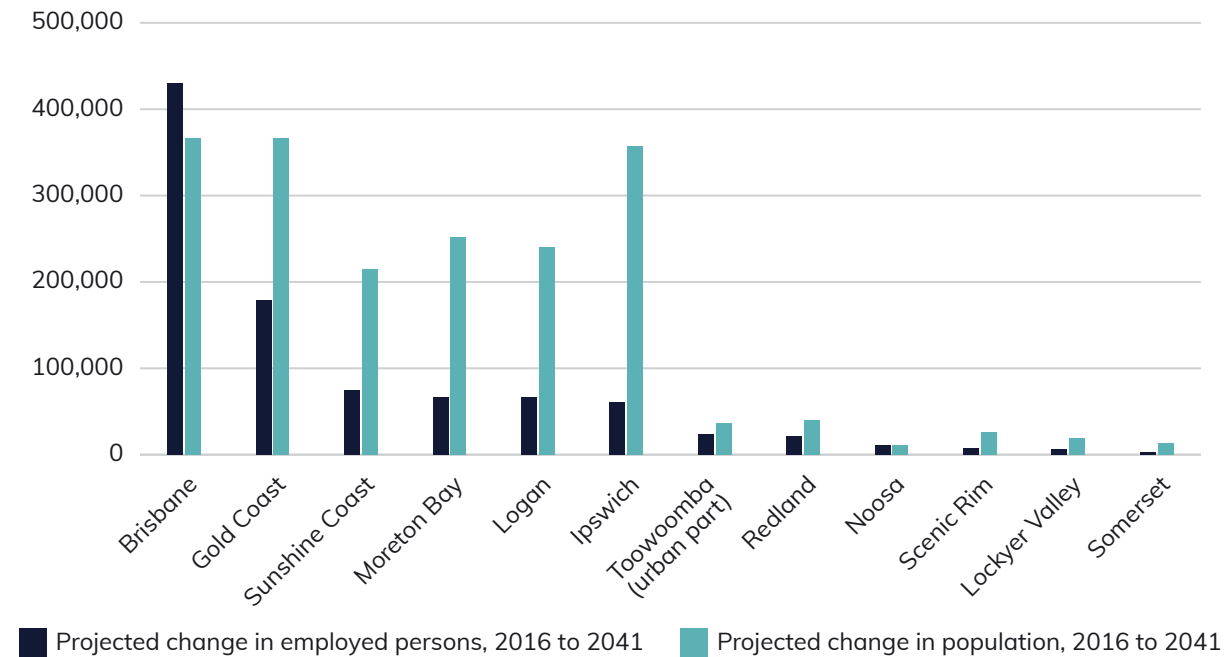
*ShapingSEQ* anticipates that changing technologies will cause a fundamental shift in the locational distribution of employers and jobs in SEQ over time (Queensland Government 2017). It aims to locate more jobs where people live and in Regional Economic Clusters (RECs), the regional activity centre network, Knowledge and Technology Precincts (KTPs) and Major enterprise and industrial areas (ibid). More recently, the SEQ Economic Foundations paper identified the five economic corridors that will be key to realising the ambitions for employment growth in SEQ. These corridors link the RECs, key urban growth areas and export gateways, and are mapped in Figure 5.9.

*ShapingSEQ* contains some guidance on the potential spatial distribution of jobs growth in SEQ through to 2041 (Queensland Government 2017). These employment growth projections are on a place of work basis and were prepared by Queensland Treasury in 2016, using a 2010–11 baseline. They do not reflect up-to-date information on the SEQ economy, and need to be treated with corresponding caution. Nevertheless they do provide some indication of where employment growth might be expected to be concentrated over the long-term.

Figure 10.5 presents the projected change in employment for the 2016 to 2041 period and compares it to the Queensland Government's population projections from 2018. Between 2016 and 2041, SEQ's projected growth in employment is 0.95 million persons (Queensland Government 2016). While the Brisbane LGA is expected to have a similar population increase to the Ipswich and Gold Coast LGAs between 2016 and 2041, Figure 10.5 shows that it is expected to accommodate a much larger proportion of jobs growth than the other two LGAs.

- The Brisbane LGA is expected to contribute 19 per cent of SEQ's population growth between 2016 and 2041, but it is expected to accommodate 45 per cent of employment growth (on a place of work basis).
- Gold Coast is expected to contribute 19 per cent of both population and jobs growth.
- The outer suburban growth LGAs of Moreton Bay, Logan and Ipswich (as well as the Sunshine Coast), are expected to contribute a much smaller share of SEQ's jobs growth than its population growth.

**Figure 10.5: Projected growth in employment and population from 2016 to 2041**



Note: Employment projections are on a place of work basis. The employment projections were prepared prior to the population projections, and will reflect different inputs and assumptions. Projected population growth differs from that presented in Chapter 3 as a 2016 baseline has been used to align with the employment projections (whereas a 2020 baseline is used in Chapter 3, e.g. Table 3.20).

Sources: Queensland Government 2018 population projections (medium series); Queensland Government 2016 employment projections.

This imbalance suggests that many of the future new residents of these outer LGAs will need to spend significant time commuting into the Brisbane LGA to access employment. The imbalance is particularly pronounced for the Ipswich LGA which is projected to account for 18 per cent of SEQ’s total population growth but just 6 per cent of employment growth between 2016 and 2041. The results highlight the importance of initiatives to facilitate the development of employment precincts in these outer suburban growth areas, in order to better provide employment opportunities for local residents. Relevant examples include the Ipswich, North Lakes-Mango Hill and Yatala-Stapylton-Beenleigh RECs, and in the longer term the Bromelton State Development Area.

Chapter 5 showed how jobs are not evenly distributed throughout SEQ, but instead are concentrated in Inner Brisbane and in suburban industrial precincts and specialised centres. Some LGAs have plenty of jobs, and attract commuters from further afield, while others do not have sufficient jobs for local residents. There are 6 SEQ LGAs which are expected to add over 180,000 residents between 2020 and 2041 (with the remaining 12 LGAs each adding less than 35,000 new residents). Table 10.2 shows the 2016 ratio of local workers to employed residents for these six significant growth LGAs. The Brisbane LGA is home to many more jobs than needed to employ its local residents, while the Gold Coast and Sunshine Coast both have only a slight deficit of local employment opportunities.

Moreton Bay currently offers only 60 local jobs for every 100 employed residents, and so the projected growth of 181,522 new residents will present significant challenges in terms of boosting local employment opportunities, pressures on the transport network (particularly the key routes to central Brisbane) and impacts on the quality of life of residents. Both Logan and Ipswich LGAs currently offer around 70 local jobs for every 100 employed residents, and the substantial population growth projected for these LGAs may pose similar challenges. However, the Logan LGA currently has relatively good commuter connectivity, enabling residents to access many jobs in neighbouring LGAs within a 45 minute drive.

**Table 10.2: Ratio of workers to employed residents in LGAs with significant projected population increases from 2020 to 2041**

LGA	Ratio of local workers to employed residents, 2016	Projected population increase, 2020 to 2041
Ipswich	0.74	327,804
Gold Coast	0.90	308,495
Brisbane	1.25	278,150
Logan	0.68	212,342
Moreton Bay	0.60	210,963
Sunshine Coast	0.86	181,522

Note: The ratio of local workers to employed residents averages less than one, mainly because about 5 per cent of workers do not have a fixed address of work.

Source: BCARR analysis of ABS Census of Population and Housing, 2016 and Queensland Government 2018 population projections (medium series)

The strong employment growth forecast for the Professional, scientific and technical services and Health care and social assistance industries (National Skills Commission 2021; Queensland Government 2020a and 2016) is likely to flow through to jobs growth in the Brisbane Capital City precinct and health-oriented employment precincts throughout SEQ (e.g. South Brisbane, Chermside, Ipswich, Southport).

## What types of jobs will be created?

Significant population growth typically flows through to create employment growth in population-serving industries, such as Retail trade, Accommodation and food services, Education and training, and Health care and social assistance. Employment in residential building construction, an important component of the Construction industry, is also partly dependent on population growth. Therefore, over the period to 2041, we should expect to see ongoing growth in these industries in the six growth LGAs listed in Table 10.2, and particularly in Ipswich and Gold Coast, which have the largest projected population growth.

Between 2016 and 2041, the Queensland Government predicts that the main industry source of employment growth in SEQ will be Health care and social assistance (227,300), followed by Professional, scientific and technical services (160,000) and Construction (130,100) (Queensland Government 2016). Professional, scientific and technical services is expected to be the main source of growth for employed persons working in the Brisbane LGA. In Gold Coast, Sunshine Coast, Ipswich and Moreton Bay, the Health care and social assistance industry is expected to be the main source of employment growth. In the Logan LGA, the Construction industry is expected to be the main contributor (ibid).

Further sets of state government projections focus on how the skills of the Queensland workforce will change over a five-year timeframe, identifying that Professionals show the most employment growth of all occupations (Queensland Government 2020a), and showing strong growth in those with bachelor degrees and higher qualifications (Queensland Government 2021). Currently, jobs for those with university qualifications are heavily concentrated in the Brisbane LGA (and specifically in the Inner Brisbane ring). However, the future population growth slated for the remaining 11 SEQ LGAs will increasingly involve university-qualified workers, many of whom would prefer to work close to home rather than commute into inner Brisbane for work. In Sydney, office parks (e.g. Norwest) have been set up in suburban locations where they can gain access to an educated and skilled workforce, and this may become an option in SEQ in the future as the resident workforce of the growth LGAs becomes increasingly skilled.

In general, countries or cities with a greater portion of their population with higher educational qualifications and skilled workforces see faster economic growth than countries or cities with less-educated and less-skilled workers (Tuli et al., 2019). With technological advancement, cities are becoming more competitive around the world. With a better-qualified and higher-skilled workforce, SEQ will be better prepared to adopt technological advancements.

The pandemic was also associated with an increase in working from home, and while the incidence of working from home has declined from its initial COVID peak, Chapter 7 showed it remained above pre-pandemic levels in SEQ into early-2022. The incidence of working from home is significantly higher for the Brisbane LGA than the other SEQ LGAs. Working from home capability and uptake tends to be highest for Professionals, Managers and Clerical and administrative workers (Vij et al. 2021). While it is not yet clear where things will settle post-pandemic, there is the potential for working from home arrangements to have an expanded role into the future, particularly for traditionally office-based jobs.

## 10.6 Implications of growth for commuter transport and connectivity

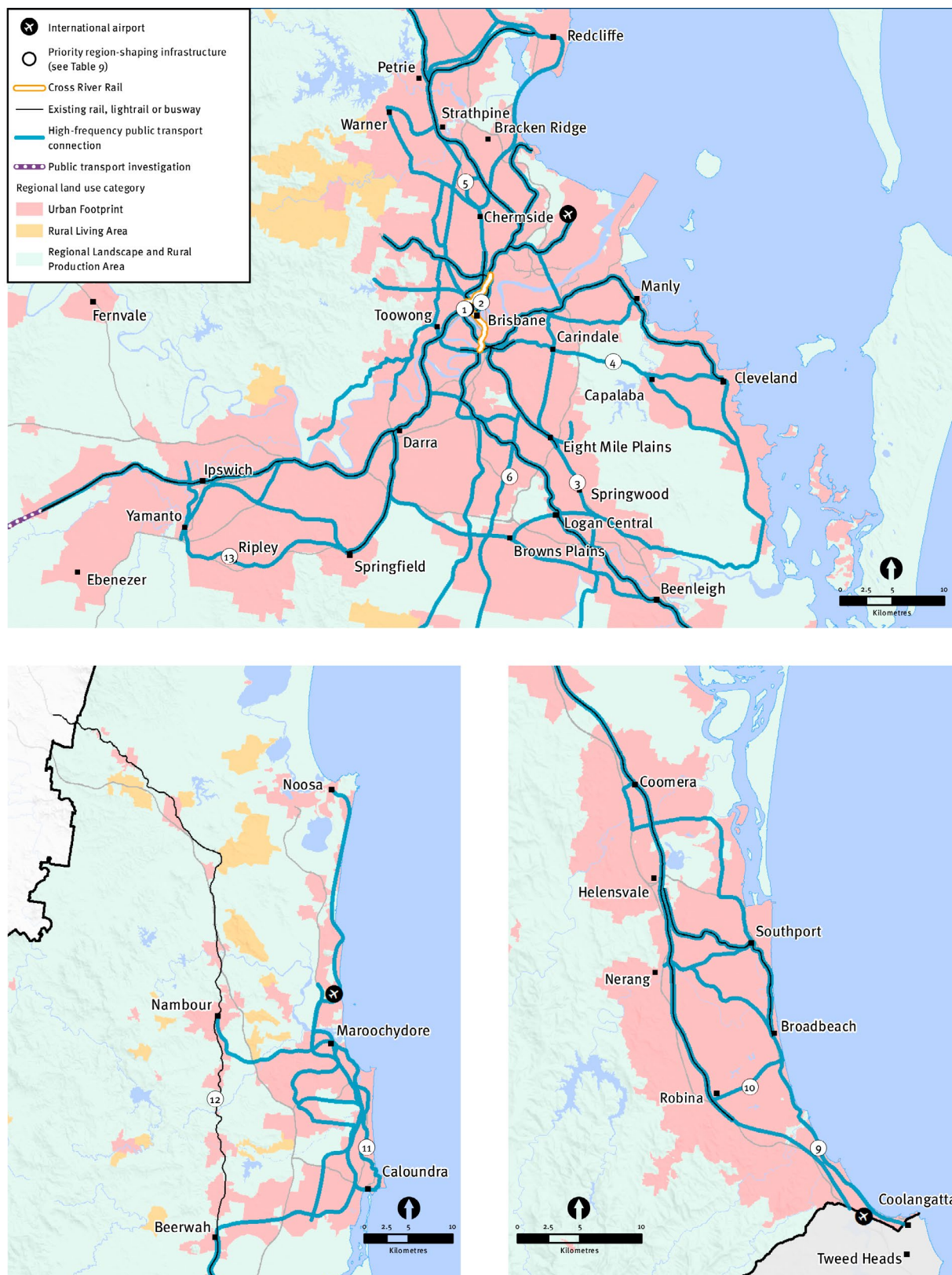
Commuter travel in SEQ is highly car dependent. The Brisbane LGA is the least car dependent of the SEQ LGAs, with a 70 per cent private vehicle mode share and an 18 per cent public transport mode share for the journey to work (see Table 7.3). All of the remaining significant growth LGAs (i.e. Gold Coast, Ipswich, Logan, Moreton Bay and Sunshine Coast) are relatively car dependent, with a private vehicle mode share of between 83 and 87 per cent and a public transport mode share of between 2 and 9 per cent.

As Figure 10.5 showed, the strong population growth in the Ipswich, Moreton Bay, Logan and Sunshine Coast LGAs through to 2041 is expected to generate significant out-commuting by residents of these LGAs, due to limited new job creation within these LGAs. This will create significant pressures on the existing transport network, including the motorway connections to central Brisbane, while likely increases in congestion and travel times will impact the quality of life of residents. Such impacts could be mitigated by investment in the capacity and efficiency of the transport network or by facilitating the development of employment precincts within those LGAs.

*ShapingSEQ* aims to prioritise public transport and active transport, so that people can move around the region in a healthier, more efficient and sustainable way (Queensland Government 2017). Figure 10.6 shows the vision for 2041 of a strategic transport system that connects people, places and employment efficiently with high-frequency passenger transport services. That vision leads to long-term public transport investment priorities that include:

- Cross River Rail
- Frequent public transport services to major expansion areas, such as Caboolture West and Yarrabilba
- Ipswich to Springfield public transport corridor
- Extension of light rail from Broadbeach to Coolangatta and new connection linking Broadbeach to Robina
- Establishing high frequency public transport services from Maroochydore to Caloundra to Beerwah (ibid).

Figure 10.6: ShapingSEQ’s vision for the strategic public transport system in 2041



Source: ShapingSEQ Figure 4a (Queensland Government 2017).

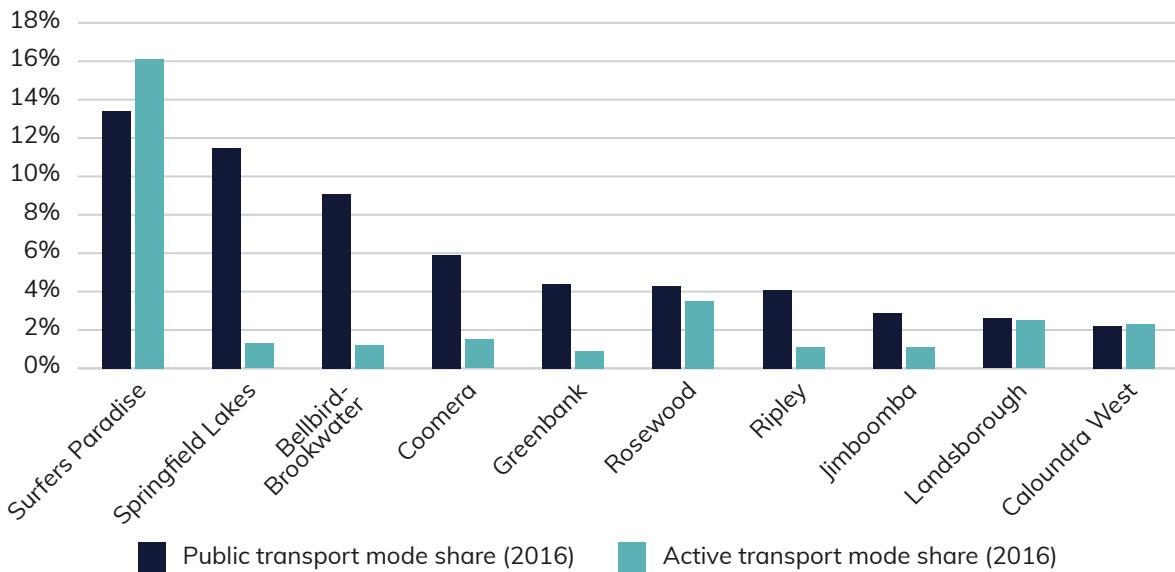
Figure 10.7 shows the public transport and active transport mode shares as of 2016 for the 10 SA2s that are projected to add the most population between 2020 and 2041. These growth SA2s can be grouped into 3 different categories based on their development type and public transport use:

- Higher density infill development with above-average public transport and active transport use: Surfers Paradise
- Expansion area with above-average public transport use: Springfield Lakes and Bellbird-Brookwater<sup>31</sup>
- Expansion area with limited public transport use: Ripley, Rosewood, Greenbank, Jimboomba, Coomera, Landsborough and Caloundra West.

Surfers Paradise is obviously quite a different case from the other growth SA2s. Its high-density housing coupled with significant local employment is conducive to active travel and it is well served by the frequent Gold Coast Light Rail.

The opening of the Springfield Railway Line in 2013 provides residents of Springfield Lakes and Bellbird-Brookwater with a frequent, high-capacity public transport option to central Brisbane. While these two growth areas already have a significant population base, much more growth is expected. The initial investment in the rail connection is already reflected in the commuting behaviour of local residents, in contrast to the other expansion SA2s in which residents are more reliant on cars to access their jobs.

**Figure 10.7: Public transport and active transport mode shares for top ten future growth areas**



Note: Growth areas identified based on Table 3.22.

Source: BCARR analysis of ABS Census of Population and Housing place of usual residence data.

Numerous studies have highlighted the limited and/or delayed delivery of transport infrastructure and services as a major challenge for new greenfields suburbs (Kroen et al 2021; Victorian Auditor General 2013). Delbosc et al. (2015) highlights the need for early delivery of public transport services in new fringe areas, as transparency about when services will be delivered will enable home buyers and renters to make informed decisions about what locations will support their family’s needs. Where public transport is not available, car-based commuting behaviours can

31 While Bellbird-Brookwater does not exceed the SEQ public transport mode share of 10.0 per cent, it is well above the average for the Outer ring of 7.8 per cent.

become entrenched. To help manage the impacts of future population growth on SEQ's road network, consideration should be given to early investment in new or upgraded public transport connections to major expansion areas.

Public transport use declined in SEQ, and other Australian cities, during the pandemic due to health and safety reasons, and has not yet returned to pre-pandemic levels. Public transport patronage in SEQ stood at 73 per cent of pre-pandemic patronage, as of August 2022 (Bailey 2022). The increased public concerns about the health and safety of public transport use are something of a setback to the *ShapingSEQ* plans for prioritising public transport, that would not have been foreseen back in 2017. However, it is not yet clear how persistent this behavioural change will be.

Table 10.3 presents some summary measures of commuter connectivity for the six significant growth LGAs. The Brisbane LGA is relatively self-contained, with residents having good job access and relatively short commuting distances. The Gold Coast and Sunshine Coast LGAs are also relatively self-contained, but commuting distances are higher and residents only have access to a small proportion of SEQ's jobs. The Ipswich, Logan and Moreton Bay LGAs all have much lower self-containment, with around 40 per cent of employed residents commuting into the Brisbane LGA for work. Commuting distances are correspondingly high, but residents can access around half of SEQ's jobs within a 45 minute commute. This reinforces the previous point that the large-scale population increases predicted for these three LGAs will be likely to generate a significant increase in long-distance commuter flows towards the Brisbane LGA in the morning peak (and reverse flows in the afternoon peak), unless the spatial distribution of SEQ's employment is fundamentally transformed.

**Table 10.3: Selected indicators of commuter connectivity for SEQ's significant growth LGAs**

LGA of residence	Self-containment rate, 2016 (per cent)	Other key destinations (share >5 per cent), 2016	Average commuting distance, 2016 (km)	30-minute job access, 2019 (per cent)	45-minute job access, 2019 (per cent)
<b>Brisbane</b>	85	nil	12	48	65
<b>Gold Coast</b>	78	Brisbane (7 per cent)	19	13	22
<b>Ipswich</b>	47	Brisbane (40 per cent)	21	16	51
<b>Logan</b>	40	Brisbane (40 per cent), Gold Coast (7 per cent)	21	23	61
<b>Moreton Bay</b>	48	Brisbane (41 per cent)	21	13	41
<b>Sunshine Coast</b>	78	nil	21	6	9

Note: The self-containment rate is the proportion of employed residents of the LGA who have a fixed work address in the LGA. The 30 and 45 minute job access measures capture the proportion of total SEQ jobs that can be accessed by residents of the LGA by road within the specified time.

Source: BCARR analysis of ABS Census of Population and Housing, 2016, as presented in Chapter 8.

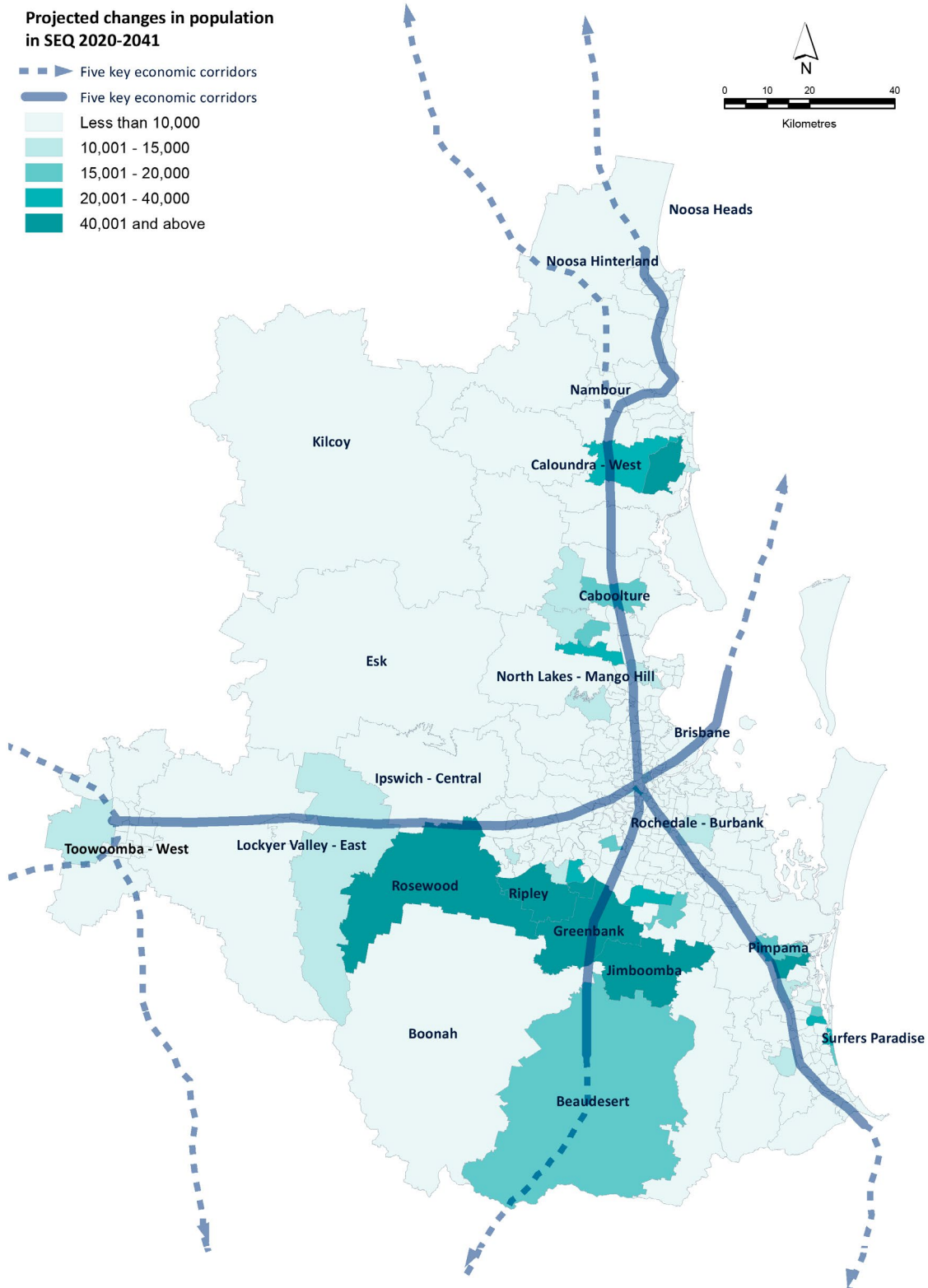
The analysis in Chapter 8 highlighted how the expansion growth areas tended to have much lower 30 minute job access than either the consolidation areas or the remaining SA2s. However, the expansion areas were not at a disadvantage with respect to 45 minute job access. Over the 20 year period to 2041, as the residential growth front shifts further outwards, this may no longer remain the case.

Figure 10.8 presents the projected population increase for SA2s through to 2041, and overlays that with the five key employment corridors from the SEQ Economic Foundations paper. These corridors contain nearly all the major employment precincts of SEQ as identified in Chapter 5. Some of these growth SA2s are directly located on one of the corridors, and all are located within a 10km drive of a corridor.

The Jimboomba and Greenbank SA2s are an interesting case, as although the planned Greater Flagstone and Yarrabiliba residential growth areas are located along the South-West corridor, this corridor is an emerging one, and does not currently contain any significant employment precincts.

The limited current availability of jobs is reflected in employed residents travelling an average distance of 34km to work from Jimboomba and 30km from Greenbank in 2016. The sequencing of residential development at Greater Flagstone and Yarrabilba with economic development at the Bromelton State Development Area will be a key driver of transport and commuting outcomes.

**Figure 10.8 Projected increase in population of SEQ SA2s from 2020 to 2041 and five key employment corridors**



Source: BCARR analysis of Queensland Government 2018 population projections – medium series and Figure 4.9 from the SEQ Economic Foundations paper (Queensland Government 2018a).



## 10.7 Conclusion

This report aims to provide an evidence base on the spatial distribution of population and population growth, housing, jobs and skills, connectivity and liveability within SEQ. This research will support the process of sustainably accommodating an additional 1.64 million people through efficient land use, housing diversity and residential density.

The evidence base built for this study can be used to monitor how population, jobs, connectivity and liveability evolve in response to government initiatives. This study provides evidence of recent spatial development trends in SEQ and compares the reality of those trends to the strategic direction for the region's growth set out in the Queensland Government's recent regional plans. In addition, the report also identifies some implications of this population growth for housing, jobs, transport, connectivity and liveability.

This report summarises the population distribution, population growth and population projections for the SEQ region. Brisbane, Gold Coast and Moreton Bay LGAs have contributed significantly to recent population growth. The most densely populated sub-regions were in Inner Brisbane and the Gold Coast, and the largest increases in density also happened in these two sub-regions. By 2041 the population is projected to reach 5.41 million, a 44 per cent population increase over 21 years. Much of this additional population is projected to be accommodated in the Ipswich, Gold Coast and Brisbane LGAs. Also, SEQ is projected to have a much older population by 2041.

Currently, most of the LGAs in the SEQ region are dominated by separate, low-density, detached housing types, except in the Brisbane, Gold Coast and Sunshine Coast LGAs. Between 2016 and 2021, 59 per cent of residential building approvals were for separate houses in SEQ, which indicates some shift towards higher density forms of residential development since 2016. This shift has been most pronounced in the Brisbane and Gold Coast LGAs. Median lot sizes are also getting smaller across the SEQ region.

SEQ is expected to add 60 per cent of its new dwellings through consolidation rather than expansion between 2016 and 2041. The Brisbane and Gold Coast LGAs are expected to add the most dwellings through urban consolidation, while Ipswich and Logan are likely to add the most dwellings through urban expansion. These two LGAs – Ipswich and Logan – have the most available land identified for future development.

Jobs are heavily concentrated in Inner Brisbane. As of 2016, 48 per cent of SEQ's employed persons had a place of work in the Brisbane LGA and 16 per cent worked in the Gold Coast LGA. The outer suburban LGAs of Redland and Moreton Bay had insufficient jobs to employ local residents. Between 2016 and 2021, the Gold Coast, Inner Brisbane and Ipswich SA4s had SEQ's strongest growth in employed residents.

The Brisbane LGA is expected to accommodate 45 per cent of SEQ's jobs growth between 2016 and 2041, despite contributing only 19 per cent of SEQ's population growth. The Moreton Bay, Logan and Ipswich LGAs are expected to contribute a much smaller share of SEQ's jobs growth than its population growth. The implications of this spatial imbalance include more lengthy commutes and increased congestion. The results highlight the importance of initiatives to improve transport connections and facilitate the development of employment precincts in these suburban growth areas.

The Health care and social assistance industry is the top employing industry in SEQ, except in Brisbane Inner City and Brisbane West, where Professional, scientific and technical services is the top employing industry. The industries with the largest projected employment increases in SEQ from 2016 to 2041 are Health care and social assistance, Professional, scientific and technical services and Construction.

Inner Brisbane has the most skilled workforce in the SEQ region, with the highest proportions of Managers and Professionals. Gold Coast has had the largest increase in Managers and Professionals over the last 5 years, followed by Inner Brisbane. Professionals are projected to have the most significant increase of all occupations by 2024. SEQ is also projected to become

more educated in the future, with a large increase of people with Bachelor's degrees and higher qualifications. With a more educated and higher-skilled workforce, SEQ will be better prepared to adopt technological advancements.

In terms of transport, private vehicle was the most dominant commuter transport mode and public transport was less widely used in SEQ. Inner Brisbane residents used public transport the most. As mentioned earlier, Inner Brisbane has the highest concentration of employment too. This is a common trend in Australian cities and most of the developed nations in the world, and SEQ is not an exception. The areas of SEQ that are projected to grow most strongly over the next two decades typically have very low current public transport use, and there may be a role for timely investments in public transport to these areas to help manage the impacts of growth on the existing road network.

Public transport and private vehicle use both declined dramatically in 2019–2020 due to the COVID–19 pandemic outbreak and associated restrictions on movement, and public transport use has not yet returned to pre-pandemic levels. Similarly, while the incidence of working from home has dropped from its peak during the pandemic, it remains well above pre-pandemic levels.

Across the 12 LGAs of SEQ, over 70 per cent of employed residents work within their LGA of residence, with Toowoomba and Brisbane LGAs possessing the highest self-containment rates. Employed residents of Outer Brisbane and the Rest of SEQ experienced significantly longer average commuting distances than residents of Inner Brisbane. The available congestion metrics show that congestion in the Gold Coast is similar to that in Brisbane, but the Sunshine Coast has relatively low congestion levels.

The Brisbane LGA scored highest for most of the access to services indicators. The most highly liveable areas in SEQ, in particular, were centred around Middle and Inner Brisbane. Outer Brisbane lagged behind for many of the access to services indicators. The expansion growth areas scored lower than consolidation growth areas for all six liveability indicators, reflecting expansion areas not yet establishing or attracting a full range of services. This is a common scenario in Australia, where houses are laid out first, then social and other services flow with a significant lag, and SEQ follows the same pattern.

Housing affordability varies across SEQ, but compared to rental stress, mortgage stress is low. The Gold Coast LGA is the least affordable for renters, while the Logan and Scenic Rim LGAs have the highest proportion of households with mortgage stress. The available evidence suggests that rental affordability issues in the Gold Coast and some other SEQ locations have become more pronounced over the last 12 months. Housing affordability (as measured by the ratio of house prices to income) is lower in Inner Brisbane and the Gold Coast and more affordable in outer Brisbane. This, however, is a trade off. If people would like to live closer to the established areas and have good access to services, they are likely to need to pay more for housing. This is also a common picture in Australia, and SEQ is not an exception.

The implications of adding 1.64 million new residents to SEQ over the next two decades are far-reaching. This chapter is by no means comprehensive, but has highlighted some of the implications for housing, jobs and skills, transport and connectivity, and liveability in SEQ, as well as some of the inter-connections between these factors. A particular focus has been exploring the spatial distribution of growth throughout SEQ and how its impacts are likely to play out spatially.

## 10.8 Limitations and future directions

The report does not make use of the 2021 ABS Census of Population and Housing data, from which initial data was released in June 2022, with further data released in October 2022. The majority of this report was drafted before the release of the relevant census data, and analysis of the 2021 census data was outside of the scope of the study.

A range of issues lie beyond this study's scope, including digital connectivity, freight movements, sustainability (including biodiversity) and major infrastructure projects (e.g. rail, road, water). There is also very limited analysis of urban planning, governance and leadership issues in this report. In order to fit the project within available resourcing, it was necessary to focus on a targeted set of research questions that fell within BCARR's areas of expertise. Through the consultation process for this research report, there was also interest expressed in topics such as community housing and the implications of an ageing population, that lie beyond the scope of the existing study.

The COVID-19 pandemic has had major impacts on working patterns, international and internal migration flows, skill shortages, fuel costs and housing affordability in Australia and throughout the developed world. This Department has partnered with other organisations to conduct research into the future of remote work arrangements (Vij et al. 2021) and post-pandemic settlement patterns (iMOVE 2022). BCARR will use this and other research to monitor the ongoing and expected future impacts for SEQ and other Australian cities.

