Measuring the
liveability of the
21 largest cities
in Australia

Liveability
Report for
Canberra

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

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About this report

This report is one of a series of 21 Liveability Reports presenting indicators and maps on the liveability of Australia's 21 largest cities. It builds on the *Creating Liveable Cities in Australia Report* and *Scorecards* developed by researchers from the Healthy, Liveable Cities Group at RMIT University. This report includes two new indicators – a Liveability Index and Social Infrastructure Index as well as liveability indicators for seven domains.

Liveability Index

Walkability

Social Infrastructure

Public Transport

Food Environment

Alcohol Environment

Public Open Space

Employment

Housing Affordability

Liveability Index

Rationale

The economic, social, environmental and health co-benefits of urban liveability are now recognised by all levels of government in Australia and globally. Liveable communities are safe, socially cohesive and inclusive, and environmentally sustainable. They have affordable housing linked via public transport, walking and cycling infrastructure, to employment; education; shops and services; public open space; and social, cultural and recreational opportunities [1, 2].

What we measured

The Liveability Index is underpinned by seven years of research [3]. It combines six domains of liveability found to be associated with health and wellbeing outcomes: walkability and access to social infrastructure, public transport, larger public open space, affordable housing and local employment. Higgs et al 2019 [3] found that people who live in more liveable communities are more likely to walk, cycle and use public transport and less likely to drive. Details for the included measures are contained in Higgs et al 2019 [3].

Results

Analysis of liveability for Canberra suburbs reveals wide variation over the city.

Figure 1. Liveability Index for Canberra.
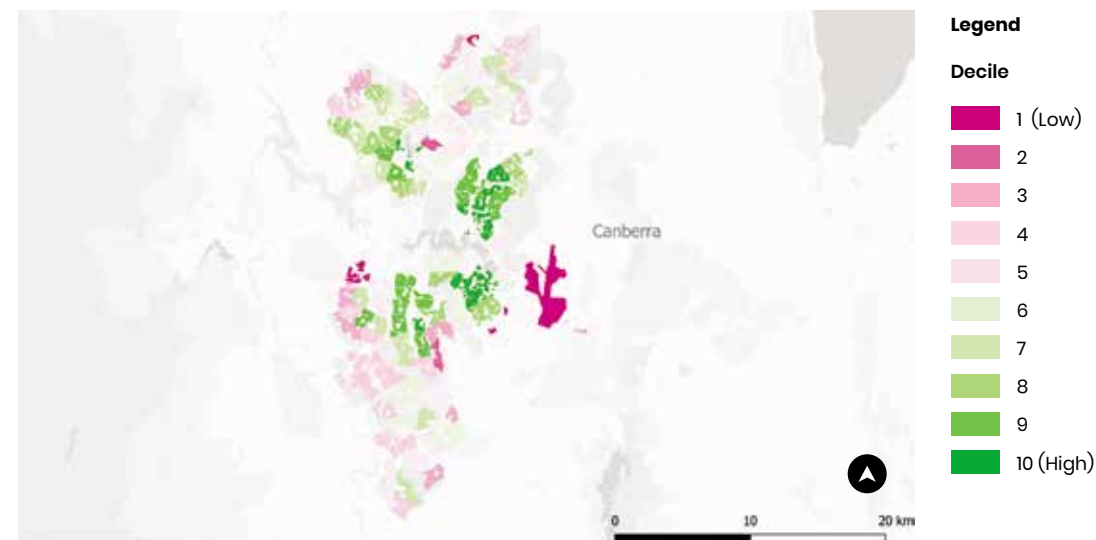
Legend

Decile

- 1 (Low)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (High)

Walkability

Rationale

Walkability measures the ease of walking in an area. Neighbourhoods with shops and services to walk to, small blocks and good street connectivity, and higher population density tend to be more walkable [4]. Walkable neighborhoods discourage driving and increase walking, cycling and active transport use which improves levels of physical activity and reduces chronic disease outcomes [5-8].

What we measured

Walkability is calculated as a composite index 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 [4, 9].

Results

A closer analysis of walkability across the suburbs of Canberra reveals wide variation over the city.

Figure 2. Walkability Index for Canberra.
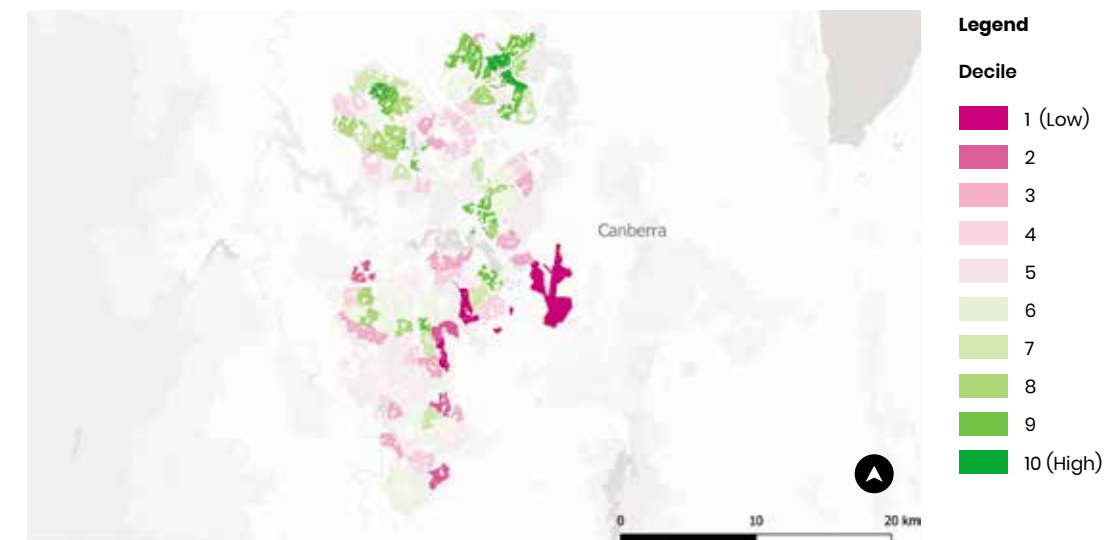
Legend

Decile

- 1 (Low)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (High)

Social Infrastructure

Rationale

Social infrastructure provides access to essential community services and resources [10]. Access to a wide range of different types of social infrastructure is therefore important for the creation and ongoing development of healthy communities. High levels of access to social infrastructure is linked to increased physical activity [11] and wellbeing [10], and increases satisfaction with the local community [1] improving social interactions and mental health outcomes [12]. Social infrastructure is therefore a key component of liveability.

What we measured

The Social Infrastructure Index included access to 16 types of social infrastructure at various recommended distances from dwellings [10]. It included 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 [3].

Results

Across Australia's largest 21 cities, a wider mix of social infrastructure is available in

Rank 1
**Sydney**

Rank 2
Melbourne

Rank 3
Adelaide

▼

The average number of social infrastructure destinations accessible within recommended distances from dwellings across all areas of Canberra is

5 out of a total of 16

However, a closer analysis of the mix of social infrastructure across Canberra reveals wide variation across the city.

Figure 3. Social Infrastructure Index for Canberra.

Legend

Decile

- 1 (Low)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (High)
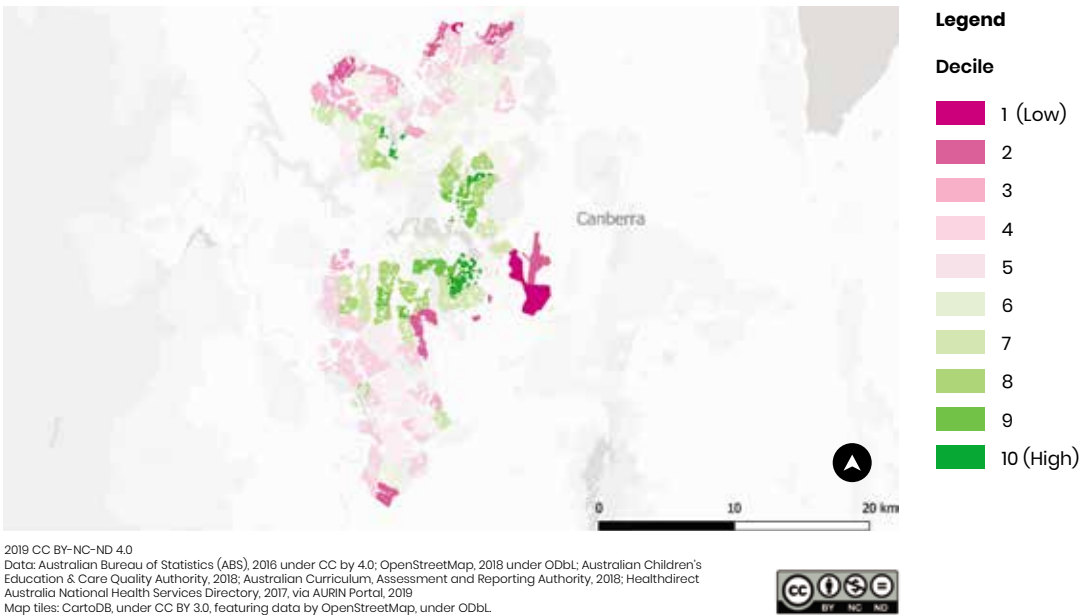
Public Transport

Rationale

Living close to public transport supports health and wellbeing in a number of ways: by encouraging walking and reducing dependence on driving; and, providing residents with access to employment and amenities. People who live close to public transport are more likely to use it [5], and in turn achieve daily recommended physical activity. Having a public transport stop near home and work, increases the likelihood of using public transport [18]. While living within 400m of a public transport stop with a service every 30 minutes, is likely to encourage more walking [19].

Providing regular and proximate public transport also reduces inequities. It enables people who have restricted mobility or can't drive - such as young people, older adults, and people with disabilities – and those without a private motor vehicle to access services, education and jobs. Along with active transport, it also facilitates more sustainable mobility.

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 7am and 7pm. Access was measured as the percentage of dwellings within 400m of any of these stops based on a walkable road network distance. The distance of 400m is consistent with access standards in many Australian state transport policies.

Results

Across Australia's largest 21 cities, access to regular public transport is available to more residents living in

Rank 1
Canberra

Rank 2
Sydney

Rank 3
Adelaide

▼

The percentage of residences with proximate access to regular public transport in Canberra is

65%*

*This figure is based on up-dated methods and data and is not comparable to previously reported figures. Up-dated figures for previous years can be accessed through the Australian Urban Observatory.

A closer analysis of access to regular public transport across the suburbs of Canberra reveals wide variation over the city.

Figure 4. Percentage of residences with proximate access to regular public transport for Canberra.

Legend

Decile

- 1 (Low)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (High)
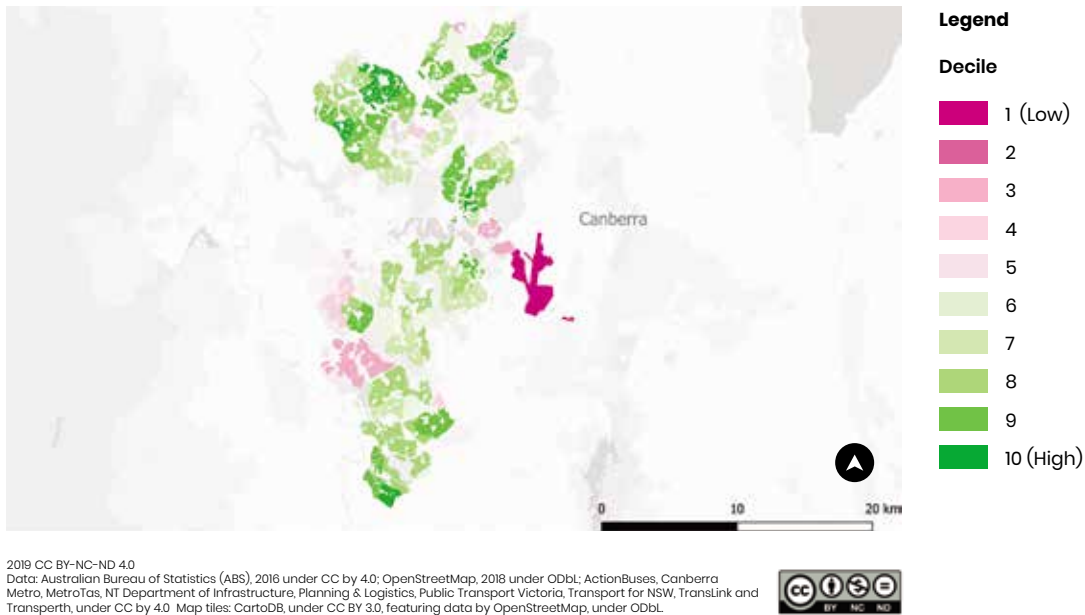
Food Environment

Rationale

Being close to a supermarket supports healthy eating and active living by providing easy access to fruit, vegetables and healthy food within a walkable distance. People living within walking distance of a supermarket are more likely to walk or cycle instead of driving [5, 13]. Increases in physical activity from active transportation, such as walking and cycling, reduces chronic disease risk and congestion issues. In disadvantaged areas, living within 800m of a supermarket reduces the risk of overweight and obesity [14].

What we measured

We measured the average distance to any type of supermarket. Distances were calculated from individual dwellings using a pedestrian accessible road network.

Results

Of the 21 largest cities in Australia, the average distance to a supermarket is lowest in

Rank 1
Launceston

Rank 2
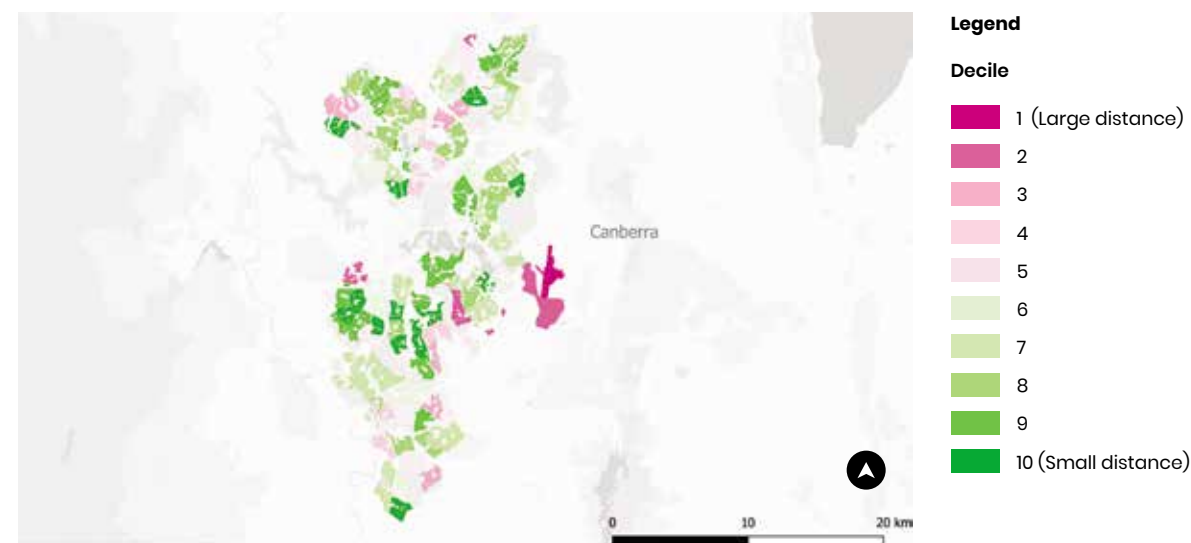**Canberra**

Rank 3
Sydney

▼

The average distance to a supermarket for Canberra is

1058m

A closer analysis of average distances to supermarkets across the suburbs of Canberra reveals wide variation over the city.

Figure 5. Average distances in metres to supermarkets for Canberra.

Legend

Decile

1 (Large distance)
2
3
4
5
6
7
8
9
10 (Small distance)

Alcohol Environment

Rationale

Access to alcohol has been linked to harmful alcohol consumption and alcohol-related violence [15, 16]. Furthermore, alcohol outlets are more prevalent in more disadvantaged areas [17]. For those living in disadvantage areas where there are fewer alcohol outlets, there appears to be a protective affect with enhanced self-reported health [17].

What we measured

Access to off-licence alcohol outlets were included in this report. This 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

Across Australia's largest 21 cities, the average distance to an off-licence alcohol outlet is furthest in

Rank 1
Toowoomba

Rank 2
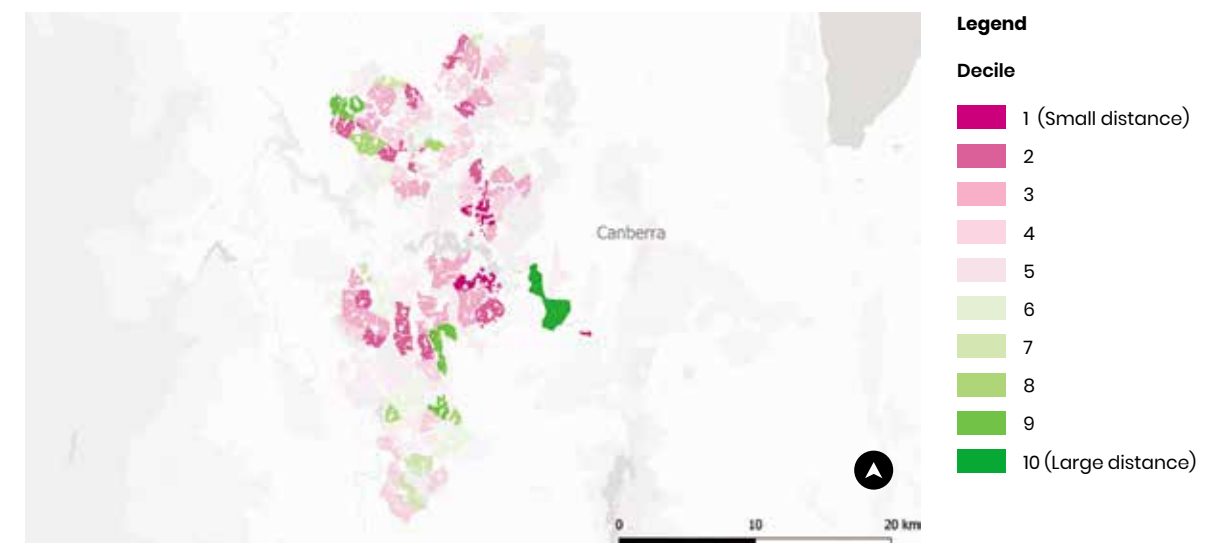**Townsville**

Rank 3
Bendigo

▼

The average distance to an off-licence alcohol outlet for Canberra is

829m

A closer analysis of alcohol outlets across the suburbs of Canberra reveals wide variation over the city.

Figure 6. Average distances in metres to an off-licence outlet for Canberra.

Legend

Decile

1 (Small distance)
2
3
4
5
6
7
8
9
10 (Large distance)

Public Open Space

Rationale

Pubic 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 and gardens, and some green recreational space. Parks support both the physical and mental health of people living nearby and are important for supporting the local ecology and biodiversity of an area [21].

What we measured

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 [22, 23]. Access was measured as the percentage of dwellings within 400m based on a walkable road network distance. The distance of 400m represents a 5-minute walk for most people.

This measure is also included in the National Cities Performance Framework under the liveability and sustainability domain [20].

Results

Across Australia's largest 21 cities, living within 400m of public open space of 1.5 hectares is available to more residents living in

Rank 1
Canberra

Rank 2
Ballarat

Rank 3
Newcastle

▼

The percentage of residences living within 400m of public open space of at least 1.5 hectares in Canberra is

72%*

*This figure is based on up-dated methods and data and is not comparable to previously reported figures.
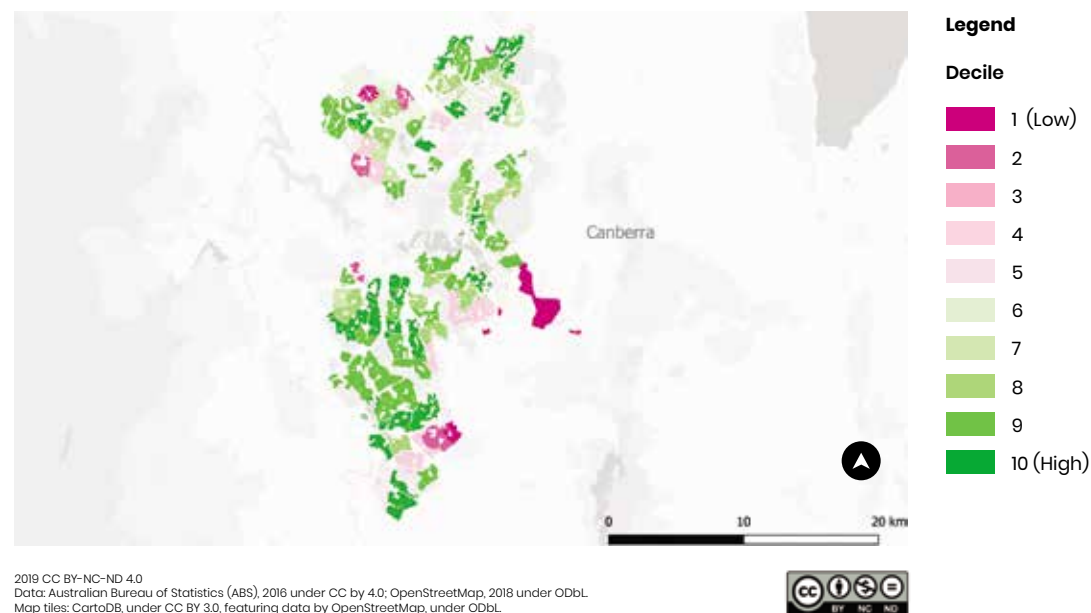
A closer analysis of access to public open space across the suburbs of Canberra reveals wide variation over the city.

Figure 7. Percentage of residences living within 400m of large public open space for Canberra.

Legend

Decile

1 (Low)
2
3
4
5
6
7
8
9
10 (High)

2019 CC BY-NC-ND 4.0
Data: Australian Bureau of Statistics (ABS), 2016 under CC by 4.0; OpenStreetMap, 2018 under ODbL.
Map tiles: CartoDB, under CC BY 3.0, featuring data by OpenStreetMap, under ODbL.

Local Employment

Rationale

Accessible employment is a social determinant of health, providing workers 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 [24]. Access to local employment with shorter travel times has the potential to support work-life balance with shorter travel times found to be associated with a reduced risk of obesity [25].

What we measured

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

Results

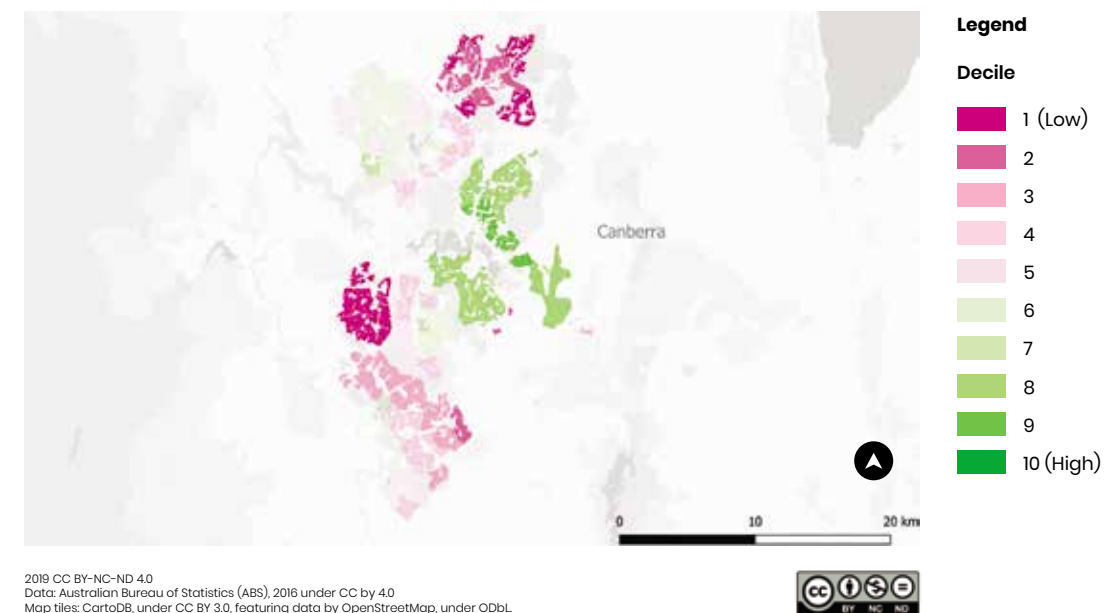Across Australia's largest 21 cities, more local employment is available in

Rank 1
Townsville

Rank 2
Toowoomba

Rank 3
Mackay

▼

The percentage living with local employment access at SA3 level for Canberra is

30%

A closer analysis of Local Employment across the suburbs of Canberra reveals wide variation over the city.

Figure 8. Percentage living at SA1 with local employment access at SA3 for Canberra.

Legend

Decile

1 (Low)
2
3
4
5
6
7
8
9
10 (High)

2019 CC BY-NC-ND 4.0
Data: Australian Bureau of Statistics (ABS), 2016 under CC by 4.0
Map tiles: CartoDB, under CC BY 3.0, featuring data by OpenStreetMap, under ODbL.

Housing Affordability

Rationale

Decent and affordable housing supports families by providing safe, stable and healthy shelter. Affordable housing frees up family finances for use on health care and food, and supports physical and mental health and wellbeing [26]. The 30/40 affordable housing measure [27] is associated with poorer self-reported health, higher community dissatisfaction, and residents feeling unsafe [28].

What we measured

We measured housing affordability according to a refined indicator of housing stress (10) where households in the bottom 40 percent of income spend more than 30 percent of their household income on housing costs [28].

Results

Across Australia's largest 21 cities, housing stress is least common in

Rank 1
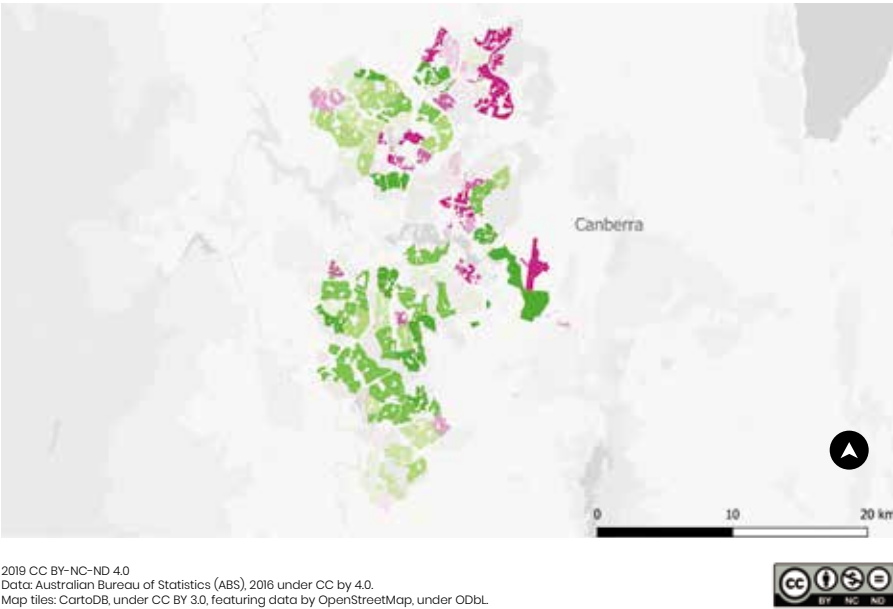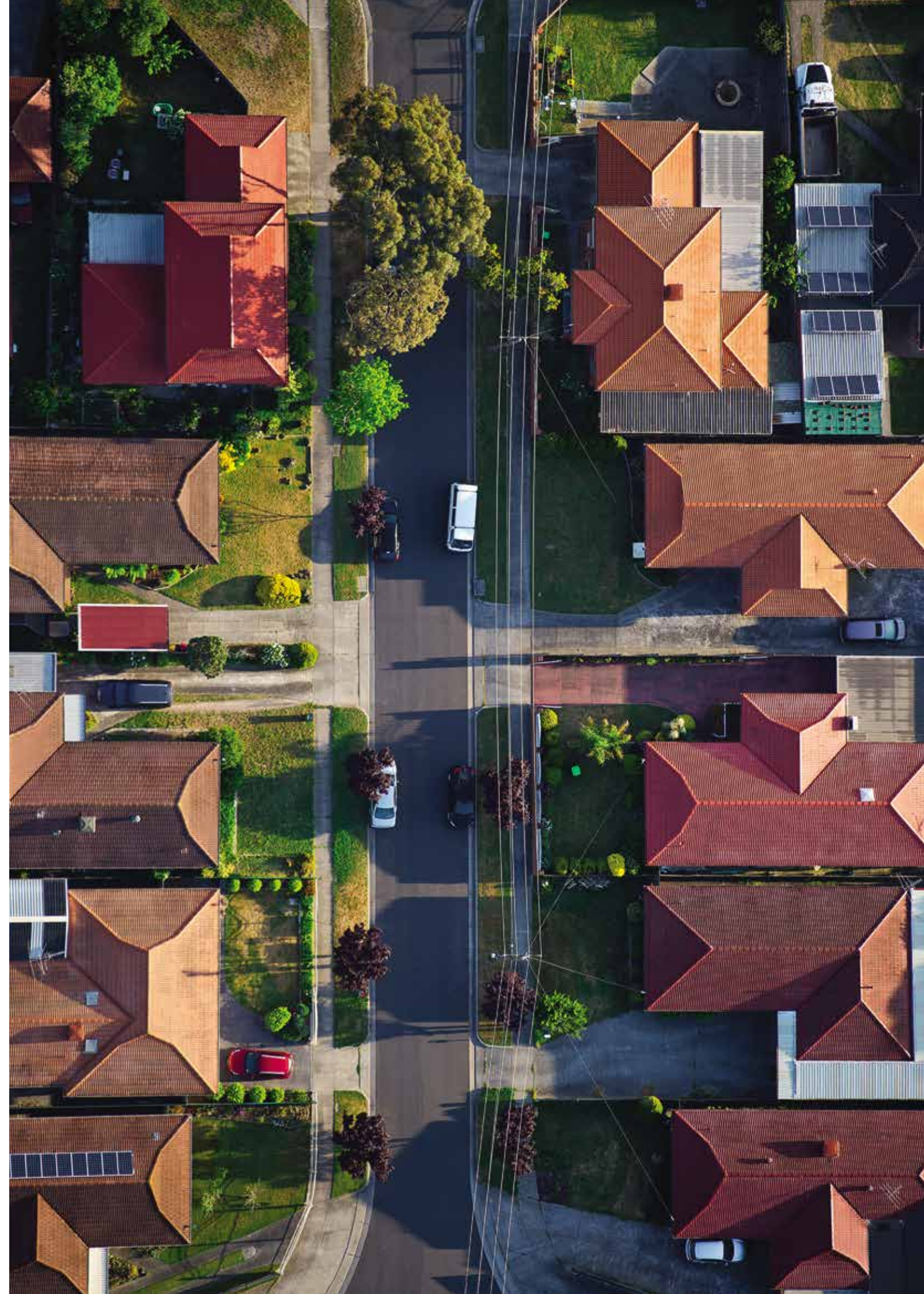Launceston

Rank 2
Hobart

Rank 3
Wollongong

▼

In Canberra, the percentage of households in the bottom 40 percent of the income distribution spending more than 30 percent of household income on housing costs is

35%

A closer analysis of housing stress across the suburbs of Canberra reveals wide variation over the city.

Figure 9. Percentage of households under housing stress for Canberra.

Legend

Decile

- 1 (High)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (Low)

Summary
for Canberra

Indicator		Brief Description	Value
Liveability	✓	Liveability Index	See map
Walkability	🚶	Walkability Index	See map
Social Infrastructure	🏫	Social Infrastructure Index	5 destinations
Public Transport	🚆	Percentage living within 400m to regular public transport	65%
Food Environment	🍎	Average distance to closest supermarket	1058 m
Alcohol Environment	🍽	Average distance to an off-licence alcohol outlet	829 m
Public Open Space	🌳	Percentage living within 400m of public open space of 1.5 hectares	72%
Local Employment	💼	Percentage living with employment access at SA3 level	30%
Housing Affordability	🏠	Percentage of households in the lowest 40% of household incomes spending more than 30% of income on housing	35%

Please visit the Australian Urban Observatory at **auo.org.au** for more reports covering the liveability of Australia's 21 largest cities.

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