CHAPTER 9

LIVEABILITY

Key points

- This chapter presents data on three key indicators of liveability from the Australian Urban Observatory (AUO): access to services and social infrastructure (including health, education, arts and culture infrastructure, and community and sports infrastructure), walkability and access to public open space.
- In 2018, for all of the social infrastructure indicators, Brisbane LGA achieved the highest scores (0.47 for access to health infrastructure, 0.65 for education, 0.34 for arts and culture and 0.08 for community and sports – see Box 9.2).
- Toowoomba consistently performed well on all of the social infrastructure measures: ranking second for access to education (0.55) and arts and culture (0.29); and third for access to health (0.35) and community and sports infrastructure (0.05).
- Of the other LGAs, Somerset did well for access to health infrastructure (0.36) and Scenic Rim did well for access to community and sports infrastructure (0.05). Both of these LGAs came second only to Brisbane on these indicators.
- For all of the social infrastructure measures, Inner Brisbane achieved the best results, followed by Middle Brisbane. The expansion growth areas (new and developing areas) scored lower than consolidation (infill) growth areas and other (non-growth) areas.
- In 2018, the LGAs that scored highest on the walkability index were Brisbane (1.29) and Gold Coast (0.48). The LGAs that scored lowest were Scenic Rim (–3.58), Somerset (–4.04) and Lockyer Valley (–5.40). SEQ achieved a score of 0.15 (see Box 9.3).
- Inner Brisbane scored much higher on the walkability index (3.29) than the next highest region, Middle Brisbane (0.59). Outer Brisbane was the least walkable region (–0.82).
- The expansion growth areas scored lower than consolidation growth areas and other areas for walkability (1.12, 1.69 and 0.09, respectively).
- In 2018, 54.5 per cent of dwellings in SEQ had access to public open space. Redland, Noosa and Gold Coast residents had the best access to public open space (64.9 per cent, 60.7 per cent and 58.7 per cent of dwellings, respectively).
- Inner Brisbane scored lowest on this indicator (52.3 per cent). Middle and Outer Brisbane both scored 55.1 per cent.
- The expansion growth areas scored lower than consolidation growth areas for access to public open space, but slightly higher than other areas (56.5 per cent of dwellings in expansion areas had access to public open space, compared with 58.4 per cent of dwellings in consolidation areas and 53.6 per cent in other areas).
- Overall, at the LGA scale, Brisbane scored highest on the access to services and walkability metrics, but was outperformed by Redland, Noosa, Gold Coast and Moreton Bay on access to public open space. In relation to the Brisbane rings, Inner Brisbane scored highest on access to services and walkability metrics, followed by Middle Brisbane. Outer Brisbane achieved the lowest scores for these indicators, however, for access to public open space it did slightly better than Inner Brisbane and was comparable with Middle Brisbane.
- The expansion growth areas scored lower than consolidation growth areas for all of the indicators, but did slightly better than other areas for access to public open space.

9.1 Introduction

Liveability is not defined consistently in the research literature. It may include factors such as access to services and amenities, availability of public open space, walkability, housing affordability and social connectedness.

This chapter presents data on three key indicators of liveability from the Australian Urban Observatory (AUO) (Box 9.1): access to services and social infrastructure (including health, education, arts and culture, and community and sports infrastructure), walkability, and access to public open space. Access to public open space and walkability are important as they provide physical activity and recreation opportunities and facilitate social interaction. These factors can have a positive impact on physical and mental health. Access to health and education services are important to all citizens, and people must have access to these in the areas in which they live. Arts and culture, and community and sports infrastructure provide opportunities for social engagement and community participation. These can be vital factors in attracting and retaining people and ensuring vibrant and sustainable communities.

This chapter will examine each of these indicators in turn. Data are presented by LGAs, BCARR rings and sub-regions, SA2s, and growth areas (for details, please see chapters 1 and 4, sections 1.3 and 4.3). As described in Chapters 1 and 4 (sections 1.3 and 4.3), SEQ growth areas have been divided into 'consolidation' and 'expansion' areas. Consolidation is development occurring on land inside the existing urban area boundary, previously known as 'infill development' . Expansion is development occurring on land outside the existing urban area boundary, previously known as 'greenfield' development. As defined in *ShapingSEQ* (Figure 32, Queensland Government 2017), the existing urban area is a statistical boundary used to measure consolidation and expansion development.

Moreton Bay is a diverse LGA and has been divided into Moreton Bay North and Moreton Bay South. This enables a more nuanced analysis of the characteristics of this LGA. Moreton Bay North consists of SA2s falling under 313 Moreton Bay-North (SA4) (except for Kilcoy, which is part of Somerset), and Moreton Bay South consists of SA2s belonging to 314 Moreton Bay-South (SA4).

Box 9.1: What is the Australian Urban Observatory and liveability data?

The Australian Urban Observatory (AUO) is a digital platform that measures and maps key aspects of liveability across Australia's 21 largest cities. It is located within the Centre for Urban Research at RMIT University.

The indicators use OpenStreetMap road network and points of interest data, and address points from the Geocoded National Address File (G-NAF) to identify and measure proximity to destination points.

The AUO covers urban areas of SEQ, that is, areas that are defined as 'urban' or 'other urban' according to the ABS classification of Section of State (SOS). Areas are only included if they have at least 5 dwellings and more than 10 people at the Mesh Block level. Areas where people do not live, such as parklands, industrial estates and commercial areas are excluded.

Only a small proportion of the Mesh Blocks in the regional LGAs of Lockyer Valley, Scenic Rim and Somerset are captured due to their rural nature. Therefore, only the urban parts of these LGAs are covered in this chapter.

More information about the AUO and the methodology used to compile the liveability indicators can be found on the AUO website: https://auo.org.au/about/

Housing affordability is another important component of liveability, and while it is not covered in this chapter, housing affordability was analysed in some detail in Chapter 4. To gain a broader perspective on liveability, the results of this chapter should be considered in conjunction with the housing affordability findings from Chapter 4.

9.2 Access to services: social infrastructure

This set of indicators consists of four types of social infrastructure: health, education, arts and culture, and community and sports. These are measures of physical proximity only and do not cover factors such as quality, cost or affordability. See Box 9.2 for information on how these indicators are measured. Each indicator will be discussed in turn.

Box 9.2: How is access to social infrastructure measured?

The table below shows the types of services (destination points) that are included in the Social Infrastructure Index developed by the AUO. Binary indicators were used to record the presence (=1) or absence (=0) of the 16 types of social infrastructure destinations (Davern et al. 2017). The index has been divided into four subdomains: arts and culture (3 service types); community and sports (3 service types); education (4 service types) and health (6 service types). The maximum score that can be obtained for health infrastructure is 6 as there are 6 different service types, the maximum that can be obtained for education is 4, and the maximum for both arts and culture and community and sports is 3. For this report, BCARR have scaled the scores to a value between 0 and 1 to allow for comparison between indicators.

Infrastructure type	Destination	Distance
Arts and culture infrastructure	Museum/Art gallery	3200m
	Cinema/Theatre	3200m
	Library	1000m
Community and sports infrastructure*	Community centre	1000m
	Public swimming pool	1200m
	Sports facility	1000m
Education infrastructure	Childcare	800m
	Out of school hours care	1600m
	Government primary school	1600m
	Government secondary school	1600m
Health infrastructure	Residential aged care facility	1000m
	Dentist	1000m
	General practitioners (GP)	1000m
	Maternal, child, family health centre	1000m
	Other community health care centre	1000m
	Pharmacy	1000m

* Private sport and recreation services are not included in this indicator.

Access to health infrastructure

Access to health infrastructure: SEQ LGAs

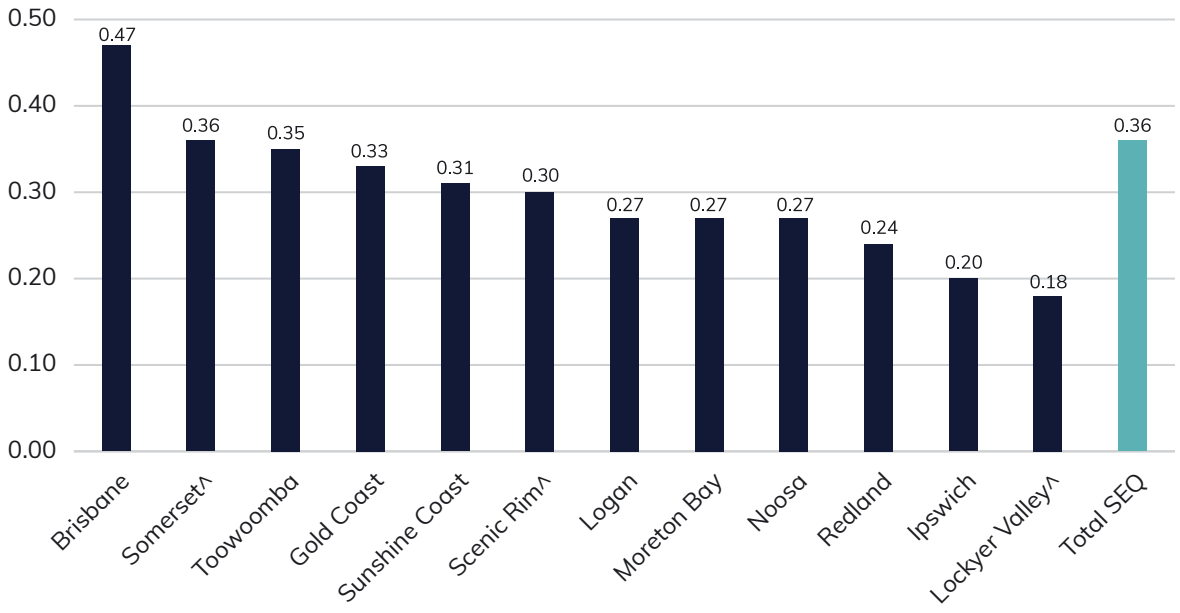
In 2018, the LGAs that scored the highest for access to health infrastructure were Brisbane (0.47), Somerset (0.36) and Toowoomba (0.35) (Figure 9.1). Redland (0.24), Ipswich (0.20) and Lockyer Valley (0.18) scored the lowest. The score for the whole of SEQ was 0.36.

It is not surprising that Brisbane LGA has scored highly on this indicator, consisting of the inner and middle areas of a major capital city and having the highest population size and density of all the LGAs (see Table 3.12). While Toowoomba doesn't have a particularly high population density, it is a major regional centre which may explain its high score for this measure.

Somerset has an ageing population and this could account for its high rank on this indicator – as health services are needed to accommodate an older cohort. As shown in Chapter 3, the proportion of the population aged 65 and over is 20.8 per cent, which compares with 15.5 per cent for all 12 LGAs. In addition, the population of this age group grew by 21 per cent between 2016 and 2020, the second fasted growing LGA with respect to this cohort. The town centre of Kilcoy has a regional hospital, a residential aged care facility, two aged care services and a range of other health services. While some of these services will not be captured in this measure (e.g., hospital) it does suggest that Kilcoy is well–served in this area.

Sunshine Coast and Scenic Rim also did relatively well on this indicator and have high proportions of persons aged 65 and over (20.7 per cent and 21.4 per cent, respectively) (see Chapter 3). Of concern is the low ranking of Noosa which has the highest proportion of older persons of all the LGAs (26.3 per cent). This suggests that Noosa is lacking in this area. Ipswich has the lowest proportion of persons aged 65 and over and is ranked second lowest on the health infrastructure index, however, it has the highest growth rate for this group (23.5 per cent) which may foreshadow increasing demand for health services in the future.

Figure 9.1: Access to health infrastructure by LGAs of SEQ in 2018



Note:

^ Only a small proportion of Mesh Blocks are captured for these LGAs.

Source: BCARR analysis of data from the Australian Urban Observatory.

Access to health infrastructure: BCARR rings and sub-regions

Inner and Middle Brisbane had the best access to health infrastructure (0.65 and 0.42, respectively) (Table 9.1 and Figure 9.2). Outer Brisbane scored the lowest (0.25). Moreton Bay North scored higher than Moreton Bay South (0.29 compared with 0.24).

Table 9.1: Access to health infrastructure by SEQ rings and sub-regions in 2018

BCARR rings/sub-regions	Health infrastructure score
INNER Brisbane*	0.65
MIDDLE Brisbane – TOTAL*	0.42
Middle East	0.39
Middle North	0.45
Middle South	0.45
Middle West	0.35
OUTER Brisbane – TOTAL	0.25
Ipswich	0.20
Redland	0.24
Logan	0.27
Moreton Bay	0.27
Moreton Bay North	0.29
Moreton Bay South	0.24
TOTAL – GREATER BRISBANE	0.37
Rest of SEQ	0.32
Gold Coast	0.33
Sunshine Coast	0.31
Noosa	0.27
Toowoomba (urban part)	0.35
Scenic Rim^	0.30
Lockyer Valley^	0.18
Somerset^	0.36
TOTAL – SOUTH EAST QUEENSLAND	0.36

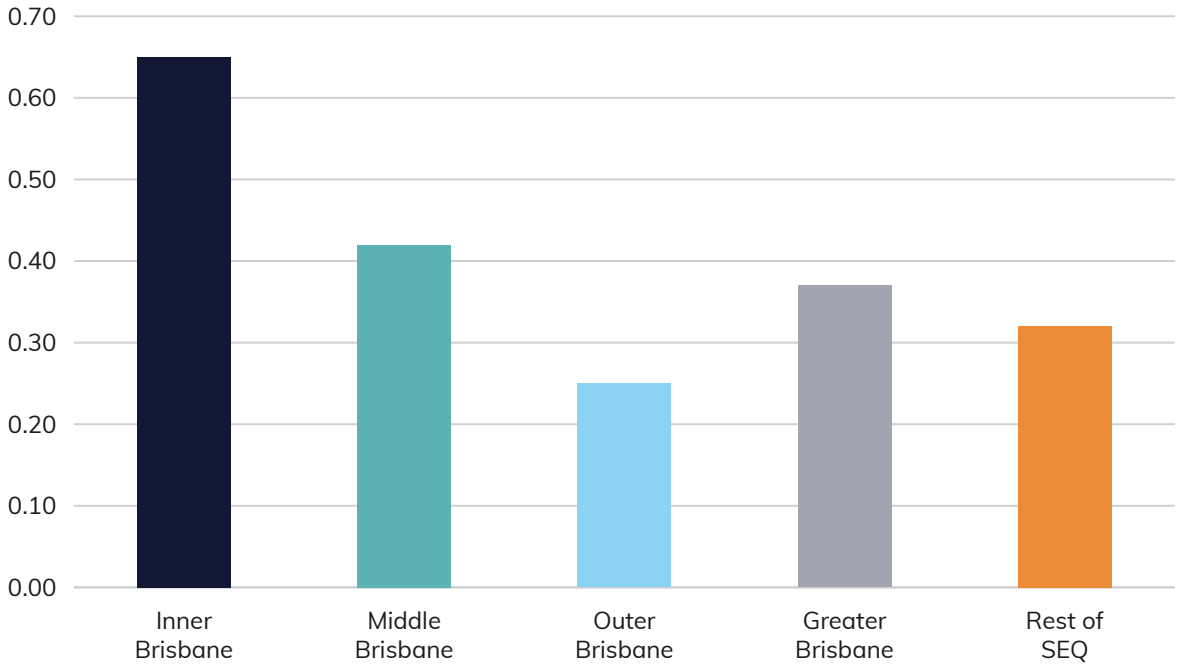
Notes:

* The Inner and Middle Brisbane Rings together comprise the City of Brisbane LGA. See Table 1.3 and Figure 1.2 in Chapter 1 for these classifications.

^ Only a small proportion of Mesh Blocks are captured for these LGAs.

Source: BCARR analysis of data from the Australian Urban Observatory.

Figure 9.2: Access to health infrastructure by SEQ rings in 2018

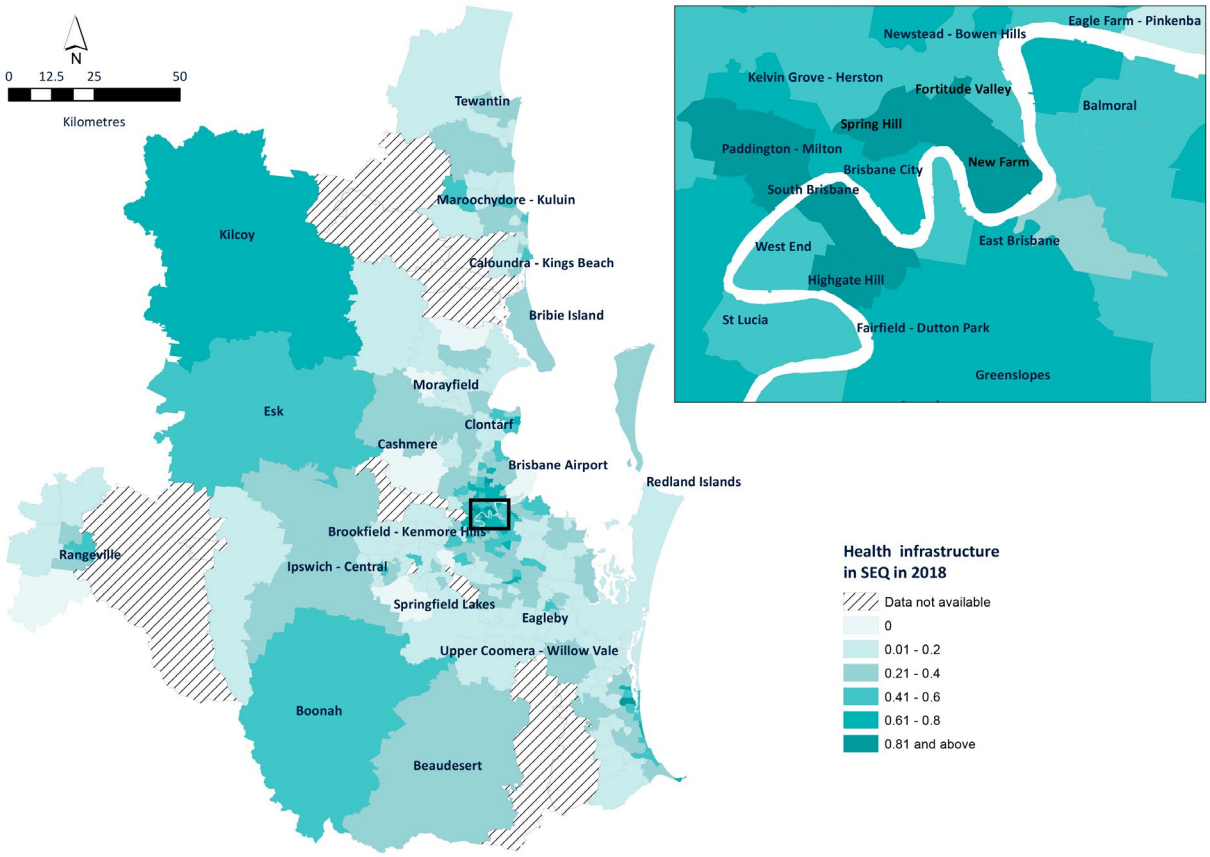


Source: BCARR analysis of data from the Australian Urban Observatory

Access to health infrastructure: SA2s

The map below (Figure 9.3) shows areas of high access to health infrastructure for Inner and Middle Brisbane. The Gold Coast coastal strip (Southport-North, Mermaid Beach and Coolangatta) also had good access, as did Kilcoy in Somerset, Redcliffe and surrounding areas in Moreton Bay North, and the urban areas of the Sunshine Coast (Caloundra and Maroochydore). Table 9.2 shows the top 10 SA2s. Areas of low access include Elimbah, Upper Caboolture and Morayfield in Moreton Bay North, Samford Valley in Moreton Bay South, Diddillibah-Rosemount in Sunshine Coast, Cambooya-Wyreema in Toowoomba, Greenbank in Logan and Ripley in Ipswich.

Figure 9.3: Access to health infrastructure by SA2s in SEQ in 2018



Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.2: Top 10 SA2s with highest access to health infrastructure in SEQ in 2018

SA2s	BCARR rings/sub-regions	Health Infrastructure score
Spring Hill	Inner	0.93
New Farm	Inner	0.87
Chermside	Middle North	0.85
Highgate Hill	Inner	0.85
South Brisbane	Inner	0.83
Fortitude Valley	Inner	0.83
Paddington – Milton	Inner	0.81
Southport – North	Gold Coast	0.81
Annerley	Middle South	0.79
Auchenflower	Inner	0.77

Source: BCARR analysis of data from the Australian Urban Observatory.

Access to health infrastructure: growth areas

Table 9.3 shows the overall scores for the consolidation and expansion areas, while Tables 9.4 and 9.5 show the scores for each SA2 within the consolidation and expansion areas.

Table 9.3: Access to health infrastructure in growth areas of SEQ in 2018

Growth area type	Health Infrastructure score
Consolidation	0.39
Expansion	0.15
Other (non-growth)	0.38

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.4: Access to health infrastructure by SA2 consolidation growth areas in 2018

SA2s	BCARR rings/sub-regions	Health Infrastructure score
Biggera Waters	Gold Coast	0.63
Bli Bli	Sunshine Coast	0.10
Bribie Island	Moreton Bay North	0.33
Brisbane City	Inner	0.76
Caboolture	Moreton Bay North	0.28
Caboolture – South	Moreton Bay North	0.20
Calamvale – Stretton	Middle South	0.32
Coorparoo	Middle South	0.72
Forest Lake – Doolandella	Middle West	0.18
Fortitude Valley	Inner	0.83
Hope Island	Gold Coast	0.20
Morningside – Seven Hills	Inner	0.50
Mountain Creek	Sunshine Coast	0.12
Newstead – Bowen Hills	Inner	0.57
Oxenford – Maudsland	Gold Coast	0.13
Peregian Springs	Sunshine Coast	0.06
Robina	Gold Coast	0.34
Scarborough – Newport – Moreton Island	Moreton Bay North	0.31
South Brisbane	Inner	0.83
Surfers Paradise	Gold Coast	0.49
Taigum – Fitzgibbon	Middle North	0.23
West End	Inner	0.56
Wurtulla – Birtinya	Sunshine Coast	0.15

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
Source: BCARR analysis of data from the Australian Urban Observatory.

For access to health infrastructure in 2018, the expansion growth areas scored much lower than the consolidation growth areas and other (non-growth) areas (0.15, 0.39 and 0.38, respectively). As will be discussed in subsequent sections of this chapter, this is a typical pattern that emerges for all of the indicators. This may be related to the fact that the expansion areas are newly developed areas and have yet to establish or attract services.

Table 9.4 shows the SA2s that comprise the consolidation growth areas. The health infrastructure scores ranged from 0.83 in South Brisbane to under 0.2 in Forest Lake-Doolandella, Wurtulla-Birtinya, Oxenford-Maudsland, Mountain Creek, Bli Bli and Peregian Springs. The scores for the SA2s that comprise the expansion growth areas ranged from 0.32 in Dakabin-Kallangur, to 0 in Pallara-Willawong, Greenbank and Ripley (Table 9.5).

Table 9.5: Access to health infrastructure by SA2 expansion growth areas in 2018

SA2s	BCARR rings/sub-regions	Health Infrastructure score
Bellbird Park – Brookwater	Ipswich	0.11
Boronia Heights – Park Ridge	Logan	0.24
Caloundra – West	Sunshine Coast	0.19
Cashmere	Moreton Bay South	0.13
Chambers Flat – Logan Reserve	Logan	0.02
Coomera	Gold Coast	0.15
Dakabin – Kallangur	Moreton Bay South	0.32
Greenbank	Logan	0.00
Jimboomba	Logan	0.04
Murrumba Downs – Griffin	Moreton Bay South	0.15
Narangba	Moreton Bay North	0.16
Noosa Hinterland	Noosa	0.19
North Lakes – Mango Hill	Moreton Bay South	0.14
Ormeau – Yatala	Gold Coast	0.07
Pallara – Willawong	Middle South	0.00
Pimpama	Gold Coast	0.04
Redbank Plains	Ipswich	0.12
Redland Bay	Redland	0.23
Ripley	Ipswich	0.00
Rochedale – Burbank	Middle South	0.02
Springfield Lakes	Ipswich	0.18
Thornlands	Redland	0.15
Toowoomba – West	Toowoomba (part)	0.10
Upper Coomera – Willow Vale	Gold Coast	0.20

Notes: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3. AUO data are unavailable for the SA2 locality of Landsborough in Sunshine Coast.

Source: BCARR analysis of data from the Australian Urban Observatory.

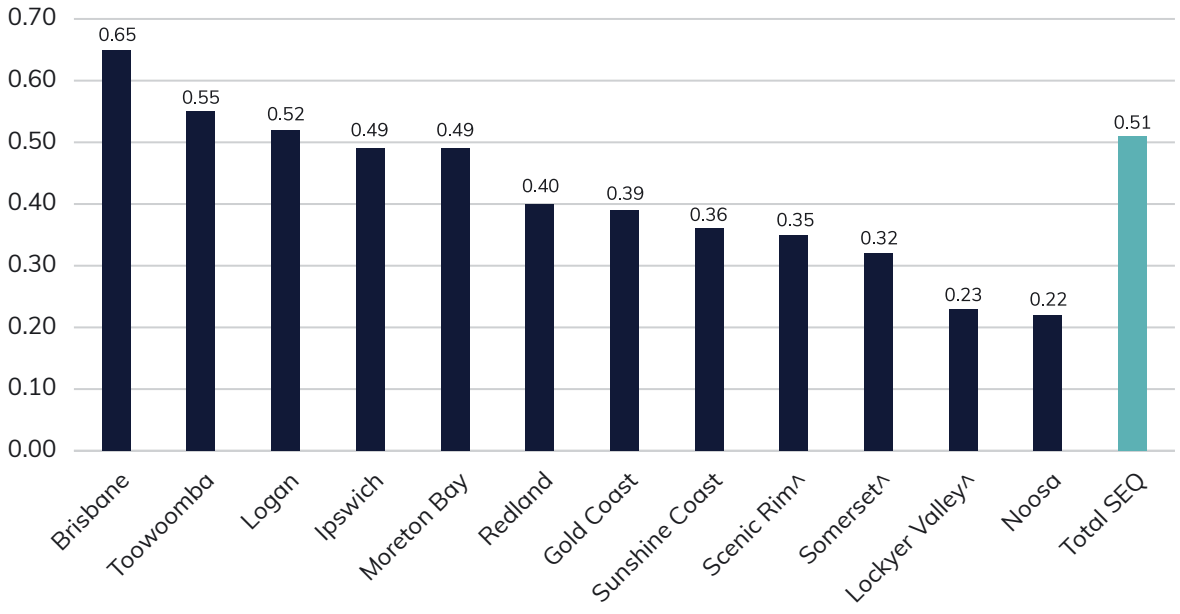
Access to Education infrastructure

Access to education infrastructure: LGAs

Similar to the pattern noted above with regard to access to health infrastructure, Brisbane and Toowoomba scored highest on this indicator (0.65 and 0.55, respectively) (Figure 9.4). Logan is the next highest scoring LGA (0.52), and this is not surprising as it has a high child population (23.0 per cent of the population aged 0–14 years, compared with 19.1 per cent for all 12 LGAs) (see Chapter 3). Ipswich and Moreton Bay have also done well on this indicator and have high school-aged cohorts (23.8 and 20.5 per cent, respectively).

The LGAs that scored the lowest on this indicator were Somerset (0.32), Lockyer Valley (0.23) and Noosa (0.22). Noosa has the lowest proportion of children aged 0–14 years (15.6 per cent), while Somerset and Lockyer Valley are close to the average (around 19 per cent).

Figure 9.4: Access to education infrastructure by LGAs of SEQ in 2018



Note:

^ Only a small proportion of Mesh Blocks are captured for these LGAs.

Source: BCARR analysis of data from the Australian Urban Observatory.

Access to education infrastructure: BCARR rings and sub-regions

Inner and Middle Brisbane scored the highest for access to education infrastructure (0.73 and 0.62, respectively) (Table 9.6 and Figure 9.5). Outer Brisbane and Rest of SEQ scored the lowest (0.48 and 0.39, respectively). Moreton Bay South scored slightly higher than Moreton Bay North (0.50 compared with 0.48).

Table 9.6: Access to education infrastructure by SEQ rings and sub-regions in 2018

BCARR rings/sub-regions	Education infrastructure score
INNER Brisbane*	0.73
MIDDLE Brisbane – TOTAL*	0.62
Middle East	0.54
Middle North	0.65
Middle South	0.62
Middle West	0.59
OUTER Brisbane – TOTAL	0.48
Ipswich	0.49
Redland	0.40
Logan	0.52
Moreton Bay	0.49
Moreton Bay North	0.48
Moreton Bay South	0.50
TOTAL – GREATER BRISBANE	0.57
Rest of SEQ	0.39
Gold Coast	0.39
Sunshine Coast	0.36
Noosa	0.22
Toowoomba (urban part)	0.55
Scenic Rim^	0.35
Lockyer Valley^	0.23
Somerset^	0.32
TOTAL – SOUTH EAST QUEENSLAND	0.51

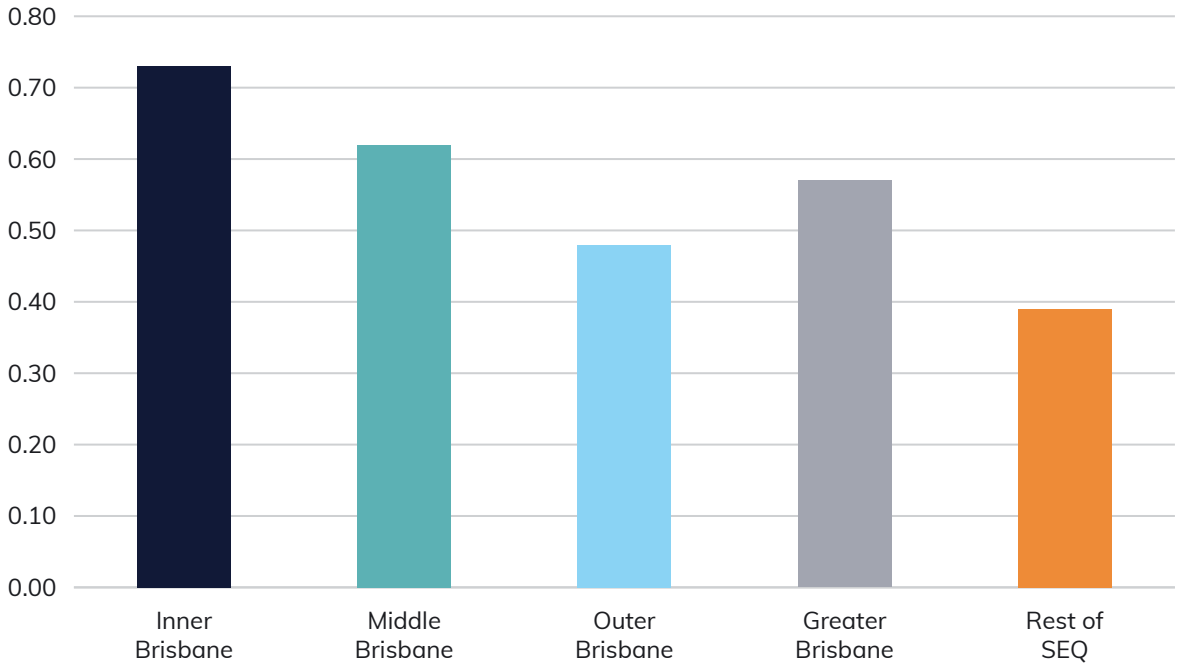
Notes:

* The Inner and Middle Brisbane Rings together comprise the City of Brisbane LGA. See Table 1.3 and Figure 1.2 in Chapter 1 for these classifications.

^ Only a small proportion of Mesh Blocks are captured for these LGAs.

Source: BCARR analysis of data from the Australian Urban Observatory.

Figure 9.5: Access to education infrastructure by SEQ rings in 2018

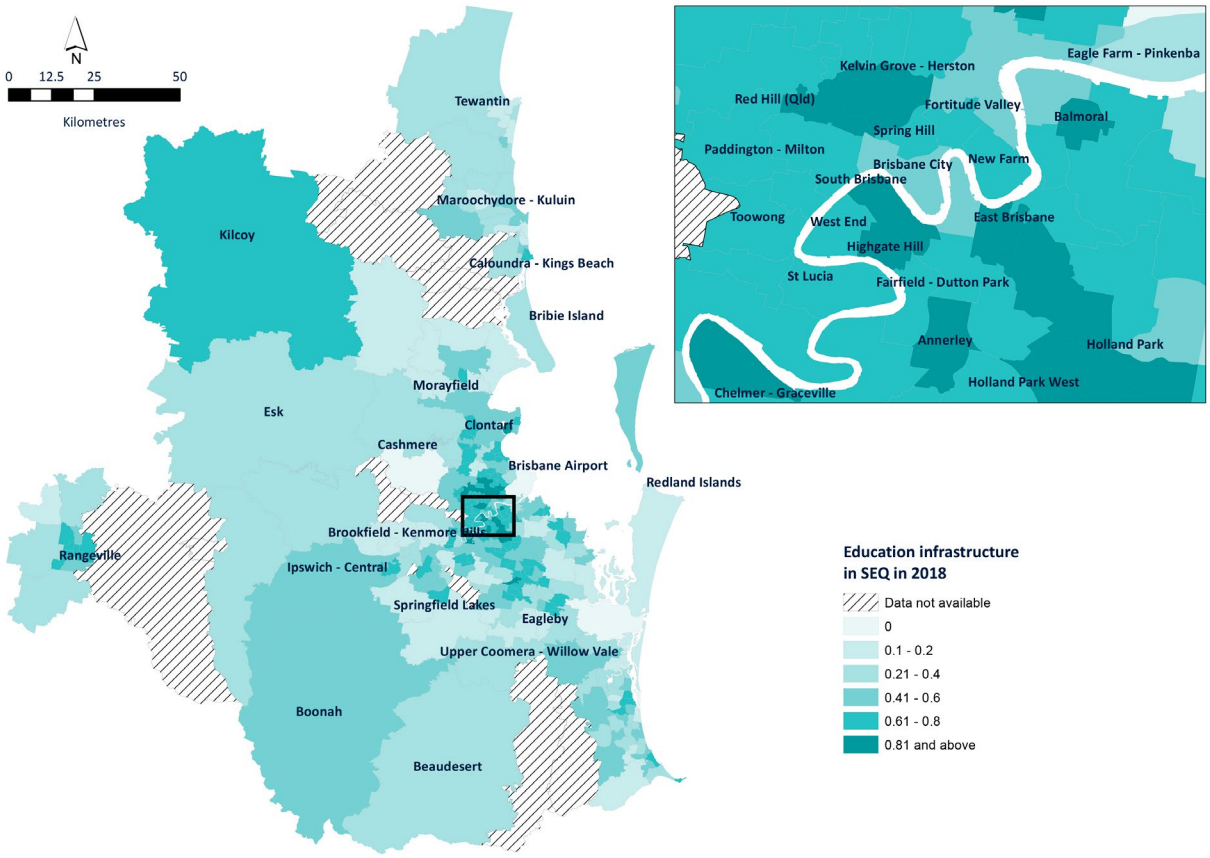


Source: BCARR analysis of data from the Australian Urban Observatory

Access to education infrastructure: SA2s

Areas with high access to education infrastructure can be seen in Inner and Middle Brisbane (Figure 9.6). Other areas with good access include Clontarf and Redcliffe in Moreton Bay North, several areas in Logan (Logan Central, Eagleby, Waterford West, Springwood and Kingston), the central areas of Toowoomba and Ipswich, and Kilcoy in Somerset (see Table 9.7 for the top 10 SA2s). Areas of lower access include Jacobs Well and Main Beach in Gold Coast, Munruben and Greenbank in Logan, Noosa Heads and Peregian Beach in Noosa, Elimbah in Moreton Bay North, Samford Valley in Moreton Bay South and Diddillibah-Rosemount in Sunshine Coast.

Figure 9.6: Access to education infrastructure by SA2s in SEQ in 2018



Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.7: Top 10 SA2s with the highest access to education infrastructure in SEQ in 2018

SA2s	BCARR rings/sub-regions	Education Infrastructure score
Balmoral	Inner	0.99
Wooloowin – Lutwyche	Inner	0.94
South Brisbane	Inner	0.93
Corinda	Middle West	0.91
Holland Park	Middle South	0.90
Chermside West	Middle North	0.90
Logan Central	Logan	0.89
Clayfield	Inner	0.88
Clontarf	Moreton Bay North	0.88
Mitchelton	Middle West	0.87

Source: BCARR analysis of data from the Australian Urban Observatory.

Access to education infrastructure: growth areas

The score for consolidation growth areas was 0.47 and the score for expansion areas was 0.37 (Table 9.8). Both were lower than the score for other (non-growth) areas (0.53). For the SA2 consolidation growth areas, scores ranged from between 0.93 for South Brisbane and under 0.20 for Surfers Paradise, Hope Island and Wurtulla-Birtinya (Table 9.9). For the expansion growth areas, scores ranged from 0.60 in Dakabin-Kallangur and Springfield Lakes to under 0.20 in Pallara-Willawong, Ripley, Redland Bay and Greenbank (Table 9.10).

Table 9.8: Access to education infrastructure in growth areas of SEQ in 2018

Growth area type	Education Infrastructure score
Consolidation	0.47
Expansion	0.37
Other (non – growth)	0.53

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.9: Access to education infrastructure by SA2 consolidation growth areas in 2018

SA2s	BCARR rings/sub-regions	Education Infrastructure score
Biggera Waters	Gold Coast	0.47
Bli Bli	Sunshine Coast	0.32
Bribie Island	Moreton Bay North	0.29
Brisbane City	Inner	0.59
Caboolture	Moreton Bay North	0.58
Caboolture – South	Moreton Bay North	0.47
Calamvale – Stretton	Middle South	0.29
Coorparoo	Middle South	0.84
Forest Lake – Doolandella	Middle West	0.60
Fortitude Valley	Inner	0.74
Hope Island	Gold Coast	0.10
Morningside – Seven Hills	Inner	0.80
Mountain Creek	Sunshine Coast	0.41
Newstead – Bowen Hills	Inner	0.57
Oxenford – Maudsland	Gold Coast	0.39
Peregian Springs	Sunshine Coast	0.43
Robina	Gold Coast	0.32
Scarborough – Newport – Moreton Island	Moreton Bay North	0.45
South Brisbane	Inner	0.93
Surfers Paradise	Gold Coast	0.18
Taigum – Fitzgibbon	Middle North	0.52
West End	Inner	0.79
Wurtulla – Birtinya	Sunshine Coast	0.08

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.10: Access to education infrastructure by SA2 expansion growth areas in 2018

SA2s	BCARR rings/sub-regions	Education Infrastructure score
Bellbird Park – Brookwater	Ipswich	0.42
Boronia Heights – Park Ridge	Logan	0.45
Caloundra – West	Sunshine Coast	0.20
Cashmere	Moreton Bay South	0.22
Chambers Flat – Logan Reserve	Logan	0.26
Coomera	Gold Coast	0.41
Dakabin – Kallangur	Moreton Bay South	0.60
Greenbank	Logan	0.02
Jimboomba	Logan	0.27
Murrumba Downs – Griffin	Moreton Bay South	0.42
Narangba	Moreton Bay North	0.45
Noosa Hinterland	Noosa	0.30
North Lakes – Mango Hill	Moreton Bay South	0.45
Ormeau – Yatala	Gold Coast	0.35
Pallara – Willawong	Middle South	0.18
Pimpama	Gold Coast	0.36
Redbank Plains	Ipswich	0.50
Redland Bay	Redland	0.16
Ripley	Ipswich	0.17
Rochedale – Burbank	Middle South	0.43
Springfield Lakes	Ipswich	0.60
Thornlands	Redland	0.28
Toowoomba – West	Toowoomba (part)	0.22
Upper Coomera – Willow Vale	Gold Coast	0.41

Notes: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3. AUO data are unavailable for the SA2 locality of Landsborough in Sunshine Coast.

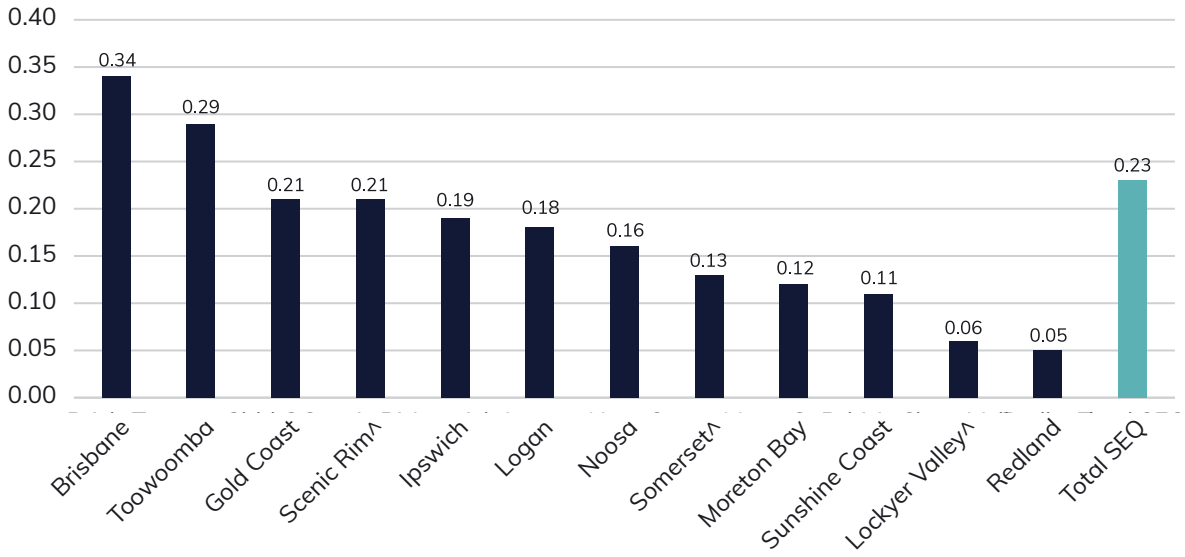
Source: BCARR analysis of data from the Australian Urban Observatory.

Access to arts and culture infrastructure: SEQ LGAs

Brisbane and Toowoomba have again scored the highest for this indicator (0.34 and 0.29), Gold Coast and Scenic Rim have also done well (0.21 each). The LGAs with the lowest scores were Sunshine Coast (0.11), Lockyer Valley (0.06) and Redland (0.05).

The high score for Gold Coast may be related to its function as a tourist and entertainment precinct. This LGA features several cinemas, art galleries and museums.

Figure 9.7: Access to arts and culture infrastructure by LGAs of SEQ in 2018



Note:

^ Only a small proportion of Mesh Blocks are captured for these LGAs.

Source: BCARR analysis of data from the Australian Urban Observatory.

Access to arts and culture infrastructure: BCARR rings and sub-regions

Inner Brisbane (0.63) scored substantially higher than the other sub-regions for access to arts and culture infrastructure. Outer Brisbane scored the lowest (0.14) (Table 9.11 and Figure 9.8). Moreton Bay North scored higher than Moreton Bay South (0.17 and 0.06, respectively).

Table 9.11: Access to arts and culture infrastructure by SEQ rings and sub-regions in 2018

BCARR rings/sub-regions	Arts and Culture score
INNER Brisbane*	0.63
MIDDLE Brisbane – TOTAL*	0.24
Middle East	0.02
Middle North	0.26
Middle South	0.31
Middle West	0.18
OUTER Brisbane – TOTAL	0.14
Ipswich	0.19
Redland	0.05
Logan	0.18
Moreton Bay	0.12
Moreton Bay North	0.17
Moreton Bay South	0.06
TOTAL – GREATER BRISBANE	0.25
Rest of SEQ	0.19
Gold Coast	0.21
Sunshine Coast	0.11
Noosa	0.16
Toowoomba (urban part)	0.29
Scenic Rim^	0.21
Lockyer Valley^	0.06
Somerset^	0.13
TOTAL – SOUTH EAST QUEENSLAND	0.23

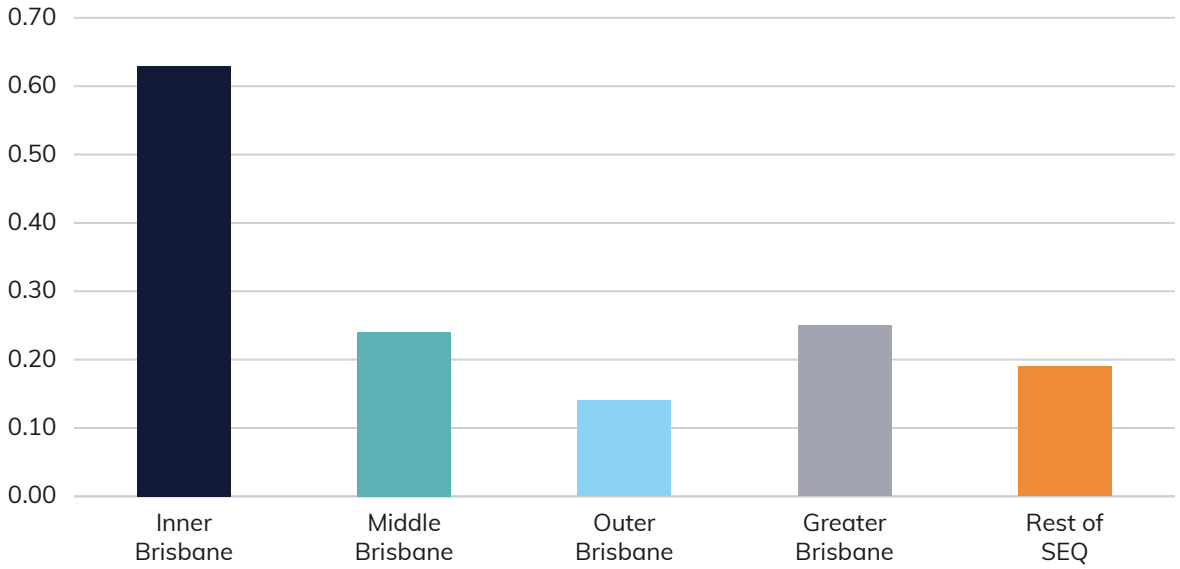
Notes:

* The Inner and Middle Brisbane Rings together comprise the City of Brisbane LGA. See Table 1.3 and Figure 1.2 in Chapter 1 for these classifications.

^ Only a small proportion of Mesh Blocks are captured for these LGAs. Lockyer Valley and Somerset have been excluded from the community and sport indicator due to data quality issues, likely the result of low coverage of these areas.

Source: BCARR analysis of data from the Australian Urban Observatory.

Figure 9.8: Access to arts and culture infrastructure by SEQ rings in 2018



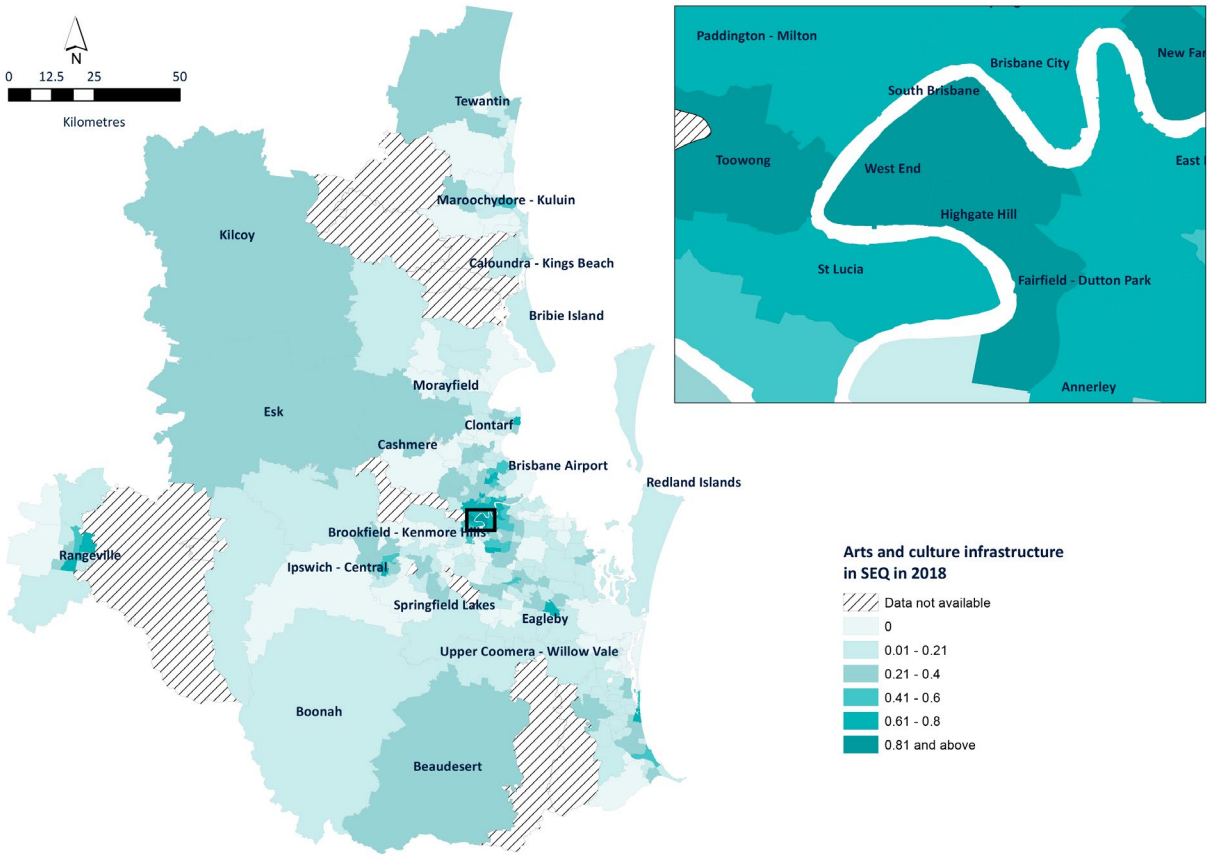
Source: BCARR analysis of data from the Australian Urban Observatory.

Access to arts and culture infrastructure: SA2s

The SA2s around Inner Brisbane had the best access to arts and culture infrastructure (Figure 9.9). Ipswich-Central also had good access, as did: Redcliffe in Moreton Bay North; Beenleigh and Mount Warren Park in Logan; Surfers Paradise and Main Beach in Gold Coast; and the central areas of Toowoomba (Toowoomba-East and Darling Heights). Table 9.12 shows the top 10 SA2s.

The areas with low access include: much of the Sunshine Coast (except for the central band stretching west from Maroochydore); outer areas of Moreton Bay North; northern areas of the Gold Coast and Currumbin Valley; outer Ipswich; some of the outer areas of Logan including Greenbank and Crestmead; and Toowoomba West.

Figure 9.9: Access to arts and culture infrastructure by SA2s in SEQ in 2018



Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.12: Top 10 SA2s with the highest access to arts and culture infrastructure in SEQ in 2018

SA2s	BCARR rings/sub-regions	Arts and Culture Infrastructure score
South Brisbane	Inner	0.87
Toowong	Inner	0.85
Highgate Hill	Inner	0.84
West End	Inner	0.82
Fairfield – Dutton Park	Middle South	0.82
New Farm	Inner	0.81
Brisbane City	Inner	0.80
Woolloongabba	Middle South	0.79
Greenslopes	Middle South	0.77
Ipswich – Central	Ipswich	0.76

Source: BCARR analysis of data from the Australian Urban Observatory.

Access to arts and culture infrastructure: growth areas

For arts and culture infrastructure, the consolidation growth areas (0.32) scored much higher than the expansion growth areas (0.07) and other (non-growth) areas (0.24) (Table 9.13). For consolidation growth SA2s, South Brisbane, West End and Brisbane City scored the highest (0.87, 0.82 and 0.80, respectively) (Table 9.14). There were several SA2s that scored 0, including four SA2s from Sunshine Coast. Scores for the expansion growth areas were much lower, ranging from 0.26 for Noosa Hinterland to 0 for several SA2s (Table 9.15). Three of the lowest scoring SA2s were from Moreton Bay South.

Table 9.13: Access to arts and culture infrastructure in growth areas of SEQ in 2018

Growth area type	Arts and Culture Infrastructure score
Consolidation	0.32
Expansion	0.07
Other (non – growth)	0.24

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.14: Access to arts and culture infrastructure by SA2 consolidation growth areas in 2018

SA2s	BCARR rings/sub-regions	Arts and Culture Infrastructure score
Biggera Waters	Gold Coast	0.33
Bli Bli	Sunshine Coast	0.00
Bribie Island	Moreton Bay North	0.18
Brisbane City	Inner	0.80
Caboolture	Moreton Bay North	0.14
Caboolture – South	Moreton Bay North	0.00
Calamvale – Stretton	Middle South	0.02
Coorparoo	Middle South	0.56
Forest Lake – Doolandella	Middle West	0.00
Fortitude Valley	Inner	0.67
Hope Island	Gold Coast	0.00
Morningside – Seven Hills	Inner	0.60
Mountain Creek	Sunshine Coast	0.00
Newstead – Bowen Hills	Inner	0.68
Oxenford – Maudsland	Gold Coast	0.14
Peregian Springs	Sunshine Coast	0.00
Robina	Gold Coast	0.35
Scarborough – Newport – Moreton Island	Moreton Bay North	0.19
South Brisbane	Inner	0.87
Surfers Paradise	Gold Coast	0.66
Taigum – Fitzgibbon	Middle North	0.14
West End	Inner	0.82
Wurtulla – Birtinya	Sunshine Coast	0.00

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.15: Access to arts and culture infrastructure by expansion growth areas in 2018

SA2s	BCARR rings/sub-regions	Arts and Culture Infrastructure score
Bellbird Park – Brookwater	Ipswich	0.21
Boronia Heights – Park Ridge	Logan	0.00
Caloundra – West	Sunshine Coast	0.16
Cashmere	Moreton Bay South	0.00
Chambers Flat – Logan Reserve	Logan	0.00
Coomera	Gold Coast	0.08
Dakabin – Kallangur	Moreton Bay South	0.00
Greenbank	Logan	0.00
Jimboomba	Logan	0.07
Murrumba Downs – Griffin	Moreton Bay South	0.00
Narangba	Moreton Bay North	0.25
Noosa Hinterland	Noosa	0.26
North Lakes – Mango Hill	Moreton Bay South	0.02
Ormeau – Yatala	Gold Coast	0.02
Pallara – Willawong	Middle South	0.00
Pimpama	Gold Coast	0.00
Redbank Plains	Ipswich	0.02
Redland Bay	Redland	0.02
Ripley	Ipswich	0.00
Rochedale – Burbank	Middle South	0.00
Springfield Lakes	Ipswich	0.24
Thornlands	Redland	0.05
Toowoomba – West	Toowoomba (urban part)	0.00
Upper Coomera – Willow Vale	Gold Coast	0.14

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
AUO data are unavailable for the SA2 locality of Landsborough in Sunshine Coast.

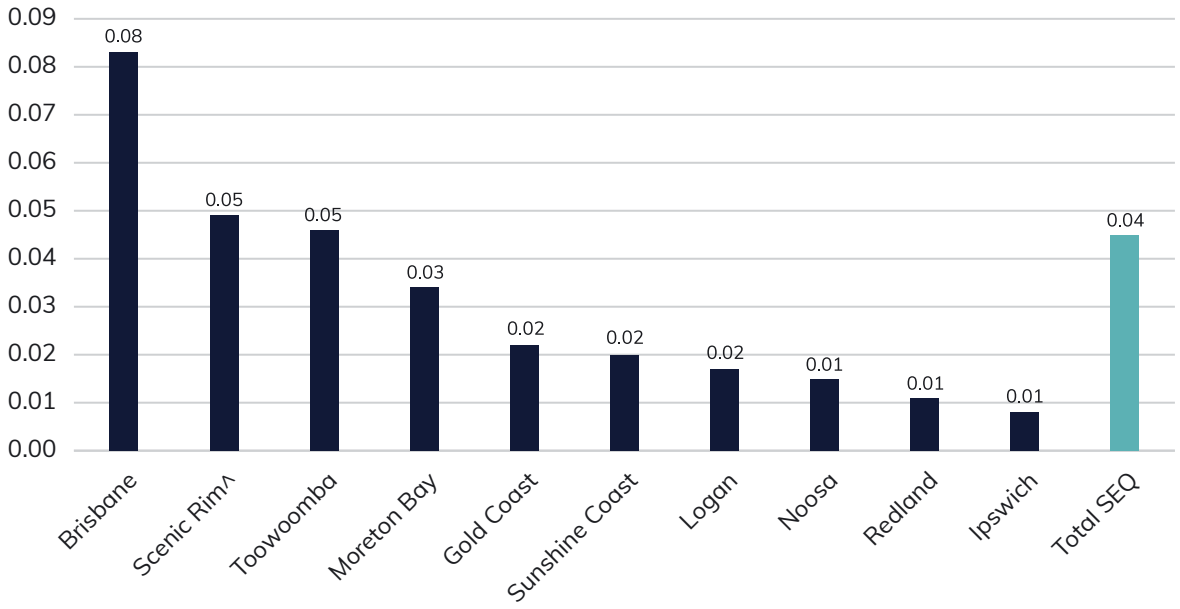
Source: BCARR analysis of data from the Australian Urban Observatory.

Access to community and sports infrastructure: SEQ LGAs

The LGAs that scored highest for access to community and sports infrastructure were Brisbane (0.08), Scenic Rim (0.05) and Toowoomba (0.05) (Figure 9.10). The LGAs that scored lowest were Noosa, Redland and Ipswich (all scored 0.01). The score for the whole of SEQ was 0.04.

It is interesting that while Brisbane is again the highest scoring LGA, Scenic Rim, one of the smallest LGAs, has scored slightly higher than Toowoomba. The main town centre of Beaudesert has an olympic-sized swimming pool and houses a range of sporting clubs and associations (Scenic Rim Regional Council 2022). This may reflect the way in which sporting associations often play an important role in small regional towns in relation to supporting social capital and community engagement (Tonts 2005).

Figure 9.10: Access to community and sports infrastructure by LGAs of SEQ in 2018



Note:

^ Only a small proportion of Mesh Blocks are captured for these LGAs. Lockyer Valley and Somerset have been excluded due to data quality issues, likely the result of low coverage of these areas.

Source: BCARR analysis of data from the Australian Urban Observatory.

Access to community and sports infrastructure: BCARR rings and sub-regions

Inner Brisbane had the best access to community and sports infrastructure (0.12), which was higher than Middle Brisbane (0.07), Rest of SEQ (0.02) and Outer Brisbane (0.02) (Table 9.16 and Figure 9.11). Moreton Bay North scored higher than Moreton Bay South (0.05 compared with 0.02).

Table 9.16: Access to community and sports infrastructure by SEQ rings and sub-regions in 2018

BCARR rings/sub-regions	Community and Sports infrastructure score
INNER Brisbane*	0.12
MIDDLE Brisbane – TOTAL*	0.07
Middle East	0.03
Middle North	0.04
Middle South	0.11
Middle West	0.06
OUTER Brisbane – TOTAL	0.02
Ipswich	0.01
Redland	0.01
Logan	0.02
Moreton Bay	0.03
Moreton Bay North	0.05
Moreton Bay South	0.02
TOTAL – GREATER BRISBANE	0.06
Rest of SEQ	0.02
Gold Coast	0.02
Sunshine Coast	0.02
Noosa	0.01
Toowoomba (urban part)	0.05
Scenic Rim^	0.05
Lockyer Valley^	–
Somerset^	–
TOTAL – SOUTH EAST QUEENSLAND	0.04

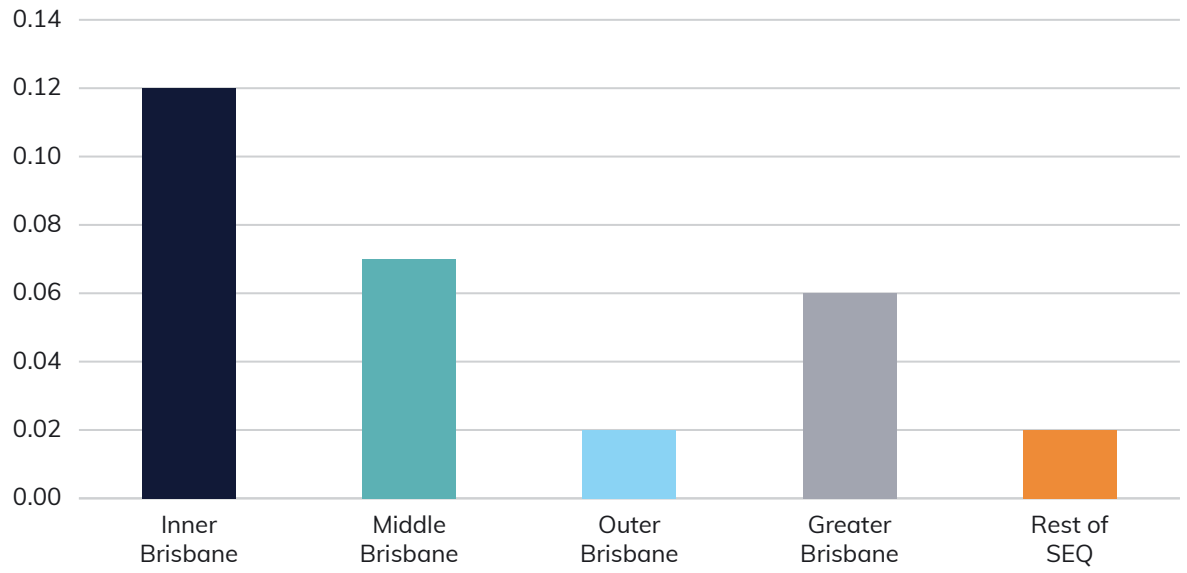
Notes:

* The Inner and Middle Brisbane Rings together comprise the City of Brisbane LGA. See Table 1.3 and Figure 1.2 in Chapter 1 for these classifications.

^ Only a small proportion of Mesh Blocks are captured for these LGAs. Lockyer Valley and Somerset have been excluded from the community and sport indicator due to data quality issues, likely the result of low coverage of these areas.

Source: BCARR analysis of data from the Australian Urban Observatory.

Figure 9.11: Access to community and sports infrastructure by SEQ rings in 2018

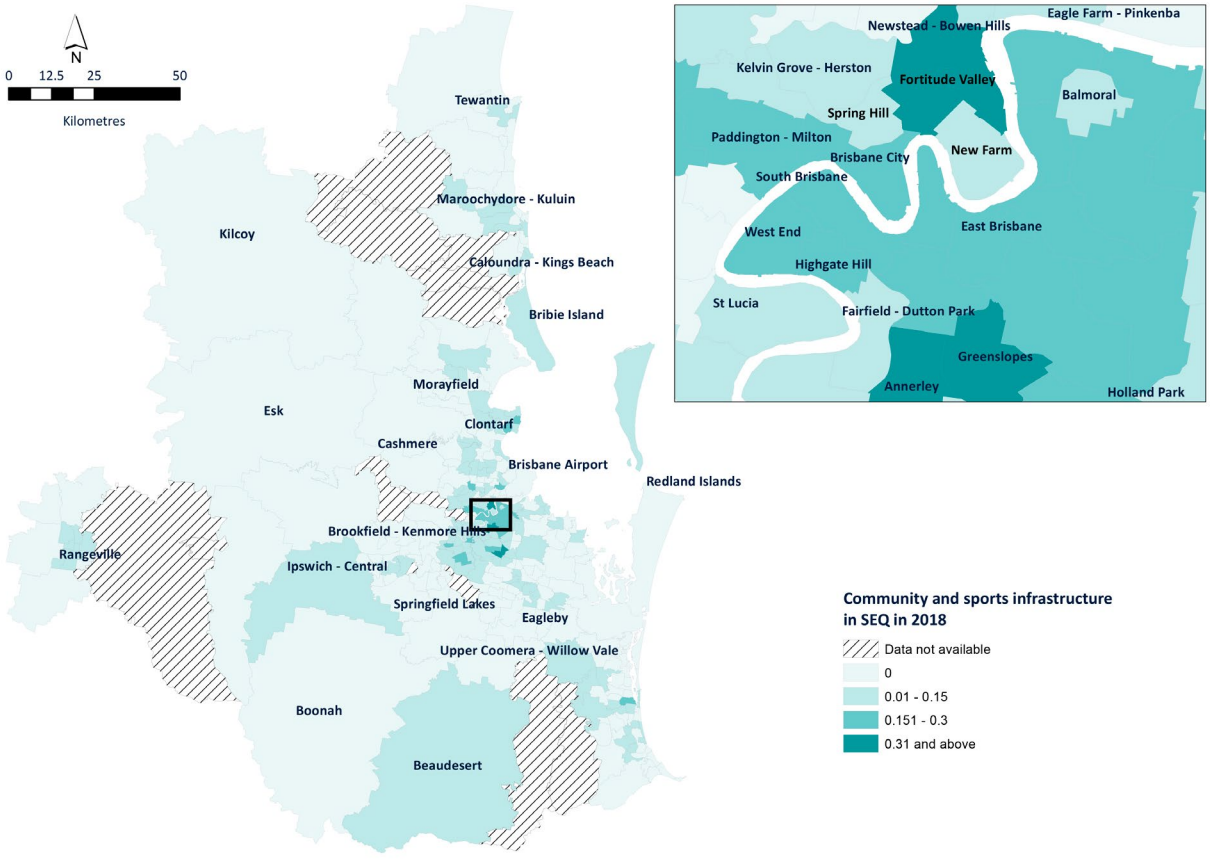


Source: BCARR analysis of data from the Australian Urban Observatory.

Access to community and sports infrastructure: SA2s

The map below (Figure 9.12) shows the highest scoring SA2s centred around Inner Brisbane (see Table 9.17 for the top 10 SA2s).

Figure 9.12: Access to community and sports infrastructure by SA2s in SEQ in 2018



Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.17: Top 10 SA2s with highest access to community and sports infrastructure in SEQ in 2018

SA2s	BCARR rings/sub-regions	Community and sports Infrastructure score
Sunnybank	Middle South	0.37
Annerley	Middle South	0.33
Fortitude Valley	Inner	0.33
Newstead – Bowen Hills	Inner	0.31
Macgregor (Qld)	Middle South	0.30
Greenslopes	Middle South	0.30
East Brisbane	Inner	0.28
Brisbane City	Inner	0.28
South Brisbane	Inner	0.26
Corinda	Middle West	0.26

Source: BCARR analysis of data from the Australian Urban Observatory.

Access to community and sports infrastructure: growth areas

The consolidation growth areas (0.08) scored much higher than expansion growth areas (0.01) and other (non-growth) areas (0.04) (Table 9.18). The highest scoring SA2s from the consolidation growth areas were Fortitude Valley (0.33) and Newstead-Bowen Hills (0.31) (Table 9.19). Several SA2s scored 0, including all of the Sunshine Coast SA2s and most of the Gold Coast SA2s. Only two expansion SA2s scored above 0 – Upper Coomera – Willow Vale (0.08) and North Lakes – Mango Hill (0.01) (Table 9.20).

Table 9.18: Access to community and sports infrastructure in growth areas of SEQ in 2018

Growth area type h area type	Community and sports Infrastructure score
Consolidation	0.08
Expansion	0.01
Other (non – growth)	0.04

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.

Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.19: Access to arts and culture and community and sports infrastructure by SA2 consolidation growth areas in 2018

SA2s	BCARR rings/sub-regions	Community and sports Infrastructure score
Biggera Waters	Gold Coast	0.00
Bli Bli	Sunshine Coast	0.00
Bribie Island	Moreton Bay North	0.04
Brisbane City	Inner	0.28
Caboolture	Moreton Bay North	0.03
Caboolture – South	Moreton Bay North	0.04
Calamvale – Stretton	Middle South	0.00
Coorparoo	Middle South	0.23
Forest Lake – Doolandella	Middle West	0.00
Fortitude Valley	Inner	0.33
Hope Island	Gold Coast	0.00
Morningside – Seven Hills	Inner	0.18
Mountain Creek	Sunshine Coast	0.00
Newstead – Bowen Hills	Inner	0.31
Oxenford – Maudsland	Gold Coast	0.00
Peregian Springs	Sunshine Coast	0.00
Robina	Gold Coast	0.03
Scarborough – Newport – Moreton Island	Moreton Bay North	0.00
South Brisbane	Inner	0.26
Surfers Paradise	Gold Coast	0.00
Taigum – Fitzgibbon	Middle North	0.08
West End	Inner	0.21
Wurtulla – Birtinya	Sunshine Coast	0.00

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.

Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.20: Access to community and sports infrastructure by expansion growth areas in 2018

SA2s	BCARR rings/sub-regions	Community and sports Infrastructure score
Bellbird Park – Brookwater	Ipswich	0.00
Boronia Heights – Park Ridge	Logan	0.00
Caloundra – West	Sunshine Coast	0.00
Cashmere	Moreton Bay South	0.00
Chambers Flat – Logan Reserve	Logan	0.00
Coomera	Gold Coast	0.00
Dakabin – Kallangur	Moreton Bay South	0.00
Greenbank	Logan	0.00
Jimboomba	Logan	0.00
Murrumba Downs – Griffin	Moreton Bay South	0.00
Narangba	Moreton Bay North	0.00
Noosa Hinterland	Noosa	0.00
North Lakes – Mango Hill	Moreton Bay South	0.01
Ormeau – Yatala	Gold Coast	0.00
Pallara – Willawong	Middle South	0.00
Pimpama	Gold Coast	0.00
Redbank Plains	Ipswich	0.00
Redland Bay	Redland	0.00
Ripley	Ipswich	0.00
Rochedale – Burbank	Middle South	0.00
Springfield Lakes	Ipswich	0.00
Thornlands	Redland	0.00
Toowoomba – West	Toowoomba (urban part)	0.00
Upper Coomera – Willow Vale	Gold Coast	0.08

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
AUO data are unavailable for the SA2 locality of Landsborough in Sunshine Coast.

Source: BCARR analysis of data from the Australian Urban Observatory

9.3 Walkability

Walkability is a measure of the extent to which people can 'move around their local neighbourhoods to complete everyday activities' (AUO 2022). It encompasses three key factors: proximity to services of daily living (something to walk to), street connectivity and dwelling density. See Box 9.3 for more information on how this indicator is measured.

Walkability: LGAs

In 2018, SEQ scored 0.15 on the walkability index (Figure 9.13). The LGAs that scored highest were Brisbane (1.29), Gold Coast (0.48) and Sunshine Coast (–0.35). The LGAs that scored lowest were Scenic Rim (–3.58), Somerset (–4.04) and Lockyer Valley (–5.40).

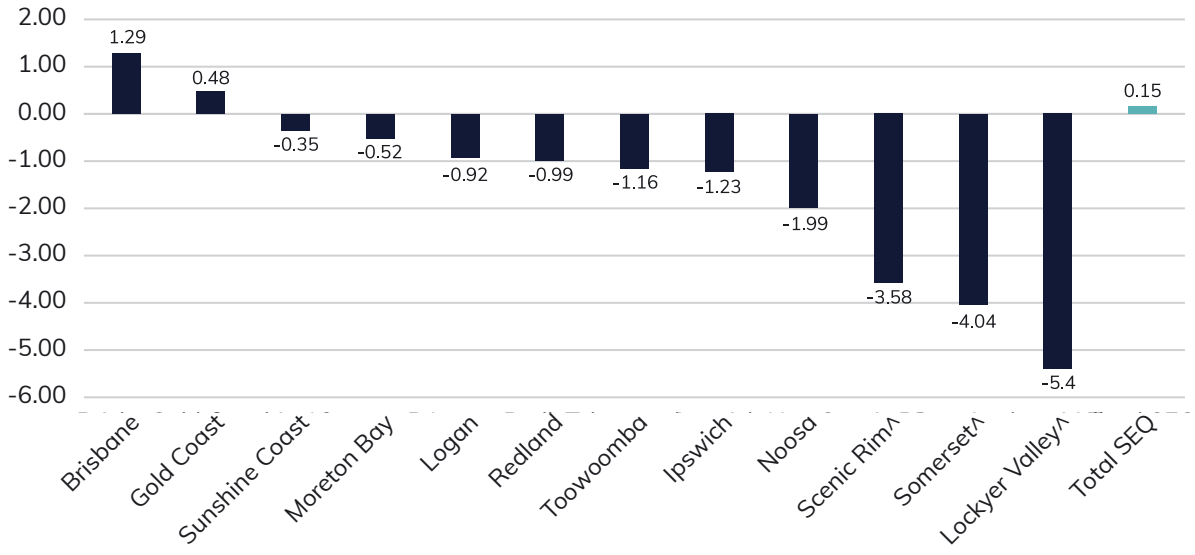
It is likely that population density is a factor here, as dwelling density it is a component of the walkability measure (Box 9.3). The two highest scoring LGAs (Brisbane and Gold Coast) have the highest population densities (see Chapter 3).

Box 9.3: How is walkability measured?

The walkability index is calculated as the sum of normalised scores for three factors: local neighbourhood street connectivity, dwelling density and daily living score (Gunn et al., 2017). Street connectivity is calculated as the number of intersections within the local walkable neighbourhood. Dwelling density is the number of (estimated) dwellings reachable within the local walkable neighbourhood. The AUO estimates dwelling locations by taking the number of dwellings in a Mesh Block and assigning them proportionally to all the GNAF address points within the Mesh Block. A daily living score is based on access to three kinds of basic amenities including a public transport stop, a supermarket, and a convenience location (including convenience stores, newsagents and petrol stations—places where people can get basics like milk and a newspaper) (AUO 2021).

A score of zero on the walkability index represents the mean at the Mesh Block level. The score for each LGA is a weighted average of all the Mesh Blocks in the LGA.

Figure 9.13: Walkability by LGAs of SEQ in 2018



Note:
^ Only a small proportion of Mesh Blocks are captured for these LGAs.
Source: BCARR analysis of data from the Australian Urban Observatory

Walkability: BCARR rings and sub-regions

Inner Brisbane scored substantially higher on the walkability index (3.29) than the next highest region–Middle Brisbane (0.59) (Table 9.21 and Figure 9.14). Outer Brisbane was the least walkable region (–0.82). Moreton Bay South scored higher than Moreton Bay North (0.12 compared with –0.99).

Table 9.21: Walkability by SEQ rings and sub-regions in 2018

BCARR rings/sub-region	Walkability index
INNER Brisbane*	3.29
MIDDLE Brisbane – TOTAL*	0.59
Middle East	0.23
Middle North	0.82
Middle South	0.85
Middle West	0.12
OUTER Brisbane – TOTAL	–0.82
Ipswich	–1.23
Redland	–0.99
Logan	–0.92
Moreton Bay	–0.52
Moreton Bay North	–0.99
Moreton Bay South	0.12
TOTAL – GREATER BRISBANE	0.33
Rest of SEQ	–0.19
Gold Coast	0.48
Sunshine Coast	–0.35
Noosa	–1.99
Toowoomba (urban part)	–1.16
Scenic Rim^	–3.58
Lockyer Valley^	–5.40
Somerset^	–4.04
TOTAL – SOUTH EAST QUEENSLAND	0.15

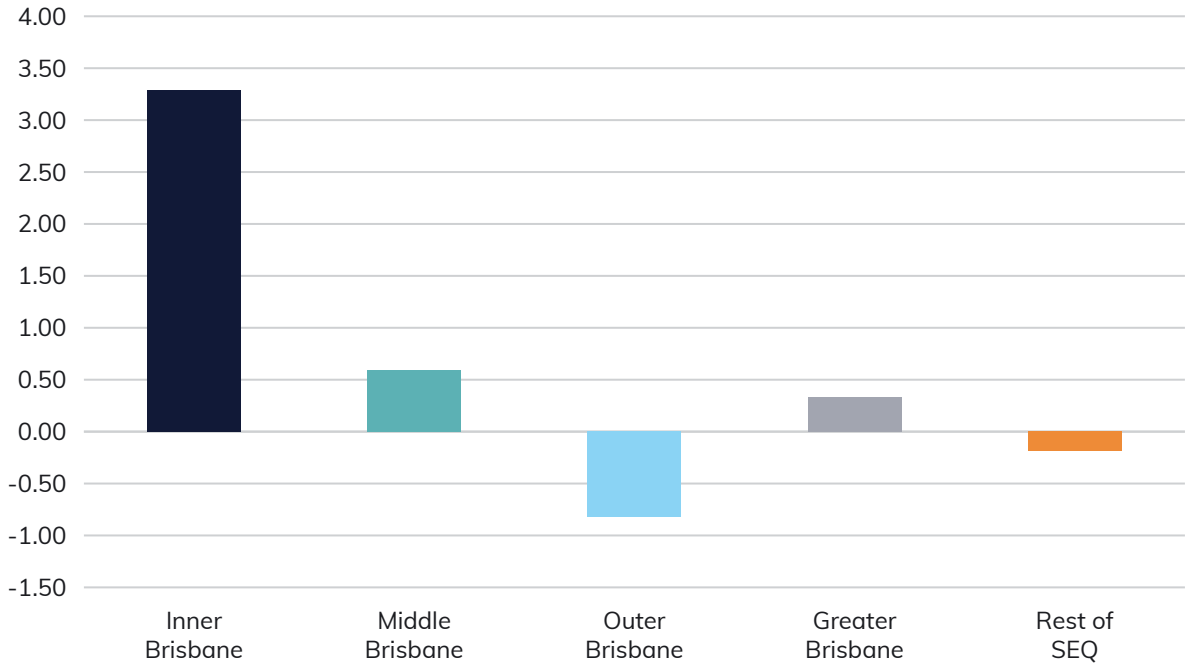
Note:

* The Inner and Middle Brisbane Rings together comprise the City of Brisbane LGA. See Table 1.3 and Figure 1.2 in Chapter 1 for these classifications.

^ Only a small proportion of Mesh Blocks are captured for these LGAs.

Source: BCARR analysis of data from the Australian Urban Observatory.

Figure 9.14: Walkability by SEQ rings in 2018

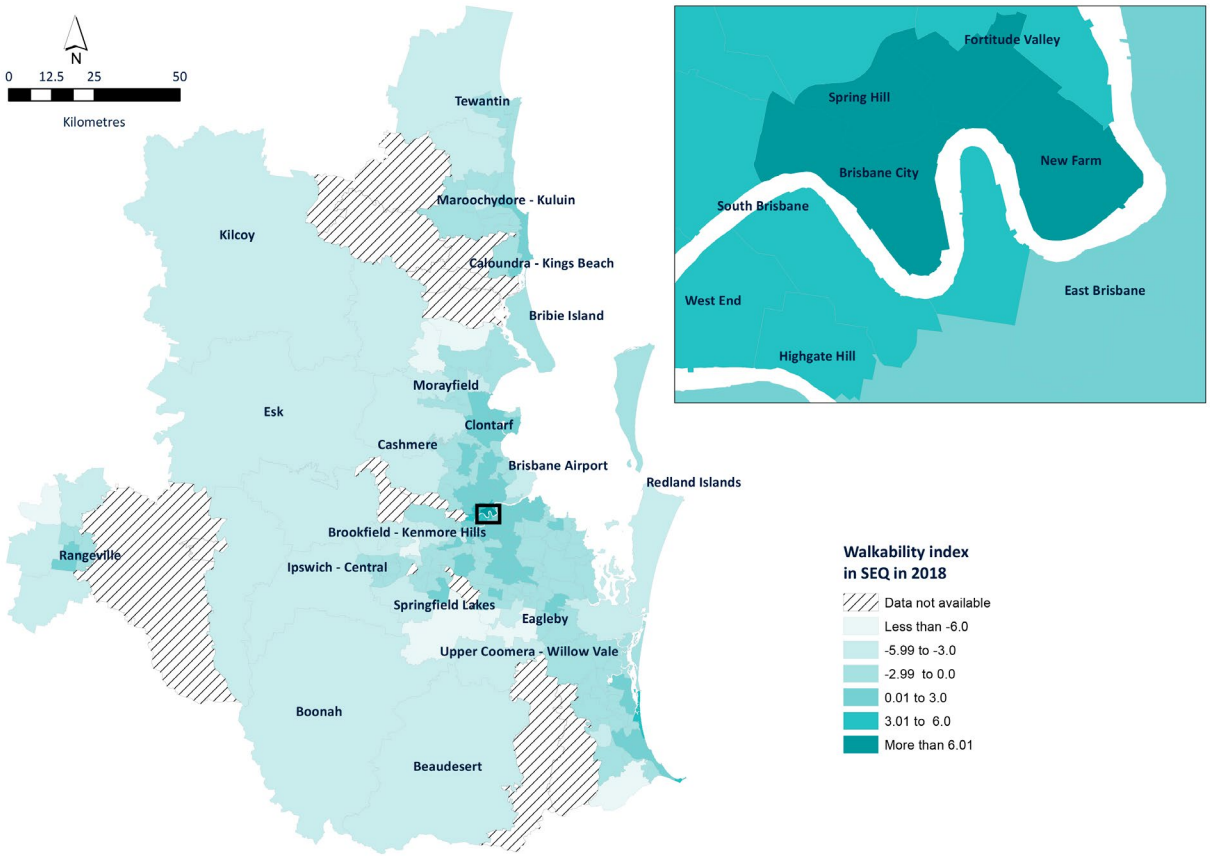


Source: BCARR analysis of data from the Australian Urban Observatory.

Walkability: SA2s

The map below (Figure 9.15) shows highly walkable areas around Inner and Middle Brisbane, the coastal strips of Sunshine Coast and Gold Coast, the coastal areas of Moreton Bay (surrounding Clontarf), and central Toowoomba (see Table 9.22 for top 10 SA2s). Areas of lower walkability are evident in Wamuran and Elimbah (upper Moreton Bay North), areas of Logan (Greenbank, Logan Village and Munruben), Gowrie in Toowoomba, Currumbin Valley in the Gold Coast, and Karalee in Ipswich.

Figure 9.15: Walkability in SA2s of SEQ in 2018



Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.22: Top 10 SA2s with the highest walkability scores in SEQ in 2018

SA2s	BCARR rings/sub-regions	Walkability Index
Fortitude Valley	Inner	6.82
Brisbane City	Inner	6.80
Spring Hill	Inner	6.67
New Farm	Inner	6.10
Newstead – Bowen Hills	Inner	5.78
Surfers Paradise	Gold Coast	5.76
Kangaroo Point	Inner	5.19
South Brisbane	Inner	4.66
Main Beach	Gold Coast	4.47
West End	Inner	4.31

Source: BCARR analysis of data from the Australian Urban Observatory.

Walkability: SA2 growth areas

The consolidation growth areas scored higher than the expansion growth areas and other (non-growth) areas (1.69, 1.12 and 0.09, respectively) (Table 9.23). Table 9.24 shows the SA2s for the consolidation growth areas. Scores ranged from 6.82 for Fortitude Valley in Inner Brisbane to –2.19 for Bli Bli in Sunshine Coast. For the expansion areas, walkability scores ranged from 1.19 for North Lakes-Mango Hill in Moreton Bay South, to –6.95 for Greenbank in Logan (Table 9.25).

Table 9.23: Walkability by growth areas in SEQ in 2018

Growth area type	Walkability Index
Consolidation	1.69
Expansion	–1.12
Other (non – growth)	0.09

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.24: Walkability by SA2 consolidation growth areas in 2018

SA2s	BCARR rings/sub-regions	Walkability Index
Biggera Waters	Gold Coast	1.89
Bli Bli	Sunshine Coast	–2.19
Bribie Island	Moreton Bay North	–0.64
Brisbane City	Inner	6.80
Caboolture	Moreton Bay North	–1.22
Caboolture – South	Moreton Bay North	–0.71
Calamvale – Stretton	Middle South	1.17
Coorparoo	Middle South	2.05
Forest Lake – Doolandella	Middle West	1.43
Fortitude Valley	Inner	6.82
Hope Island	Gold Coast	–1.52
Morningside – Seven Hills	Inner	1.82
Mountain Creek	Sunshine Coast	–0.08
Newstead – Bowen Hills	Inner	5.78
Oxenford – Maudsland	Gold Coast	–1.57
Peregian Springs	Sunshine Coast	–1.76
Robina	Gold Coast	0.69
Scarborough – Newport – Moreton Island	Moreton Bay North	–1.52
South Brisbane	Inner	4.66
Surfers Paradise	Gold Coast	5.76
Taigum – Fitzgibbon	Middle North	2.42
West End	Inner	4.31
Wurtulla – Birtinya	Sunshine Coast	0.70

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.25: Walkability by SA2 expansion growth areas in 2018

SA2s	BCARR rings/sub-regions	Walkability Index
Bellbird Park – Brookwater	Ipswich	–1.05
Boronia Heights – Park Ridge	Logan	–1.37
Caloundra – West	Sunshine Coast	–0.08
Cashmere	Moreton Bay South	–1.47
Chambers Flat – Logan Reserve	Logan	–5.41
Coomera	Gold Coast	–0.81
Dakabin – Kallangur	Moreton Bay South	0.91
Greenbank	Logan	–6.95
Jimboomba	Logan	–4.57
Murrumba Downs – Griffin	Moreton Bay South	0.91
Narangba	Moreton Bay North	–0.44
Noosa Hinterland	Noosa	–4.90
North Lakes – Mango Hill	Moreton Bay South	1.19
Ormeau – Yatala	Gold Coast	–2.52
Pallara – Willawong	Middle South	–0.07
Pimpama	Gold Coast	–2.05
Redbank Plains	Ipswich	–0.75
Redland Bay	Redland	–1.72
Ripley	Ipswich	–4.18
Rochedale – Burbank	Middle South	–2.33
Springfield Lakes	Ipswich	0.98
Thornlands	Redland	–1.23
Toowoomba – West	Toowoomba	–3.88
Upper Coomera – Willow Vale	Gold Coast	–0.71

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
AUO data are unavailable for the SA2 locality of Landsborough in Sunshine Coast.
Source: BCARR analysis of data from the Australian Urban Observatory.

9.4 Access to public open space

The AUO defines public open space as 'areas such as parks and recreational reserves, public gardens, nature reserves, civic areas and promenades' (AUO, 2022) that are publicly available for everyone to use. An important aspect of this definition is that public open spaces do not only include green areas such as parklands and nature reserves, but other spaces that may not necessarily have coverage of green canopy. It is also important that such areas are publicly accessible.

There are many benefits to having such spaces in urban environments. Parks and green spaces can support environmental health, create opportunities for recreation and physical activity, facilitate social interaction and have a positive impact upon health and well-being (Davern et al. 2017). Civic spaces that may not include green areas, such as town squares, are also important as they are places where people can gather together, thus affording social benefit.

Box 9.4: How is public open space identified?

GIS analysis was used to identify areas of public open space (POS) greater than 1.5 hectares in area. Access points are not available for Australian POS so the AUO generates potential access points every 20 metres along the road network to create a national POS dataset. POS geometries are then buffered by 20 metres, and any potential access points that intersect those buffers, are treated as an access point. Areas of open space, and those which may be considered publicly accessible, were identified using a detailed set of morphological criterions.

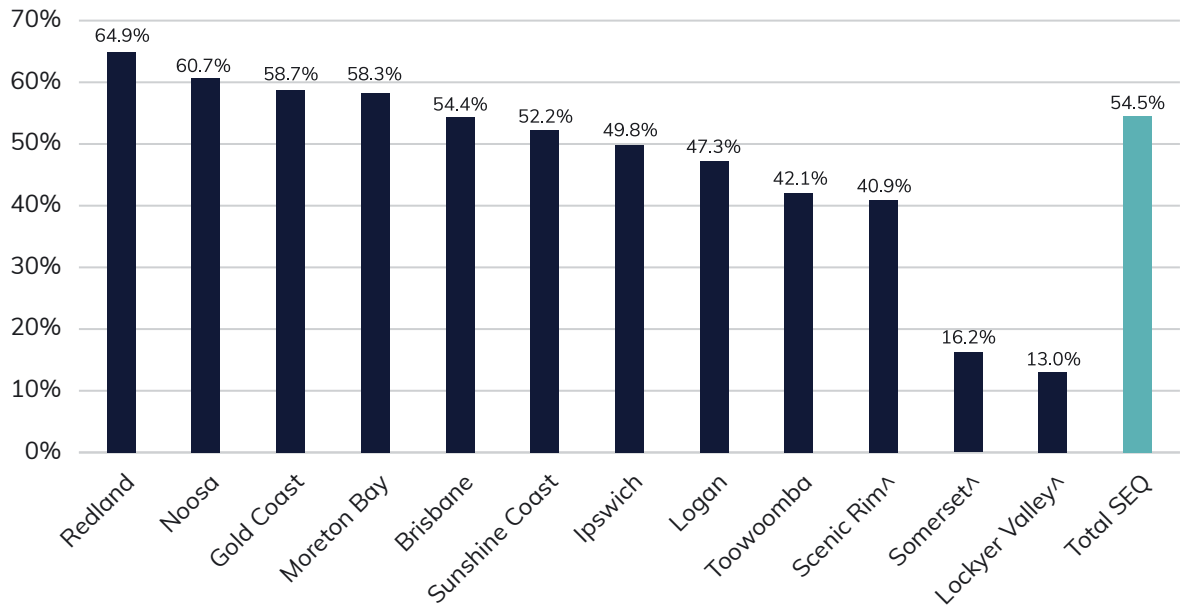
The score for this indicator is a measure of the percentage of dwellings within 400m of public open space greater than 1.5 hectares.

Access to public open space: LGAs

In 2018, 54.5 per cent of dwellings in SEQ had access to public open space (Table 9.16). Redland, Noosa and Gold Coast residents had the best access to public open space (with scores of 64.9 per cent, 60.7 per cent and 58.7 per cent, respectively).

The LGAs that scored lowest on this measure were Scenic Rim (40.9 per cent), Somerset (16.2 per cent) and Lockyer Valley (13.0 per cent). These results may seem surprising as these LGAs are in semi-rural or regional areas and may include rural properties or bushland. Such areas, however, may not be publicly accessible or able to be identified as such (see Box 9.4).

Figure 9.16: Access to public open space by LGAs of SEQ in 2018



Note:

^ Only a small proportion of Mesh Blocks are captured for these LGAs.

Source: BCARR analysis of data from the Australian Urban Observatory.

Access to public open space: BCARR rings and sub-regions

Figure 9.17 shows that there was little difference with regard to the rings and sub-regions, with Middle and Outer Brisbane scoring the highest (55.1 per cent and 54.8 per cent, respectively), and Inner Brisbane scoring the lowest (52.3 per cent) (Table 9.26). However, it must be noted, that there was a great deal of variation within the sub-regions: ranging from between 52.5 and 58.3 per cent for Middle Brisbane, between 47.3 and 64.9 per cent for Outer Brisbane, and between 13.0 and 60.7 per cent for the Rest of SEQ. Moreton Bay South scored substantially higher than Moreton Bay North (61.7 per cent compared with 55.8 per cent).

Table 9.26: Access to public open space by SEQ rings and sub-regions in 2018

BCARR rings/sub-regions	Access to public open space (per cent of dwellings)
INNER Brisbane*	52.3
MIDDLE Brisbane – TOTAL*	55.1
Middle East	57.2
Middle North	55.0
Middle South	52.5
Middle West	58.3
OUTER Brisbane – TOTAL	54.8
Ipswich	49.8
Redland	64.9
Logan	47.3
Moreton Bay	58.3
Moreton Bay North	55.8
Moreton Bay South	61.7
TOTAL – GREATER BRISBANE	54.7
Rest of SEQ	54.2
Gold Coast	58.7
Sunshine Coast	52.2
Noosa	60.7
Toowoomba (urban part)	42.1
Scenic Rim^	40.9
Lockyer Valley^	13.0
Somerset^	16.2
TOTAL – SOUTH EAST QUEENSLAND	54.5

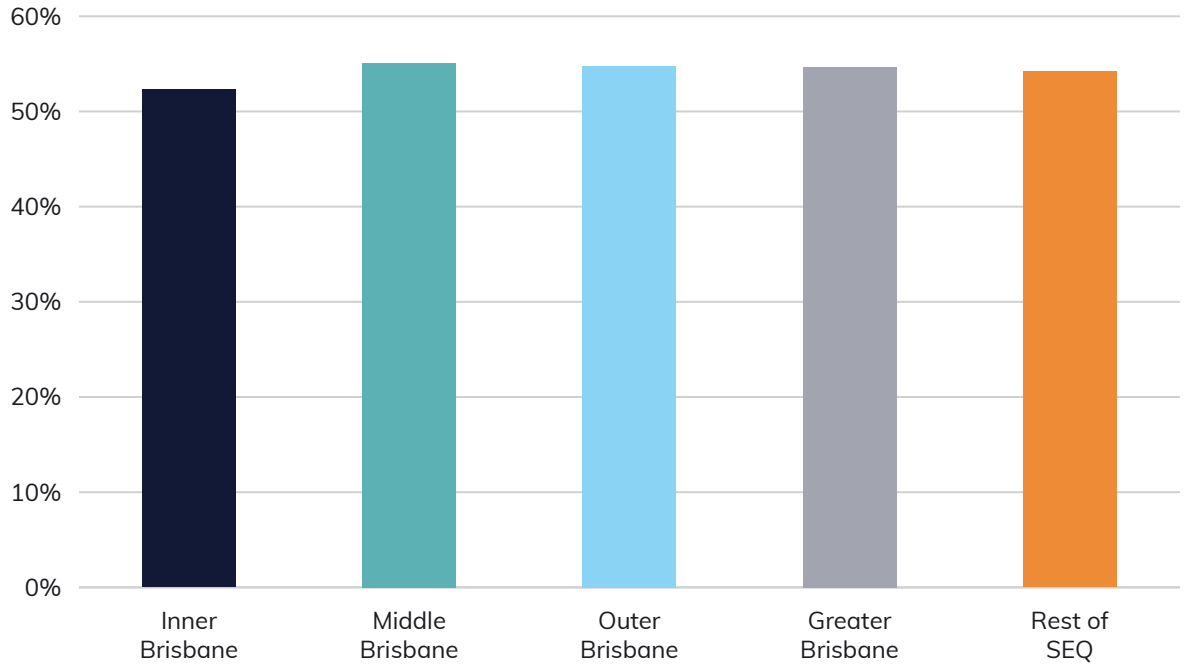
Notes:

* The Inner and Middle Brisbane Rings together comprise the City of Brisbane LGA. See Table 1.3 and Figure 1.2 in Chapter 1 for these classifications.

^ Only a small proportion of Mesh Blocks are captured for these LGAs.

Source: BCARR analysis of data from the Australian Urban Observatory.

Figure 9.17: Access to public open space by SEQ rings in 2018



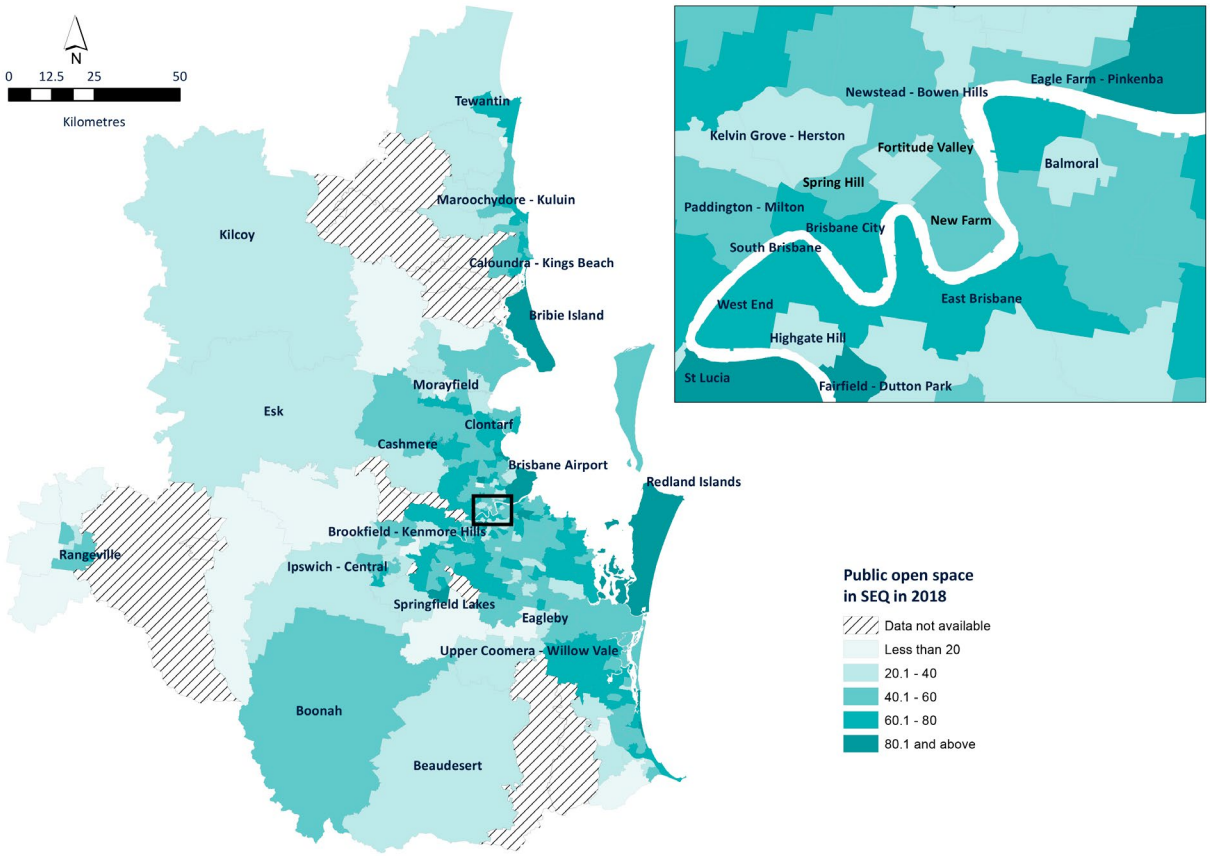
Source: BCARR analysis of data from the Australian Urban Observatory.

Access to public open space: SA2s

Figure 9.18 shows the distribution of scores for the SA2s. As can be seen, the SA2s around Middle Brisbane scored the highest, with areas of good access to public open space extending south through Logan and Redland to the coastal areas of the Gold Coast. Redland Islands and Bribie Island scored well, as did the coastal areas of the Sunshine Coast and Noosa (see Table 9.27 for the top ten SA2s).

SA2s with lower access included areas of Moreton Bay North (Woodford-D' Aguilar, Morayfield and Elimbah), the outer SA2s in Toowoomba (Gowrie, Cambooya-Wyreema, Toowoomba-West and Highfields), the southern inland areas of the Gold Coast (Highland Park, Worongary-Tallai and Currumbin Valley-Tallebudgera), Lowood (south Somerset) and Lockyer Valley-East, and Logan Village and adjacent Greenbank.

Figure 9.18: Access to public open space by SA2s in SEQ in 2018



Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.27: Top 10 SA2s with the highest access to public open space in SEQ in 2018

SA2s	BCARR rings/ sub-regions	Public open space score (per cent of dwellings)
Redland Islands	Redland	99.3
Bribie Island	Moreton Bay North	99.3
Eagle Farm – Pinkenba	Middle North	95.5
Sandgate – Shorncliffe	Middle North	86.6
Tingalpa	Middle East	83.7
Chermside West	Middle North	82.5
St Lucia	Middle West	82.5
Fairfield – Dutton Park	Middle South	81.7
Mermaid Beach – Broadbeach	Gold Coast	81.7
Main Beach	Gold Coast	81.2

Source: BCARR analysis of data from the Australian Urban Observatory.

Access to public open space: growth areas

Table 9.28 shows the results for the growth areas. Both scored higher than other (non-growth) areas (58.4 per cent, 56.5 per cent and 53.6 per cent, respectively). For the SA2 consolidation growth areas, scores ranged from 99.3 per cent in Bribie Island to below 30 per cent in Biggera Waters, Bli Bli and Peregian Springs (Table 9.29). For the SA2 expansion areas, scores ranged from 80.8 per cent in Springfield Lakes to 14.1 per cent in Greenbank (Table 9.30).

Table 9.28: Access to public open space in growth areas of SEQ in 2018

Growth area type	Access to public open space (per cent of dwellings)
Consolidation	58.4
Expansion	56.5
Other (non – growth)	53.6

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.29: Access to public open space by SA2 consolidation growth areas in 2018

SA2s	BCARR rings/ sub-regions	Access to public open space (per cent of dwellings)
Biggera Waters	Gold Coast	27.0
Bli Bli	Sunshine Coast	26.4
Bribie Island	Moreton Bay North	99.3
Brisbane City	Inner	75.3
Caboolture	Moreton Bay North	49.8
Caboolture – South	Moreton Bay North	47.2
Calamvale – Stretton	Middle South	51.6
Coorparoo	Middle South	34.9
Forest Lake – Doolandella	Middle West	65.8
Fortitude Valley	Inner	31.3
Hope Island	Gold Coast	59.3
Morningside – Seven Hills	Inner	40.2
Mountain Creek	Sunshine Coast	69.4
Newstead – Bowen Hills	Inner	57.9
Oxenford – Maudsland	Gold Coast	79.6
Peregian Springs	Sunshine Coast	3.71
Robina	Gold Coast	45.3
Scarborough – Newport – Moreton Island	Moreton Bay North	49.6
South Brisbane	Inner	71.0
Surfers Paradise	Gold Coast	76.8
Taigum – Fitzgibbon	Middle North	66.8
West End	Inner	62.1
Wurtulla – Birtinya	Sunshine Coast	70.8

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
Source: BCARR analysis of data from the Australian Urban Observatory.

Table 9.30: Access to public open space by SA2 expansion growth areas in 2018

SA2s	BCARR rings/sub-regions	Access to public open space (per cent of dwellings)
Bellbird Park – Brookwater	Ipswich	49.6
Boronia Heights – Park Ridge	Logan	40.1
Caloundra – West	Sunshine Coast	51.1
Cashmere	Moreton Bay South	60.9
Chambers Flat – Logan Reserve	Logan	49.3
Coomera	Gold Coast	72.5
Dakabin – Kallangur	Moreton Bay South	57.0
Greenbank	Logan	14.1
Jimboomba	Logan	26.0
Murrumba Downs – Griffin	Moreton Bay South	70.7
Narangba	Moreton Bay North	63.9
Noosa Hinterland	Noosa	23.3
North Lakes – Mango Hill	Moreton Bay South	68.6
Ormeau – Yatala	Gold Coast	47.9
Pallara – Willawong	Middle South	69.8
Pimpama	Gold Coast	68.4
Redbank Plains	Ipswich	66.4
Redland Bay	Redland	65.1
Ripley	Ipswich	21.7
Rochedale – Burbank	Middle South	43.1
Springfield Lakes	Ipswich	80.8
Thornlands	Redland	61.6
Toowoomba – West	Toowoomba (urban part)	19.4
Upper Coomera – Willow Vale	Gold Coast	73.6

Note: Details of consolidation and expansion areas are available in chapters 1 and 4, in sections 1.3 and 4.3.
AUO data are unavailable for the SA2 locality of Landsborough in Sunshine Coast.

Source: BCARR analysis of data from the Australian Urban Observatory.

9.5 Conclusion

Brisbane LGA scored highest for all of the AUO liveability indicators except access to public open space. The most highly liveable areas, in particular, were centred around Middle and Inner Brisbane. Toowoomba also did well on many of the indicators, scoring in the top three for all of the social infrastructure measures. While population size and density may be a factor in accounting for the success of Brisbane, this is not the case with Toowoomba, which may have relatively good access to services due to its historical function as a regional centre.

With regards to health and education infrastructure, it is evident that population structure may be a factor relevant to outcomes. Although Brisbane and Toowoomba were the highest scoring LGAs for these indicators, there are other LGAs that did well which may be related to particular demographic characteristics. Somerset, Sunshine Coast and Scenic Rim, for example, scored well on the health index and these LGAs have older populations. The LGAs with large school–aged cohorts (Logan and Ipswich) scored high on the education index.

While Brisbane and Toowoomba again achieved good results in relation to arts and culture, and community and sports infrastructure, Gold Coast and Scenic Rim did respectively well on these indicators reflecting their unique local characteristics.

In relation to access to public open space, some outer and regional LGAs (Redland, Noosa, Gold Coast and Moreton Bay) achieved the best results. Brisbane and Gold Coast scored highest for walkability, and this may be related to population density.

Outer Brisbane, lagged behind Middle and Inner Brisbane for access to social infrastructure and walkability. It achieved better results, however, for access to public open space – nudging slightly ahead of Inner Brisbane and matching Middle Brisbane.

Notably, the expansion growth areas scored lower than consolidation growth areas and other (non-growth) areas for most indicators. One reason for this, is that as developing or new areas, expansion areas have yet to establish or attract a full range of services.

The implications of this will be discussed in the next chapter, where these and other findings are examined in relation to challenges and opportunities for the future growth and development of SEQ.