



URBAN DESIGN FOR WELLBEING + MENTAL HEALTH CASE STUDY OF ADELAIDE

INTRODUCTION

This work respectfully acknowledges all first nations of the state of South Australia and pays respect to the Spiritual Ancestors, Elders and Traditional Owners and Custodians, their customs, traditions, culture and in their protection and nurturing of this place; their tribal lands and waters.

The purpose of this Greater Adelaide case study is to describe how the capital city of South Australia applies the key principles of urban design for wellbeing and the population's mental health.

It brings together the relevant history, current policy, as well as social and cultural context with the perspectives of local urban professionals, in an endeavour to provoke further discussion, collaboration and action in the endless pursuit to live meaningfully and sustainably.

The scope of this study is Greater Adelaide comprising the City of Adelaide municipality, as well as 26 inner city, metropolitan and regional municipalities.¹

Urban design refers to the creation of the places people live – our suburbs, towns and cities. It determines the appearance, scale and ambience of a place, and is influenced by political, economic, environmental, social and cultural life.

The World Health Organisation defines mental health as a state of wellbeing in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to her or his community.

¹ Greater Metropolitan Adelaide region as defined by the LGA SA comprising: City of Adelaide, Adelaide Hills Council, Alexandrina Council, Barossa Council, City of Burnside, Campbelltown City Council, City of Charles Sturt, Town of Gawler, City of Holdfast Bay, Light Regional Council, Mallala District Council, City of Marion, City of Mitcham, Mount Barker District Council, Rural City of Murray Bridge, City of Norwood Payneham & St. Peters, City of Onkaparinga, City of Playford, City of Port Adelaide Enfield, City of Prospect, City of Salisbury, City of Tea Tree Gully, City of Unley, Victor Harbor Council, Town of Walkerville, City of West Torrens, District Council of Yankalilla.

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North Terrace Cultural Boulevard
Image by Sam Noonan

METHOD

LITERATURE REVIEW

A search was conducted on South Australian Government websites to identify relevant policy documents. These were retrieved and assessed, and relevant sections were identified and extracted. Further policies mentioned by interviewees and survey participants were also examined.

SURVEY

An online survey was conducted comprising 31 responses from academics, public health specialists, municipal and State Government administrators, wellbeing and mental health practitioners, urban planners, urban designers, developers and architects.

INTERVIEW

Ten Adelaide based academics, public health specialists, municipal and State Government administrators, wellbeing and mental health practitioners, urban planners, urban designers, developers and architects were identified using snowball sampling.

Semi-structured interviews were conducted, and each subject was asked about what they considered to be urban design factors that support good mental health.



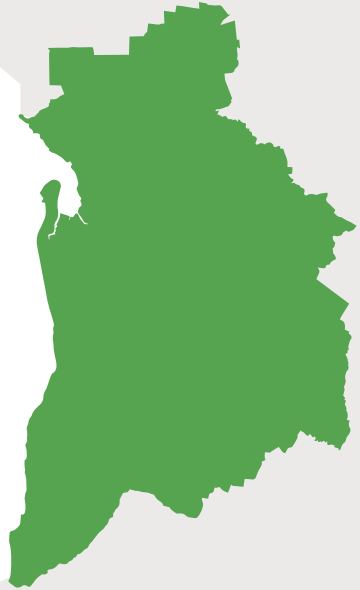
Adelaide, South Australia Map
Prepared by the Office for Design and Architecture SA

OVERVIEW OF GREATER ADELAIDE

The Greater Adelaide Region is built on the traditional lands and waters of five of the world's longest enduring cultures; Kurna people across the Adelaide Plains, Ramindjeri, Ngadjuri and Peramangk people throughout the Adelaide Hills and Ngarrindgeri people in the south.

Click [here](https://aiatsis.gov.au/explore/map-indigenous-australia) to view the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) Map of Indigenous Australia.*

Greater Adelaide is now home to almost 1.5 million people from over 200 culturally, linguistically and religiously diverse backgrounds, accounting for nearly 85% of South Australia's population.



Map of the Greater Adelaide Region in South Australia
Prepared by the Office for Design and Architecture SA

*<https://aiatsis.gov.au/explore/map-indigenous-australia>

Colonised in 1836, Adelaide (named after Queen Adelaide) was designed by Malaysian born British Surveyor General Colonel William Light. Adelaide's signature grid layout, with alternating wide and narrow streets, interspaced with six public squares and the meandering Karrawirraparri River (River Torrens), feels like a city in a park. It is one of the few remaining garden cities in the world and recognised as a national heritage place.

Designed for the good life, Greater Adelaide in South Australia is defined by its liveability, characterised by its thriving arts and cultural scene, premium food and wine, affordable living, short commute times, stunning beaches and a unique natural environment.

*“Everything we do is centred around a simple yet intrinsically significant desire: to create inspiring and enriching lives and improve the wellbeing and quality of life for the people of Adelaide.”
City of Adelaide, Designed for Life*



Metropolitan Adelaide
Image by Andrew Barlett

Adelaide's weather is often described as Mediterranean, experiencing cool to mild winters with moderate rainfall and warm to hot, generally dry summers. It has an average maximum temperature of 29°C (84.2°F) in summer and 15-16°C (59-60.8°F) in winter. In summer the average sea temperature ranges from 19.7-21.2°C (67.5-70.1°F). The annual rainfall is approximately 550mm.

There are four distinct weather periods recognised in the Kaurna seasonal cycle. These include Warltati (summer) between the months of January and March, Parnati (autumn) between April and June, Kudlila (winter) between July and September, and Wirltuti (spring) between October and December. The seasons are identified as hot, windy, wet and mild warm, respectively.

Greater Adelaide is nestled between 'the hills' of the Mount Lofty Ranges to the east, studded with small townships, nature parks, ancient Aboriginal rock art, walking and cycling trails as well as world class food and wine producers, and bordered to the west by expansive pristine beaches.



Chambers Walking Trail
Image by Jake Wundersitz

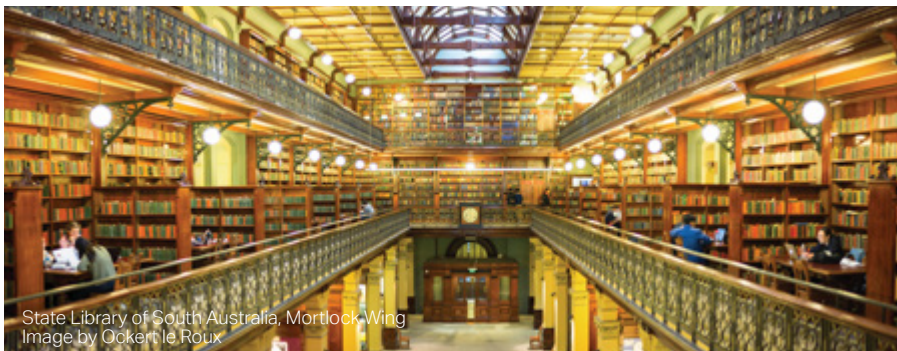
The abundance of Edwardian and Victorian architecture constructed in locally sourced bluestone and sandstone is most evident along the splendid boulevard of cultural institutions, galleries and museums, including the South Australian Museum showcasing the some of the finest and oldest known Ediacaran fossils; the first forms of complex life, and the Botanic Garden – which hosts a State Herbarium and a Museum of Economic Botany; the only remaining of its kind in the world.

Founded on a vision of religious tolerance, from the mid-19th century Adelaide was regarded as the “City of Churches” referring to its diversity of faiths rather than the devoutness of its citizens, and is ironically one of Australia’s least religious cities.²

“But South Australia deserves much, for apparently she is a hospitable home for every alien who chooses to come, and for his religion too.”³
Mark Twain, 1897

Yet amid the prosperity, Adelaide faces several persistent cultural, social and environmental challenges that threaten individual and collective wellbeing.

Intractable issues that have profound human costs, hamper economic growth, create inequality and increase the need for expensive public services. This includes substance abuse, the impact of climate change, a transitioning economy, modest education outcomes and unacceptable disparity in the prosperity, health and wellbeing of first nations people.



State Library of South Australia, Mortlock Wing
Image by Ockert le Roux

² Australian Bureau of Statistics Census, 2011.

³ M. Twain, *Following the Equator: a journey around the world* (Hartford: American Publishing Company, 1897), 181.

It is anticipated that the population of Greater Adelaide is intended to grow by over half-a-million people in the next 30 years, meaning at least an additional 15,000 individuals living in the Adelaide central business district by 2036.

Recent legislation against unnecessary and unwarranted urban sprawl under the *Planning, Development and Infrastructure Act 2016*, intended to protect precious food production areas, meaning that the majority (85% by 2045⁴) of all new housing in Greater Metropolitan Adelaide will be infill in established urban areas.

This modest projected population growth and commitment to urban densification presents an outstanding and exciting opportunity for the quality design of tens of thousands of dwellings, open spaces, community amenities and transport infrastructure that is good for people and the planet.

⁴ Department of Planning, Transport and Infrastructure, Government of South Australia, *The 30-Year Plan for Greater Adelaide (2017 Update)*.



Cycling
Image courtesy of the South Australian Tourism Commission and Sven Kovac

MENTAL HEALTH IN URBAN DESIGN AND PLANNING

There is strong recognition among professional practitioners and government administrators in Adelaide of the connection between quality urban design, mental health and wellbeing.

“Even the simplest of things [matter] like how places feel and smell. Without even realising it, our senses are deciding how we perceive places.”

“Everything matters. Green, sustainable, comfortable, bespoke, local.”

“Creating human scale spaces, with places for pause and contemplation, as well as inclusion, activity, recreation and inspiration. Above all, the greatest connection to nature, living elements including trees, plants, water, fauna and flora.”

“Design needs to include spaces for active and passive activities and to connect people with nature.”

However, there was consensus that wellbeing and mental health are not currently prioritised enough, taught or measured holistically in residential, private or public development.

“They [Project Commissioners] often think of the cost, feasibility, interest models, return income. Unfortunately, these financial interests may not coincide with prioritising health related outcomes.”

“Need to counterbalance the negativity around how our built environment contributes to our wellbeing and mental health with stronger evidence and make that known by planners etc.”

“The benefits of the principles of design and how our built environments contribute to our mental health needs to be embedded in education – in the degrees where ideals and values are ingrained.”

While the consideration of wellbeing and mental health is intrinsic for many design practitioners, barriers such as the limited scope of functional briefs and financial constraints were cited as obstructive in achieving optimal outcomes.

“Poor outcomes result from a limited brief, budgets, timelines and governance.”

“A poorly designed project brief, conservative/risk averse local government, budget constraints.”

“Economic constraints; lack of coordination between policy makers and agencies responsible for delivery of urban environments; lack of time to undertake genuine consultation and engagement and develop projects in response to this information.”

There was general concern for the limited acknowledgement and public discussion regarding the negative impact of poor urban design on wellbeing and mental health, and the need for value-based decision making.

“Making people and communities central to the discussions and decisions.”

“Ensuring governments really get how important these issues are to our cities and embedding these elements in policy through Health.”

“I think interpretive elements are a great way to provide connection to place.”

“Free spaces. Activation for families. Adelaide CBD is now very young adult focussed, only some of the edges suit families. Playful art/water installations.”

While the value of placemaking and place management is beginning to be pre-emptively considered in urban design, wellbeing and mental health are not routinely measured or reported post-occupancy.

“It’s important how a space/place is programmed after the design process.”

Quality urban design process, including the strategic development of the brief and genuine engagement with end users, was recognised as important for the ownership of outcomes and attachment to place.

“Consultation with community, to understand end user requirements, it’s about facilitation not design.”

“Opportunities for social interaction and inclusion. Human scale design. Connection to nature. Inclusive processes and a sense of ownership of final outcomes.”

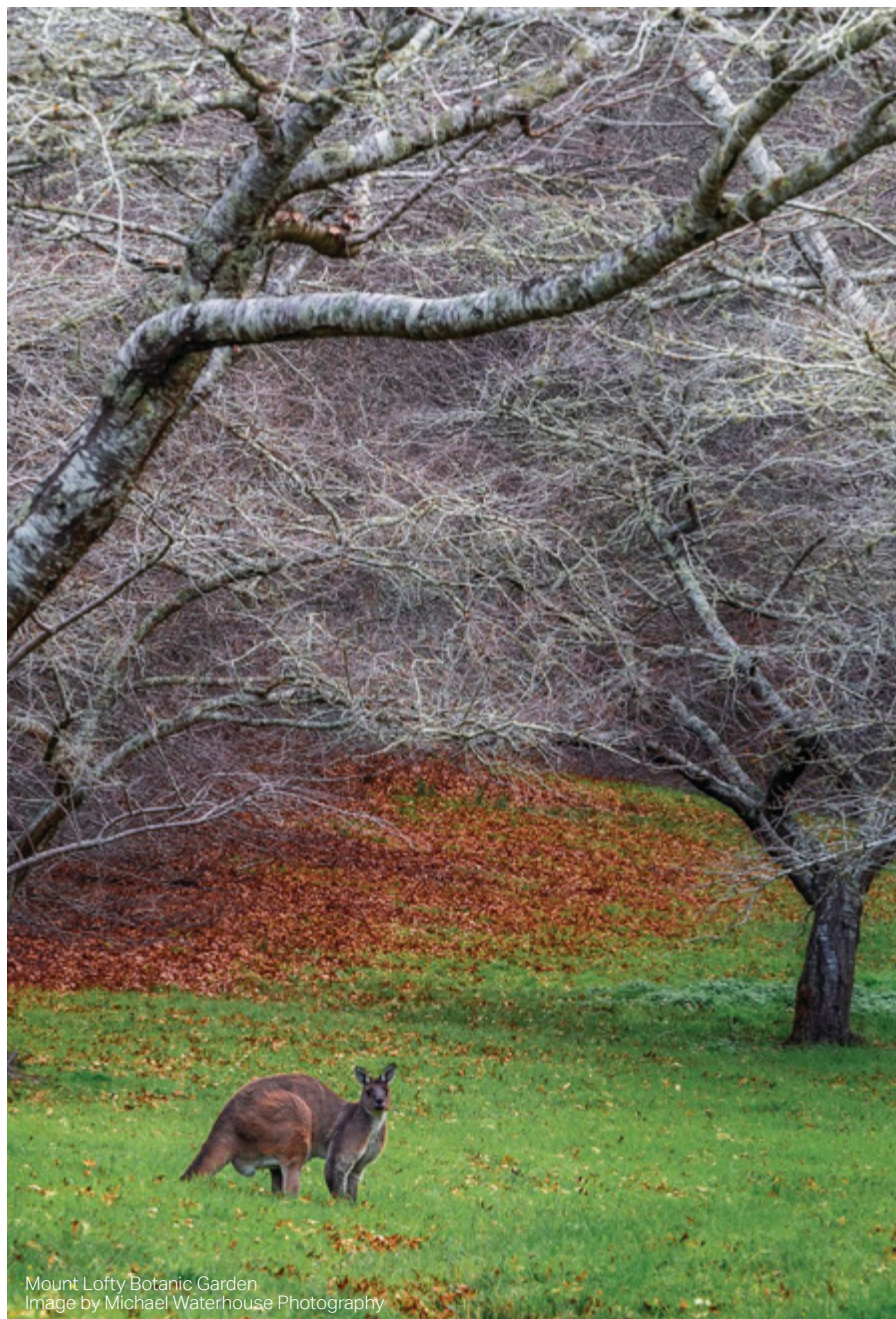
“Curiosity and divergent thinking at the beginning of the process – ideally prior to drafting the brief.”

“Architects, designers and so forth would feel more appreciated if they were considered as relevant contributors to a problem solution from the beginning of a project.”

“Bringing designers to the table to work with other professionals is in general very productive. And designers should support other professionals creative thinking too.”



Adelaide Botanic Gardens
Image by Sam Noonan



GAPS FRAMEWORK

This section considers Greater Adelaide in the context of the Centre for Urban Design and Mental Health's GAPS Framework:

- Green Places
- Active Places
- Pro-social Places
- Safe Places

GREEN PLACES

Almost all (94%) South Australian's value interacting with nature and strongly believe in the importance of conserving and protecting the natural environment.⁵

While there is a public perception that Adelaide's green spaces are being protected, recent evidence indicates it is declining; from 2013 to 2017 there was a loss of tree and shrub canopy and an increase in hard surfaces (such as paved driveways) in 17 councils across Greater Adelaide.

HEALTHY PARKS HEALTHY PEOPLE SOUTH AUSTRALIA

In response to the abundance of evidence which demonstrates that contact with nature improves physical health, psychological health as well as social and cultural wellbeing, the South Australian Department for Environment and Water, and the Department of Health partnered to develop and implement the *Healthy Parks Healthy People South Australia 2016-2021*⁶ framework.

The framework sets out seven focus areas:

1. Promoting physical activity in nature
2. Mental health benefits of contact with nature
3. Promoting the cultural value of Country for Aboriginal health and wellbeing
4. Community health and wellbeing in a changing climate
5. Childhood development and nature
6. Green infrastructure and urban settings
7. Biodiversity, conservation and human health

⁵ K. Krebs, *South Australian's and the Environment – An insight to the connections* (Adelaide and Mt Lofty Ranges NRM Board, Harrison Research, 2016).

⁶ "Healthy Parks Healthy People South Australia 2016-2021: Making contact with nature, second nature," SA Health, 2016.

<https://www.sahealth.sa.gov.au/wps/wcm/connect/public/content/sa+health+internet/resources/healthy+parks+healthy+people+south+australia+2016+2021>.

A significant amount of work and engagement has occurred since the release of the framework including:

- Release of the first *Healthy Parks Healthy People South Australia Action Plan*, 'Realising the mental health benefits of contact with nature' and the development of a discussion paper 'Connecting nature and parks to mental health promotion and mental illness prevention strategies in South Australia' to embed connection to nature and parks in mental health promotion and mental illness prevention strategies through the *Suicide Prevention Strategy 2017-2021* and the *South Australian Mental Health Strategic Plan 2017-2022*.
- Commissioning of university researchers at University of Melbourne and RMIT to complete an evidence review of how quality green space supports health, wellbeing and biodiversity.
- Release of the second *Healthy Parks Healthy People Action Plan*, 'Quality Green Public Space' in August 2017 to promote the greening of the public realm through the South Australian planning reform and the implementation of the *30-Year Plan for Greater Adelaide*.
- The development of *Principles for Quality Green Public Open Space* to support a shared understanding of the value of green open space.
- A 'Connection to Country for Aboriginal Health and Wellbeing' workshop was convened and attended by over 80 people from diverse Aboriginal communities and organisations, to gain a deeper understanding of how Connection to Country can be better promoted and integrated into research, policy and programs across the health and wellbeing, environment and Aboriginal sectors. This information will inform a Joint Statement of Action for Connection to Country for Aboriginal health and wellbeing.



Botanic Gardens of South Australia
Image courtesy of the South Australian Tourism Commission

Healthy Parks Healthy People has adapted the *Five Ways to Wellbeing* released by the New Economics Foundation in 2008 and developed a public campaign entitled 'Five Ways to Wellbeing in Nature' which outlines five key actions for people to incorporate nature in their daily lives and enhance their overall wellbeing:

1. Connect: Make time for people and enjoy the world around you
2. Be Active: Go outside, move your body and breathe in the fresh air
3. Take Notice: Find a moment to take in the beauty of nature
4. Keep Learning: Be curious about nature and discover something new
5. Give: Do something nice for someone and the environment

Acknowledging the economic, biophysical and social benefits of urban tree cover; trees and shrubs located in street verges, parks and backyards, the *30-Year Plan for Greater Adelaide* aims to 'increase urban green cover by 20% by 2045' (Target 5).⁷

Focus will be placed on ensuring that urban infill areas maintain appropriate levels of urban greenery. This target will support the work being done by councils through their tree strategies which address biodiversity and quality of vegetation.

Recognised benefits of urban tree cover include:

- Maintenance of habitat for native fauna, which can include vulnerable or threatened species in fragmented urban landscapes
- Reduction of the urban heat island effect
- Air quality improvements
- Stormwater management improvements through reductions in the extent of impervious surfaces provision of spaces
- Interaction, amenity and recreation, which improve community health and social wellbeing
- Increased level of neighbourhood safety
- Positive visual amenity for urban residents
- Productive trees that can contribute to local food security

To protect the highly productive agricultural and horticultural land surrounding Adelaide, the urban footprint is being actively contained. By 2045, 85% of all new housing will be urban infill (Target 1)⁸. Other benefits of densification include reduced car dependence, associated infrastructure costs, environmental benefits and better social connection.

⁷ Department of Planning, Transport and Infrastructure, Government of South Australia, *The 30-Year Plan for Greater Adelaide (2017 Update)*, 140.

⁸ Department of Planning, Transport and Infrastructure, Government of South Australia, *The 30-Year Plan for Greater Adelaide (2017 Update)*, 152.

BLUE INFRASTRUCTURE

There is growing evidence of a positive association between greater exposure to outdoor blue spaces and benefits to mental health and wellbeing.⁹

The cool temperate waters of South Australia host some of the most unique marine life on the planet. These include some of Australia's most iconic species such as the southern right whale, bottlenose dolphin, weedy sea dragon, Australian sea lions, great white shark, little penguin and giant Australian cuttlefish.

These waters contain more varieties of marine life than the Great Barrier Reef and around 80% of them are not found anywhere else on Earth.

To protect our native species and the unique marine environment, South Australia has created a network of 19 marine parks, totalling 2.6 million square kilometres or 44% of the state's waters.



Semaphore Beach
Image by Michael Waterhouse Photography

⁹ M. Gascon, W. Zijlema, C. Vert, M.P. White, M.J. Nieuwenhuijsen, M.J., "Outdoor blue spaces, human health and wellbeing: A systematic review of quantitative studies." *International Journal of Hygiene and Environmental Health* 220, no. 5 (November 2017): 1207- 1221, <https://doi.org/10.1016/j.ijeh.2017.08.004>.

The Adelaide Dolphin Sanctuary is one example in the metropolitan area, just 20 minutes from the city centre and features a 10,000-year-old mangrove forest. A resident pod of about 30 bottlenose dolphins live in the area, while another 300 visit the area regularly.

Greater Adelaide also has a series of protected temporary and permanent wetlands.



Glenelg Beach
Image by Bunie Carthew

ACTIVE PLACES

Greater Adelaide has well established excellent informal and formal sporting, recreational and aquatic facilities and programs. The Adelaide Park Lands, which surround the central business district, have over 207 hectares of sporting open space suitable for a range of organised sports, ages and abilities.

The Office for Recreation, Sport and Racing has a vision for South Australia to be an active state grounded in the belief that sport and active recreation develops stronger, healthier, happier and safer communities.¹⁰

People that cycle are healthier and less of a burden on the health system, make cities safer, create less pollution and generate few carbon emissions. In Adelaide, 31% of carbon emissions are from transport, of which 91% are from private vehicles.¹¹



Ebenezer Place, Adelaide
Image courtesy of the South Australian Tourism Commission

¹⁰ "Strategic Plan," Office for Recreation, Sport and Racing, Government of South Australia, http://ors.sa.gov.au/about_us/2017-2021_strategic_plan.

¹¹ Celis-Morales Carlos A, Lyall Donald M, Welsh Paul, Anderson Jana, Steell Lewis, Guo Yibing et al, "Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study," *The BMJ* 357, iss. 8102 (April 2017): 1456, <https://doi.org/10.1136/bmj.j1456>.

Adelaide has the potential to be one of the world's greatest cycling cities – it is very flat, the roads are uncongested and easy to navigate. However, commuting rates have dropped 20% over the past six years to 7% of the population (approximately 240,000) compared to 43% of the Dutch and 30% of Danes who cycle daily.

This is despite recent legislation requiring drivers to allow a minimum of one metre when passing a cyclist (or 1.5 metres where the speed limit is over 60 kilometres per hour) and is thought to be largely due to the aggression of car drivers and fear of collision.

Adelaide has long been criticised as being too car-centric, with streets prioritised for vehicles, overly generous car parking, a dysfunctional ring road, under-developed public transport system, disconnected bicycle network, as well as a weak pedestrian network with delays on walking routes and frequent footpath interruptions.¹²

The State Government has committed to increase the number of cyclists to 600,000 by 2020 and partner with the City of Adelaide to invest in cycling infrastructure and provide protected dedicated cycling corridors east-west and north-south in the central business district as well as alongside train lines.

Adelaide hosts the annual Tour Down Under event and has numerous coastal and regional bike trails as well as mountain bike paths throughout the Adelaide Hills and beyond.

“The discouraging happens when we follow the ‘way we always do things’, where the vehicle is more important than the pedestrian, where the sell is more important than creating soul.”

“Improved linking of green spaces so that vehicular traffic doesn’t need to be negotiated.”

¹² Gehl Architects, *Public Spaces & Public Life Study* (City of Adelaide 2011), 5-15, https://www.cityofadelaide.com.au/assets/documents/ACC_edited_Adelaide_PSP_L2011_01Introduction.pdf.

Acknowledging active transport as an important mode of commuting and its positive impact on public health and associated reduced health care costs, lower carbon emissions and less pollution, reduced traffic congestion, and improved community wellbeing and social cohesion. The *30-Year Plan for Greater Adelaide* aims to 'increase the share of work trips made by active transport by 30% by 2045 (Target 3)'.¹³

This will be achieved in part of Adelaide by locating housing close to centres of activity, jobs, services and public transport to provide more opportunities for active travel for short daily trips (less than two kilometres for walking and five kilometres for cycling).

Well-designed transport infrastructure is identified as key to encouraging increased usage as it provides an appropriate level of amenity and safety for users and a more pleasant and appealing journey.



Target 3 Getting Active and Target 4 Walkable Neighbourhoods
Source: *The 30-Year Plan for Greater Adelaide (2017 Update)*
The Department of Planning, Transport and Infrastructure South Australia

¹³ Department of Planning, Transport and Infrastructure, Government of South Australia, *The 30-Year Plan for Greater Adelaide (2017 Update)*, 144.

In recognition of the significant economic, social, health and environmental benefits associated with being able to walk to important amenities and services of daily life, the *30-Year Plan for Greater Adelaide* includes Target 4 which is to 'increase the percentage of residents living in walkable neighbourhoods by 25% by 2045'. This is based on being within 400 metres (or a five minute walk) from public open space greater than 4000m² and frequent bus services, as well as within 800 metres (or a 10 minute walk) from fixed line transport, within one kilometre (or a 15 minute walk) of a primary school and 800 metres (or a 10 minute walk) from shops.¹⁴

A five year trial of a driverless vehicle has commenced, transporting Flinders University students from the campus to the train station in Adelaide's southern suburbs and travels up to 30 kilometres per hour, which is also anticipated to increase active transport at either end of the journey.

By 2045, 60% of new housing will be built within a walkable distance to current and proposed transport infrastructure (Target 2).¹⁵



EcoCaddy
Image courtesy of the South Australian Tourism Commission

¹⁴ Department of Planning, Transport and Infrastructure, Government of South Australia, *The 30-Year Plan for Greater Adelaide (2017 Update)*, 146.

¹⁵ Department of Planning, Transport and Infrastructure, Government of South Australia, *The 30-Year Plan for Greater Adelaide (2017 Update)*, 142.



Moseley Square
Image courtesy of the South Australian Tourism Commission

PRO-SOCIAL SPACES

ACCESSIBILITY

Adelaide supports people of all ages and abilities participating in urban life with as few barriers as possible.

Blessed with a flat terrain and community conscience, Adelaide pioneered 'pram ramps' throughout the city and suburbs in the 1950s.

From the late 1970s, Adelaide had a strong government commitment to disability leadership. This commitment supported people with a disability progress to senior roles in State Government, bringing real life experiences and perspectives to education, transport, health and general access improvements.

A 30-year plan (from 1998) to create an accessible bus fleet is nearing completion with all of Adelaide's trams, trains and train stations now accessible and almost 1,000 easy access buses retrofitted to include features such as seating for two mobility aid users and people with low vision contributing to Adelaide's reputation as Australia's most accessible capital city for public transport.

The public domain in Adelaide's central business district is largely accessible and signed, including raised tactile Braille street names at major intersections.

HOUSING DIVERSITY

Single person households are the fastest growing household type in the state and predicted to grow by 44% to 188,000 by 2013 (up from 131,000 in 2011) in a place where the predominant form of housing has historically been detached dwellings on large allotments.¹⁶

The *30-Year Plan for Greater Adelaide* seeks to increase housing diversity by 25% by 2045 (Target 6) to facilitate the supply of a diverse and well-designed range of housing types to cater for all ages and lifestyles, making the best use of land and infrastructure.

¹⁶ Department of Planning, Transport and Infrastructure, Government of South Australia, *The 30-Year Plan for Greater Adelaide (2017 Update)*, 152.

ENGAGEMENT IN ADELAIDE AND SOUTH AUSTRALIA

Municipalities and the South Australian Government engage communities in a variety of ways on a diverse range of issues that impact urban life.

Trust, accountability and transparency of government are recurring topics of discussion across many sectors including urban life.

The state planning reform process, currently underway, includes a stronger emphasis on high-quality design as well as community engagement. A Community Engagement Charter has been established placing consultation and participation at the forefront of the planning process. The Community Engagement Charter establishes an outcome-based, measurable approach for engaging communities on planning policy, strategies and schemes.



Word on the Street.
Image courtesy of the Community Arts Network

The Department of the Premier and Cabinet has a 'Better Together' unit that exists to enable Government to make better decisions by bringing the voices of citizens and stakeholders into the issues that are relevant to them. 'YourSAy' is an online consultation hub where citizens can find and provide feedback on consultations open across the South Australian Government. Municipalities across the state also use the 'YourSAy' platform to engage residents.

Located in the heart of the cultural precinct, the Centre of Democracy showcases the people and ideas that have shaped democracy in South Australia and features programs and activities that challenge visitors to think again about people and power.

PLACE ATTACHMENT

There is growing recognition of the important correlation between how attached people feel to where they live and local gross domestic product (GDP) growth; the more people love their place, neighbourhood or city, the more economically vital that place will be.

Beyond the function of experience with nature or social interaction is the construction of identity¹⁷ through the reflection of one's personal values as well as the meaning of experiences and histories of a place.

"Places need to reflect our values and have meaning."

People's perception of aesthetics; the physical beauty of the community, including the parks and green spaces, the quality of the social and cultural offerings as well as how welcoming the place is all impact of place attachment.¹⁸

¹⁷ C. Raymond, G. Brown, D. Weber, "The measurement of place attachment: Personal, community, and environmental connections," *Journal of Environmental Psychology* 30, iss. 4 (December 2010): 422-434.

¹⁸ "The Soul of the Community," Knight Foundation, 2010, <https://knightfoundation.org/sotc/>.

WELCOMING CITY

In 2018, Adelaide became Australia's first capital Welcoming City, joining a national network of inclusive, vibrant communities internationally recognised for their ability to foster a sense of belonging and participation.

In August 2014 the City of Adelaide was declared a Refugee Welcome Zone, welcoming refugees and asylum seekers and acknowledging the difficult journey men, women and children make to Australia to seek our protection.

The Welcome Centre is a safe drop-in centre for refugee families, people seeking asylum, and new arrivals to come together to access essential services and build genuine friendships.

The collective identity and shared values inform the meaning of a place.

“Allow for diversity of experience and human exchange.”

ARTS IN PUBLIC SPACE

There is also growing evidence of the positive impact of art interventions in public space in relation to better wellbeing and mental health including improved social relations, community cohesion, building civic pride, connection to place-based culture, stronger civic participation and greater use of public space.¹⁹

Branded 'The Festival State' the South Australian cultural calendar explodes with a cluster of major festivals in the early autumn months known locally as 'Mad March' which comprises the Adelaide Festival of Arts, the Adelaide Fringe Festival, Adelaide Writers Week and WOMADelaide.

¹⁹ A. Bagnall, J. South et al., *Places, spaces, people and wellbeing: a full review* (Leeds Beckett University, 2018), <https://whatworkswellbeing.org/product/places-spaces-people-and-wellbeing/>.



WOMAdelaide 2018
Image courtesy of WOMAdelaide

Held in the winter month of August, the South Australian Living Artists (SALA) Festival is the biggest visual arts festival in the world, boasting participation by over 9,000 artists across over 700 venues across the state.

Other festivals held throughout the year include Tarnathi (a festival celebrating Aboriginal and Torres Strait Island arts and culture), Adelaide Festival of Ideas, the Adelaide Fashion Festival, the Festival of Architecture and Design (FAD), the South Australian History Festival, Dream BIG Children's Festival, OzAsia Festival, Adelaide Cabaret Festival, Umbrella Winter Festival, Adelaide Guitar Festival, Adelaide Film Festival and FEAST Festival (a LGBTI+ celebration).

As the home to people from over 200 cultures, a plethora of international cultural fairs also enrich Adelaide's cultural calendar.

South Australia is home to 18 wine regions and Adelaide, the wine capital of Australia. A cluster of food and wine festivals including Tasting Australia, CheeseFest + FERMENT as well as vintage and gourmet festivals hosted by each of the five major wine regions fill the calendar (and stomachs) of locals and visitors from around the world.

Adelaide is also a designated 'City of Music' by the UNESCO Creative Cities Network (UCCN) and hosts three of Australia's leading contemporary dance companies; the Australian Dance Theatre (ADT), Leigh Warren & Dancers and the Restless Dance Theatre – nationally recognised for working with disabled and non-disabled dancers.

Public art is another important way that communities express collective identity, shared values and build meaning; to provoke a particular sentiment, express a certain narrative, be decorative, interpretive or commemorative.

“Public art matters – it makes us think and deepens our sense of meaning. It can disrupt – exposing unknowns, transforming our understanding of complex matters and provoking new ideas.”

Public art can amplify the cultural value of a site, space or building and significantly contribute to the aesthetic and sensory quality of a construction project, strengthening a site's connection to place and identity.²⁰

Public art is a broad term that refers to a range of artistic works in the public realm. Works can be in the form of enduring iconic pieces or stand-alone works, temporary installations, performative works, media works or integrated artistic elements. Works might include custom designed sculptural wayfinding and building signage, special seating in public areas, land art, art designed to be portable between sites, and specially designed functional public realm items such as recycling bins, bollards, drinking fountains, seating, retaining walls, lighting and planting.

Some municipalities allocate a percentage of development investment towards public art, it is the exception, rather than the rule. It is understood that the strongest public art outcomes are achieved through the commissioning of artists to develop site specific works. The response and concept of such works will consider location, scale, form and materials. In contrast, the purchasing of works for installation is not responsive to site or context and is, therefore, less likely to make an integrated contribution to place.

²⁰ Arts South Australia, Government of South Australia, *Public Art Commissioning Guidelines* (2016), http://arts.sa.gov.au/sites/default/files/public/grants/PAD-Public-Art-Commissioning-Guidelines_2.pdf.

In 2012, a *Cultural Impact Guide* was developed in South Australia by the Creative Communities Network; an informal network of Local Government arts and cultural managers, officers and other practitioners. Five municipalities, State Government (through Arts South Australia) and the Local Government Association (LGA) of South Australia partnered to develop the work as part of a broader *Cultural Impact Framework*.²¹

The *Cultural Impact Guide*: a guide to consider the impact of any decision on culture is intended as a set of provocations for elected Members to consider the impact of their decisions on culture.

Culture is encapsulated as five domains: creativity, connectedness, values, sustainability and engagement. Each is conveyed through three indicators as follows:

1. Creativity: Imagination, Innovation, Expression
2. Connectedness: Relationships, Commitment, Networking
3. Values: Belonging, Respect, Trust
4. Sustainability: Tradition, Anticipation, Resilience
5. Engagement: Interaction, Enrichment, Involvement



Michelle Nikou and Jason Milanovic, Glow (2009)
Image courtesy of Arts South Australia

²¹ Creative Communities Network SA, Government of South Australia, *South Australian Cultural Impact Guide: A guide to consider the impact of any decision on culture*, <https://cdn.marion.sa.gov.au/sp/SA-Cultural-Impact-Guide.pdf>.

“What would be the impact if people on public transport put their screens away and looked about they may appreciate and feel greater responsibility for their environment as well as meeting people who share their physical space, but with whom they share little sense of community?”

“If we can promote and facilitate human interaction through the design of our environment this will diminish isolation that exacerbates mental health issues and will build wellbeing and happiness.”

“People need time to be able to engage with their environment and the people around them.”

“The pace of our life is working against many people’s ability to engage with others and build community.”

“A space that meets everyone’s basic needs and inviting for people from all walks of life, not giving off exclusive vibes e.g. just for richer people or ‘hipsters’.”

The Adelaide and Mount Lofty Ranges Natural Resources Management Board has used the *Cultural Impact Framework* to evaluate its urban sustainability program.

The impact of art interventions in public space on wellbeing and mental health is not currently measured or routinely evaluated in Adelaide.

SAFE PLACES

In 2012 the State Government through the Integrated Design Commission (now the Office for Design and Architecture South Australia) hosted a 'Design Lab' to explore how to best address alcohol fuelled violence on Hindley Street; an Adelaide street notorious for alcohol related violence and aggression particularly in the early hours of the morning on weekends.

The primary hunch or insight that emerged from the 'Design Lab' was the need to dilute the density of drunk and aggressive primarily male individuals. This contributed to the inspiration to introduce small venue legislation in 2013, which made it easier and cheaper to open a small bar.

In the last four years, 94 new venues have opened across Adelaide's laneways, stimulating over 1300 jobs and over \$90 million in economic activity, radically transforming and revitalising the ambience of the city.

Subsequent placemaking initiatives including the use of ambient lighting are being used to encourage patrons to linger longer, while feeling safe as they wander through the city.

Lighting is recognised as an important element of the city's design, helping to improve safety and amenity, improving the quality of public spaces, a crucial aspect of supporting an evening economy which forms a pillar of the City of Adelaide's Design Principles.

In 2013, the South Australian Government also introduced 'lockout' law, to curb alcohol fuelled violence in the city. The law stops people from entering venues after 3:00am, as well as a restriction on the sale of some drinks and a ban on glassware after 4:00am, which has reportedly resulted in a 25% reduction in alcohol-related crime.

The City of Adelaide and South Australia Police acknowledge that the design of an environment can influence the way a person feels and can influence their behaviour. Three Crime Preventions through Environmental Design (CPTED) strategies are employed to minimise the opportunity for criminal behaviour, including access control, surveillance and territorial reinforcement.²²

²² South Australian Police, Government of South Australia, *Preventing Crime: Crime Prevention Through Environmental Design (CPTED) Strategies*, https://www.police.sa.gov.au/_data/assets/pdf_file/0004/2659/Crime-Prevention-Through-Environmental-Design-CPTED-Strategies.pdf.



Alfred's Bar, Peel Street
Image by Meaghan Coles

PRINCIPLES OF URBAN DESIGN FOR HEALTH

The value of good design is formally recognised at both the state and city of Adelaide level as fundamental to improving our quality of life and creating sustainable developments and environments that bring lasting benefits to communities

However, not all municipalities across Greater Adelaide acknowledge quality design to the same extent.



Plant 4 Bowden
Image by Sam Noonan

SOUTH AUSTRALIA'S PLANNING REFORM

South Australia's planning system is currently amid generational reform. South Australia's planning and development system involves:

- Strategic Planning: A long term vision for land use across South Australia influencing how we live, work and move.
- Planning Policy: Rules for the kind of development that should take place locally to respond to community needs.
- Development Assessment: A process for gaining approval for how buildings are shaped and land is used.
- Building Policy: Minimum standards for building and construction work.

In April 2016, the Parliament of South Australia passed the *Planning, Development and Infrastructure Act 2016* to implement a new planning system (replacing the *Development Act 1993*).

This new legislation introduces the biggest changes to the South Australian planning system in 25 years and will affect how development policy is formed and amended and how development applications are lodged and assessed.

The new system aims to be flexible, transparent and easier to use with faster and more consistent planning assessment processes, with greater emphasis on the importance of high-quality design and community engagement.

As part of the new system, State Planning Policies have been developed which set out a state-wide framework for land use planning in South Australia. These aim to address economic, environmental and social planning priorities, including housing supply and diversity, climate change and strategic transport infrastructure.

The Office for Design and Architecture South Australia have developed a practical framework for how good design practices can support better outcomes for the benefit of communities and neighbourhoods and demonstrate the government's commitment to achieving design excellence in South Australia's built environment. This framework is referred to as the *Principles of Good Design*.

The *Principles of Good Design*²³ are embedded in the State Planning Policies.

²³ Office for Design and Architecture SA, Government of South Australia, *Good Design for Great Neighbourhoods and Places (2018)*, <https://www.odasa.sa.gov.au/wp-content/uploads/Good-Design-for-Great-Neighbourhoods-and-Places-5MB.pdf>.

The *Principles of Good Design* are:

- Context: Good design is contextual because it responds to the surrounding environment and contributes to the existing quality and future character of a place.
- Inclusive: Good design is inclusive and universal because it creates places for everyone to use and enjoy, by optimising social opportunity and equitable access.
- Durable: Good design is durable because it creates buildings and places that are fit-for-purpose, adaptable and long-lasting.
- Value: Good design adds value by creating desirable places that promote community and local investment, as well as enhancing social and cultural value.
- Performance: Good design performs well because it realises the project potential for the benefit of all users and the broader community.
- Sustainable: Good design is sustainable because it is environmentally responsible and supports long-term economic productivity, health and wellbeing.

DESIGN REVIEW

Design Review is an independent evaluation process in which a panel of built environment experts review the design quality of development proposals. It is a reliable method of promoting good design in South Australia and improving the quality of design outcomes in the built environment.

Design Review is a free, confidential pre-lodgement service offered to developers by both the South Australian Government and the City of Adelaide, guided by the *Principles of Good Design* and the *Adelaide Design Manual*, respectively.



Rundle Mall, Adelaide
Image courtesy of the City of Adelaide

ADELAIDE DESIGN MANUAL

The *Adelaide Design Manual* sets the direction and standards regarding the design and management of high-quality, durable, flexible, accessible and sustainably designed public spaces in the City of Adelaide.

It builds on the city's current strengths and draws from past experiences, locally, nationally and internationally, in urban design and sustainability principles providing future design direction for public spaces.

The *Adelaide Design Manual* is a toolkit for designing the streets, squares, laneways, Park Lands and public spaces in the city. It has been produced to be used by government staff, design professionals, members of the community and others with an interest in public life.

It is divided into the following sections:

Street types, which defines the major streets by their function, use and movement, reinforcing their unique character and scale, and creating a long-term vision for the city.

Street design, which provides a range of technical and strategic approaches for creating integrated and sustainable streets that support and encourage city life.

Furniture and materials, which contains guidance on the elements used in the city's streets for a consistent, complementary and high-quality approach to selection and placement.

Greening, which provides the technical and strategic guidance for increasing trees and plantings in the city in a sustainable way, contributing to environmental and lifestyle benefits.

Building frontages, which explains how private buildings that face public spaces can contribute to a rich and diverse city experience through detailing and thoughtful design.

Lighting, which provides approaches to lighting that complements the city environment, improves safety and amenity, promotes sustainability, and builds on the city's lifestyle and character.

HEALTHY ACTIVE BY DESIGN

The Healthy Active by Design²⁴ website is a toolbox for creating liveable, active places and spaces in South Australia. Many of the resources and information provided on this website have been developed locally for and by South Australians.

THE STREETS FOR PEOPLE COMPENDIUM

Published in 2012 by the Government of South Australia in partnership with the Heart Foundation and the Planning Institute of Australia, the *Streets for People Compendium* reinforced the concept of 'link and place' to policy makers and designers, quantifying road width in relation to footpath and verge width and has influenced subsequent urban design and renewal.

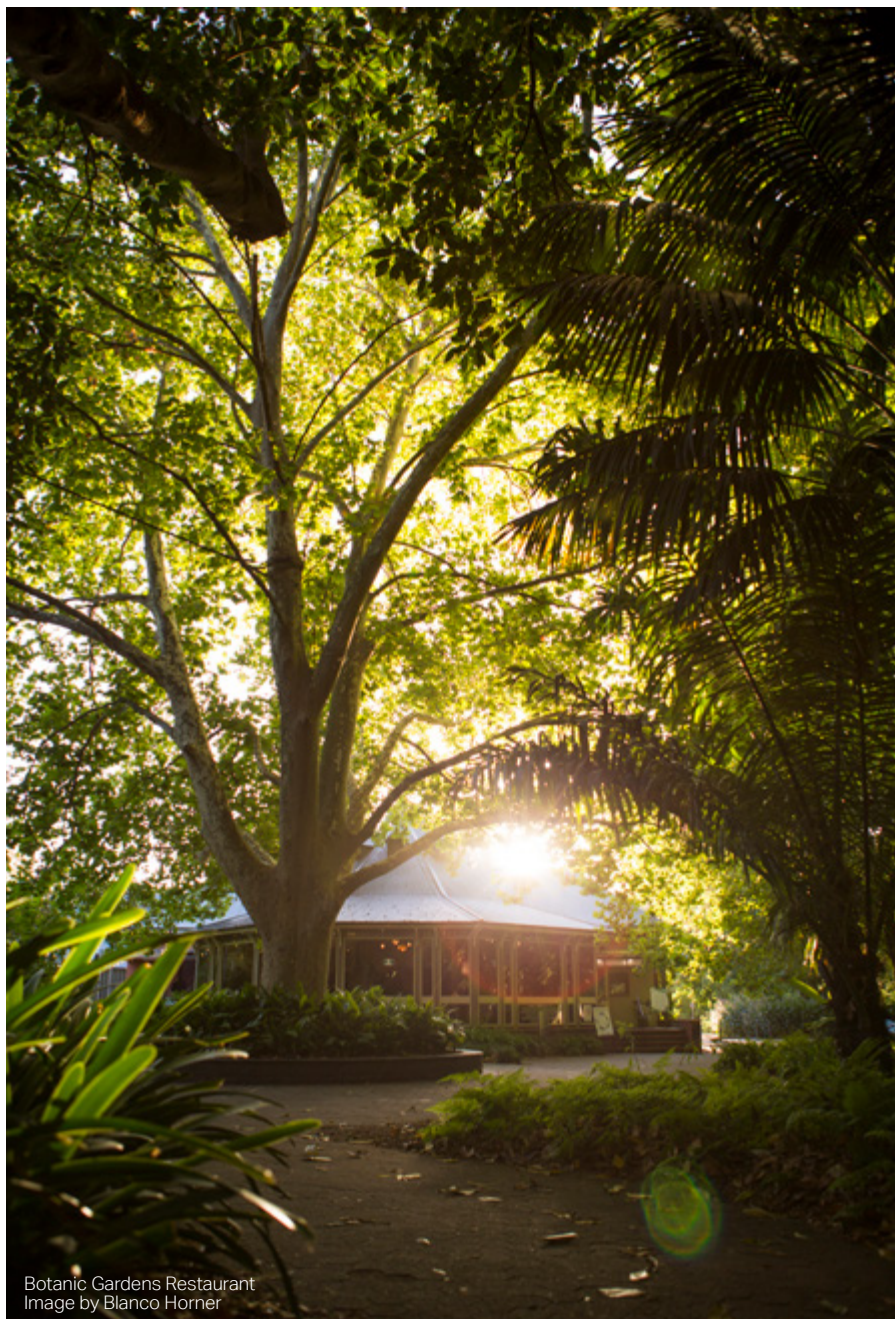


Adelaide Botanic Gardens
Image courtesy of the South Australian Tourism Commission

²⁴ "About," Healthy Active by Design, Heart Foundation, 2018, <http://www.healthyactivebydesign.com.au/about>.



SeaSalt Henley
Image courtesy of the Food & Wine Collective



Botanic Gardens Restaurant
Image by Blanco Horner

FACTORS IMPACTING WELLBEING AND MENTAL HEALTH

CLIMATE CHANGE

All South Australians will experience the impact of climate change on their health and wellbeing. Understanding the risks, identifying and supporting vulnerable members of the community and developing appropriate urban design adaptation strategies will be critical to the success of healthy cities globally, including Adelaide.

Adelaide is getting warmer (overall 0.96°C warming between 1910 to 2005) and projected to become drier with heatwaves more frequent and more severe. The number of days over 35°C in Adelaide projected to increase from their current average of 20 to 24-29 by 2030 and to 29-57 by 2090. The fire season is likely to start earlier with an increase in the number of fire danger days. Annual rainfall is projected to decrease, but the intensity likely to increase.

Sea levels are rising five millimetres per year in the region and projected to rise a further 60 centimetres by 2090.

Gulf and ocean waters are warming and are also becoming more acidic as a result of absorbing higher amounts of carbon dioxide from the atmosphere, threatening marine biodiversity.²⁵

Temperature rises exacerbate the urban heat island effect caused by a density of hard surfaces, predominately with darker, heat absorbent materials, loss of tree canopy cover and green open spaces, grassed areas and planted areas.

Australia's first climate change legislation was enacted in South Australia.

Carbon Neutral Adelaide is an ambition to make the City of Adelaide the world's first carbon neutral city – to achieve zero emissions by 2050.²⁶

The Adelaide and Mount Lofty Ranges Natural Resources Management Board has developed Climate Change Adaptation Plans with local government alliances to build resilience against extreme weather events.

²⁵ Government of South Australia, *South Australia's Climate Change Strategy 2015-2050: Towards a low carbon economy*, <https://s3-ap-southeast-2.amazonaws.com/cna-public-assets/general-downloads/SA-Climate-Change-Strategy-2015-2050.pdf>.

²⁶ "About," Carbon Neutral Adelaide, <https://www.carbonneutraladelaide.com.au/about>.

ENERGY

Being the capital city of the driest state in the driest continent of the world, Adelaide's reputation for resourcefulness, inventiveness and progressive thinking has emerged through the necessity to act more sustainably.

Adelaide derives most of its electricity from local privately operated gas-fired plants (Torrens Island Power Station and Pelican Point), observing strict controls to ensure the protection of the local marine environment, as well as from the national network. Gas is supplied from the Moomba Gas Processing Plant in the Cooper Basin through the Moomba Adelaide Pipeline System and the SEA Gas pipeline from Victoria.

South Australia generates 18% of its electricity from wind power and has 51% of the installed capacity of wind generators in Australia.

South Australia is the leading producer of wind power in Australia and over 50% of the state's electricity is generated from renewable energy sources.

REDUCING EMISSIONS WHILE GROWING THE ECONOMY

South Australia's net greenhouse gas emissions have been reducing since 2005. The latest estimate indicates that net greenhouse emissions in 2012/2013 were 9% below the 1990 baseline. South Australia's Gross State Product (GSP) during this period grew more than 60% from \$55.2 billion in 1989/90 to \$94 billion in 2012/2013, demonstrating that economic growth can be decoupled from growth in greenhouse gas emissions.

AIR QUALITY

The air quality of Greater Adelaide is constantly monitored by the Environmental Protection Agency²⁷ of South Australia and generally considered to be very good.

The *Environment Protection (Air Quality) Policy 2016* was established to protect human health and the environment by providing a modernised and consolidated legislative framework.²⁸



WOMAdelaide 2015, Botanic Park
Image by Grant Hancock

²⁷ "Air Quality Monitoring," Environmental Protection Authority South Australia, https://www.epa.sa.gov.au/data_and_publications/air_quality_monitoring.

²⁸ "Environment Protection (Air Quality) Policy 2016," South Australian Legislation, 2016, [https://www.legislation.sa.gov.au/LZ/C/POL/ENVIRONMENT%20PROTECTION%20\(AIR%20QUALITY\)%20POLICY%202016/CURRENT/2016.-.AUTH.PDF](https://www.legislation.sa.gov.au/LZ/C/POL/ENVIRONMENT%20PROTECTION%20(AIR%20QUALITY)%20POLICY%202016/CURRENT/2016.-.AUTH.PDF).

FOOD SECURITY

For many tens of thousands of years South Australia's first nations people ingeniously survived sustainably on what the land and waters provided through sophisticated agricultural practices and skilled husbandry.²⁹ Harvesting and storing cereals and grains, cultivating nuts, seeds and deep rooted vegetables, using fire to replenish food resources and building complex aquaculture systems.

Aboriginal lore prescribes the responsibility to nurture and respect the nature and the environment.

Dreaming explains that everything in the environment; the underground, the land, the waters, the sky, the fire, the wind and weather, plants and animals, holds the living essence of ancestors.

In contemporary Adelaide and many parts of South Australia, it's easy to buy food and drink from the people who produced it, reflecting a growing recognition of the environmental consequences of food transport, refrigeration and processing as well as an intensifying affinity with 'local' and the land that feeds us, but comes at a cost.



Karl Telfer Paitya Dancers
Image courtesy of the South Australian Tourism Commission and Adam Bruzzone

²⁹ Bruce Paoee, *Dark Emu: Black Seeds: Agriculture or Accident?* (Western Australia: Magabala Books, 2014).

In the 200 years since colonialism, the introduction of predators, notably cats, foxes, rabbits and other rodents have caused the mass extinction of species. The European carp has devastated fresh water fish stock and damages waterways. The introduction of sheep, cattle and other hooved animals has desecrated grasslands and hardened the soil, to the extent that precious rain is either absorbed more quickly or runs off the surface of the land, carrying with it soil and nutrients. The removal of perennial, deep-rooted vegetation for annual introduced crops causes groundwater to rise, dissolves salt crystallised in the soil, resulting in soil salinity.

While it takes time to evolve the necessary customs, rituals, recipes, skills and ethics to live in a place that authentically and sustainably feeds its people, Adelaide and South Australia has the privilege of having deep and traditional Aboriginal knowledge and practices to inspire and guide the future of agriculture.

As the effects of drought devastate agriculture in South Australia, there is an increasing recognition of the need to transform agricultural practices.



Adelaide Central Market
Image courtesy of Tourism Australia

WATER SECURITY

Being one of the driest inhabited places on Earth with a population scattered across a large area, water security is an ongoing challenge for Adelaide and South Australia.

Adelaide's water is sourced from a range of different places including the Murray River, desalinated sea water and local reservoirs: Mount Bold, Happy Valley, Myponga, Millbrook, Hope Valley, Little Para and South Para. The yield from these reservoir catchments can be as little as 10% of the city's requirements in drought years and about 60% in average years.

South Australia and importantly the city of Adelaide are at the end of the esteemed Murray-Darling Basin river system that produces one third of Australia's food supply and supports over a third of Australia's total gross value of agricultural production.

The majestic lifeline comprises Australia's three longest rivers; the Darling (2740 kilometres long), the Murray (2520 kilometres long) and the Murrumbidgee (1575 kilometres long), which has existed for over 60 million years, since Australia split from the giant super continent, Gondwanaland.

According to the Ngarrindjeri, the Murray used to be just a stream. It became the mighty river we know today when local 'hero spirit' Ngurunderi chased a giant cod (Ponde). As the fish swam ahead of Ngurunderi, it widened the river with sweeps of its tail. When Ngurunderi got to Tailem Bend (Tagalang), he threw a spear at the giant fish. The spear caused the cod to surge ahead of Ngurunderi, creating a long, straight stretch in the river.

South Australia capped its water use from the Murray River in 1969 and campaigned strongly for a basin-wide plan entitled the *Murray-Darling Basin Agreement*, which was established in 2012. The agreement mandated sustainable water usage ensuring the whole system retains the water it needs to stay healthy, for the benefit of the environment and the 3.4 million people nationally who rely on the system for drinking water, food production and livelihood.

A Royal Commission is currently underway into allegations that water is being illegally taken from the Murray-Darling Basin by upstream states for agriculture.

The Australian \$50 note features Ngarrindjeri man David Unaipon. Ngarrindjeri are the traditional Aboriginal people of the lower Murray River and the Coorong in South Australia, a nation comprising 18 independent territorial clans and arguably most impacted by the destruction of the Murray-Darling river system. During the millennium drought (1995-2009) water levels dropped so low that ancient traditional Ngarrindjeri burial grounds were exposed.

Water Sensitive SA, established by the Adelaide and Mount Lofty Ranges Natural Resources Management Board, exists to provide government and developers with technical information and expertise.



Australian 50 Dollar featuring David Unaipon
Image courtesy of the Australian Broadcasting Commission

DESALINATION

SA Water's largest desalination plant is the Adelaide Desalination Plant (ADP) at Lonsdale. The plant was built to provide long-term water security for South Australia and has been contributing to delivering drinking water since 2011.

In full operation, the plant can produce 100 gegalitres per year, which is approximately half of Adelaide's annual water needs, and while it has one of the smallest carbon footprints of any desalination facility in the world, using energy from renewable sources, desalination remains a financially and environmentally expensive way to treat water and considered a last resort and not to offset inefficient water use practises.

WATER SENSITIVE URBAN DESIGN

Water sensitive urban design (WSUD) is crucial to the sustainable use and re-use of water in urban development and buildings.

The South Australian Government has developed a *Water Sensitive Urban Design Policy* with established targets for new developments and technical manual for developers and builders. WSUD integrates the total water cycle from all sources (including rainwater, storm water, groundwater, mains water and waste water) into urban development and building processes. WSUD measures and tools are applied to residential, commercial and industrial developments and buildings and range from the storage, treatment and use of runoff to water-efficient landscaping.

WASTE

South Australia has the highest per capita recycling rate in Australia and among the best in the world – nearly 80% of total waste generated is recovered.³⁰

South Australia has achieved a 27% reduction in waste to landfill since 2003.

The waste sector contributes around 3% of South Australia's greenhouse gas emissions which is largely from the release of methane produced when organic matter breaks down.

Since 1977, South Australia has had a container deposit scheme, which diverts almost 97% of bottles and drink containers from landfill to recycling.

South Australia's Waste Strategy 2015-2020 currently includes targets to reduce municipal solid waste to landfill by 70% by 2020; to reduce commercial and industrial waste to landfill by 80% by 2020; and to reduce construction and demolition waste to landfill by 90% by 2020.

The waste management and resource recovery industry in South Australia has an annual turn-over of around \$1 billion, contributes \$500 million annually to Gross State Product and employs almost 5,000 people.³¹

³⁰ "South Australia's Waste Strategy 2015-2020," Green Industries SA, Government of South Australia, <https://www.greenindustries.sa.gov.au/sa-waste-strategy>.

³¹ "Publications - Waste Strategy 2015-2020," Green Industries SA, Government of South Australia, <https://www.greenindustries.sa.gov.au/publications-waste-strategy-2015-2020>.

TRANSPORT

Adelaide has a metropolitan-wide public transport system, consisting of a bus system (with diesel and electric lines) and a metropolitan tram through the city centre to the inner north-west suburbs.

Historically, Adelaide was known as a “20 minute city” with commuters having been able to travel from metropolitan outskirts to the city proper in roughly 20 minutes and while this is no longer possible during times of peak traffic, the wide streets keep congestion to a minimum.

In recognition of the need to link transport and land use planning, in 2016 the State Government released an *Integrated Transport and Land Use Plan* (ITLUP) which is grounded in three goals; healthy, safe, affordable and connected communities, a strong, diverse and growing economy and a thriving natural and built environments.³²



Victoria Square, Adelaide
Image by Sam Noonan

³² Government of South Australia, *The Integrated Transport and Land Use Plan* (2015), http://www.transportplan.sa.gov.au/_data/assets/pdf_file/0007/173482/ITLUP_-_July_2015.pdf.

DIGITAL TECHNOLOGIES

Digital technologies will continue to play an increasingly important role in contemporary life and access to high-speed, secure internet is fast becoming a foundation of prosperity around the world.

Adelaide is on its way to building the fastest, most secure and robust data networks in the southern hemisphere by installing a revolutionary high-speed, high-performance fibre optic data network that is being rolled out to commercial buildings across the City of Adelaide.

The Ten Gigabit Adelaide network will enable businesses and organisations to share and receive high volumes of data at phenomenal 10Gbps data speeds.

In January 2015, Cisco declared Adelaide as the first smart and connected 'Lighthouse City' in Australia through its leadership in deploying free outdoor wireless technology across the city.



Adelaide Central Business District
Image by Sam Noonan



Moseley Square, Glenelg
Image courtesy of the South Australian Tourism Commission

OVERVIEW OF WELLBEING AND MENTAL HEALTH

It is a focus on wellness, rather than mental illness that characterises Adelaide's approach to mental health and wellbeing.

"Aboriginal perceptions of health and wellbeing are holistic and are determined by a range of life factors including physical health and wellbeing, cultural connection, social inclusion, identity and autonomy."
Healthy Parks Healthy People

Adelaide and South Australia's approach to wellbeing and mental health aspires to reflect this traditional wisdom recognising that it encompasses the health of the whole individual, their environment and the whole community. It acknowledges the interplay between all elements within human health; biological, mental, social, environmental, spiritual, and economic and considers broad ranging health determinants.

Almost half (765,000) of all South Australians aged 16 to 85 years, are likely to have experienced symptoms of mental illness at some time in their lives.³³

In any 12 month period, almost one in five or nearly a quarter of a million South Australians are likely to experience symptoms of one of the common forms of mental illness (anxiety, depression, mood disorders or substance use disorders).

It is estimated that approximately 53,000 South Australians experience severe mental illness in any 12 month period, either episodic or chronic, often with substantial effects on ability to function in society and at home, and in great need of care and support.

³³ "National Survey of Mental Health and Wellbeing: Summary of Results 2007," Australian Bureau of Statistics, 2008, <http://www.abs.gov.au/ausstats/abs@nsf/mf/4326.0>.

Mental illness is the third leading cause of disease burden in South Australia, behind cardiovascular disease and cancer. However, for South Australians 24 years and under, mental illnesses are estimated to be the leading cause of burden and disease in our community. The age of onset of around half of the more common mental illnesses is by 14 years, and around three-quarters by the age of 24 years.

Aboriginal people are twice as likely as non-Aboriginal people to feel high or very high levels of psychological distress due to the intergenerational trauma of colonisation; the dispossession from traditional lands and culture, the impact of policies that followed, such as the forced removal of Aboriginal children from their families and the denial of humanity and identity.³⁴



Adelaide Riverbank Footbridge
Image by Andre Castellucci

³⁴ Professor Helen Milroy, Zubrick et al., *Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice* (2010), <https://www.telthonkids.org.au/globalassets/media/documents/aboriginal-health/working-together-second-edition/working-together-aboriginal-and-wellbeing-2014.pdf>.

ALCOHOL AND SUBSTANCE USE

Alcohol and other drug problems affect many South Australians and have both personal and social impacts across the community affecting families and relationships as well as having health, economic and criminal justice consequences.

In South Australia, alcohol consumption is responsible for exacerbating depression as well as at least 30% of road accidents, 44% of fire injuries, 34% of falls and drownings, 6% of child abuse cases, 12% of suicides, 10% of industrial accidents and accounts for approximately 12,500 hospitalisations and 600 deaths per year resulting from associated chronic and acute conditions.³⁵

In South Australia in 2016, 5.9% reported drinking alcohol daily and 15.7% reported using an illicit drug in the last 12 months, similar to Australian statistics.

The most commonly used illicit drug in South Australia in 2016 was cannabis (10.7%) followed by cocaine (2%), methamphetamine (1.9%) and ecstasy (1.6%); note that ecstasy use decreased significantly from 2.8% in 2013.

The percentage of men who reported using illicit drugs was higher than that of women (18.7% compared with 13.2%) and the age group with the highest percentage of people who reported recent illicit drug use was aged 18 to 24 years (28.9%).

³⁵ "Drug and Alcohol Service Activity and Performance Data," SA Health, Government of South Australia, 2019, <https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/about+us/health+statistics/hospitals+and+other+health+care+services+statistics/drug+and+alcohol+service+activity+and+performance+data>.

CHILDREN AND YOUNG PEOPLE IN ADELAIDE

In 2016, the South Australian Commission for Children and Young People was established to improve the wellbeing of children and young people in South Australia across four focus areas:

- Place the interests of children and young people front and centre in everyday life
- Prioritise the rights and interests of those doing it tough
- Engage and empower digital citizens
- Strengthen children and young people's participation in society

During the initial engagement with children and young people, the Commissioner heard first hand that many children and young people in South Australia lead happy active lives and feel respected by adults. Young people reported that they value school, education and learning, family relationships, their culture, opportunities to participate, friendship and their pets. They are also very concerned for those who they see are feeling less included, less mentally well, less financially secure and less prepared for their future.³⁶



Adelaide Riverbank, Elder Park
Image courtesy of the South Australian Tourism Commission

³⁶ Commissioner for Children and Young People, *Front & Centre – An Agenda for South Australian Children and Young People* (2017), <https://www.ccyip.com.au/wp-content/uploads/2018/08/Front-and-Centre-Agenda-06-08-2018-Lower-Res.pdf>.

SUICIDE IN SOUTH AUSTRALIA

In 2015, 236 South Australians took their lives. The suicide rate in Adelaide is 13.3 per 100,000 (in 2015) which is slightly higher than the national average and the leading cause of death for South Australians aged 15 to 44. Indigenous suicide rates are between one and four times those of non-Indigenous Australians.³⁷

Following extensive public engagement, the *South Australian Suicide Prevention Plan 2017-2021* was established to focus on raising awareness, breaking-down the stigma associated with mental illness, increasing social connection and responding compassionately.

“Unresolved trauma is the underlying cause of most social and health problems in Aboriginal and Torres Strait Islander communities today. If we can effectively tackle the cause – at an individual, family and community level – we can change the future and generate benefits for all Australians.”
Healing Foundation

SA Health has a comprehensive range of public mental health services for children and adolescents, adults and older people. Services are provided through community health centres and hospitals and to individuals and families in their own homes, by the State Government and a broad network of non-government organisations.

The state offers a Mental Health Triage Service, staffed by mental health professionals which operates 24 hours a day, 7 days a week as a main point of information and referral to mental health services in a mental health emergency or crisis.³⁸

A key element of the South Australian approach to suicide prevention is the establishment of Suicide Prevention Networks within local communities to start life-saving conversations, breakdown the stigma, increase individual awareness of the thoughts and feelings that lead to suicide and provide information on how to respond and support those bereaved by suicide.

³⁷ “Causes of Death, Australia, 2017,” Australian Bureau of Statistics, 2018, <https://www.abs.gov.au/ausstats/abs@.nsf/mf/3303.0>.

³⁸ “Mental Health Services,” SA Health, Government of South Australia, 2019, <https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/health+services/mental+health+services>.

SOUTH AUSTRALIA – THE STATE OF WELLBEING

In 2013, South Australia's Thinker in Residence, Professor Martin Seligman challenged the state to position itself as a State of Wellbeing.

Several key initiatives have been progressed including:

- Establishing the Wellbeing and Resilience Centre at the South Australian Health and Medical Research Institute (SAHMRI) to measure and build wellbeing and resilience through teaching a set of positive psychology skills across the lifespan to communities and organisations.
- Systemising measurement of the wellbeing of school students across Adelaide and South Australia with the Middle Years Development Index.
- Embedding Positive Education across Adelaide and South Australian public and private schools.

ADELAIDE'S WELLBEING

During a four-week period in May/June 2016, City of Adelaide residents were invited to participate in a Wellbeing and Resilience Centre survey (PERMA+ survey) using an adapted survey instrument; the PERMA+ survey measures PERMA (positive emotion, engagement, relationships, meaning and accomplishment) as well as optimism, physical activity, nutrition and sleep.

654 individuals participated in the PERMA+ survey, of which 484 individuals identified as residents of the City of Adelaide.

The overall mean of PERMA for City of Adelaide residents was 7.2, indicating a level of wellbeing that is slightly higher than the global average score of 7.1.

City of Adelaide residents scored higher than the global average PERMA, females scored slightly higher than males, those who scored higher than the group's average of 7.2 were aged 65 to 74 years, those 18 to 24 years had lower PERMA, while one in five residents had very low overall PERMA (less than 6.0).



Skye Lookout, Wattle Park
Image by Callum Jackson

SOUTH AUSTRALIA - A GREAT STATE OF MIND

In 2015, the South Australian Government established the South Australian Mental Health Commission to take a more holistic approach to wellbeing and mental health.

The South Australian Mental Health Commission has developed a *Mental Health Strategic Plan 2017-2022*³⁹ that sets the strategic direction for building a resilient, compassionate and connected community. The strategic plan takes a whole-of-person, whole-of-life, whole-of-government and whole-of-community approach to building, sustaining and strengthening the mental health and wellbeing of South Australians.

Nine principles underpin the core strategies and strategic directions outlined in the plan.



East End
Image courtesy of the South Australian Tourism Commission

³⁹ "South Australian Mental Health Strategic Plan 2017-2022," SA Mental Health Commission, Government of South Australia, 2019, <http://samentalhealthcommission.com.au/the-plan/vision/>.

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1. **Dignity:** South Australians are treated with dignity and respect, and their human rights are upheld, in their interactions with mental health and wellbeing services and in the broader community.
 2. **Person First:** People across the lifespan are recognised for their own unique capacities, strengths and needs in building, maintaining and strengthening their mental health and wellbeing, and that of their communities.
 3. **Support and Connection:** Networks of support and connection are recognised as integral to, and are included in, building, sustaining and strengthening the mental health and wellbeing of our loved ones and communities.
 4. **Meaning and Purpose:** Opportunities for people to explore meaning and purpose, through activity and/or learning, are recognised as integral to building positive self-identity and community connection.
 5. **Inclusion and Diversity:** People are recognised as having unique social, cultural and spiritual needs and these are included in building, maintaining or sustaining mental health and wellbeing.
 6. **Recovery:** People are recognised as having unique capabilities to heal, learn, develop and grow with regard to their own experience of building, sustaining and maintaining mental health and wellbeing.
 7. **Equity:** Mitigating social and health inequities arising from differing access to social supports such as housing, employment, healthcare and education due to life circumstances is integral to building, sustaining and maintaining our community's mental health and wellbeing.
 8. **Collaboration and partnership:** People with lived experience, services and communities work together to respond to, build and strengthen mental health and wellbeing, with a commitment to co-production at all levels.
 9. **Communication:** People, services and communities connect, provide and respond to feedback and information to enhance mutual understanding and partnership.
- In 2018, the new South Australian Government appointed a Minister for Health and Wellbeing (previously the Minister for Health).



Adelaide Central Business District
Image courtesy of City of Adelaide

HOMELESSNESS

Up to 125 individuals sleep rough in Adelaide every night.

An action plan has been developed to achieve functional zero homelessness in Adelaide by 2020, with a coalition of community service providers, government agencies and private sector organisations committed to leading the change.

ADELAIDE'S THINKER IN RESIDENCE PROGRAM

Established in 2003, Adelaide's Thinker in Residence program was a global first to address urgent challenges or to explore areas of opportunity, through new policy development and systems reform.

For over a decade, the program informed the State Government's response to some of the most important issues including health, education, water, climate change, manufacturing, transport and road safety.

Some significant impacts of the program include the development of Health in All Policies (Ilona Kickbush), the establishment of the Australian Centre for Social Innovation (Geoff Mullgan), the Wellbeing and Resilience Centre (Martin Seligman), the state-wide measurement of progress in children's development through the Australian Early Development Index (Fraser Mustard) and the construction of Common Ground Adelaide sites to house the long-term homeless (Rosanne Haggerty).

The program has been adapted and is managed by not-for-profit sector, by the Don Dunstan Foundation.

SOUTH AUSTRALIA - HEALTH IN ALL POLICIES INITIATIVE

Health in All Policies acknowledges that health is influenced by a wide range of social, economic, political, cultural and environmental determinants of health that require joint policy responses.

Health in All Policies was established in South Australia in 2007 as a principal recommendation of 'Thinker in Residence' Professor Ilona Kickbusch, to strengthen the focus on improving health and wellbeing through the goals of other sectors.

Public health is what we do as a society collectively to create the conditions and environments that support the wellbeing of all South Australians. Public health works to ensure that individuals and communities avoid illness and injury and opportunities are created for social inclusion and building a strong and resilient community.

Subsequently, the *South Australian Public Health Act 2011* (the Act) was established to provide the necessary legislative framework for South Australia to better respond to emerging and traditional public health challenges and is underpinned by mechanisms to systematise Health in All Policies across government.

The scope of the Act reflects public health in its broadest sense, covering the foundational role of public health in protecting against environmental hazards and preventing communicable disease and extends to the promotion of healthy environments and lifestyles to address chronic conditions.

The Act recognises that many factors impact on the health of communities including the social, economic and physical environment as well as individual characteristics and behaviours.

Since the inception of Health in All Policies in 2007, the Government of South Australia has partnered with the World Health Organisation (WHO) and in 2017 published *Progressing the Sustainable Development Goals through Health in All Policies – Case Studies from Around the World*. It describes experiences from around the world in the context of the 2030 Sustainable Development Agenda and is aimed at the international community and the broader sustainable development network.⁴⁰

⁴⁰ "Progressing the Sustainable Development Goals through Health in All Policies – Case studies from around the world," Government of South Australia, World Health Organisation, 2017, https://www.who.int/social_determinants/publications/liap-case-studies-2017/en/.



TreeClimb Adelaide
Image courtesy of TreeClimb Adelaide



STATE PUBLIC HEALTH PLAN 2019-2024

Building on the strength of the previous *State Public Health Plan* the revised draft plan identifies a clear vision: a healthy, liveable and connected community for all South Australians, where communities are friendly, safe and sustainable with well-designed places that support physical and mental health and wellbeing.

The draft plan recognises the importance of urban design in relation to health and wellbeing in the context of being active, connected and engaged in community and cultural life.

This includes being able to walk or cycle to local services, easily access public transport to larger centres and the right to enjoy being active in parks and other recreational facilities. The plan also acknowledges the need to celebrate South Australia's rich diversity and offer community activities accessible to everyone as well as the importance of community participation and involvement in local decision making.



Twin Street
Image courtesy of the South Australian Tourism Commission

CASE STUDY 1

ADELAIDE CENTRAL MARKET

Established in 1869, the Adelaide Central Market has been a thriving hub of food and culture in the heart of the city, for over 149 years.

With over 70 traders under one roof, the Adelaide Central Market is one of the largest undercover fresh produce markets in the Southern Hemisphere and remains Adelaide's premier food destination of multicultural cuisine and fresh produce.

The market is a feast for the senses offering a huge range of multicultural cuisine and fresh produce including fruit and vegetables, meat and poultry, seafood, cheeses, bakery, smallgoods and health foods, along with some of Adelaide's most popular cafes and eateries.

Over nine million people visit the market every year, making it South Australia's most visited tourist attraction.



Adelaide Central Market
Image courtesy of the South Australian Tourism Commission

CASE STUDY 2

ADELAIDE PARK LANDS

The Adelaide Park Lands is the largest inner urban park system in Australia.

The 800 hectares of park lands surround the city of Adelaide and provide public space enjoyed by over 8.9 million residents and visitors annually for diverse arts and cultural events, sports and informal recreation activities.

The Adelaide Park Lands are registered on Australia's National Heritage List and widely regarded as a masterwork of urban design, giving rise to Adelaide's identity as a city in a park.

KAURNA PLACE NAMING

In recognition of Kaurna people's longstanding occupation, conservation and cultural connection with the land, the City of Adelaide are iteratively formally recognising a number of Kaurna heritage sites and installing signage in English and Kaurna languages, in consultation with Kaurna community culture and heritage groups. Interpretative signage has been installed in the 29 parks surrounding the city.

This initiative enriches and deepens residents' and visitors' connection to place.



Adelaide Park Lands
Image courtesy of the South Australian Tourism Commission

THE TORRENS LINEAR PARK / KARRAWIRRA PARRI

A 30 kilometre Linear Park runs westward from the Adelaide Hills, through the Adelaide central business district and Park Lands, to the sea, used daily by thousands of cyclists and walkers to commute and recreate.

It was completed in 1997 as the first of its kind and is a visionary and innovative response to what began as a flood mitigation scheme along the River Torrens.

COAST PARK

Coast Park is an initiative to develop a continuous two-way linear park for walkers and cyclists along 70 kilometres of Adelaide's metropolitan coast from north to south.

Jointly funded by the State Government and the six Councils located along the foreshore, Coast Park will see the delivery of approximately 60 separate projects which will provide public access along the length of the coast, provide a pedestrian and cycling-friendly foreshore environment, and recognise and enhance the diversity of the natural environment through a large scale environmental management program.

Approximately 65% of the coastal linear park has now been completed.

CASE STUDY 3

BOWDEN URBAN VILLAGE

Bowden is the State Government's first higher density urban infill project. Located 2.5 kilometres from Adelaide's central business district on 16 hectares of land, on a former industrial site, bordered by park lands, the project sets new standards in urban renewal, delivered through a partnership between the State Government and the private sector.

More than 600 homes have been sold and more than 3,500 residents will move in over the coming decade. Bowden homes meet the '6 Star Green Star – Communities' rating assessed across five impact categories including liveability.

Bowden is becoming an exciting integration of contemporary building and design innovation, adding to an already established community rich in culture and heritage, reflected through the use of unfinished and recycled materials complemented by a natural colour palette for buildings and streetscapes.⁴¹

The Bowden precinct is designed to be a safe, walkable urban neighbourhood a stone's throw from the city. It provides energy efficient housing, affordable housing and fosters a strong, diverse community.

⁴¹ Renewal SA, Government of South Australia, *Bowden Developer's Handbook & Urban Design Guidelines* (January 2016), <https://lifemoreinteresting.com.au/wp-content/uploads/Bowden-Developers-Handbook-Urban-Design-Guidelines-Jan-2016.pdf>.



CASE STUDY 4

NATURE PLAY

Adelaide's biggest new playground is based at the entrance of Morialta Conservation Park, just 10 kilometres from the central business district. There are five play areas: Frog Island, Eagle's Perch, Great Snake, Bird Nests, that comprise climbing boulders, creeks, mudpools, paths and climbing trees.

Mukanthi Playspace represents the growing interest in nature-based play in Adelaide.

Parents and the community express growing concern about changing nature of childhood in the context of having busy lives, the structured nature of childhood activities and ubiquitous exposure to digital technology and related impacts on children's health and wellbeing.

GLENTHORNE NATIONAL PARK – URBAN FOREST

Glenthorne National Park will be a 1,500 hectare national park in Adelaide's southern suburbs. The recreation space will comprise nature playgrounds, walking and bike trails, picnic areas, camp grounds and 200 hectares of native revegetation.



Mukanthi Playground, Morialta, Peter Semple Landscape Architects
Photography by Peter Semple

SWOT ANALYSIS

STRENGTHS

- Home to the world's longest living Aboriginal culture
- World class local food and wine production
- Quality arts and cultural festivals
- Fast, secure internet (Ten Gigabit Adelaide)
- Scale conducive to liveability
- City in a park (surrounded by Adelaide Park Lands)
- City committed to quality design
- City acknowledges the importance of wellbeing
- Pristine natural environments
- Leaders in renewable energy
- Excellent professional and community sporting facilities
- Friendly, relaxed ambience
- UNESCO City of Music
- Cisco Lighthouse City

WEAKNESSES

- Limited evidence of the impact of urban projects on wellbeing and mental health
- Population is widely dispersed
- Incentivise investment in green infrastructure for household level and other development
- Over-governed
- Substance abuse
- Self-deprecating attitudes
- Conservative and complacent attitudes
- Limited access to quality of arts and cultural offerings in suburban areas

OPPORTUNITIES

- Develop a post occupancy wellbeing and mental health measurement
- Quality design of medium and high-density architecture
- Draw inspiration from traditional Aboriginal knowledge in relation to sustainable green infrastructure and agriculture
- Extend the scope of Aboriginal dual naming across Greater Adelaide
- Expand existing arts capability to improve social connection and cohesion, wellbeing and health
- Formally acknowledge the negative impact of decisions that erode trust, threaten people's sense of connection and social cohesion
- Manage green infrastructure like other infrastructure assets
- Leadership in renewables and carbon neutral initiatives
- Zero homelessness
- Strengthen values-based decision making and the impact of decisions on culture
- Strengthen regional urban centres

THREATS

- Decline of the Murray River system
- Loss of green space and tree cover
- Transitioning economy
- Substance abuse
- Housing affordability
- Economic stress

CONCLUSION

Lessons from Adelaide that could be applied to promote wellbeing and good mental health through urban planning and design in other cities include:

1. Measure and actively build wellbeing at the population level.
2. Adopt the *Principles of Good Design* in the approval of private and public development: Context, Inclusive, Durable, Value Performance and Sustainable.
3. Strong citizen engagement – adopt a range of consultation platforms for engagement where citizens can find and provide feedback on a range of topics.
4. Healthy Parks Healthy People – adopt a framework that promotes physical activity in nature, childhood development and nature, green infrastructure and urban settings and biodiversity, conservation and human health.
5. Invest in renewables – Adelaide's aspiration to be the world's first carbon neutral city is driving important initiatives across industry, infrastructure and public engagement.

Recommendations for Adelaide to improve mental health and wellbeing through urban planning and design include:

1. Explore and better define South Australian values to inform all decision making that reflects our shared identity.
2. Be inspired by traditional Aboriginal knowledge, experience and connection to the land and courageously face and heal the impact of colonisation. This would need to be scoped and led by Aboriginal people but might include English/Aboriginal dual naming of municipalities, extended Aboriginal language urban signage and might extend to routinely teaching Aboriginal language in all South Australian schools.
3. Utilise the existing arts and creative industries capability to contribute to solving persistent social issues including improving wellbeing, mental health, reducing substance abuse, welcoming refugees and international students. Draw inspiration from the Healthy Parks Healthy People initiative.
4. Realise Adelaide's potential as one of the world's great cycling cities, celebrate cyclists and make active transport the most convenient and popular way to get around.
5. Systemise the consideration of Cultural Impact into decision making at the municipality and State Government level through Cabinet Submissions.
6. Use smart technology to manage green infrastructure as a physical asset, establish a green infrastructure register, monitor the health and lifecycle of urban plants including succession planning to strengthen place attachment and mitigate the urban heat island effect.
7. Re-purpose the Botanic Gardens and State Herbarium of South Australia's Bicentenary Conservatory as an innovative and stimulating global destination hub for the science of plants in space, bringing together South Australia's expertise in arid plant science, wellbeing and space industries.
8. Consider planting a sizable urban forest north-west of the city to intercept the hot north winds and influence the microclimate of the city.
9. Build a stronger mindset – celebrate curiosity, courage, and confidence, embrace (not fear) challenges, see effort as crucial in the path to mastery and find inspiration (not threat) from the success of others.

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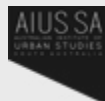
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