

# Adelaide, Australia

## Healthy and Sustainable City Indicators Report: Comparisons with 25 cities internationally

Global Healthy & Sustainable City-Indicators Collaboration

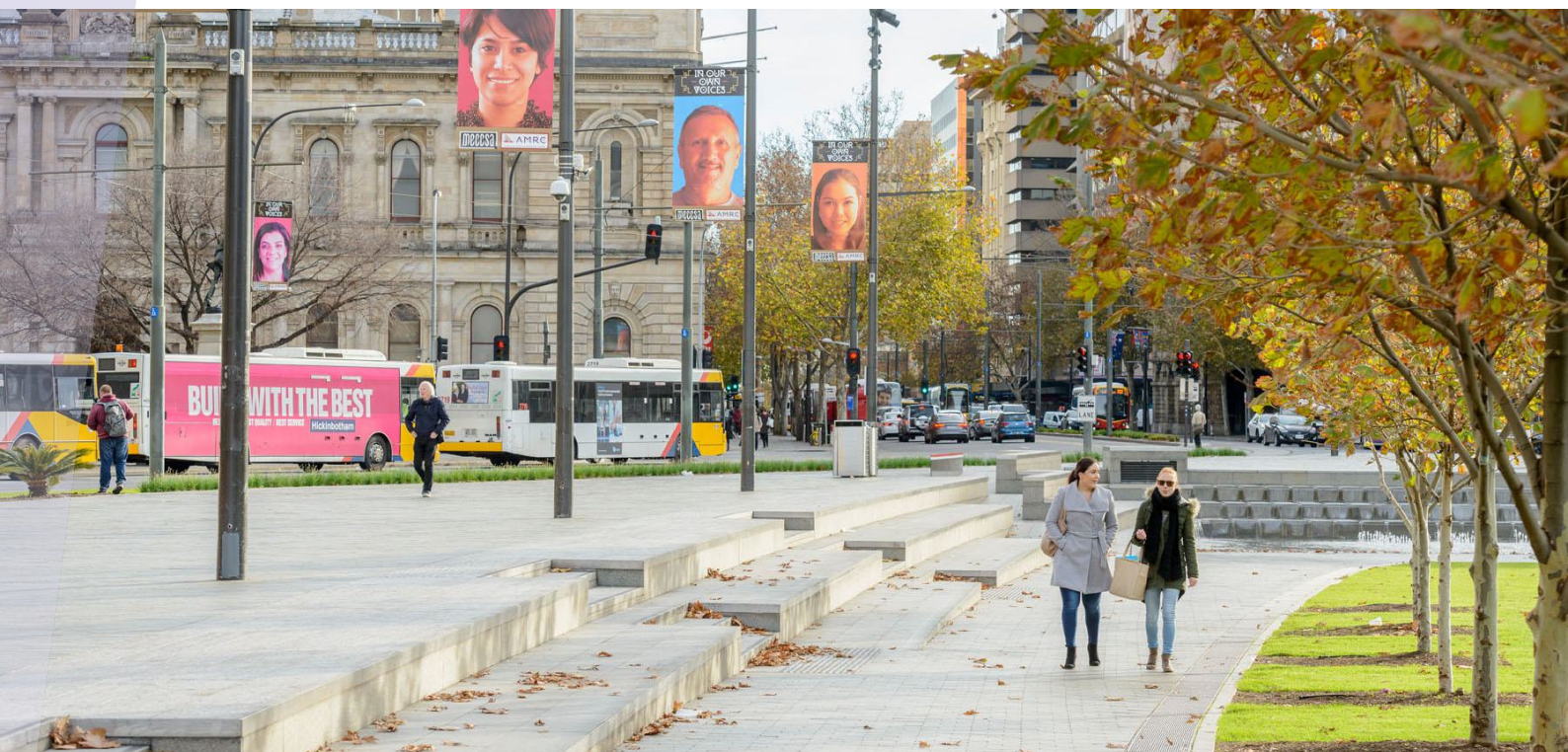


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Global Observatory of  
**Healthy and  
Sustainable Cities**

Full report including data, methods and study limitations has been published as:

The Lancet Global Health Series on urban design, transport, and health. 2022. <https://www.thelancet.com/series/urban-design-2022>

Global Observatory of Healthy & Sustainable Cities. 2022. <https://www.healthysustainablecities.org>

Population data: Schiavina, M. et al. (2019): GHS population grid multitemporal (1975, 1990, 2000, 2015) R2019A. European Commission, Joint Research Centre (JRC). <https://doi.org/10.2905/42E8BE89-54FF-464E-BE7B-BF9E64DA5218>

Urban boundaries: Florczyk, A. et al. (2019): GHS Urban Centre Database 2015, multitemporal and multidimensional attributes, R2019A. European Commission, Joint Research Centre (JRC).

<https://data.jrc.ec.europa.eu/dataset/53473144-b88c-44bc-b4a3-4583ed1f547e>

Urban features: OpenStreetMap contributors. Openstreetmap (2020). <https://planet.osm.org/pbf/planet-200803.osm.pbf.torrent>

Colour scale: Crameri, F. (2018). Scientific colour-maps (3.0.4). Zenodo. <https://doi.org/10.5281/zenodo.1287763>

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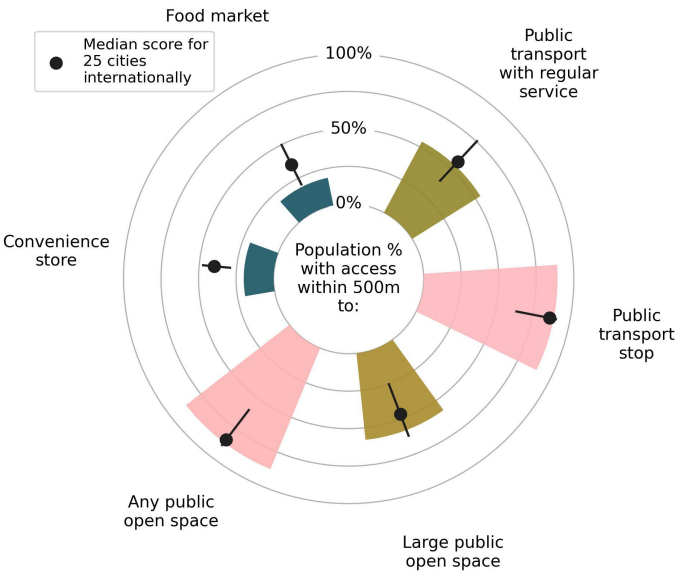
Jonathan Arundel, Pinki Bhasin Mishra, Carl Higgs, Melanie Lowe & Carmel Williams

Healthy and Sustainable City Indicators Report

This brief report outlines how Adelaide performs on a selection of spatial and policy indicators of healthy and sustainable cities. Our collaborative study examined the spatial distribution of urban design and transport features and the presence and quality of city planning policies that promote health and sustainability for 25 cities across 19 countries.

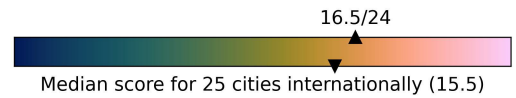
Comparisons with the median values for all cities included in this international study could inform changes needed for local city policies. The maps show the distribution of urban design and transport features across Adelaide, and identify areas that could benefit the most from interventions to create healthy and sustainable environments.

(below) Percentage of population with access to amenities within 500 metres (m) in Adelaide, Australia.



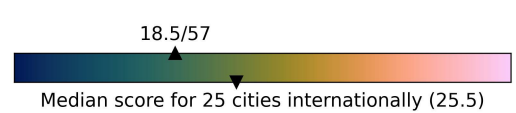
Policy presence in Adelaide

Urban design and transport policies supporting health and sustainability



Policy quality in Adelaide

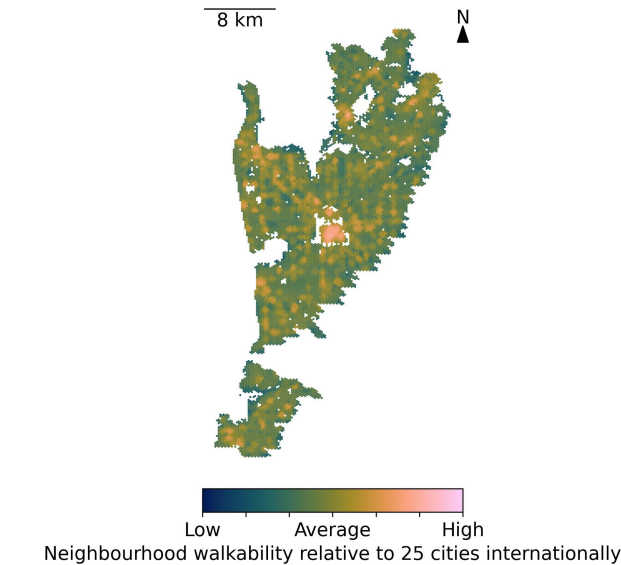
Policy quality rating for specific, measurable policies aligned with consensus evidence on healthy cities



City planning requirements	Adelaide	% of cities with requirement met, by country income group	
		Middle /6	High /19
Specific health-focused actions in metropolitan urban policy	✓	0%	84%
Specific health-focused actions in metropolitan transport policy	✗	50%	63%
Health Impact Assessment requirements in urban/transport policy/legislation	✗	33%	11%
Information on government expenditure on infrastructure for different transport modes	✓	33%	47%
Air pollution policies related to transport planning	✗	50%	89%
Air pollution policies related to land use planning	✗	67%	84%

Walkability in Adelaide

Walkable neighbourhoods provide opportunities for active, healthy, and sustainable lifestyles through having sufficient but not excessive population density to support adequate provision of local amenities, including public transport services. They also have mixed land uses and well-connected streets, to ensure proximate and convenient access to destinations. High-quality pedestrian infrastructure and reducing traffic through managing demand for car use can also encourage walking for transport.

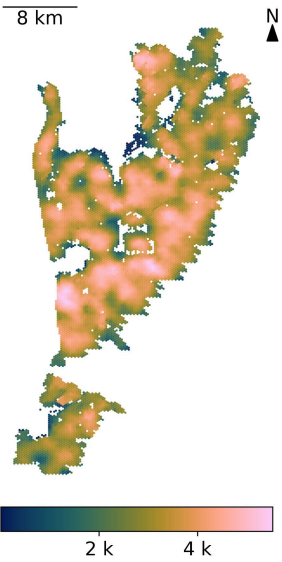


(above) 37.5% of population live in neighbourhoods with walkability scores greater than the 25 international city median

Walkability policy for Adelaide				
	Policy identified	Specific standard or aim	Measurable target	Consistent with health evidence
Housing density requirements	✓	✓	✓	✓
Street connectivity requirements	✗	-	-	-
Parking restrictions to discourage car use	✗	-	-	-
Pedestrian infrastructure provision	✓	✓	✗	✓
Cycling infrastructure provision	✓	✓	✗	✓
Walking participation targets	✓	✓	✓	~
Cycling participation targets	✓	✓	✓	✗



Population density

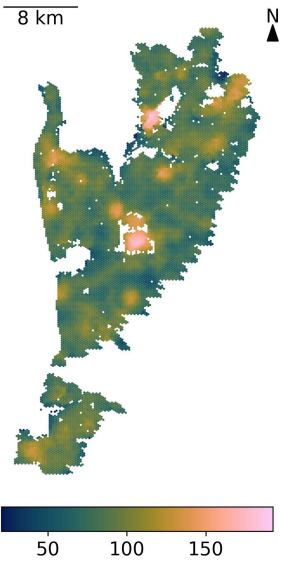


Neighbourhood population density (per km<sup>2</sup>)

(above) 0.0% of population meet minimum threshold\* for neighbourhood population density (5,677 people per km<sup>2</sup>)

\* Thresholds are based on our modelling of built environment features required to reach the World Health Organization's Global Action Plan for Physical Activity target of a 15% relative reduction in insufficient physical activity through walking. We found preliminary evidence that street intersection density above 250 per km<sup>2</sup> and ultra-dense neighbourhoods (> 15,000 persons per km<sup>2</sup>) may have decreasing benefits for physical activity. This is an important topic for future research.

Street connectivity



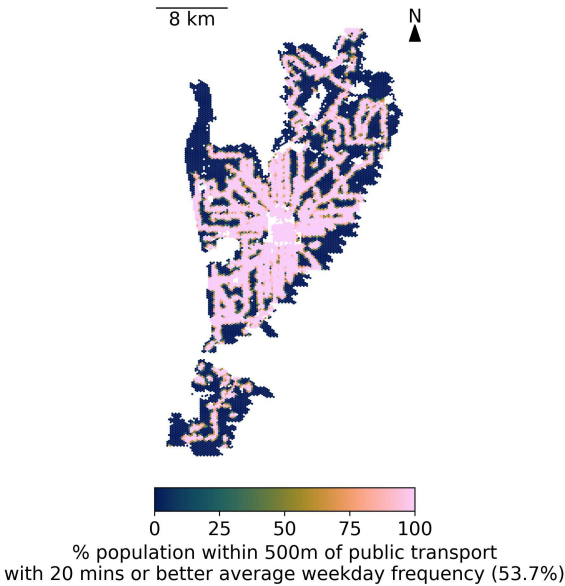
Neighbourhood street intersection density (per km<sup>2</sup>)

(above) 12.6% of population meet minimum threshold\* for neighbourhood street intersection density (106 intersections per km<sup>2</sup>)





Public transport access

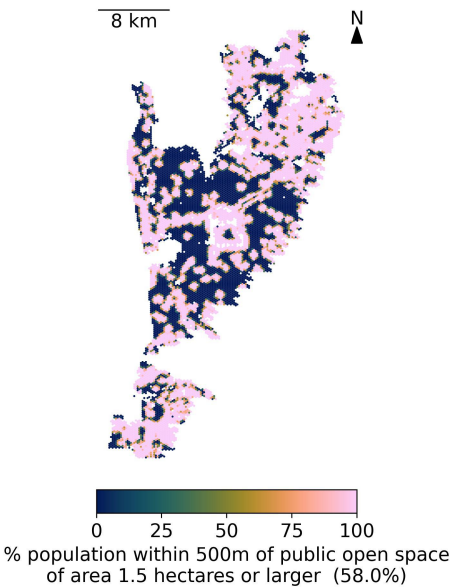


Easy access to frequent public transport is a key determinant of healthy and sustainable transport systems. Public transport near housing and employment increases the mode share of public transport trips, thus encouraging transport-related walking; offering access to regional jobs and services; improving health, economic development, and social inclusiveness; and reducing pollution and carbon emissions. The frequency of services also encourages public transport use, in addition to the proximity of stations or stops.

Public transport policy for Adelaide

	Policy identified	Specific standard or aim	Measurable target	Consistent with health evidence
Requirements for public transport access to employment and services	✓	✓	✗	✓
Employment distribution requirements	✓	✓	✓	✓
Minimum requirements for public transport access	✓	✓	✓	✓
Targets for public transport use	✓	✓	✓	✗

Public open space access



Local access to high-quality public open space promotes recreational physical activity and mental health. Nearby public open space creates convivial, attractive environments, helps cool the city and protects biodiversity. As cities densify and private open space declines, providing more public open space is critical for population health. Having public open space within 400 m of homes can encourage walking. Access to larger parks may also be important.

Public open space policy for Adelaide

	Policy identified	Specific standard or aim	Measurable target	Consistent with health evidence
Minimum requirements for public open space access	✓	✓	✓	✓

Summary

The availability of urban and transport policies supporting health and sustainability in Adelaide is above average compared with other cities studied. However, the quality of those policies is below average. Adelaide does not appear to have transport planning policies incorporating health-focussed actions or air pollution policies related to transport or land use planning. Nor does it require health impact assesement of transport and land use interventions. Adelaide's targets for walking and cycling participation and public transport use are too low to be consistent with healthy cities evidence. Hence, relative to the 25 cities in this international study, the vast majority of neighbourhoods in Adelaide have low walkability. In terms of thresholds to achieve WHO targets to increase physical activity, no neighbourhoods in Adelaide achieve population density thresholds and only 13% achieve street connectivity thresholds. Only 54% of residents have nearby access to public transport stops with regular services. The majority of residents have some public open space within 500m. However, this drops to only 58% who have access to larger public open space, and access is spatially patterned. Compared with the other cities studied, the proportion of the population in Adelaide with access within 500m to a food market, convenience store and, to a lesser extent, public transport stop with a regular service is below average.

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**Citation**

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