

Understanding
liveability
inequities across
the suburbs of
Canterbury-
Bankstown

Liveability Scorecard For the LGA of Canterbury- Bankstown: 2021

Acknowledgements

This work is licensed under CC BY-ND 4.0 and is free to share and redistribute the material but must give appropriate attribution and credit. Any maps reproduced as part of this project must include attribution and citation.

Both, A., Gudes, O., Papaix, B., Roberts, R., Tao, Y., Rivera Villicana, J. & Davern, M. Liveability Scorecard for the LGA of Canterbury-Bankstown: Understanding liveability inequities across the suburbs of Canterbury-Bankstown. Australian Urban Observatory, RMIT University, Melbourne.

<https://doi.org/10.25439/rmt.28237094>.

Enquiries regarding this report may be directed to:

Australian Urban Observatory

Building 8, Level 11, RMIT University City campus, 124 La Trobe Street, Melbourne VIC, 3000 Australia
E auo@rmit.edu.au

Sydney Health Promotion Unit

E SLHD-HPUReception@health.nsw.gov.au
P 02 9515 9055

Indicator data and maps can be accessed through the Australian Urban Observatory:

W auo.org.au

About this report

This Local Government Area (LGA) Liveability Scorecard has been prepared by the Australian Urban Observatory (AUO) in partnership with the Health Promotion Unit, Sydney Local Health District. It has been designed to understand the liveability of individual suburbs within an LGA and prioritise future actions and investments of interest to councils, community, urban planners, developers, and other decision makers to achieve healthier and more liveable places across an entire LGA.

The LGA Liveability Scorecard includes AUO indicators measuring overall liveability, walkability, social infrastructure, public transport, healthy food, alcohol, public open space, local employment and housing affordability^[1]. For each indicator, suburb level results are compared to the LGA average to understand place-based liveability strengths and areas needing future prioritisation and action. All AUO indicators align with the UN Sustainable Development Goals^[2].

The LGA Liveability Scorecards are aligned with a range of AUO scorecards including [City Scorecards](#) and [Growth Area Scorecards](#) developed by the AUO @ RMIT University based on 2021 indicator results.

More detailed neighbourhood, suburb, and Local Government Area results across Australian cities are available online at auo.org.au.



Liveability Index



Walkability



Social Infrastructure



Transport



Food



Alcohol



Public Open Space



Employment



Housing

Summary for Canterbury-Bankstown

Indicator		Brief Description	Value	Difference between LGA and Greater Sydney	
Liveability Index		Liveability Index	99.5	●	Similar*
Walkability Index		Walkability Index	0.9	▲	Better
Social Infrastructure Index		Social Infrastructure Index	6.8	●	Similar*
Public Transport		Percentage living within 400m to regular public transport	81.1%	▲	Better
Food Environment		Average distance to closest healthy food outlet (super-market or greengrocer)	991.3m	▲	Better
Alcohol Environment		Average distance to closest off-license alcohol outlet	750.5m	●	Similar*
Public Open Space		Percentage living within 400m of public open space of 1.5 hectares	28.6%	▼	Worse
Local Employment		Percentage of employed people living and working in the same SA3	27.3%	▼	Worse
Housing Affordability		Percentage of households spending more than 30% of income on housing costs	42.6%	▼	Worse

* Similar = less than 10% difference between LGA and city average.



Liveability Index

Rationale

The economic, social, environmental and health co-benefits of urban liveability are recognised by all levels of government in Australia and globally^[3]. Liveable communities are safe, socially cohesive, inclusive and environmentally sustainable^[4]. They have affordable housing linked via public transport, walking and cycling infrastructure to employment, education, shops, services, public open space and social, cultural and recreational opportunities^[3].

What we measured

The Liveability Index is underpinned by over a decade of research. It combines six domains of liveability found to be associated with health and wellbeing outcomes: walkability; access to social infrastructure; public transport; larger public open space; affordable housing; and local employment.

Results

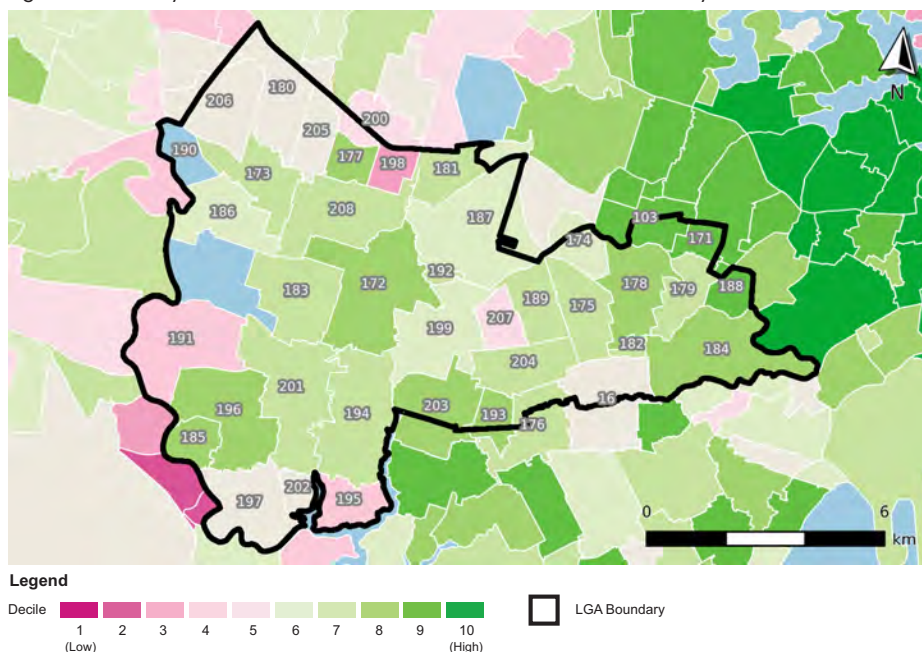
ID	Suburb	Value
171	Ashbury	102.5
188	Hurlstone Park	102.0
103	Croydon Park	101.9
196	Panania	101.2
177	Birrong	101.1
184	Earlwood	100.8
193	Narwee	100.7
203	Riverwood	100.6
185	East Hills	100.4
178	Campsie	100.3
172	Bankstown	100.3
175	Belmore	100.2
179	Canterbury	100.2
204	Roselands	100.0
176	Beverly Hills	100.0
208	Yagoona	99.8
189	Lakemba	99.7
182	Clemton Park	99.5
192	Mount Lewis	99.5
194	Padstow	99.5
201	Revesby	99.5
183	Condell Park	99.3
173	Bass Hill	99.3
181	Chullora	99.3
186	Georges Hall	99.0
187	Greenacre	98.9
174	Belfield	98.8
199	Punchbowl	98.5
202	Revesby Heights	98.3
197	Picnic Point	98.1
180	Chester Hill	98.1
16	Kingsgrove	98.0
205	Sefton	97.8
206	Villawood	97.4
207	Wiley Park	97.2
200	Regents Park	96.9
191	Milperra	96.0
195	Padstow Heights	95.9
198	Potts Hill	94.0
190	Lansdowne	nan

The Liveability Index score for residences across the LGA of Canterbury-Bankstown is

99.5

This Liveability Index score is similar to the Greater Sydney average of 99.7.

Figure 1. Liveability Index scores for suburbs across the LGA of Canterbury-Bankstown





Walkability

Rationale

Walkability measures the ease and safety of walking in an area. Neighbourhoods that have shops and services to walk to, small blocks, good street connectivity, and higher population density are more walkable^[5]. Walkable neighbourhoods discourage driving and encourage active travel resulting in higher levels of walking and cycling. The benefits of a physically active life are well established in reducing chronic disease and maintaining health and wellbeing^[6].

What we measured

Walkability for Transport is calculated as a composite index, with 0 being the national average, that includes access to daily living destinations (something to walk to), dwelling density (population needed to supply services and destinations), and street connectivity (a way to get there) within a reasonable walking distance of home. The higher the score above zero, the more walkable the area.

Results

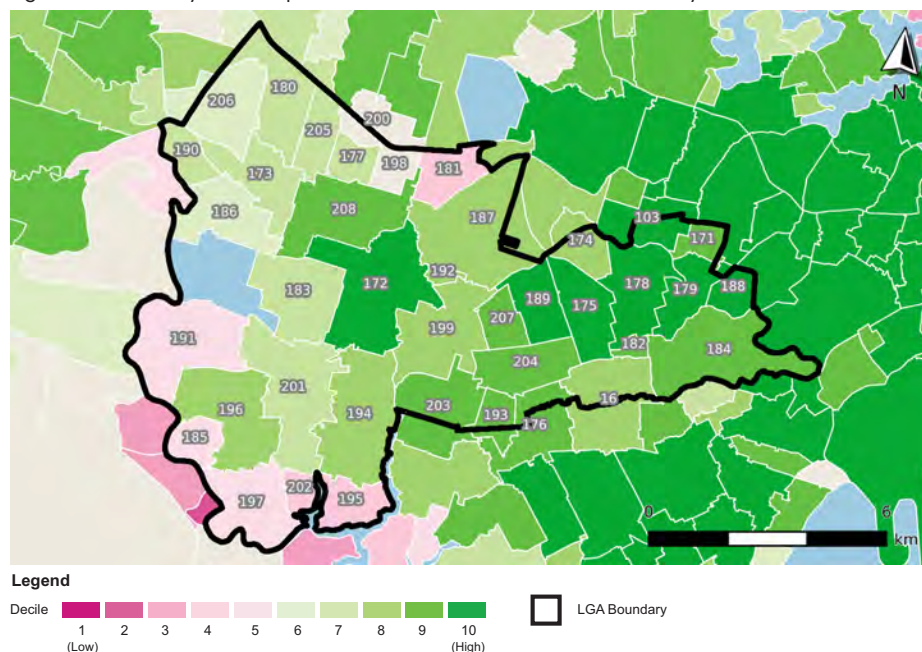
ID	Suburb	Value
178	Campsie	3.1
179	Canterbury	2.4
188	Hurlstone Park	2.4
189	Lakemba	2.3
103	Croydon Park	2.2
175	Belmore	2.1
172	Bankstown	2.0
193	Narwee	1.8
204	Roselands	1.5
176	Beverly Hills	1.5
182	Clemton Park	1.4
207	Wiley Park	1.3
171	Ashbury	1.3
184	Earlwood	1.1
203	Riverwood	1.1
208	Yagoona	0.8
174	Belfield	0.7
199	Punchbowl	0.6
187	Greenacre	0.4
192	Mount Lewis	0.4
16	Kingsgrove	0.3
196	Panania	0.3
194	Padstow	0.1
201	Revesby	0.0
177	Birrong	0.0
173	Bass Hill	-0.1
183	Condell Park	-0.2
190	Lansdowne	-0.2
180	Chester Hill	-0.2
205	Sefton	-0.4
206	Villawood	-0.8
186	Georges Hall	-0.9
200	Regents Park	-1.1
198	Potts Hill	-1.4
185	East Hills	-1.6
197	Picnic Point	-1.8
191	Milperra	-1.9
202	Revesby Heights	-2.1
181	Chullora	-2.4
195	Padstow Heights	-2.5

The LGA of Canterbury-Bankstown ranks

15th

within all LGAs in Greater Sydney for Walkability.

Figure 2. Walkability for transport across suburbs across the Canterbury-Bankstown LGA





Social Infrastructure

Rationale

Social infrastructure refers to essential community services and resources^[7]. Ready access to a wide range of different types of social infrastructure is important for the creation and ongoing development of healthy communities. The availability of well-planned social infrastructure supports liveable communities by promoting increased physical activity^[8], wellbeing^[7], increased satisfaction with the local community^[9], improving social interactions and mental health outcomes^[10]. Social infrastructure is a key component of liveability.

What we measured

The Social Infrastructure Index includes access to 16 types of social infrastructure at various recommended distances from dwellings. It includes access to childcare facilities, community centres, libraries, aged care facilities, pharmacies, family and community healthcare, dentists and general practitioners, sporting facilities, swimming pools, outside school hours childcare, primary and secondary schools, museums or galleries, and cinemas and theatres.

Results

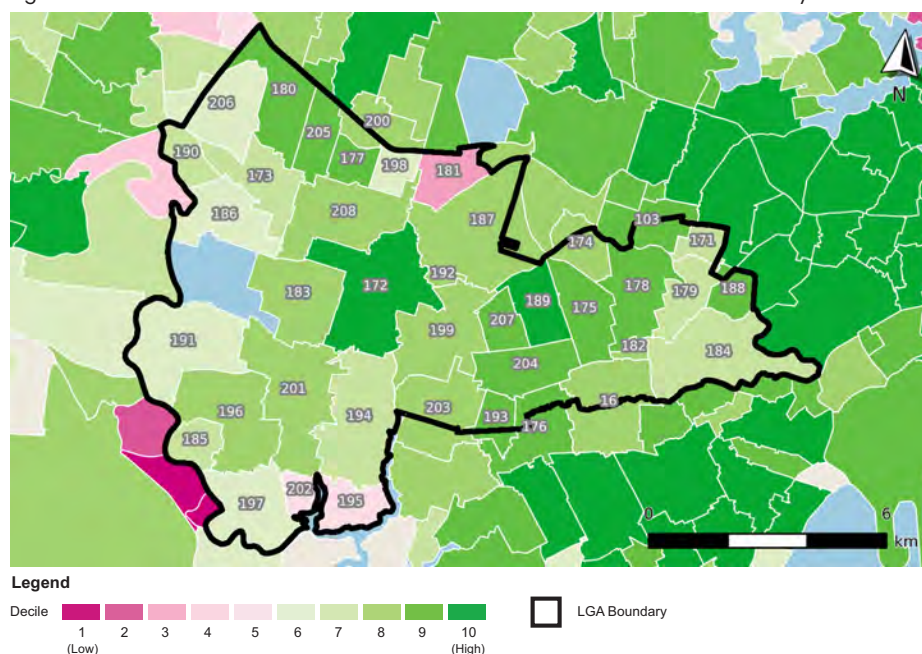
ID	Suburb	Value
172	Bankstown	9.0
189	Lakemba	8.8
178	Campsie	8.1
193	Narwee	8.0
175	Belmore	8.0
204	Roselands	7.6
176	Beverly Hills	7.5
103	Croydon Park	7.5
188	Hurlstone Park	7.4
180	Chester Hill	7.3
207	Wiley Park	7.2
205	Sefton	7.1
177	Birrong	6.9
203	Riverwood	6.8
183	Condell Park	6.8
16	Kingsgrove	6.7
199	Punchbowl	6.7
196	Panania	6.7
200	Regents Park	6.6
208	Yagoona	6.4
182	Clemton Park	6.4
174	Belfield	6.0
192	Mount Lewis	6.0
187	Greenacre	5.9
201	Revesby	5.9
179	Canterbury	5.8
171	Ashbury	5.8
185	East Hills	5.7
194	Padstow	5.7
184	Earlwood	5.7
173	Bass Hill	5.2
190	Lansdowne	5.0
186	Georges Hall	4.9
191	Milperra	4.8
197	Picnic Point	4.5
206	Villawood	4.5
198	Potts Hill	4.3
202	Revesby Heights	3.4
195	Padstow Heights	3.0
181	Chullora	1.8

▼
The Social Infrastructure Index score for residences across the LGA of Canterbury-Bankstown is

7.0 out of a total of 16.

In comparison, the score for Greater Sydney, on average, is 6.288.

Figure 3. Social Infrastructure Index results across suburbs of the LGA of Canterbury-Bankstown.





Public Transport

Rationale

People living close to public transport are more likely to use it, less dependent on cars and more likely to achieve physical activity requirements^[6]. Living within 400m of a public transport stop with a service every 30 minutes encourages more walking^[11]. It supports sustainability and people with restricted mobility, including young people, older adults, people with disabilities and people who don't own cars to access services, education and jobs.

What we measured

We measured access to bus, train, and tram stops with an average service interval of no more than 30 minutes between the weekday hours of 7 am and 7 pm. Access was measured as the percentage of dwellings with a regular service within 400m of any of these stops based on a walkable road network distance.

Results

ID	Suburb	Value
190	Lansdowne	100.0%
202	Revesby Heights	96.7%
193	Narwee	95.5%
185	East Hills	94.9%
204	Roselands	94.6%
192	Mount Lewis	91.9%
16	Kingsgrove	91.2%
188	Hurlstone Park	91.2%
175	Belmore	90.7%
103	Croydon Park	90.1%
189	Lakemba	89.3%
203	Riverwood	89.2%
174	Belfield	88.1%
199	Punchbowl	86.9%
172	Bankstown	86.5%
208	Yagoona	85.7%
171	Ashbury	85.5%
179	Canterbury	85.1%
184	Earlwood	83.9%
187	Greenacre	83.4%
183	Condell Park	81.4%
178	Campsie	80.8%
201	Revesby	80.2%
194	Padstow	80.0%
197	Picnic Point	77.7%
206	Villawood	76.8%
196	Panania	75.2%
176	Beverly Hills	75.1%
173	Bass Hill	75.1%
177	Birrong	72.7%
180	Chester Hill	70.3%
205	Sefton	63.4%
200	Regents Park	61.8%
198	Potts Hill	58.1%
182	Clemton Park	55.9%
186	Georges Hall	54.8%
191	Milperra	51.9%
207	Wiley Park	47.7%
195	Padstow Heights	42.0%
181	Chullora	25.6%

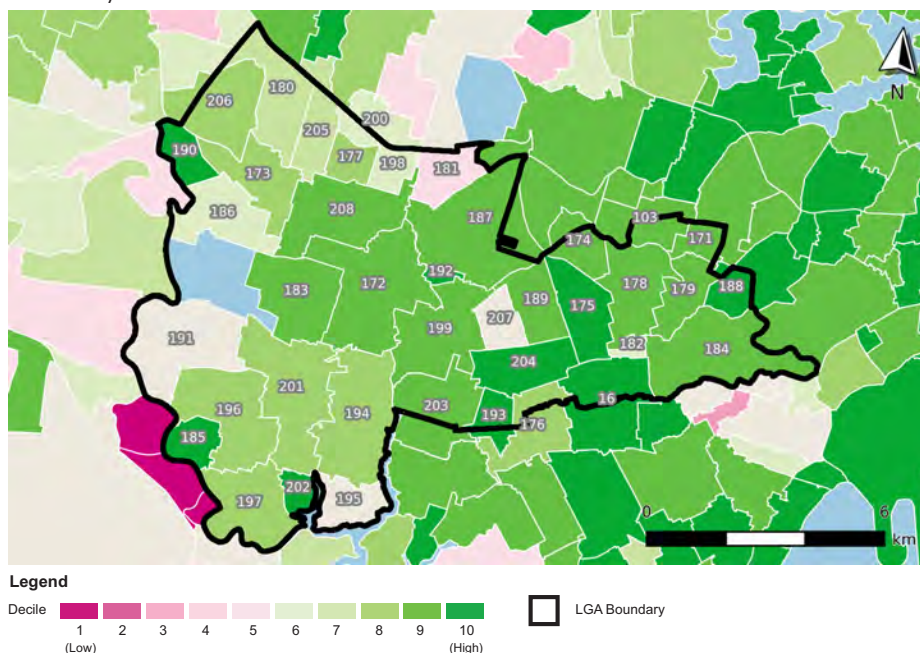


The percentage of households across the LGA of Canterbury-Bankstown with access to frequent public transport is

81.1%

This is better than the Greater Sydney average of 73.3%.

Figure 4. Access to Frequent Public Transport within 400m across the suburbs of the LGA of Canterbury-Bankstown





Food

Rationale

Supermarkets support healthy eating and provide access to affordable fresh fruit and vegetables. People living within a short walk of a supermarket are more likely to walk or cycle instead of driving^[6,12]. Increases in physical activity through active transport modes like walking and cycling, also reduce chronic disease risk and traffic congestion. In disadvantaged areas, living within 800m of a supermarket reduces the risk of overweight and obesity^[13].

What we measured

We measured the average distance to a healthy food outlet (supermarket or greengrocer). Distances were calculated according to a pedestrian accessible road network.

Results

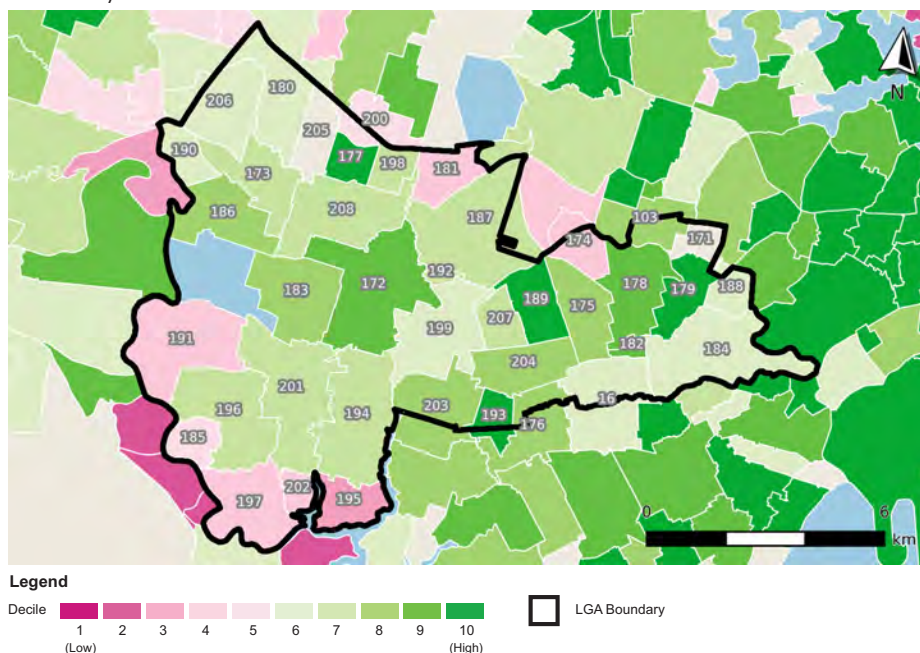
ID	Suburb	Value
179	Canterbury	389.3m
193	Narwee	570.4m
177	Birrong	575.7m
189	Lakemba	597.5m
178	Campsie	673.8m
182	Clemton Park	713.9m
172	Bankstown	784.3m
176	Beverly Hills	813.7m
204	Roselands	827.0m
103	Croydon Park	828.5m
203	Riverwood	855.9m
186	Georges Hall	856.7m
175	Belmore	868.8m
183	Condell Park	912.8m
196	Panania	969.7m
187	Greenacre	977.2m
207	Wiley Park	984.5m
173	Bass Hill	1012.1m
198	Potts Hill	1022.7m
194	Padstow	1024.9m
208	Yagoona	1029.5m
192	Mount Lewis	1048.7m
201	Revesby	1060.1m
184	Earlwood	1064.6m
16	Kingsgrove	1067.6m
206	Villawood	1113.3m
188	Hurlstone Park	1138.4m
190	Lansdowne	1151.7m
199	Punchbowl	1197.9m
180	Chester Hill	1199.5m
171	Ashbury	1219.7m
205	Sefton	1329.7m
200	Regents Park	1412.9m
185	East Hills	1512.0m
202	Revesby Heights	1750.1m
197	Picnic Point	1779.2m
181	Chullora	1981.2m
174	Belfield	2010.5m
191	Milperra	2031.2m
195	Padstow Heights	2283.6m

The average distance to a supermarket or greengrocer for residences in the Canterbury-Bankstown LGA is

991.3 metres.

This is better than the Greater Sydney average of 1117.9 metres.

Figure 5. Distance to a supermarket or greengrocer for suburbs across the LGA of Canterbury-Bankstown





Alcohol

Rationale

Increased access to alcohol has been linked to harmful alcohol consumption and alcohol-related violence^[14,15]. Furthermore, alcohol outlets are more likely to be located in more disadvantaged areas^[16]. For those living in disadvantaged areas where there are fewer alcohol outlets, there appears to be a protective affect with enhanced self-reported health^[16].

What we measured

The average distance to off-license alcohol outlets which includes bottle shops and supermarkets where alcohol can be purchased and taken to another premise for consumption. Distances were calculated from individual dwellings using a pedestrian accessible road network.

Results

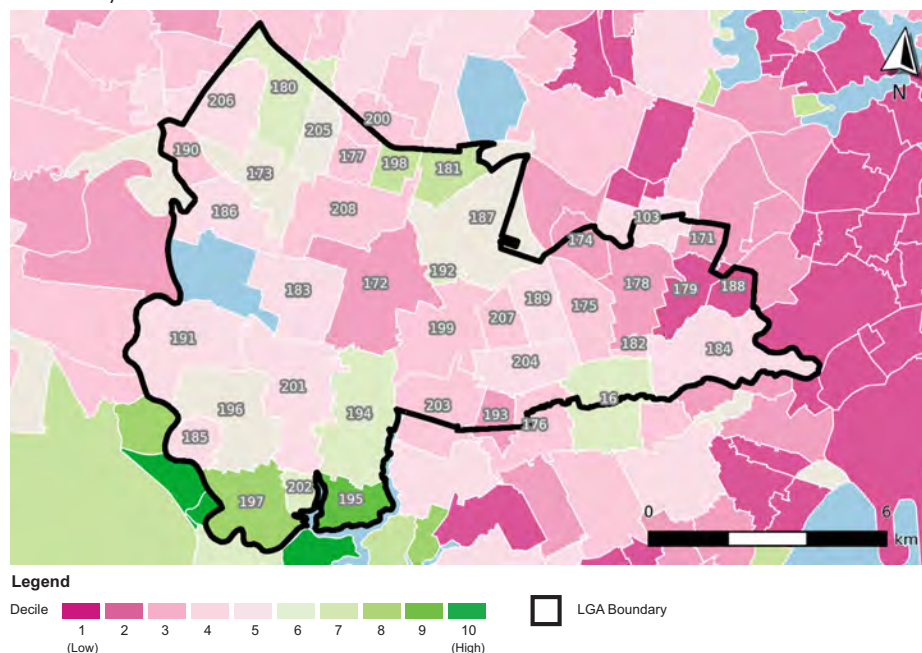
ID	Suburb	Value
195	Padstow Heights	2306.1m
197	Picnic Point	1659.0m
181	Chullora	1183.4m
198	Potts Hill	1126.8m
202	Revesby Heights	1049.6m
16	Kingsgrove	1001.7m
192	Mount Lewis	968.9m
194	Padstow	964.9m
180	Chester Hill	962.5m
205	Sefton	867.6m
187	Greenacre	865.8m
173	Bass Hill	841.1m
196	Panania	829.1m
206	Villawood	826.5m
186	Georges Hall	825.1m
204	Roselands	818.3m
103	Croydon Park	765.5m
189	Lakemba	764.1m
184	Earlwood	753.2m
185	East Hills	749.3m
191	Milperra	743.8m
201	Revesby	741.0m
183	Condell Park	708.3m
208	Yagoona	703.4m
176	Beverly Hills	694.8m
203	Riverwood	677.9m
200	Regents Park	668.5m
199	Punchbowl	646.9m
182	Clemon Park	626.6m
175	Belmore	625.5m
190	Lansdowne	615.4m
177	Birrong	602.5m
207	Wiley Park	594.8m
172	Bankstown	541.3m
193	Narwee	508.9m
171	Ashbury	507.0m
178	Campsie	478.7m
174	Belfield	472.0m
179	Canterbury	381.9m
188	Hurlstone Park	346.9m

▼
The average distance to an off-license alcohol outlet across the suburbs of the LGA of Canterbury-Bankstown is

750.5 metres.

This is similar to the Greater Sydney average of 799.3 metres.

Figure 6. Distance to an off-license alcohol outlet across the suburbs of the LGA of Canterbury-Bankstown





Public Open Space

Rationale

Public open space includes parks, open areas and places where people can congregate for active and passive recreation and enjoyment. Parks are one form of public open space that usually include grassed areas, gardens, and some green recreational space. Public open spaces support both the physical and mental health of people living nearby. Green public open spaces also support ecosystems, ecology and biodiversity of an area^[17] and provide cooling effects mitigating urban heat island effects.

What we measured

Large Public Open Space was defined as urban parks greater than or equal to 1.5 hectares, since larger parks have been shown to support physical activity. Access was measured as the percentage of dwellings within 400m based on a walkable road network distance.

Results

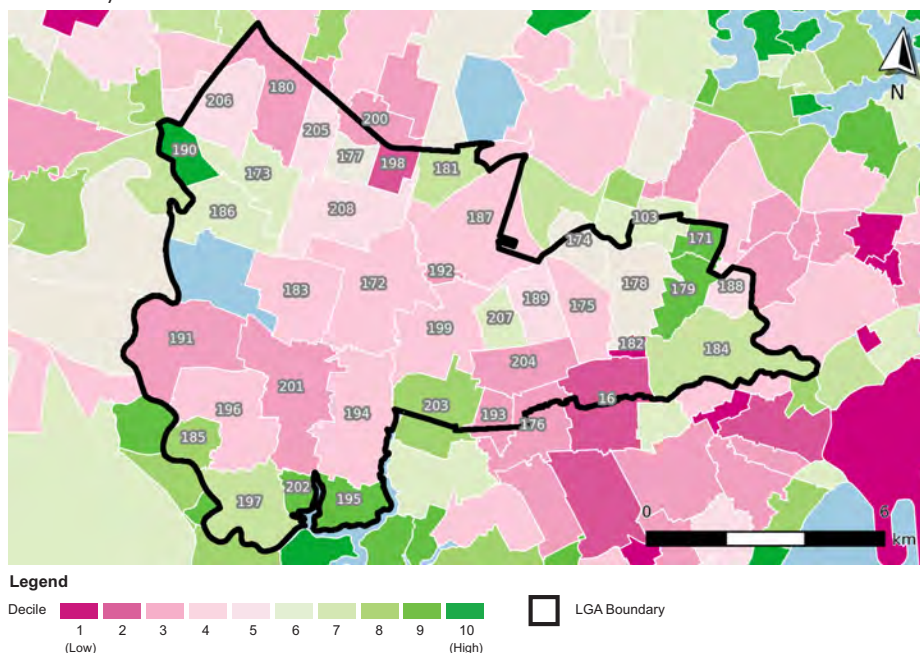
ID	Suburb	Value
190	Lansdowne	100.0%
202	Revesby Heights	83.4%
179	Canterbury	80.4%
195	Padstow Heights	73.6%
171	Ashbury	72.9%
185	East Hills	58.5%
203	Riverwood	57.8%
181	Chullora	53.8%
184	Earlwood	53.3%
197	Picnic Point	50.9%
103	Croydon Park	43.0%
186	Georges Hall	42.6%
173	Bass Hill	41.4%
207	Wiley Park	39.2%
177	Birrong	38.8%
174	Belfield	36.7%
178	Campsie	33.7%
206	Villawood	29.6%
188	Hurlstone Park	29.6%
189	Lakemba	28.3%
208	Yagoona	25.3%
205	Sefton	23.7%
196	Panania	22.3%
194	Padstow	20.9%
172	Bankstown	19.6%
187	Greenacre	17.3%
199	Punchbowl	17.0%
183	Condell Park	16.5%
175	Belmore	15.3%
176	Beverly Hills	14.0%
201	Revesby	13.0%
180	Chester Hill	12.7%
204	Roselands	11.7%
193	Narwee	11.3%
200	Regents Park	5.6%
192	Mount Lewis	5.4%
191	Milperra	1.9%
16	Kingsgrove	0.2%
198	Potts Hill	0.1%
182	Clemton Park	0.0%

▼
The percentage of residences with access to Large Public Open Space within 400m across the LGA of Canterbury-Bankstown is

28.6%

This is worse than the Greater Sydney average of 40.6%.

Figure 7. Access to large public open space within 400m across the suburbs of the LGA of Canterbury-Bankstown





Employment

Rationale

Accessible employment is a social determinant of health, providing people with financial resources to support themselves and their families. Access to local employment reduces vehicle kilometres travelled, travel time and traffic congestion on city roads. It also increases the likelihood of people using active transport such as walking, cycling and public transport, and has been associated with improved self-reported health^[18]. Access to local employment with shorter travel times has the potential to support work-life balance and is associated with a reduced risk of obesity^[19].

What we measured

We measured access to local employment as the percentage of residents living in an Australian Bureau of Statistics' Statistical Area Level 1 (SA1), and working within the same Statistical Area Level 3 (SA3). On average, SA1 areas represent approximately 400 people while SA3 areas represent between 30,000 and 130,000 people.

Results

ID	Suburb	Value
181	Chullora	100.0%
183	Condell Park	40.0%
186	Georges Hall	39.8%
191	Milperra	36.3%
187	Greenacre	35.2%
173	Bass Hill	34.4%
208	Yagoona	33.2%
192	Mount Lewis	32.6%
202	Revesby Heights	32.5%
172	Bankstown	31.9%
197	Picnic Point	31.3%
196	Panania	30.3%
177	Birrong	30.0%
195	Padstow Heights	29.9%
201	Revesby	29.5%
185	East Hills	29.4%
194	Padstow	26.9%
103	Croydon Park	26.4%
206	Villawood	25.6%
171	Ashbury	25.5%
200	Regents Park	25.0%
204	Roselands	24.8%
180	Chester Hill	24.4%
199	Punchbowl	24.3%
189	Lakemba	23.7%
175	Belmore	23.1%
184	Earlwood	21.9%
207	Wiley Park	21.5%
16	Kingsgrove	21.4%
198	Potts Hill	21.3%
188	Hurlstone Park	21.3%
205	Sefton	21.3%
182	Clemton Park	21.1%
178	Campsie	19.7%
174	Belfield	19.2%
176	Beverly Hills	18.6%
203	Riverwood	18.2%
193	Narwee	16.5%
179	Canterbury	15.2%
190	Lansdowne	0.0%

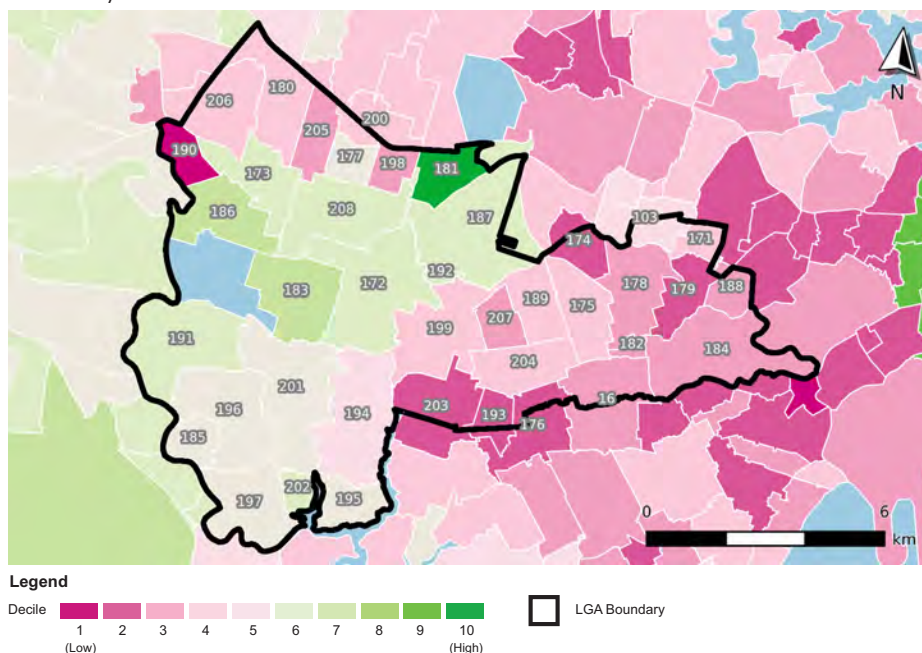


The proportion of the population living and working locally in the LGA of Canterbury-Bankstown is

27.3%

This is worse than the Greater Sydney average of 32.5% .

Figure 8. Proportion of the population living and working locally across the suburbs of the LGA of Canterbury-Bankstown





Housing

Rationale

Housing is a key social determinant of health. Decent and affordable housing supports families by providing safe, stable, and healthy shelter. Affordable housing frees up family finances for use on healthcare and food, and supports physical and mental health and wellbeing. Housing affordability stress is associated with poorer self-reported health, higher community dissatisfaction, and residents feeling unsafe. Affordable housing frees up family finances for use on health care, food, education and recreation, and supports physical and mental health and wellbeing^[20].

What we measured

Housing affordability was measured according to housing stress and represents any household spending more than 30% of their household income on housing costs.

Results

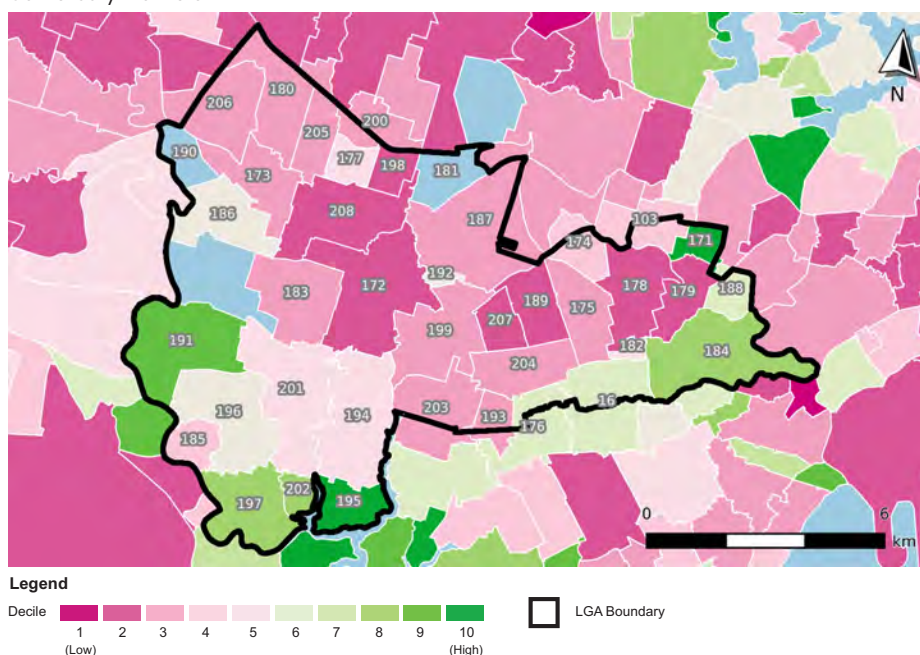
ID	Suburb	Value
171	Ashbury	11.9%
195	Padstow Heights	15.1%
191	Milperra	19.1%
184	Earlwood	20.5%
202	Revesby Heights	22.6%
197	Picnic Point	22.8%
16	Kingsgrove	27.5%
176	Beverly Hills	27.9%
188	Hurlstone Park	29.3%
196	Panania	29.6%
186	Georges Hall	31.8%
192	Mount Lewis	31.8%
177	Birrong	33.7%
201	Revesby	34.4%
182	Clemon Park	34.4%
194	Padstow	34.5%
185	East Hills	36.0%
103	Croydon Park	36.9%
174	Belfield	37.2%
183	Condell Park	39.8%
187	Greenacre	41.0%
204	Roselands	41.6%
205	Sefton	41.7%
173	Bass Hill	42.1%
193	Narwee	42.3%
200	Regents Park	42.8%
180	Chester Hill	43.5%
206	Villawood	43.9%
175	Belmore	43.9%
203	Riverwood	44.0%
199	Punchbowl	45.4%
208	Yagoona	46.3%
179	Canterbury	51.2%
178	Campsie	51.7%
207	Wiley Park	53.4%
189	Lakemba	54.2%
172	Bankstown	55.0%
198	Potts Hill	66.7%
181	Chullora	nan%
190	Lansdowne	nan%

▼
The percentage of households across the LGA of Canterbury-Bankstown spending more than 30% of income on housing is

42.6%

This is worse than the Greater Sydney average of 37.7% .

Figure 9. Percentage of households under housing stress across the suburbs of the LGA of Canterbury-Bankstown



References

- [1] Australian Urban Observatory, "What we measure," 2024. [Online]. Available: <https://auo.org.au/measure/>.
- [2] Australian Urban Observatory. Sustainable Development Goals. Guidance Note. November 2020 AUO-SDG-Guidance-Note-Nov-2020.pdf
- [3] H. Badland, C. Whitzman, M. Lowe, M. Davern, L. Aye, I. Butterworth, D. Hes and B. Giles-Corti, "Urban liveability: Emerging lessons from Australia for exploring the potential for indicators to measure the social determinants of health," *Social Science & Medicine*, no. 111, pp. 64–73, 2014.
- [4] C. Higgs, H. Badland, K. Simons, D. L. Knibbs and B. Giles-Corti, "The Urban Liveability Index: developing a policy-relevant urban liveability composite measure and evaluating associations with transport mode choice," *International Journal of Health Geographics*, vol. 18, no. 1, p. 14, 2019.
- [5] P. Hooper, M. Knuiman, S. Foster and B. Giles-Corti, "The building blocks of a 'Liveable Neighbourhood': Identifying the key performance indicators for walking of an operational planning policy in Perth, Western Australia," *Health & Place*, vol. 36, pp. 173–183, 2015.
- [6] C. Boulange, L. Gunn, B. Giles-Corti, S. Mavoa, C. Pettit and H. Badland, "Examining associations between urban design attributes and transport mode choice for walking, cycling, public transport and private motor vehicle trips," *Journal of Transport & Health*, vol. 6, pp. 155–166, 2017.
- [7] M. Davern, L. Gunn, C. Whitzman, C. Higgs, B. Giles-Corti, K. Simons, K. Villanueva, S. Mavoa, R. Roberts and H. Badland, "Using spatial measures to test a conceptual model of social infrastructure that supports health and wellbeing," *Cities & Health*, vol. 1, no. 2, pp. 194–209, 2017.
- [8] B. Giles-Corti, F. Bull, M. Knuiman, G. McCormack, K. Van Niel, A. Timperio, H. Christian, S. Foster, M. Divitini, N. Middleton and B. Boruff, "The influence of urban design on neighbourhood walking following residential relocation: longitudinal results from the RESIDE study," *Social Science & Medicine*, vol. 77, pp. 20–30, 2013.
- [9] M. Lowe, C. Whitzman, H. Badland, M. Davern, L. Aye, D. Hes, B. Giles-Corti and I. Butterworth, "Planning Healthy, Liveable and Sustainable Cities: How Can Indicators Inform Policy?," *Urban Policy and Research*, vol. 33, no. 2, pp. 131–144, 2015.
- [10] G. W. Evans, "The built environment and mental health," *Journal of Urban Health*, vol. 80, no. 4, pp. 536–555, 2003.
- [11] J. N. Rachele, V. Learnihan, H. M. Badland, S. Mavoa, G. Turrell and B. Giles-Corti, "Are Measures Derived From Land Use and Transport Policies Associated With Walking for Transport," *Journal of Physical Activity & Health*, vol. 15, no. 1, pp. 13–21, 2018.
- [12] L. D. Gunn, S. Mavoa, C. Boulangé, P. Hooper, A. Kavanagh and B. Giles-Corti, "Designing healthy communities: creating evidence on metrics for built environment features associated with walkable neighbourhood activity centres," *The International Journal of Behavioural Nutrition and Physical Activity*, vol. 14, no. 1, p. 164, 2017.
- [13] M. Murphy, J. Koohsari, H. Badland and B. Giles-Corti, "Supermarket access, transport mode and BMI: The potential for urban design and planning policy across socio-economic areas," *Public Health Nutrition*, vol. 20, no. 18, p. 3304, 2017.
- [14] S. Foster, G. Trapp, P. Hooper, W. H. Oddy, L. Wood and M. Knuiman, "Liquor landscapes: Does access to alcohol outlets influence alcohol consumption in young adults?," *Health & Place*, vol. 45, pp. 17–23, 2017.
- [15] M. Livingston, "Alcohol outlet density and harm: comparing the impacts on violence and chronic harms," *Drug and Alcohol Review*, vol. 30, no. 5, pp. 515–23, 2011.
- [16] H. Badland, S. Mavoa, M. Livingston, S. David and B. Giles-Corti, "Testing spatial measures of alcohol outlet density with self-rated health in the Australian context: Implications for policy and practice," *Drug and Alcohol Review*, vol. 35, no. 3, pp. 298–306, 2016.
- [17] M. Davern, A. Farrar, D. Kendal and B. Giles-Corti, "Quality Green Space Supporting Health, Wellbeing and Biodiversity: A Literature Review," University of Melbourne, Melbourne, Australia, 2016.
- [18] H. Badland, A. Milner, R. Roberts and B. Giles-Corti, "Are Area-Level Measures of Employment Associated with Health Behaviours and Outcomes?," *Social Indicators Research: An international and Interdisciplinary Journal for Quality-of-Life Measurement*, vol. 134, no. 1, pp. 237–251, 2017.
- [19] L. D. Frank, M. A. Andresen and T. L. Schmid, "Obesity relationships with community design, physical activity, and time spent in cars," *American Journal of Preventative Medicine*, vol. 27, no. 2, pp. 87–96, 2004.
- [20] N. Brackertz, J. Davidson and A. Wilkinson, "Trajectories: the interplay between mental health and housing pathways, a short summary of the evidence, report prepared by AHURI Professional Services for Mind Australia," Melbourne, 2019.

Appendix (list of AUO measures available)

Walkability

Walkability – Australian Urban Observatory (auo.org.au)

Average distance to closest activity centre
Average dwelling density per hectare
Average street connectivity per square kilometre
Average number of daily living destinations present (0–3) within 1600 m
Walkability for Transport Index

Social Infrastructure

Social Infrastructure – Australian Urban Observatory (auo.org.au)

Health Infrastructure subdomain
Education Infrastructure subdomain
Community and Sport Infrastructure subdomain
Cultural Infrastructure subdomain
Average distance to closest GP clinic
Average distance to closest GP clinic with bulk-billing
Average distance to closest playground

Transport

Transport – Australian Urban Observatory (auo.org.au)

Average distance to closest public transport stop
Percentage of dwellings within 400 m of a bus stop
Average distance to closest train station
Average distance to closest bus stop with a regular 15-minute weekday service
Average distance to closest bus stop with a regular 30-minute weekday service
Average distance to closest bus stop with a regular 45-minute weekday service
Percentage of people aged 15 years and over using active transport to travel to work
Percentage of people aged 15 years and over using public transport to travel to work
Percentage of people aged 15 years and over using private vehicle/s to travel to work

Food

Food – Australian Urban Observatory (auo.org.au)
Percentage of dwellings without any food outlet within 3.2km

Percentage of dwellings within 1km of a supermarket
Average distance to closest fast food outlet

Alcohol

Alcohol – Australian Urban Observatory (auo.org.au)
Average number of on-licence alcohol outlets within 400m

Average number of off-licence alcohol outlet within 800m
Average distance to closest on-licence alcohol outlet
Average distance to closest off-licence alcohol outlet

Public Open Space

Public Open Space – Australian Urban Observatory (auo.org.au)

Average distance to closest public open space
Percentage of dwellings within 400 m or less of public open space
Average distance to closest public open space larger than 1.5 hectares
Percentage of dwellings within 400 m of public open space larger than 1.5 hectares
Percentage of dwellings within 400 m or less distance of any local park (> 0.4 to. <= 1 ha)
Percentage of dwellings within 800 m or less distance of any neighbourhood park (>1 ha to <= 5 ha)
Percentage of dwellings within 400 m or less distance of a neighbourhood recreation park (> 0.5 ha)
Average distance to closest public open space with a nearby public toilet (within 100 m)

Employment

Employment – Australian Urban Observatory (auo.org.au)

Percentage of employed persons living and working in the same SA3

Housing*

Housing – Australian Urban Observatory (auo.org.au)
Percentage of dwellings that are government owned or community housing

Percentage of households in the bottom 40% of incomes spending more than 30% of income on housing costs
Percentage of rental households in the bottom 40% of incomes spending more than 30% of income on housing costs
Percentage of mortgaged households in the bottom 40% of incomes spending more than 30% of income on housing costs
Percentage of rental or mortgaged households in the bottom 40% of incomes spending more than 30% of income on housing costs
Percentage of households spending more than 30% of household income on housing costs

*Additional specialist housing indicators available

ABS Demographics

People – Australian Urban Observatory (auo.org.au)



Notes

[illegible]

Notes

[illegible]

