

2023

BENCHMARKING ADELAIDE





Acknowledgment of Country

The Committee for Adelaide acknowledges that it operates on the traditional Country of the Kaurna people of the Adelaide Plains and pays respect to Elders past and present. The Committee recognises and respects their cultural heritage, beliefs and relationship with the land.

About this report

This report was conceived in late 2022 by Committee for Adelaide in order to look at Adelaide's prospects afresh and inform the approach Adelaide takes to its recovery and reinvention. It draws on a combination of publicly available studies that rank and compare cities, long-standing statistical databases from the likes of the OECD and UN, and real time data aggregated through trusted APIs of platforms such as Google, Twitter, Dealroom and others. It assesses Adelaide among a group of 20 cities. Scores in each category reflect its overall position among this group of 20.

Acknowledgements

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This report benefited from the guiding inputs of Hendri Mentz and Sarah Bastian at Deloitte, Ben Parkinson, Rick Warner and Anna-Louise Coppock at JLL, Caillin Howard and Alison McIntyre at Hames Sharley, and David Colmer, Emily Perry and Ethan Gates at RAA.

The Business of Cities is an urban intelligence firm providing data and advice to 100 global cities and companies. Based principally in London, the firm has worked with more than 10 local, state and federal governments in Australia since 2014 as well as peak leadership groups and planning commissions, on agendas surrounding the future of Australian cities' governance, built form and economy.

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GLOSSARY OF TERMS

APAC

Asia-Pacific

API

Application programming interface

CBD

Central business district

FDI

Foreign Direct Investment

EV

Electric vehicle

GDP

Gross Domestic Product

IoT

Internet of Things

R&D

Research and Development

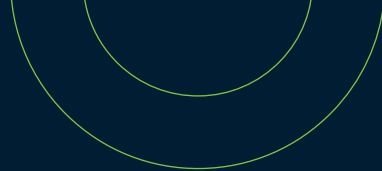
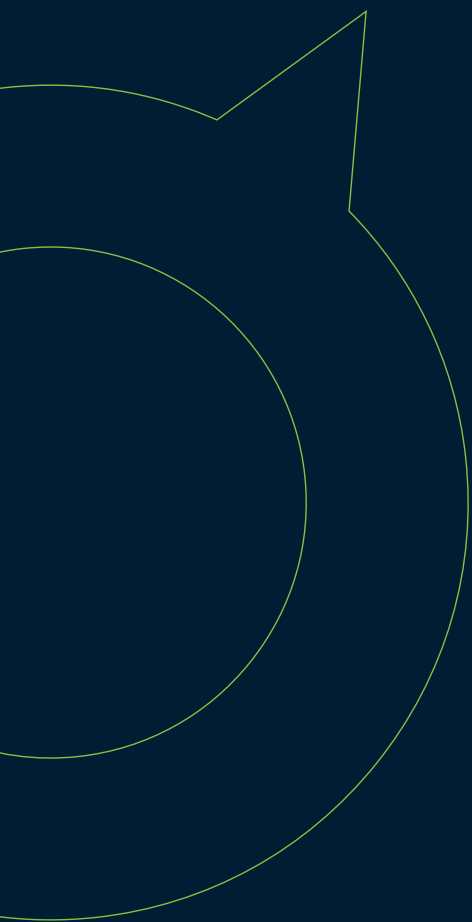
STEM

Science, Technology, Engineering and Mathematics

VC

Venture Capital





FOREWORD

Globally cities are striving to reinvent and re-engineer their economies in the aftermath of the pandemic which profoundly rebalanced how we lived our lives.

The impact of the public health emergency on Adelaide's economy was significant but abbreviated lockdowns and strong leadership allowed Adelaide's economy to rebound faster than many comparable cities.

For the first time in decades net migration to South Australia entered positive territory, as expats returning home and newcomers discovered Adelaide's enviable quality of life.

But international borders have reopened fuelling a post-Covid migration boom. Governments around the world are seeking the best and brightest talent to sustain their economic recovery.

Now is the right time to discuss how Adelaide can capitalise on its strengths and maximise opportunities to help the city reach its full potential.

It is why the Committee for Adelaide, in partnership with JLL, the RAA, Deloitte and Hames Sharley, commissioned The Business of Cities to produce the inaugural Benchmarking Adelaide report.

Using publicly available data, long-standing statistical databases and real-time data, the report measures Adelaide within a peer group of 20 global cities in areas such as economy, business dynamics, skills, transport, vibrancy, liveability, sustainability, and reputation.

In many areas Adelaide excels: its lifestyle and affordability; lower cost of doing business; capacity to attract major corporates. Against comparable cities internationally Adelaide has advantages in demographics, momentum to decarbonise, and its standing in some creative and technology sectors.

Expertise in high value industries of space, defence, advanced manufacturing and health position Adelaide as a city of opportunity. Our innovation ecosystem is also gathering pace with growth of start-ups and new businesses accelerating faster than our peers.

But on some measures Adelaide is lagging. Labour productivity is nearly 20 per cent below peer cities and the city has a smaller share of jobs in high wage and knowledge rich sectors.

Concerted efforts by Government have made strong progress in fostering globally innovative companies but venture capital funding and share of start-ups reaching late stage growth is behind our peers.

Adelaide's reputation as the festival state is reflected in the city rating 2nd behind Austin for the strength of our contemporary arts scene, underlining the global impact of events such as the Adelaide Festival and Adelaide Fringe.

Yet as Adelaide grows the city as a whole tends to fare less well for overall amenity, vibrancy and experience when rated on access to public spaces, cultural offer, community participation and social cohesion. Other cities are catching up to Adelaide in areas such as health and wellbeing, walkable neighbourhoods and access to, and protection of, green space. This reminds us of the need to protect our advantages as we deliver future development and infrastructure.

This report is not about finding fault with Adelaide, but to **spark discussion** around how to **build upon our strengths** and keep learning from the international experiences of peer cities. Everyone has a role to play in shaping the future prosperity and prospects of our city. We look forward to the conversation and collaboration.



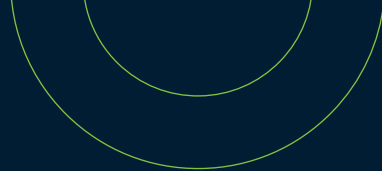
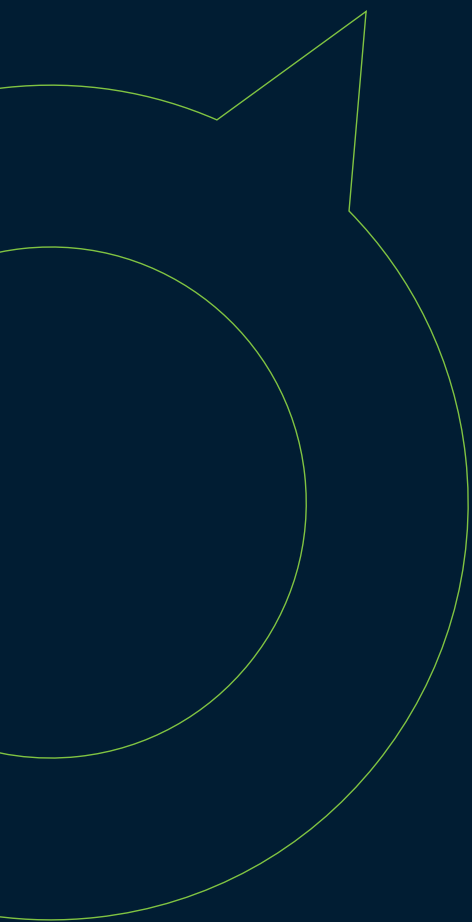
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EXECUTIVE SUMMARY

As the world looks beyond the COVID-19 pandemic, cities face a cascade of choices presented by global competition and interdependence.

Cities around the world like Adelaide have strong domestic horizons but they also compete in global circuits of capital, talent and opportunity.

What is Adelaide's place in this changing world? What does the city offer, what are its prospects, and what can it learn?

In 2023 these questions are timely given a transformational set of opportunities for Adelaide. As talent has more choices about where and how to work, Adelaide possesses an enviable combination of livability and affordability. The reset of many supply chains and trade and security alliances like AUKUS provide Adelaide with more strategic influence. And innovation in technologies and energy presents new paths for Adelaide to succeed and stand out.

Global benchmarking therefore provides a way to look at Adelaide in a fresh light.

This report gauges where the city is at against a basket of international cities that resemble Adelaide for size, lifestyle and endowment. It groups a wide range of performance measures into 10 pillars to see where the strengths, gaps and prospects are for Adelaide.

Sound fundamentals

On this international plane Adelaide does stand out for its high standards of living, health and services. The city's stable growth, territorial assets, and supply chain roles all underpin reliable demand from corporates and investors. Adelaide rates in the top 5 of 20 peer cities for both Liveability and Business pillars.

Adelaide's higher education and gastronomy is coveted. The city has vast potential in new energy, and a compactness that still promises metropolitan lifestyle at a more human scale.

Some of these strengths get overlooked in Australia. Yet they continue to buoy external interest and appetite for Adelaide. Many recognise the city's raw ingredients to become one of the 21st century's new wave of metropolitan cities.

The big issues

Adelaide's ambitions clearly need a growth economy to fuel them. The city's core business model is set to rely on attracting and retaining more talent, more quality investment, and creating critical mass.

International comparisons suggest that Adelaide has been slower than other cities to embrace an urbanised economy and physical platform that thrives on knowledge, diverse sectors and high-paying jobs. As a result rates of public and private innovation are behind, and the risks to productivity are growing.

Adelaide has to be vigilant that its long-held advantages don't erode. The city is becoming comparably less affordable. Others are catching up or even overtaking on health & wellbeing, public transport, walkable neighbourhoods, and access to green space. As it grows outwards, Adelaide's urban form may impair the easy access to services, assets and amenities that gives the city appeal.

Towards Adelaide's next success model

The 21st century's next chapter will see many more mid-sized cities succeed. Adelaide can be one of them if it can make the most of its first-mover position in the green energy transition, along with its university merger, new technical colleges, blossoming innovation districts, and other state investments, policies and partnerships underway.

If Adelaide can build its advantages in science, technology, capital, culture and relationships – and combine these with a compelling set of offers and urban choices to students, families, creatives and innovators – Adelaide is likely to see significant improvements to its performance over time.

THE DRIVERS OF CITY PERFORMANCE INTERNATIONALLY SUGGEST THAT FOR ADELAIDE THE CITY'S FUTURE SUCCESS WILL BE SHAPED BY:

1. Achieving critical mass - of jobs, capital and institutional collaboration - in key innovation niches.
2. Amplifying its reputation for quality of life among prospective talent, aided by better access to housing and transport.
3. Ensuring the whole city is resilient to a changing climate and avoids getting locked in to unsustainable and unproductive patterns of growth.

ADELAIDE'S RATINGS IN 2023

OPPORTUNITY

Productivity and Economic Mix

Top Rated City

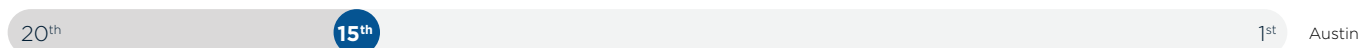


Business and Investment Dynamics



FUTURE ECONOMY

Innovation, R&D and Specialisation

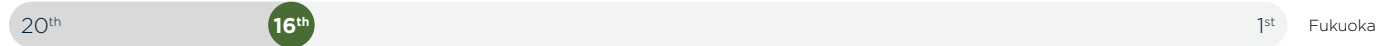


Skills, Knowledge and Population

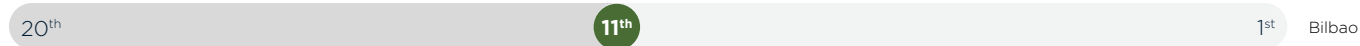


PLACE AND SPACE

Amenity, Vibrancy and Experience



Transport and Infrastructure



PEOPLE AND PLANET

Liveability, Affordability and Wellbeing

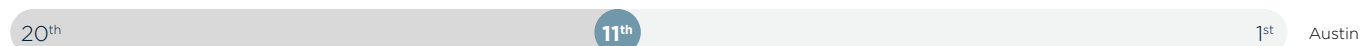


Sustainability and Resilience

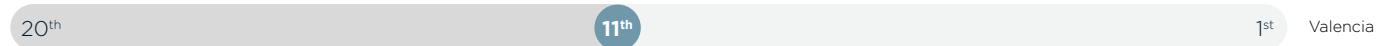


REPUTATION

Visibility and Recognition

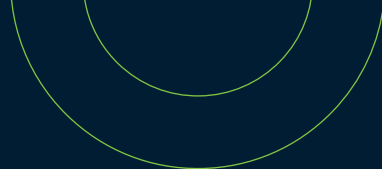


Perception, Sentiment and Appeal



Note: This chart shows Adelaide's position among a group of the 20 peer cities assessed in this report: Adelaide, Antwerp, Auckland, Austin, Bilbao, Bordeaux, Busan, Cape Town, Cardiff, Edmonton, Fukuoka, Muscat, Penang, Portland, Porto, Pune, Sacramento, San Diego, Valencia, Valparaiso. Adelaide's position is calculated using an Elo algorithm that takes into account multiple metrics.





INTRODUCTION

The Value of Benchmarking for Adelaide

Global benchmarks and comparative datasets provide a valuable set of lenses to view how Adelaide is seen by the world. In 2023 the world has a revised set of asks and expectations of cities. Higher costs, talent scarcity, altered post pandemic work patterns, and the race to decarbonise, all feature more prominently.

Benchmarking Adelaide across a broad range of metrics offers many advantages over just looking at a single ranking or a select handful of studies.

By reviewing all the emerging comparative data, it can capture indicators that come to light, as well as broader trends in how Adelaide is performing. The reasons that cities succeed or fail are not set in stone - they evolve. Benchmarks reflect the changing priorities of citizens, companies, visitors and investors.

Benchmarks have influence – they can change how people and businesses look at cities. In 2023, they help us see which cities are prospering and why, and the factors that will shape success over the next 5-10 years.

This methodology has been developed and applied in more than 30 cities around the world over the past decade, including in Oslo, Helsinki, Turin, Philadelphia, Glasgow, Antwerp and San Diego, as well as other Australian cities such as Sydney, Melbourne and Brisbane.

These benchmarking exercises have enabled cities to:

- Understand their real comparative advantages and disadvantages in a global context (e.g. Manchester, Atlanta).
- Track brand performance across a full range of measures and audiences (e.g. Helsinki, Stockholm).
- Spot areas where the city's performance diverges from its brand (e.g. Oslo).
- Create better systems and approaches to promote the city to preferred talent, businesses and investors (e.g. Glasgow, Victoria/BC).
- Build a clearer story of the wider region's capability (e.g. Brisbane & South East Queensland, Amsterdam/Randstad).
- Gain dedicated in-house resourcing for performance monitoring and management (e.g. Tel Aviv).

Outside-in benchmarking is not a substitute for inside-out analysis. Each benchmark has its own logic, strengths and limitations. Data is improving but not all the issues that matter to Adelaide are yet covered by international data.

Benchmarking allows us to look at Adelaide as the world currently sees it – to understand issues in a different light, spot new competitors, and observe some of the drivers that Adelaide will have to respond to.

THIS REPORT AIMS TO:

- Develop a bespoke outside-in analysis of Adelaide's performance and perception relative to comparable international peer cities.
- Identify comparative strengths, gaps and opportunities that can make Adelaide more internationally competitive.
- Benchmark Adelaide with other international locations with similar size, assets and relationships.

THIS REPORT DOES NOT PROVIDE:

- An inside-out analysis of all of Adelaide's economic, sectoral, and fiscal data.
- An assessment of Adelaide's strategies, governance, fiscal or policy models.
- A definitive recommendation of new policies Adelaide should adopt.

There is a lot of data that compares cities and regions. Every city is different, and data availability and quality varies. So benchmarking a city like Adelaide globally is a complex task requiring careful choices.

Today, Adelaide is approximately the world's 420th largest city. This means it features in fewer high profile benchmarks that rank and compare cities. Benchmarks include studies produced by teams of researchers, governments and consultancies, as well as reports by real estate firms, think tanks, and media and travel organisations.

Given its size in a global context, Adelaide has good visibility in these studies. Yet it still only features in around 15% of them, compared to 50% for Melbourne and 60% for Sydney.

As a result, for this report we supplement these studies with:

- Longitudinal databases and census data (e.g. from OECD, World Bank).
- Real-time platforms, aggregated from trusted APIs (from Dealroom, LinkedIn, Indeed, etc).
- Crowd-sourced perception data from APIs (from Google, Twitter, Reddit).

Each of these sources of data have their own advantages and limitations. Some have a time lag between when data is gathered and when it is published. Others are nearly real-time but may be sensitive to short-term trends or capture a certain portion of the real marketplace for cities.



BENCHMARKING: A PRIMER

What is benchmarking? For this paper “benchmarking” means comparing Adelaide to other cities through data. This includes publicly available studies that rank and compare cities, longitudinal databases, but also real-time user data.

It's all relative. A city can improve and yet fall behind its international peers if they improve faster. The opposite can also happen.

Ingredients change. For example, how sustainable a city is now focuses much more on carbon and resilience, not just air pollution and green spaces. Cities are also affected by changing values or perceptions among surveyed audiences.

City (and State) Governments can't control everything. Adelaide's performance in many areas is strongly shaped by factors outside immediate public control, including market demand. Benchmarking does not assign blame or responsibility.

THE BENCHMARKING FRAMEWORK FOR ADELAIDE

This report focuses on the areas that differentiate cities and where the global attention currently lies. This includes cities' well-being, resilience, connectivity and how prepared they are for skills, lifestyle and climate change.

After the reset of the pandemic, many benchmarks now prioritise cities' welcome and appeal to visitors, talent, entrepreneurs and other kinds of mobile opportunity.

Some of the benchmarks in this report rely on 'hard' measures such as GDP per capita or median housing costs; others measure how Adelaide is perceived by various global audiences. Both objective measures and measures of perception are important.

In general the equation for how cities compete has changed. More small cities are competing effectively on lifestyle, business climate, innovation, supply chains, resilience, competence, and perceived 'safe haven' status.

As larger cities experience growth and efficiency challenges, smaller and medium-sized cities are viewed as having the potential to shift towards a cleaner, climate-conscious economy underpinned by more effective metropolitan infrastructure and leadership.

THE 5 KEY PILLARS

Adelaide's performance is assessed across five strategic pillars:

- 1. Opportunity:** Adelaide's ability to create economic opportunity and prosperity for all residents, and to embrace changing economic and geopolitical circumstances.
- 2. Future Economy:** Adelaide's prospects to forge a competitive position in growth industries, and to foster the skills and talent needed to do so.
- 3. Place & Space:** Adelaide's capacity to develop the public realm, neighbourhoods and environments that raise the vibrancy, productivity and appeal of the city.
- 4. People & Planet:** Adelaide's track record of inclusion, wellbeing and stewardship of the urban and natural environment for residents, institutions and investors.
- 5. Reputation:** Adelaide's visibility on the radar of prospective workforce, business, students, visitors, and others, and its potential to achieve global reach and resonance for a broad base of users and markets.

These are explored in the five core sections of this report. In each case, Adelaide's performance is introduced at a glance including opportunities and risks, followed by a sample of key metrics and a summary of what the data says about Adelaide.

ADELAIDE IN AN INTERNATIONAL CONTEXT

Adelaide is experiencing an important cycle of population growth and economic change as the city approaches 2 million people.*

But as worldwide urbanisation and other cities' populations accelerate, Adelaide is set to fall from being roughly the 420th largest city today to around the 500th largest city globally by 2040.¹ The challenge is to compete and differentiate. This task takes on a new look with imminent disruption from climate change, geopolitical changes and new technologies.

Adelaide inherits a special lifestyle proposition and an incredible natural environment. Yet compared to other cities it also has lower density, lower concentration of amenities and a growth model that has been less intentionally geared around a high productivity urban economy.

Adelaide has the potential to establish itself as a high-value city, to the benefit of Australia, Asia-Pacific (APAC) and the world. It is likely to need bold new approaches to succeed in the innovation economy and the race for talent.

Adelaide's international performance is influenced substantially by it being the 5th largest city in a Australian economy that is quite distinctive and different internationally.

On the one hand Adelaide often fares better than most other Australian cities in areas where Australia as a whole has slipped behind, such as public transport, carbon emissions, and housing affordability.

On the other Adelaide also benefits because Australia as a nation has had consistent growth and holds lots of appeal. This means Adelaide in some areas does quite well when it lags behind bigger Australian cities, such as for population growth, real estate investment and ability to attract regional HQs.

*Based on latest ABS population projections (1m in 2001 to 2m in 2061)



INTRODUCING ADELAIDE'S PEERS

Adelaide is 1 of 10,000 cities in the world and it would not make sense to benchmark against all of them. Instead it is more logical to see Adelaide as part of a distinctive global cohort of liveable medium-sized cities that share common assets and ambitions. These cities form a 'peer group' for the purposes of this report.

To most usefully calibrate a city's path in its proper context, benchmarking relies on choosing suitable 'peer' cities. These are cities that share many common features. They may be competitors for certain types of mobile-traded activity such as investment, talent or visitors. Some may also be cities that Adelaide can aspire to and look towards in the next cycle.

These peer cities are not places that have necessarily undertaken benchmarking of their own. Instead their value is in helping Adelaide to monitor progress, spot areas of relative improvement and decline, and engage and educate stakeholders locally on Adelaide's journey and choices.

There are six common features of Adelaide's peer group of cities:

1. They have similar size (1-2 million people) and position in their national or regional systems. Many have larger cities near them.
2. An abundance of natural assets (including food and wine industries) and a strong liveability proposition.
3. Established niches hosting high value-added production and education.
4. Historically more dependent on commodities and visitors, but now with more diverse, knowledge-rich and talent-dependent economies.
5. Shared growth challenges of staying affordable, resilient, able to retain talent, with more dynamism in their city centres and innovation districts.
6. With lessons that may be useful to Adelaide around brand identity, governance, district development, and skills pathways.

Not all 19 peers appear in all benchmarks analysed, so the number of peers against which Adelaide is measured can vary. This is mentioned in each case.

As well as this 20-city peer group, where relevant Adelaide is also compared to:

- Other fast-growing small to medium sized cities of 1-2 million people.
- Other cities in the OECD and across the Asia-Pacific.

Whilst nationally collected data is also occasionally used, the purpose of this study is **not** to compare Adelaide primarily to other major Australian cities. Australian city comparisons are only used in cases where international data is limited or not directly comparable.

WHAT SCALE DO WE LOOK AT?

Benchmarks mostly focus on the whole city of Greater Adelaide.

References in this report to "Adelaide" or "the city" are referring to metropolitan Adelaide, unless it is otherwise specified that they are referring to the City of Adelaide, the CBD, South Australia, or some other scale.

ADELAIDE'S PEERS AND WHAT THEY SHARE

Most have a whole-city population between 1 and 2 million people.

Nearly all sit between 100th and 300th for how globally connected their economies are (GaWC).²

11 of the top 100 cities with the best perceived quality of life (Numbeo).³

Typically 2nd-tier cities within their national or regional economies.



6 of the world's 11 great wine capitals (GWCGN).⁴

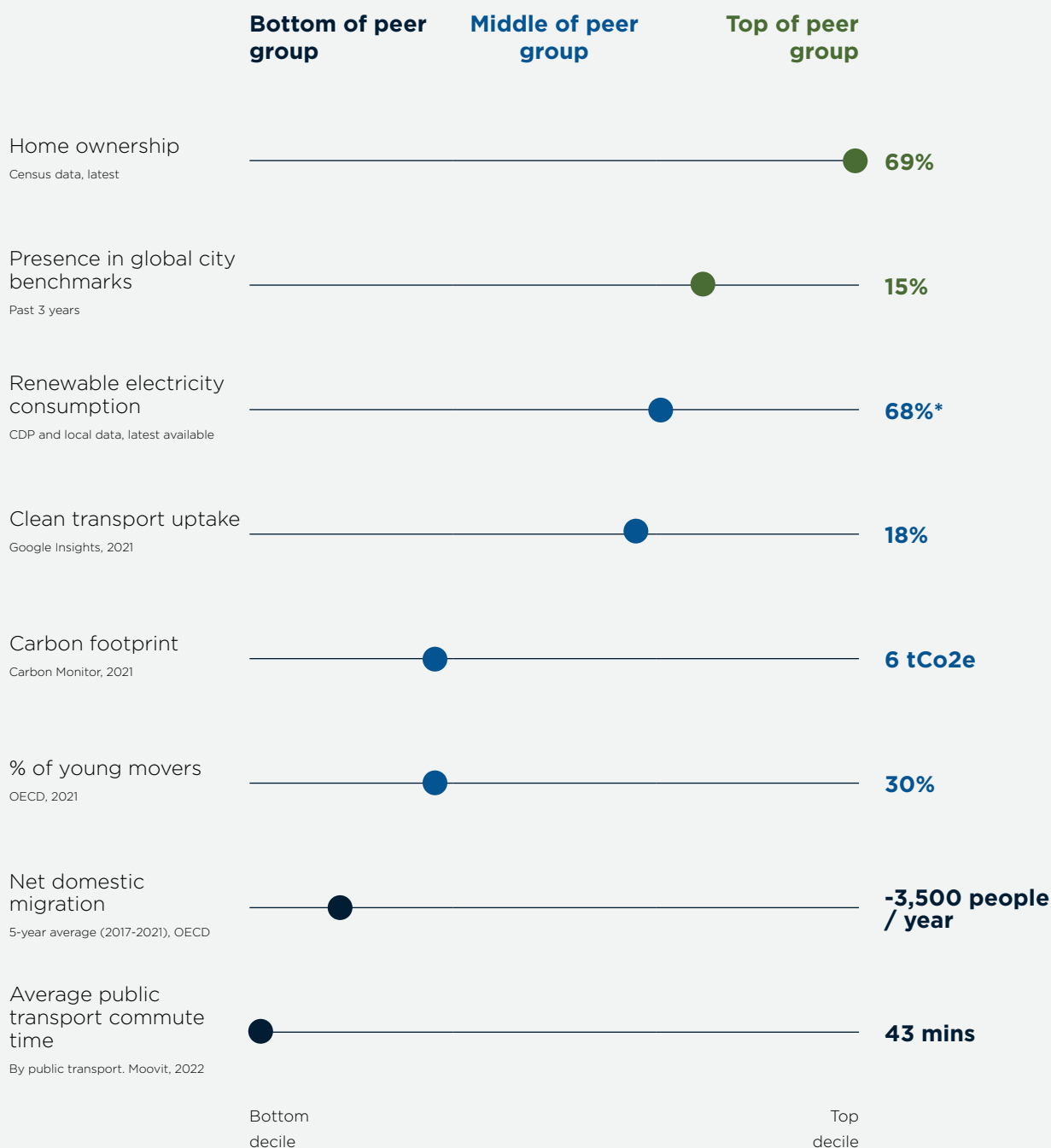
Most are one step removed from the region's main financial capital and air gateway.

An even split from Europe (6), the Americas (6) and the Rest of the World (7).

5 of the OECD's top 20 fastest-improving innovation ecosystems successfully attracting capital (Dealroom).⁵

ADELAIDE IN KEY METRICS

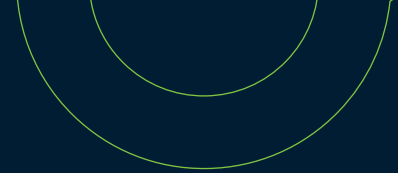
A glance of Adelaide in specific single metrics against these peer cities provides an additional snapshot. It shows Adelaide has relatively high home ownership. However commutes, carbon-intensive living, and talent loss are all more pronounced.



*South Australia data

Sources: Census data, The Business of Cities Research, CDP and local data, Google Insights, Carbon Monitor. OECD, Moovit.⁶





01

OPPORTUNITY

SUMMARY

An international perspective shines a light on Adelaide as a city of opportunity.

Stable growth and an appealing business environment underpins fairly resilient demand from corporates and occupiers. This is also reflected in lower work from home (WFH) levels in Adelaide than many others during and after the pandemic. Shorter lock-down periods and an easier to reach CBD have also driven higher return to city centre offices than in many cities.

Adelaide's multi-national base is key to driving consistent demand from foreign investors. Adelaide punches at or above its weight for attracting investment into creative and technology sectors like AI, film, television, and business processes.

The challenge that emerges is translating this into productivity that drives prosperity and incomes. Compared to cities internationally Adelaide has only made a patchy transition to jobs in high-paying sectors. Exports remain more dependent on commodities. Other cities have moved faster to build a broader base of opportunity in advanced productive sectors.

OPPORTUNITIES

- A deeper multi-national corporate base than most, some moving to innovation precincts, with potential to foster larger clusters in pharma, cyber, data and space, among others.
- Strong jobs growth in creative and services sectors as well as high-value-low-volume manufacturing, points to future enduring specialisations.
- Adelaide is at the edge of the 'mental map' for global investors in industries such as media and AI.

RISKS

- ⚠ Slower pivot to jobs in advanced services risks keeping the city stuck long-term in a medium-productivity scenario.
- ⚠ Adelaide's competitive business climate is not always well known or recognised internationally.
- ⚠ Narrower economic mix than most could impair long-term resilience and may perpetuate brain drain.



PRODUCTIVITY AND ECONOMIC MIX

Adelaide

20th

10

1st

Bottom rated city:
Valparaíso

Top rated city:
Austin

WHY DOES PRODUCTIVITY AND ECONOMIC MIX MATTER?

The more productive a city, the higher the wages, the better working environments, and more leisure time. Productivity drives new businesses, investment, and talent. It also underpins the public revenues that improve the quality of life, public services and infrastructure, and faster adoption of technology.

A diverse economic structure is essential to most cities' ability to withstand economic and societal shocks, and adapt to new opportunities. It creates thicker labour markets to retain local residents across a range of skill levels and backgrounds. Convergence at the interface between two or more sectors is also a key driver of innovation and creativity.



Among all global cities of its size, Adelaide is among the top 20 for how many globally linked corporates it hosts.⁷



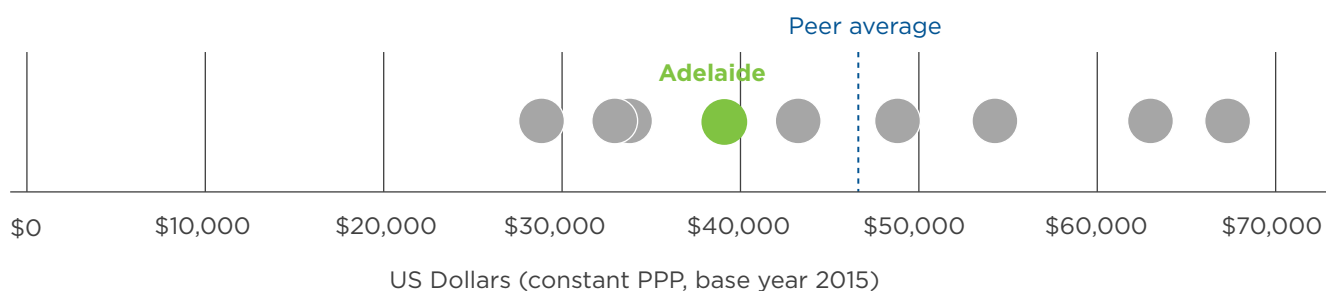
Adelaide's productivity is nearly 20% below its peer cities, as viewed by GDP per capita.⁸



The share of jobs in recognised high-paid sectors is about 15% smaller in inner Adelaide than in leading peer cities.⁹

Productivity is proving a real challenge

GDP per capita (2020), Adelaide vs selected peer cities in OECD



Source: OECD²⁰

A strong gateway for productive investment given size and location

- Adelaide is one of only 2 peers rated as a top city for the number of regional headquarters set up by global companies over the last 20 years. 22 have been set up in Adelaide during the period (fDi Intelligence).¹⁰
- Adelaide is among the top 20 smaller cities for its base of globally linked corporates. It is 148th globally (vs an average peer rank of 207th) (GaWC).¹¹

Some success at diversification

- Manufacturing is currently 17% of exports, and inner Adelaide retains the 5th highest share of jobs in manufacturing among its peers, just marginally above the average. Inner Adelaide has a larger share of people working in the combined arts & sports sector than any other peer city. Growth in health and medical research also stands out. (Metroverse).¹²
- Inner Adelaide is among the bottom 30% of its peers for the share of jobs in professional services, data and management. Its jobs share in high paid sectors is about 15% smaller than in leading peer city Antwerp (Metroverse).¹³

Productivity gap is significant

- Adelaide is in the bottom 25% among high-income OECD cities for labour productivity. This compares to places such as Leipzig, Birmingham, and Gdansk (OECD). This is consistent with the national picture for Adelaide's lower value created per hour worked (SGS).¹⁴
- Adelaide is nearly 25% behind its peer average for GDP per capita, ranking 9th out of 14 peers (OECD).¹⁵
- Adelaide is 146th in the world for its overall global firms and productivity. This places it 9th out of 10 peers (Resonance).¹⁶
- The city currently ranks bottom among 8 peers for labour force participation (7.16% below the peer average). It falls in the middle of the pack for its unemployment rate (5th out of 8 peers and 0.3% below the peer average) (Census data).¹⁷

To grow opportunity and prosperity Adelaide needs more jobs in higher paid services sectors

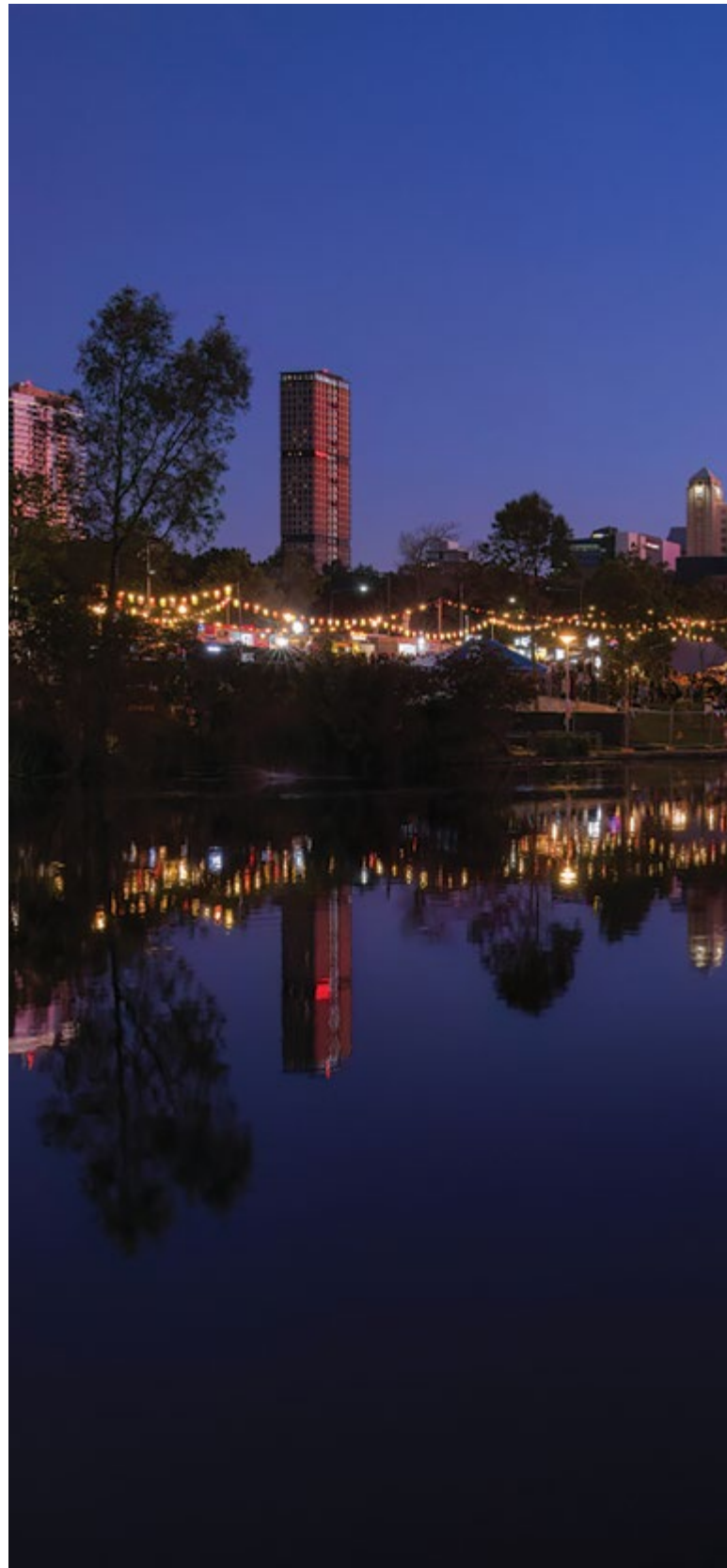
- Across most sectoral breakdowns Adelaide has a smaller share of jobs in high wage and knowledge-rich sectors. It is 5th of 6 peers for the share of jobs in business services, design and scientific R&D (7.1% in Adelaide compared to 9% on average) (Census data).¹⁸
- Such international figures reflect the need identified for more scientists, computer programmers, cyber security architects, and engineers, and for more variety of high value exports (South Australia Productivity Commission).¹⁹

HOW SHOULD ADELAIDE INTERPRET THESE SCORES?

- The overall trend line is stable in this area and will need concerted effort to improve. Adelaide could feasibly sustain a position in the top half of its international peer group over the next 2-3 years if it can successfully crowd in investment around its specialised clusters.
- The city should see corporate demand in servicing its key industries as a key advantage upon which to build a more coordinated programme for growth and innovation.

HOW CAN ADELAIDE IMPROVE ITS POSITION?

- The city needs to continue to create demand for high skills and high-paying jobs in both its established and emerging industries if it wants to become a high-productivity economy by international standards.
- Efficiency of Adelaide's infrastructure and land-use is likely to become a bigger shaper of the city's future productivity performance, as the city shifts into sectors that rely on speed, knowledge and an urban labour market.





BUSINESS AND INVESTMENT DYNAMICS

Adelaide20th3rd1stBottom rated city:
BilbaoTop rated city:
San Diego

WHY DO BUSINESS AND INVESTMENT DYNAMICS MATTER?

Successful smaller cities are consistently open to trade, business and opportunity, even during periods of shock or disruption. Costs to rent space, use energy and employ labour, as well as other indirect costs, must be competitive and stable in order for a city to attract businesses.

Business investment is also essential for cities seeking to improve productivity, generate new jobs, and raise the stock of technology. Access and appeal to different kinds of investors (corporate, real estate, venture, private equity) is a growing differentiator for cities.



A global top 30 city for FDI projects in film and TV.²¹



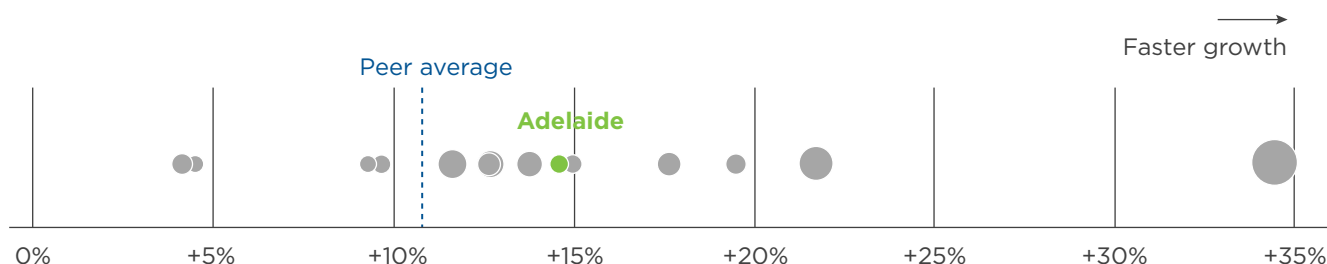
Adelaide is in the top 15% of OECD cities of its size for population growth to 2035.²²



One of only 3 peers to be rated a top place for AI investment.²³

Still growing

Forecast change in population to 2035 (%), Adelaide and selected peers



Note: bubble size proportional to population size

Source: UN World Urbanization Prospects³⁵

Strong investment niches

- Adelaide is a global top 30 city for FDI projects in film and TV (fDi Magazine).²⁴
- Adelaide is one of only 3 peers to be rated a top place for AI investment (fDi Magazine).²⁵

Robust growth and demand fundamentals

- Although forecasts show Adelaide's population is set to grow slightly slower than Australia's big city average over the next 10-15 years, the rate still puts Adelaide in the top 15% among cities of its size in high-income OECD nations. It ranks 6th out of 19 measured peers (UN).²⁶
- Adelaide rates among the top 100 out of 600 globally – and 7th out of 17 measured peers – for long-term growth prospects (UN).²⁷

Pro-business ingredients, but reputation as business friendly has not yet caught up

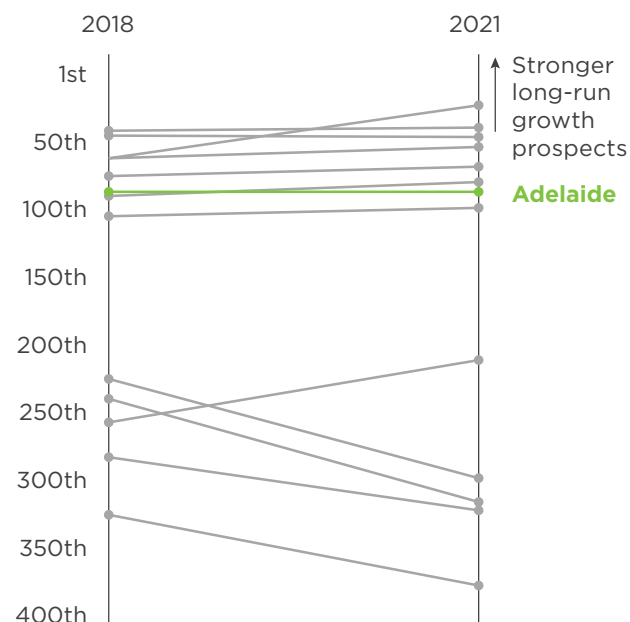
- Adelaide is in the top third among 15 peers for the actual cost of doing business (based on personal and corporate tax rates) (HSE Institute).²⁸
- South Australia has also risen 2 places to become the no. 1 Australian state for policy and infrastructure ingredients for business continuity (Cisco Digital Readiness Index).²⁹
- And Adelaide is the only major Australian city where construction costs have become cheaper in relative terms year on year (compared to Brisbane, Perth, Melbourne and Sydney) (Arcadis).³⁰
- But surveys indicate limited awareness of these advantages: in one example only 34% of South Australians chose Adelaide as the best Australian state capital to start a business, 5-30% behind other Australian states (Immigration2Australia).³¹

Office demand and investment is healthy

- Demand for modern office space is strong, with Adelaide showing prime gross rental growth of 5% in the year up to March 2023. This is on par with the successful North American peers, as well as ahead of Melbourne at 0.7% and Perth at 1.0% (JLL).³²
- As of February 2023, the city's office occupancy is the second highest nationally, at 80% vs pre-pandemic. (Property Council of Australia). This is also substantially higher than the North American peers that are typically 65-75%.³³
- Although city-wide office vacancy rates remain high by global standards, this appears to be partly explained by record levels of supply coming online as a result of the flight to quality. 60 King William Street and Festival Plaza are good forthcoming examples.
- Data during the pandemic suggested that Adelaide had the lowest proportion of the population working from home among 6 peers (Census data).³⁴

Holding up

Global rank for long-term economic growth prospects

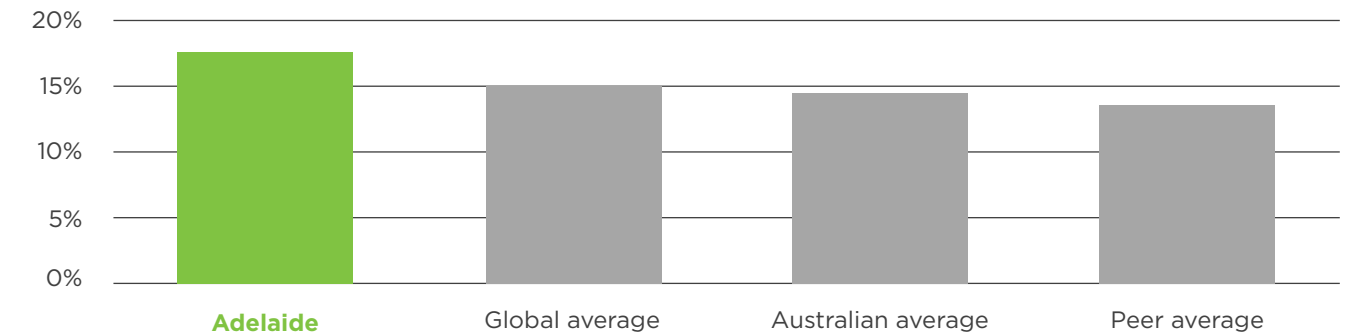


Source: UN Habitat³⁶

High office vacancies partly reflect a big jump in supply

Office vacancy rate, Adelaide vs. cities, Q1 2023

Vacancy rate



Source: JLL³⁷

HOW SHOULD ADELAIDE INTERPRET THESE SCORES?

- At first glance Adelaide looks to be in a better place than other peer cities because it still is growing its population at a reasonable rate, and its industrial, energy and scientific assets are driving long-term public and private investment. State investments to support strategic industries and decarbonisation are important to strong performance in 2023. Other cities are more vulnerable to footloose talent dispersing, or they lack as many demographic drivers of demand. This year it has resulted in unusually strong scores for Adelaide against its benchmark cities.
- Adelaide’s model has been more reliant on population growth, primary sectors and public investment than other cities. This can be a short-term or cyclical advantage. It is unlikely to consistently stay near the top of this peer group without a focus on other innovation drivers of business and investment.

HOW CAN ADELAIDE IMPROVE ITS POSITION?

- Adelaide is not yet viewed as an important enough business location to appear or register in as many important measures of global business and investor perception as it could do. Building critical mass and communicating the opportunities for specialised business and far-sighted investors will help sustain improvements in this area.

CASE STUDY: PORTO

Broadening the opportunity beyond tourism

Why was change needed?

Porto's city leaders recognised the city had become too dependent on tourism and regional food and wine exports. It was not perceived as a serious city for business and was losing out too much to the larger city of Lisbon for talent.³⁸ They saw the need to transform one of Europe's "best kept secrets" into a much larger international investment hub, otherwise they would continue to lose people and vibrancy.

What did they do, who led and how?

Porto's city and dedicated investment attraction agency have successfully combined the reputation for tourism and wine with a corporate investment proposition that has helped to revive and reinvest in the city as liveable, clean, safe and vibrant.

The city's economic development team realised the city needed to be easier for business to work with

in order to attract more overseas companies setting up gateway HfQS in advanced engineering, materials, mobility, cloud operations and nearshoring. It created a competitive overall framework for property, corporate and personal taxes combined well with a commitment to improving standards of safety and schooling to meet the expectations of expats.³⁹ The city also invested in updating the cultural offer in the city centre.

Positioning Porto as "the city that works", the city has become known for its strong aftercare services and customised training programmes.⁴⁰ The city created an Innovation Unit to bring forward more types of grow-on space, as well as work space where different industries can converge and innovations can be tested.

What have been the main impacts?

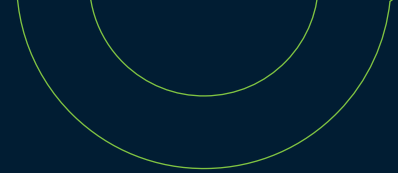
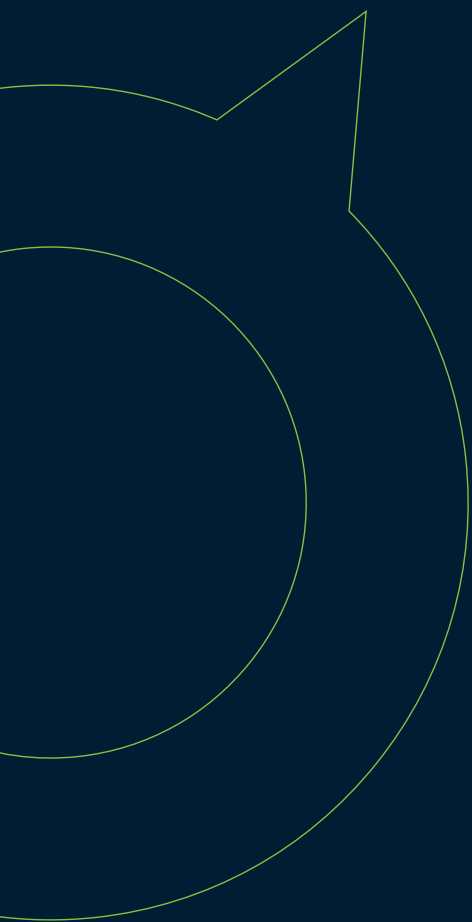
Porto's organised efforts have seen the city become one of the most successful at FDI since 2015. Across Greater Porto, FDI tripled between in the last 5 years, with foreign companies now accounting for 19% of local GVA and 13% of jobs.⁴¹

Neighbouring local governments now join forces with the city in externally communicating the "Greater Porto" region as one lined-up integrated investment opportunity at international events and expos.

What are the key lessons and success factors?

- The importance of clear policy and brand leadership for a smaller city.
- Incoming corporates need support across a whole life cycle – to access different kinds of space, expertise, services and relationships as they grow into a new national market.





02

FUTURE ECONOMY

SUMMARY

Adelaide is in an extended period of catch up in its innovation economy. It is now recording faster rates of progress than some of its international peers in a number of priority sectors and outcomes.

The merger of Adelaide's two largest universities creates a big chance for reputational and societal impacts. Against other cities internationally, the city clearly already possesses expertise in aeronautics and space and energy and waste, and its base of international graduates could be harnessed to big effect in future.

Currently student retention, R&D outcomes and collaboration with industry still lags. The ability of Adelaide companies to access venture capital is growing, although compared to other cities this is still taking place in a narrower range of sectors and stages. Becoming perceived as a city of opportunity to scale is key to retaining and maximising talent. Otherwise many firms may continue to move to other cities.

Fostering local talent and collaboration emerges as a big priority. New investment in skills centres by companies like Cognizant and Avanade coincides with a more concerted effort to physically concentrate and co-locate innovation assets (led by Lot Fourteen). This should over time help consolidate and coordinate Adelaide's innovation edges.

Digital connections and adoption is becoming more of a differentiator for smaller lifestyle-rich cities. Adelaide so far tends to perform in the middle of the pack. Many of the industries and talent bases Adelaide will seek to stand out in will rely on the solid digital backbone that investors currently seek.

OPPORTUNITIES

- Enterprise, new start-up rates and number of local ecosystem networks all stand up well in an international context and show the scale of potential.
- Adelaide is internationally competitive in scientific and industrial R&D, and the scale and mix of capabilities in aeronautics, defence and energy.
- Access to capital has recently been improving faster than other cities, and in future should provide more confidence to current and future entrepreneurs.

RISKS

- ⚠ Falling further behind as a place to build and scale high growth companies.
- ⚠ Making the most of digital infrastructure improvements to drive the innovation economy.
- ⚠ Not all precinct and collaboration environments for growth industries are optimised for clustering, commercial spillovers or talent attraction.



INNOVATION, R&D AND SPECIALISATION

Adelaide

20th

15th

1st

Bottom rated city:
Valparaíso

Top rated city:
Austin

WHY DOES INNOVATION, R&D AND SPECIALISATION MATTER?

Embracing innovation in established sectors and forging a clear position in newly emerging industries is a core part of how small liveable cities look to compete. The aim is to combine research acumen, innovation-hungry institutions, and empowered enterprise, into a larger pool of good jobs, convergence between sectors, and fewer barriers for up and coming firms. Hosting the innovation economy usually succeeds when cities are able to foster tight cluster relationships, incentivise partners to share risks, connect to a variety of capital, and adapt the physical character of more parts of the city for the purposes of co-location and critical mass.



Adelaide has grown its base of new businesses around 4% faster than its peer cities since the start of the pandemic.⁴²



The share of STEM research jointly produced between industry and academia is only just over half (6%) of its top peer city San Diego.⁴³



5% fewer of Adelaide's recognised companies progress to the late stages of growth compared to its peer group.⁴⁴

The innovation ecosystem has promise

- Over the past five years, Adelaide has created new start-ups at a faster rate than its peers (+38% since 2018 vs. 34% on average). It is also in the top third of its peer group for the share of new companies added to the mix since the pandemic (17% growth since Q4 2019 vs 13% on average among peers) (Dealroom).⁴⁵
- Adelaide now has a track record of making some companies globally successful. Ahead of cities such as Auckland and Edmonton, it ranks in the top half of peers (10th out of 20) for how many highly influential innovative companies it has grown such as Fleet Space Technology, Amplified Intelligence and Ping Services (based on Crunchbase).⁴⁶

Adelaide is carving out some small but important innovation niches

- Adelaide is top among its peers for the number, share and density of start-ups and scale-ups in the space industry (Dealroom).⁴⁷
- Adelaide is one of only 8 peers to rank in the global top 150 for energy and environment innovation (StartupBlink). It also has the 5th highest level of specialisation in energy among 17 measured peers, with 5% of all start-ups and scale-ups founded since 2000 in this sector (vs. 4.7% on average among peers) (Dealroom).⁴⁸

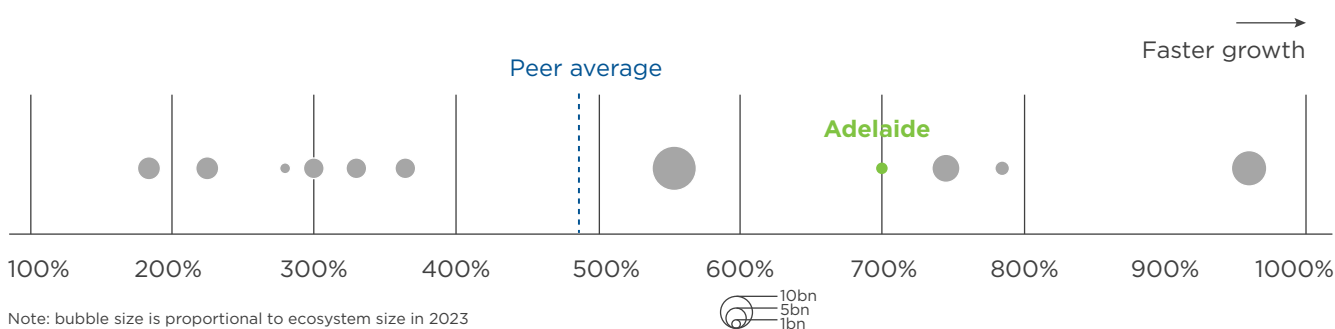
- Adelaide is 1st out of 9 smaller and medium-sized peers rated for adoption and prevalence of eHealth services (such as Lumary, Alicidion, Wellteam) (EasyPark).⁴⁹
- Adelaide ranks in the top third of its peers for the share of start-ups and scale-ups in agritech & food (Dealroom).⁵⁰
- But Adelaide's creative industries start-up scene is not yet as mature. Looking at firms founded since 2000, it has around 3x fewer start-ups and scale-ups in media, fashion, music and gaming compared to its peers (Dealroom).⁵¹

But overall scale and retention in the ecosystem is behind

- Adelaide's total ecosystem value is still around two-thirds lower than that of its peers (approx. US\$1.6bn vs \$4.8bn peer median in 2022). It is also in the bottom half for total number of start-ups and scale-ups (12th out of 17 peers), with about 55% fewer recognised companies overall (Dealroom).⁵²
- The share of start-ups that have reached late stages of growth is 14th out of 17 peers, at 5% lower than the peer average (Dealroom).⁵³
- Looking at companies created, unicorns and overall scale of venture capital lending, Adelaide is in the bottom half of its peer group (9th out of 12 peers) (HSE).⁵⁴

Growing up

Change in innovation ecosystem value over the past 5 years, Adelaide vs. peers



Source: Dealroom⁵⁵

Promising progress in deploying tech

- Adelaide is a respectable 5th among 17 peers for the share of its start-ups and scale-ups that regularly use frontier technologies (14% in Adelaide vs. 11% on average among peers) (Dealroom).⁵⁶

University merger could help high-impact STEM research translate into more joint ventures and business opportunity

- Adelaide is 11th out of 50 cities of its size globally for the global accomplishments of its universities in science & engineering (EasyPark). Its pool of highly cited researchers is 73rd out of 200 cities and 3rd out of 7 peers. This feeds into an impressive 4th out of 13 measured peers for the all-round higher education and R&D system (HSE Institute).⁵⁷
- Adelaide is in the top third of peers (5th out of 16) for the share of university publications in STEM that feature among the top 10% most cited globally (Leiden University).⁵⁸
- Adelaide ranks 2nd out of 7 measured peers for what businesses think of its universities and graduates, albeit still outside the global top 50 (QS).⁵⁹
- Adelaide is among the bottom half of its peers for R&D spending by larger corporates (8th out of 13 peers) (HSE Institute).⁶⁰
- Adelaide is behind for the share of STEM research jointly produced industry and academia (10th out of 17 peers). At 5.8%, it is well down on the likes of San Diego (10.9%) and Fukuoka (9.5%). (Leiden) This points to lower collaboration between universities and business.⁶¹

Appetite for VC investment is growing, but late-stage funding gaps persist

- Adelaide is becoming more successful at attracting venture capital. In terms of cumulative investment over the last 20 years it ranks 13th out of 17 peers, but VC investment has grown more rapidly in relative terms over the past 5 years than in all other peer cities except for Bilbao and Porto (and 300% more rapidly than on average among peers). This is mainly being driven by the success areas of telecoms, Cloudtech and IoT (e.g. Fleet Space Technologies, Myriota, Ping Services) (Dealroom).⁶²
- Yet the imbalance in this share towards early stage companies is still significant. Adelaide has the 2nd lowest share of VC funding coming from post-seed rounds among its peers, which is. nearly 4% lower than the peer average (Dealroom).⁶³

Public sector enablers of innovation can improve

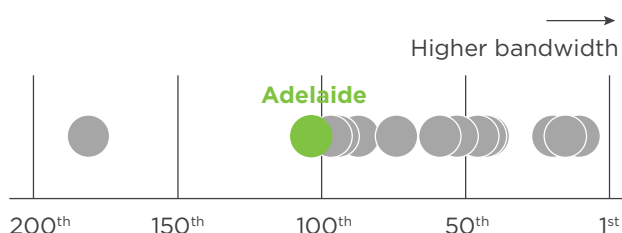
- Adelaide is among the top half of OECD cities measured for its capacity to use data to monitor impact across policy areas (OECD).⁶⁴
- But the city is in the bottom 20% of this group for its all-round track record of public sector storing and structuring data in ways that are conducive to innovation (40th out of 50 cities and 4th out of 5 peer cities) (OECD).⁶⁵
- Adelaide also ranks only 9th out of 12 measured peers for the physical infrastructure to support innovation, although this is likely to improve with recent investments (HSE Institute, based on presence and maturity of clusters, innovation districts, co-working spaces and super computers).⁶⁶

Digital connectivity likely to catch up with new investment

- Adelaide is currently in the top 10% of cities globally for mobile internet download speeds (1st out of 7 peers). (HSE Institute). And in broader measures of 5G connections and availability, Adelaide is 4th out of 9 peers (EasyPark).⁶⁷
- But Adelaide currently places in the bottom 25% of cities globally for fixed broadband download speeds (178th out of 200 cities and 7th out of 7 peers) (HSE Institute). Greater Adelaide's gap to its national average is rated at 8%, and had experienced the 3rd steepest fall in average download speeds since 2019 among 12 peers. (OECD). This makes new infrastructure investment very welcome and should register in scores over next 1-2 years.⁶⁸

Underconnected

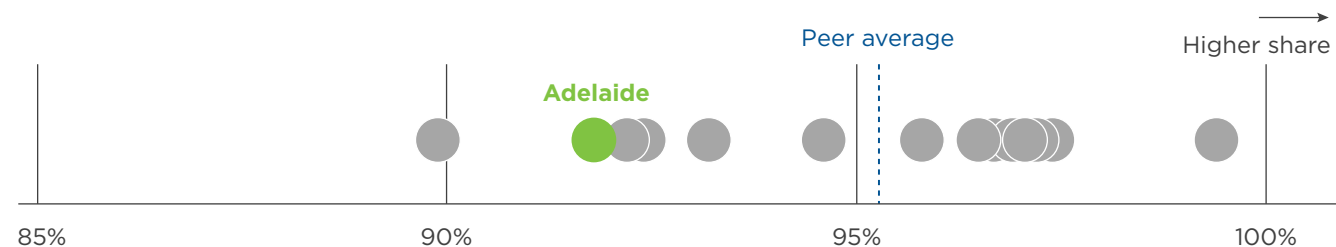
Aggregate internet bandwidth, global rank, Adelaide and peers



Source: HSE⁶⁹

Less VC available to late-stage companies

Share of VC investment for Adelaide and selected peers, post-Seed funding (Series A, B and C)



Source: Dealroom⁷⁰

HOW SHOULD ADELAIDE INTERPRET THESE SCORES?

- Among its peers, Adelaide is now progressing faster and appears to be making bigger shifts to align public investment and private demand. Its potential in spacetechnology, agritech and footech and cyber stands out, as it does in clean tech and health tech.
- Adelaide is better placed than many to co-ordinate the complementary strengths of its emerging innovation districts such as Lot Fourteen, Tonsley and BioMed, and build their roles as flagships of the region's capability, services and provision.

HOW CAN ADELAIDE IMPROVE ITS POSITION?

- Adelaide excels for scientific research but would improve over a wider set of innovation measures if the university merger and wider public policies could achieve higher collaboration with industry, more access to late-stage capital, smoother public sector procurement and decision making, more speed and scale for foundational projects, and effective incentives to innovate throughout the whole innovation value chain (prototyping, product development, trials, fabrication and production).
- Ten Gigabit Adelaide has the potential to bring much faster digital scores, including for commercial buildings.



SKILLS, KNOWLEDGE AND POPULATION

Adelaide

20th

9th

1st

Bottom rated city:
Valparaíso

Top rated city:
Austin

WHY DO SKILLS AND KNOWLEDGE MATTER?

Skills and talent are the lifeblood of nearly all urban economies. Most cities are experiencing a skills shortage and the war for scarce talent is acute in fast-growing industries where technology, science and creativity converge. Talent is also a lead factor in business attraction, and underpins the creation of new ideas, technologies and entrepreneurship. Many cities also face risks of a chronic absence of key workers that can affect infrastructure, education, quality of life and much more. Skills access, policy and investment in supply also helps more local people move up the economic ladder and achieve better-paying and more fulfilling jobs.



!

The share of Adelaide's population with a bachelor degree or higher is 11% lower than the average among 7 peer cities.⁷¹

✓



Adelaide's population has 10% more foreign-born people than its peer cities, but its median age is 2 years older.⁷²

!



A 9% smaller share of Adelaide's domestic in-migration comes from young people aged 15-29 than in peer cities.⁷³

The initial attraction of international students is a key advantage to convert

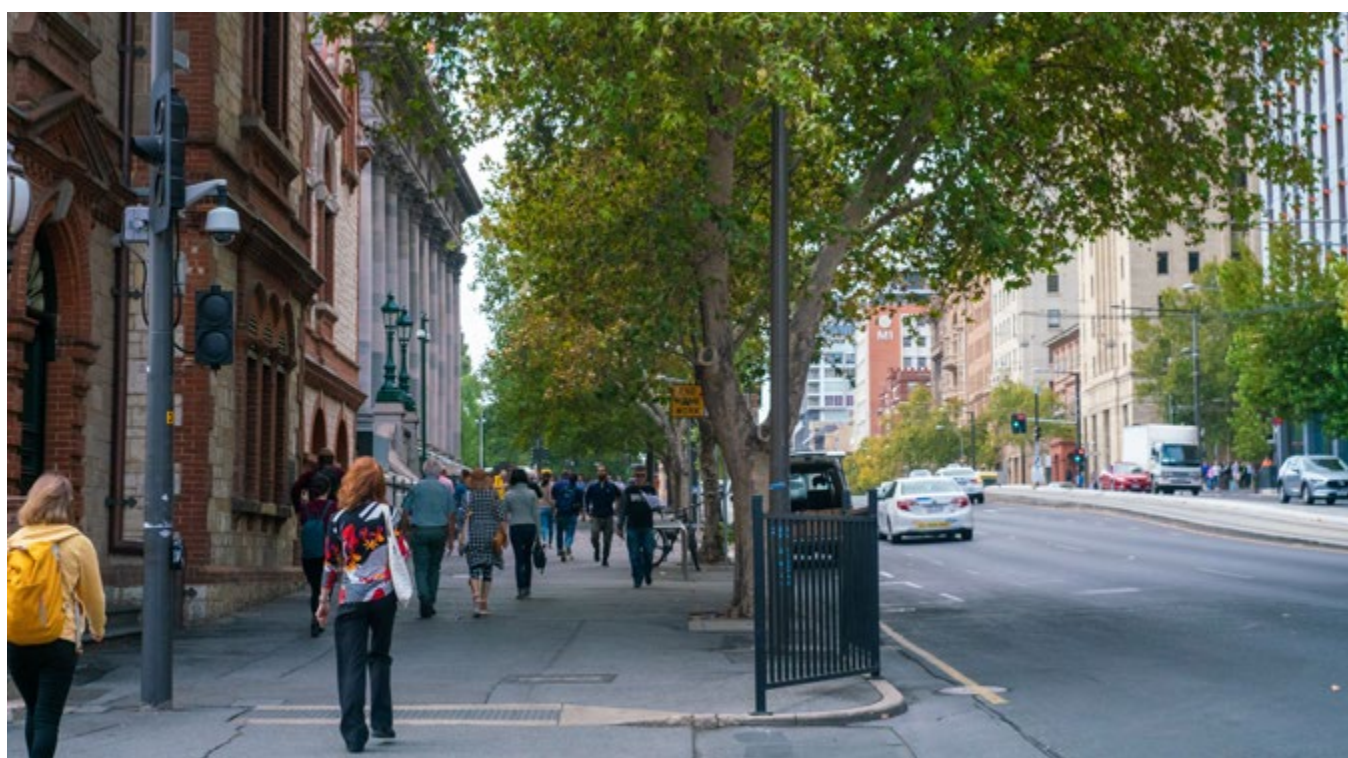
- Adelaide places in the top 20% globally for the number of international students (38th out of 200 cities and 2nd out of 5 peers), and top 10 globally among smaller cities (HSE Institute).⁷⁴
- It also still has the 2nd highest share of foreign-born population among 7 peers (31.3% vs. 21.0% peer average) (Census data).⁷⁵
- Adelaide is in the top third of peers for how many people currently live and work in the city that went to a global top 100 university in another city (6th out of 18 peers) – ahead of all other peers outside of North America except Pune (LinkedIn).⁷⁶

Some depth of talent in aerospace, defence and energy

- Adelaide is joint 2nd among 18 peers for the relative size of the talent pool working in aeronautics & weapons, and in top 6 for energy and waste (Metroverse).⁷⁷
- The share of people working in defence and space manufacturing, professional services, and technology that went to a world top 100 university in a different city is relatively high (2nd, 5th and 4th respectively among 18 peers) (LinkedIn).⁷⁸

Building a young and diverse workforce is becoming a more urgent gap

- Adelaide's median age is 39, versus an average of 37 among 7 peers (census data).⁷⁹
- Among people moving to Adelaide from other parts of Australia, only 30% are aged between 15-29. This is down from 38% in 2012 and is much lower than the average of 39% observed across 7 measured peers (OECD).⁸⁰
- However, Adelaide does rank 3rd among 14 peers for the share of female-founded companies (7% above its peer average) (Dealroom).⁸¹
- Adelaide's share of foreign-born population has fallen slightly, by 0.5%, since 2016, while peer average is 0.8% growth (Census data).⁸²
- Over the past 5 years, on average 3,500 more people per year have left Adelaide for another part of Australia than have moved in from elsewhere in the country. This is the 2nd highest outflow among 8 OECD peers after Busan and contrasts sharply with cities like Cardiff, Fukuoka and Bordeaux, which have all been growing rapidly compared to the rest of their countries (OECD).⁸³



The business base appears less responsive to labour market trends

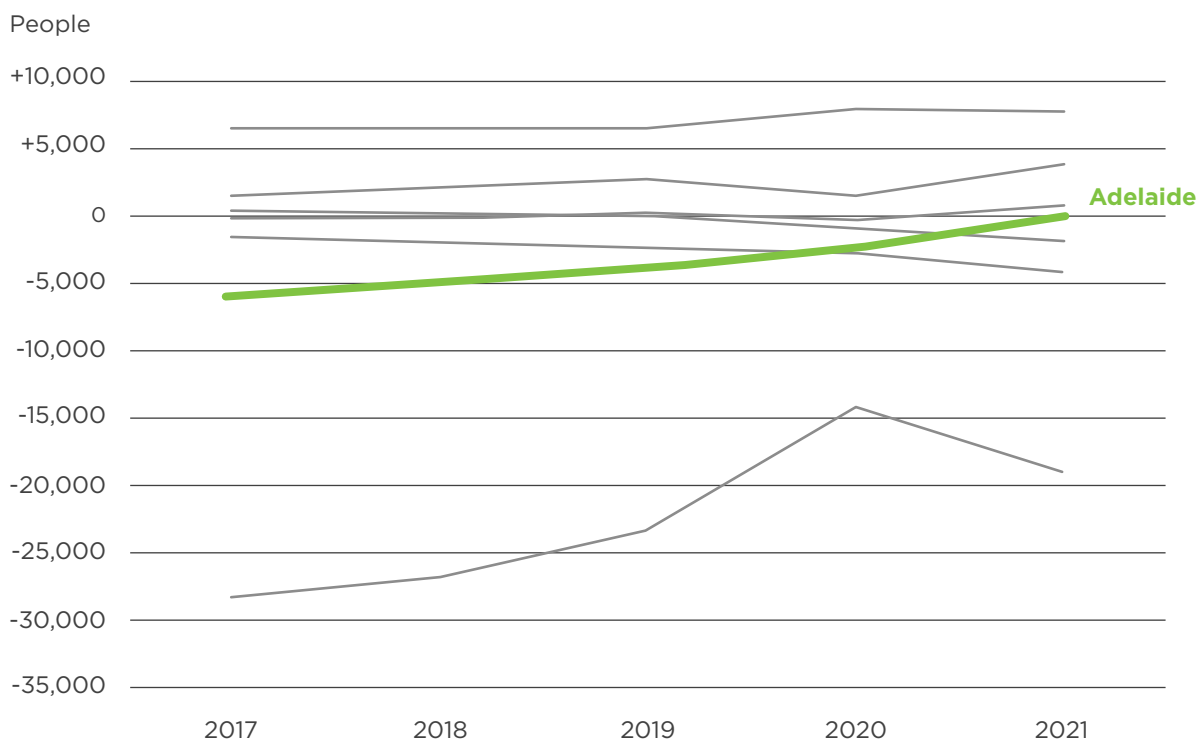
- Adelaide has the 2nd lowest volume of jobs offering flexible work among 9 peers (Indeed).⁸⁴
- Adelaide is in the bottom 15% of measured peers for the share of start-up founders rated as promising, strong or exceptional (14th out of 16 peers) (based on educational background, prior experience of founding, etc.) (Dealroom).⁸⁵
- Adelaide is last among 7 measured peers for the ability and know-how of businesses and start-ups to embrace digital technologies and platforms (Tholons).⁸⁶
- Given its size, the concentration of top-rated coders and software engineers is around 25% lower in Adelaide than the average among 17 peers (The Business of Cities research, based on GitHub data).⁸⁷

The skills supply gap is more acute than others given aging demographics and lower attainment

- Adelaide is 3rd among 9 peers for how many job vacancies there currently are in technology roles, as a share of total vacancies (Indeed).⁸⁸
- Adelaide is 9th of 13 peers for the working age share of population, and 6th out of 7 peers for the share aged 20-34 (OECD, Census data).⁸⁹
- For all-round talent availability and capability, Adelaide places in the bottom 25% of 100 global cities, or 5th among 7 measured peers (Tholons).⁹⁰
- Only 26% of Adelaide's population have a bachelor degree or higher – this is 11.5% lower than the average among 7 peers (census data). This reflects lower post-school qualifications, impacted also by Covid-19 (Cisco Digital Readiness Index).⁹¹

Brain drain has been slowing to brain drip

Net domestic migration, 2017-2021, Adelaide vs. selected OECD peers



Source: OECD⁹²

HOW SHOULD ADELAIDE INTERPRET THESE SCORES?

- Adelaide does better than expected in this area partly because it is still a more diverse, faster growing city than many smaller peer cities outside Australia.
- It is also able to attract international students and has some strength and depth in a small number of sectors.
- However this does not disguise concerning gaps in terms of retaining and attracting young people, digital nomads and the technically skilled, resulting in fewer people entering the job market. This area is likely to see declines unless Adelaide can improve its track record of attainment and attraction.

HOW CAN ADELAIDE IMPROVE ITS POSITION?

- Weak perceptions or lack of familiarity with Adelaide emerge as one area that would improve Adelaide's appeal to talent.
- There are also doubts about how to join the labour market, the costs of rental housing, and building social connections.
- Optimising and reforming the workforce development and attraction system, including through stronger relationships with industry, is an area other peer cities have tended to focus on to improve their scores. The university merger and new technical colleges are likely to make a positive difference over the medium term.



CASE STUDY: FUKUOKA

Joined-up effort to become a hub for innovation

Why was change needed?

A smaller city some distance from the largest cities of Tokyo and Osaka, Fukuoka used to suffer from low economic growth and an aging population. For 10 years the city has been trying to become much more attractive for young businesses to set up and grow. With the help of its higher level government, the city has convinced founders they can have the freedom, flexibility and time to develop disruptive businesses.

What did they do, who led and how?

Key to their success have been incentives for young companies to set up in the region, including a Startup Visa, low- interest loans for entrepreneurs, corporate tax cuts for start-ups, and a centralised ecosystem hub (the Global Startup Centre, which offers expats a well- known landing pad and English-language support on business set-up processes).⁹³

Fukuoka has seen a chance to become part of frontier supply chains. Blockchain network Astar is one example, which has helped raise perceptions of Fukuoka as a base for expansion into Japan or Asia- Pacific region.⁹⁴ New testbed capabilities include a low- power communication network for local companies to test their hi-tech products. Simpler licensing process for experiments of IoT technology has seen the city lead on the use of sensors into everyday objects and infrastructure.⁹⁵

A shared vision among broader civic leadership in the city has agreed to move from an office economy to an innovation economy. The city's cross-sector "think-do tank" Fukuoka D.C (FDC) has been especially important in creating a unified investment strategy between the city government, academia and business, and in generating support for plans to transform the character of three key areas of the city, including the riverfront.⁹⁶

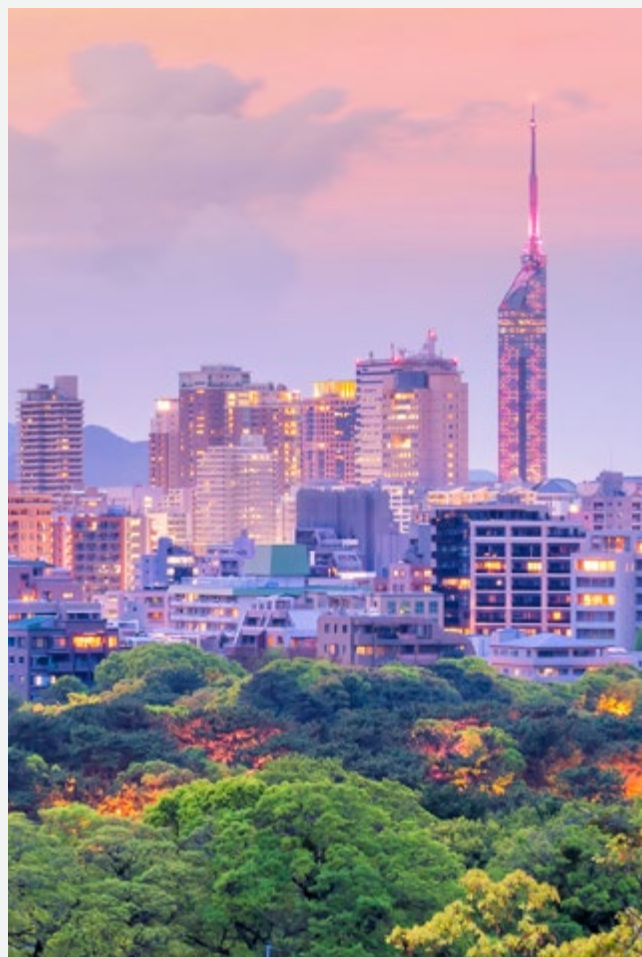
High-quality medium-density urban living helps keep the inner city affordable and attractive to new generations of entrepreneurs. Fukuoka has successfully densified both residential and commercial space in the city centre through building-height adjustments that favour higher floor area ratios (such as the Tenjin Big Bang project).⁹⁷

What have been the main impacts?

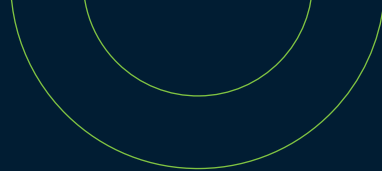
Fukuoka has reaped the rewards. It now has the highest share of young people among Japanese cities and its innovation ecosystem is ranked in the top 30 in East Asia.⁹⁸ Footloose entrepreneurs increasingly see the city as a welcome home for their ideas. The city has achieved an impressive 58% increase in international trade volumes in the last decade.⁹⁹

What are the key lessons and success factors?

- Investment in the community dynamics of innovation through tailored support and one-stop shops.
- Economic development policy married to effective land management and consistent prioritisation of the city centre.
- The strategic direction of public-private and multi-sector alliances over a longer term (10+ years) can provide the shared impetus required to achieve critical mass.







03

PLACE AND SPACE

SUMMARY

The impetus for cities to build their next-cycle proposition around lifestyle and community is becoming more urgent. Many of the cities Adelaide competes with are rising to this challenge.

Adelaide is lower density than most and more parts of the city are less compact, less walkable and more oriented around the car. This affects journey times as well as how easy and seamless it is to access amenities and enjoy pleasant walking and cycling experiences in all parts of the city.

Adelaide's modal split has started to improve, but from a lower base. Congestion is holding back adoption of micro and active last-mile mobility, especially compared to others that are moving quickly.

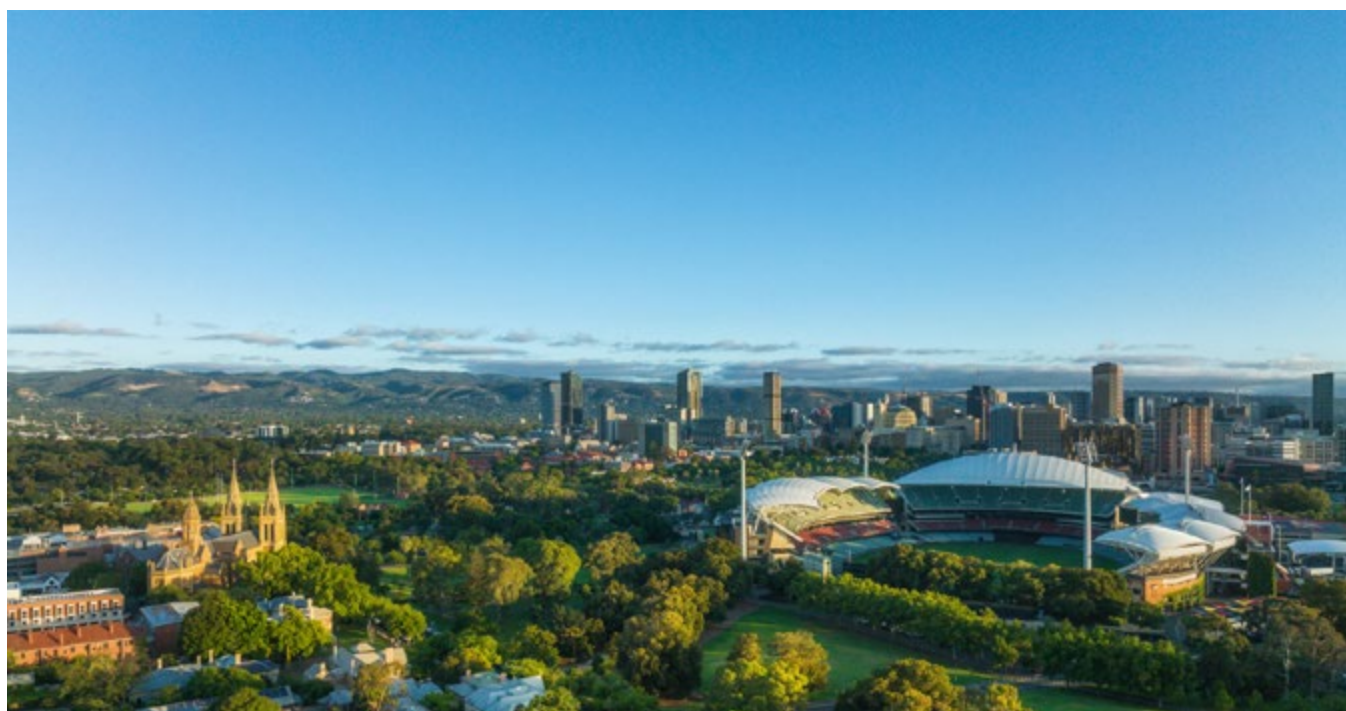
Adelaide is rightly recognised as a hub of festivals, music and film. But as the flight to quality continues, it is not yet seen as a leader for the highest rated experiences and amenities.

OPPORTUNITIES

- Relatively good access to public transport and lower wait times provides a good basis for larger systems improvements in future.
- The creative economy can play a larger role in the place activation and visitor experience as it does in other cities.

RISKS

- ⚠ An inefficient level of car dependence could become permanent without stronger alternatives and incentives.
- ⚠ Lower density, walkability and returns to office than most international cities could inhibit Adelaide's agglomeration and appeal.
- ⚠ The city's urban form, placemaking and signature neighbourhoods may not reach their potential to enable the city to broaden its brand recognition.



AMENITY, VIBRANCY AND EXPERIENCE

Adelaide

20th

16th

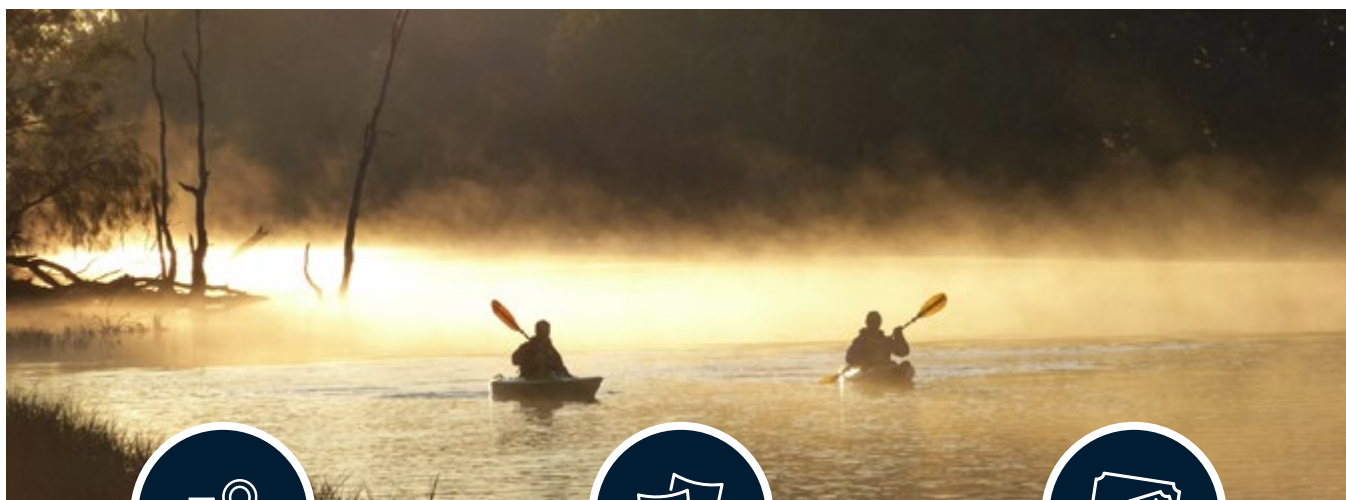
1st

Bottom rated city:
Sacramento

Top rated city:
Fukuoka

WHY DO AMENITY, VIBRANCY AND EXPERIENCE MATTER?

Small and medium-sized cities have to demonstrate they can offer the variety, quality and easy-access of amenities and experiences – for all age groups, backgrounds and incomes. Benchmarks rate cities on public spaces, cultural events, community participation and social cohesion.



!

Only 33% of Adelaide's population can easily walk to key services – 14% fewer than on average across all peer cities.¹⁰⁰



✓

Adelaide rates 2nd among its peer group for the strength of its contemporary arts scene.¹⁰¹



!

Outside the global top 100 for access to top culinary, cultural and entertainment experiences.¹⁰²

Smaller city centre residential population magnifies serious issues of vibrancy and amenity.

- At only 38%, Adelaide is the bottom city among 14 similar sized cities around the world for the share of people living in walkable neighbourhoods. The average is nearly double, at 72% (Global Observatory of Healthy and Sustainable Cities).¹⁰³
- Across all districts, Adelaide has the lowest average population density of 29 APAC cities, and is in the bottom 10% globally (ITDP).¹⁰⁴
- It also has the 3rd lowest population living immediately in and around the city centre among 18 peers, ahead only of Austin and Muscat (WorldPop).¹⁰⁵
- As a result the share of people who can easily walk to key services is nearly a third lower in Adelaide than on average across all peer cities (33% compared to 47%) (ITDP).¹⁰⁶
- Adelaide has 30% fewer pedestrian-only roads compared to the average among 10 peers (Open Street Map, based on length of pedestrian only roads per square mile).¹⁰⁷
- People in Adelaide can access 1 restaurant on average within a 5 minute walk, which is 0.5 less than its North American peer average, and 2 less than in Portland (WalkScore).¹⁰⁸
- Adelaide is also 20th out of a sample of 25 cities globally for how much of the population have easy walking access to a fresh food market or supermarket (Global Observatory of Healthy and Sustainable Cities)*.¹⁰⁹
- Adelaide ranks 9th out of 11 cities for the share of tours in the city that are walking tours (TripAdvisor and local attractions platforms).¹¹⁰

Adelaide is growing its arts & creative scene

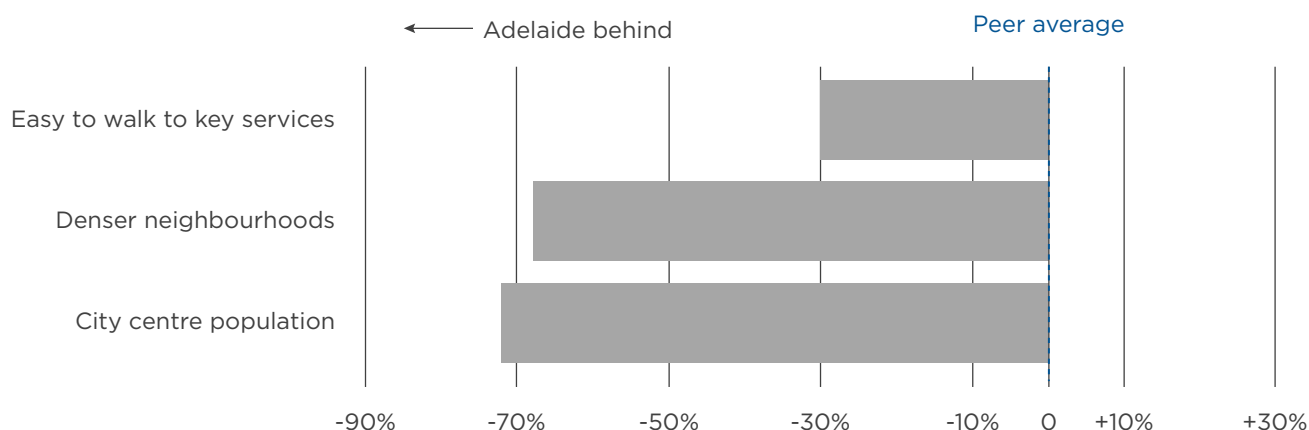
- Adelaide is 2nd among 13 measured peers for its contemporary arts scene (HSE Institute), reflecting the city's tradition of music and festivals.¹¹¹
- The city is also in the top half of its peer group for how many best-selling authors it has produced (3rd out of 13 peers), the scale of the local film industry (5th) and number of internationally recognised designers and design firms (6th) (HSE Institute).¹¹²
- The all-round size of its creative economy can grow, though. Here Adelaide is in the bottom 25% (10th out of 13 peers) (HSE Institute).¹¹³

The depth of culture on offer can improve

- Adelaide is in the bottom third of its peer group for the range of hotels, culture, entertainment, sports venues, and museums & theatres (10th out of 13 peers) (HSE Institute). A similar study rates Adelaide 7th out of 10 peers – and outside the top 100 cities globally – for access to top culinary, cultural and entertainment experiences. (Resonance).¹¹⁴
- Adelaide is only 8th of 10 peers for how many very highly user-rated activities it hosts (Holidu).¹¹⁵
- Adelaide is also among the bottom half of all peer cities for its Michelin Guide restaurants (Holidu).¹¹⁶
- Visitors to Adelaide tend not to stay as long. The city ranks 10th out of 11 peers for the average length of a stay (Kayak, based on proprietary hotel data).¹¹⁷

Struggling to foster easy access to amenities

Share of population with walkable access to key services, city centre population and weighted population density, Adelaide vs. peer average



Sources: ITDP, WorldPop¹¹⁸

Quality over quantity

Adelaide's rank across 5 core metrics for amenity, vibrancy and experience, vs. 13 selected peers



Source: HSE¹⁰⁹

HOW SHOULD ADELAIDE INTERPRET THESE SCORES?

- Adelaide is a gastronomy and festival capital and still has great potential to deliver on its 'boutique' promise through placemaking and amenity on demand.
- But currently this area emerges as a strategic weakness for Adelaide in an international context. The scale of the urban cultural and creative economy is also behind. Given the role culture and vibrancy have in talent attraction, this area could affect many of Adelaide's wider economic ambitions.

HOW CAN ADELAIDE IMPROVE ITS POSITION?

- Adelaide's vibrancy scores will improve as the city completes more infill and densifies existing locations sensitively to improve access to jobs, infrastructure and services. Wider improvements to walkability, including through for example roll out of pedestrian-only streets, may also help to enhance the city's scores in this area.
- Adelaide is sometimes penalised by global benchmarks that still look at absolute size and volume rather than quality or participation. The main ways that mid-sized cities tend to overcome this disadvantage is through compelling stories, sub-cultures, neighbourhoods or signature designs that attract international interest.





TRANSPORT AND INFRASTRUCTURE

Adelaide

20th

11th

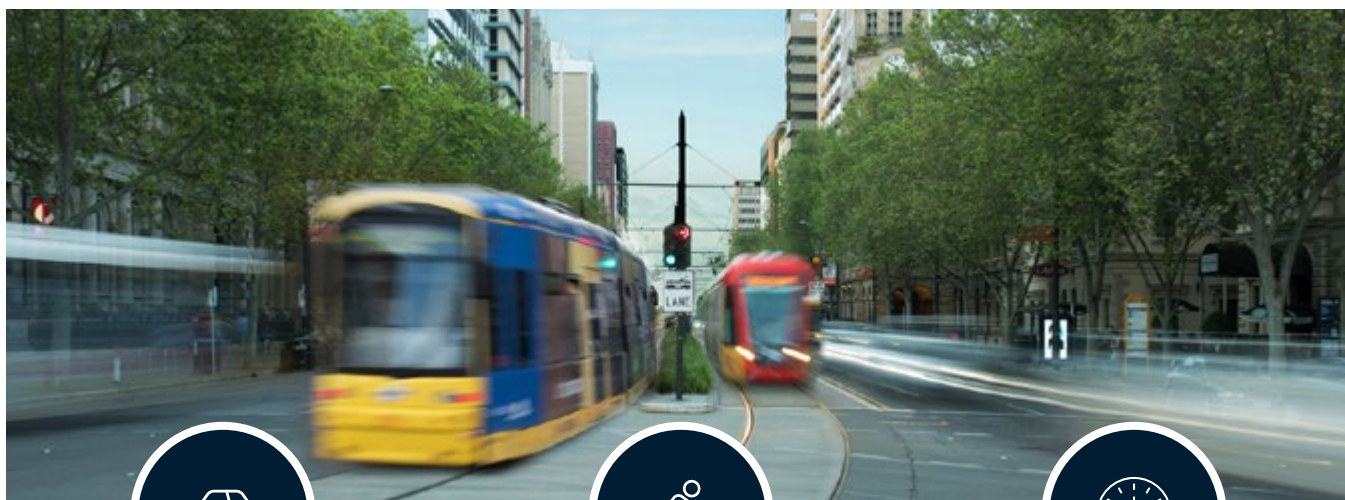
1st

Bottom rated city:
Pune

Top rated city:
Bilbao

WHY DO TRANSPORT AND INFRASTRUCTURE MATTER?

Transport and infrastructure are essential for smaller and mid-sized cities to harness economies of scale and show they can be more efficient platforms for connecting people, goods, clients, customers and services. Effective speed and coverage is important to attracting and retaining innovative businesses. There is a strong correlation in most city benchmarks between infrastructure quality and access to good public services, air quality, responsible carbon emissions, and social inclusion. Infrastructure investment and stewardship also underpins risk assessment of larger investors.



5% more trips are made by car in Adelaide than the average among its peers.¹²⁰



Adelaide currently ranks last among peers for the quality of its bike network.¹²¹



Adelaide is the only peer city where the number of hours lost to congestion has increased since 2019.¹²²

Room to progress in satisfaction with public transport

- Adelaide rates 3rd among 9 measured peers for the share of residents living within 500m of public transport (ITDP).¹²³
- The city is in the top 25% among 100 cities globally for how often people wait under 5 minutes for public transport (2nd out of 5 peers). Similarly, 10% fewer people have to wait more than 20 mins compared to all cities globally, although it ranks 4th out of 5 peers on this measure (Moovit).¹²⁴
- An Adelaide resident requires 11 minutes of work to afford a fare for a 15km journey, which is 3 minutes less than the average among 40 global cities. However, it ranks in the bottom half of cities when looking at overall fare affordability, showing that Adelaide's flat fares benefits mainly people doing longer trips (NineSquared).¹²⁵
- Adelaide has the second highest average wait time (12mins) among four peers, and slightly higher than the peer average of 11 minutes (Moovit).¹²⁶
- The main gap is efficiency - Adelaide is among the bottom half of cities globally for all-round speed and reach of the public transport platform (10th out of 15 peers) (The Business of Cities research).¹²⁷
- Adelaide has seen the largest increase among 5 peers in trips with two transfers or more, at 11% vs a peer average of 1% (Moovit transfers, change between 2020 and 2022).¹²⁸

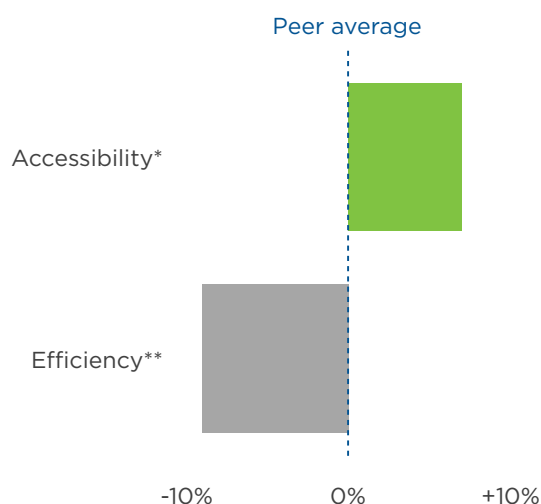
Car dependence is high, and the pace of adoption of alternatives is slower than others

- The latest data suggests that the percentage of people that travel via car is 5% higher than the average among 11 peers (Google Environmental Insights Explorer, based on geo-located mobile phone data).¹²⁹
- The shift towards more sustainable modes has slowed - Adelaide is 6th out of 7 cities for the rate of improvement between 2016 and 2021. (census data). Adelaide ranks last among peers for the quality of its bike network, and in the bottom 3rd among 170 American and European cities.¹³⁰
- The city's score is almost half of that of its peers, pointing to a real gap in its cycle network. It also ranks last among peers for access to people, jobs and educational institutions and shopping areas through low-stress biking routes (People for Bikes).¹³¹
- Adelaide is the only peer city where the number of hours lost to congestion has increased since 2019 (a 16% increase vs a 27% fall among 14 peers) (INRIX). Among 10 peers, the city has the 3rd biggest difference in average travel time between the city centre and wider urban area (5 minutes and 10 seconds, vs a peer average of 4 minutes and 40 seconds among those cities whose city centres are more congested than their wider urban areas) (based on average travel time per 10km) (TomTom Traffic Index).¹³²

- Progress rolling out shared mobility has been slower - the city has 84% fewer publicly rentable bikes compared to how big the city is, vs. 8 peers (Bike-sharing World Map, based on shareable bikes per capita). Partly as a result, Adelaide currently is 5% behind its peers for uptake of micro-mobility (Moovit).¹³³
- Adelaide is one of only 2 cities rated as not having parking restrictions designed to discourage car use (based on a sample of 20 varied cities globally). Cities globally who have had particular success on this include Barcelona and Cologne. Adelaide is also one of 10 among 25 global cities rated as not having a whole-city transport policy fully committed to health outcomes. (Global Observatory of Healthy and Sustainable Cities).¹³⁴

Accessible, but not efficient

Accessibility and efficiency of Adelaide's public transport system compared to peers



*Share of population who live within easy walking distance of a regular public transport connection

**Aggregate efficiency of the public transport platform (as measured on average across 20+ benchmarks)

Source: ITDP, The Business of Cities research¹³⁶

Enhancing air connectivity would improve access to target markets

- Adelaide ranks in the bottom 25% of its peers for number of direct international flight connections (16th out of 19 peers) - it has 7 current direct routes vs a peer average of 33 (Flightsfrom.com).¹³⁵

HOW SHOULD ADELAIDE INTERPRET THESE SCORES?

- Adelaide's high car dependence creates inefficient commuting and other costs that are borne out in more global studies. Low uptake of mobility alternatives also emerges as an issue, while the city's comparatively long and narrow spatial layout also reinforces the transport and infrastructure need through its impact on travel times and distances. Investment and innovation is required to avoid Adelaide slipping further down the charts in this area.

HOW CAN ADELAIDE IMPROVE ITS POSITION?

- There is a long-term task to ensure that congestion, travel speeds, and public transport choices and experience are in line with what is competitive internationally, and improve even while the city grows in scale and population. The gaps in public transport use and active mobility are significant, and in most cities changes to land-use patterns are also required in addition to infrastructure supply.
- Adelaide's public transport is accessible, meaning that more people live close to bus, train or tram stops. However, it falls down on efficiency, with lower travel speeds and multiple service transfers often required. Rethinking the network and introducing more flexible public transport fares, such as distance-based pricing, could be a way to increase uptake and reduce car dependence.
- More direct aviation links to Asia-Pacific will also be important to Adelaide's scores improving in this area.



CASE STUDY: PORTLAND

Integrated metropolitan planning to unlock new locations and accelerate city-wide growth

Introduction

Portland's network of trains, trams, buses, and aerial trams has become one of the most mature public transport portfolios of any medium-sized city in an English-speaking nation. Up to the pandemic, light rail grew to nearly 40 million riders a year, with trains running about every 15 minutes 20 hours a day every day.

Successive investments in light rail and now other options have been key to Portland's managed metropolitan growth. It helped first to reverse disinvestment in the CBD and then shift the whole city into a knowledge and innovation economy gravitating around key centres.¹³⁷

What did they do, who led and how?

Portland's first 25km rail system opened 40 years ago, 80% federally funded.¹³⁸ This has grown over time to 100km and 5 lines that knit together the entire metropolitan area. The follow-up light rail lines provided links to key innovation districts and business hubs, such as Pearl District, where residential densities ultimately reached higher than anywhere in the metropolitan area, at 120 housing units per acre.

Portland has matched transport with relatively far-reaching zoning rules to encourage more compact, walkable neighborhoods. The city set up Metro Portland, still the only elected metropolitan agency in the United States spanning 1.5 million residents across 25 local governments, with some powers to tax and align plans.¹³⁹

Diversifying the modes and choices has been key for Portland. The city has added new bus lines to directly connect the outer centres with each other, and added hundreds of miles of bike lanes.¹⁴⁰ Monthly rail passes for an adult are at A\$150 (US\$100), with subsidies for low income people. Portland has also created a series of 'In Motion' Plans to expand active transport across those parts of the city like East Portland where housing costs and transport options are lower.¹⁴¹

What have been the main impacts?

Up until the pandemic, of the 40 largest U.S. cities, Portland saw its residents drive the third-fewest miles per day.¹⁴²

Portland now has better infrastructure and housing choice than most US cities to suit household types, ages and incomes.¹⁴³ Over \$10 billion in development took place near the light rail stations, with initial capital costs driving real estate co-investment at ratios of 30:1 in some phases.¹⁴⁴

Portland has also done better than most at protecting surrounding agricultural land. Over 10% of Portland's metropolitan area is protected land. The successive investments have fed a clearer consciousness that everyone in Portland belongs to the same city.¹⁴⁵

What are the key lessons and success factors?

- Transport investment is an important part of building consensus around how the city should grow. It benefits from harnessing the city's social capital and the energy from the influx of young residents.
- The ROI of transport improvements grow when there is bipartisan support for more robust and integrated land-use planning.
- Transport projects succeed when they reassure local governments on the edge of the city that they benefit over the long-run in terms of connectivity, capacity, prosperity and jobs for future residents.





04

PEOPLE AND PLANET

SUMMARY

A comfortable lifestyle in an affordable city has long been Adelaide's selling point. It remains an undoubted advantage in an international context. It drives ongoing interest and curiosity in the city.

Yet as Adelaide grows and evolves, a squeeze on incomes appears to be impacting relative perceptions of the city's appeal.

The rate of housing stress is still fairly low compared to others. But home ownership and rental challenges are now growing faster than other cities, and are creating knock-on effects of longer distances between homes and jobs and diminishing family friendliness. The average age of people moving to Adelaide is starting to rise higher than other peer cities internationally. Improving the student experience and perceptions of career opportunity emerges as a key part of the people retention task.

Adelaide's overall climate resilience risks emerge as higher than many peer cities. Heat stress vulnerability is not yet as high as others, but carbon intensity remains high and the building stock is less energy efficient. The clear opportunity that emerges compared to nearly all similar cities internationally is the chance to become a pioneer of clean power whether in solar, wind or hydrogen.

OPPORTUNITIES

- Adelaide's core lifestyle ingredients, especially its quality of environment remains very competitive for a post-pandemic context where more talent sees quality of life as a real premium.
- Better wellbeing outcomes and less congestion look like key areas where Adelaide can drive up its lifestyle appeal.
- Liveable cities are competing on climate adaptation. The solar potential is greater in Adelaide than most peer cities and can help to decarbonise many city systems.

RISKS

- ⚠ Adelaide's lifestyle reputation is vulnerable to housing and energy cost rises among young families and mobile students.
- ⚠ Lock-in to low density that makes commute times less competitive and sustainable.
- ⚠ Energy-efficient and climate-resilient infrastructure has to catch up to support citizen and investor needs.



LIVEABILITY, AFFORDABILITY AND WELLBEING

Adelaide

20th

5th

1st

Bottom rated city:
Valparaíso

Top rated city:
Edmonton

WHY DO LIVEABILITY, AFFORDABILITY AND WELLBEING MATTER?

Quality of life, wellbeing and a strong social contract are defining features of the 21st century city. Ensuring that liveability is broadly enjoyed, including by long-time residents and new arrivals, differentiates the cities that are able to adapt to crisis, build consensus, and avoid polarisation, from those that do not. Staying liveable as a city grows usually relies on public co-ordination at a larger scale, effective delivery of new infrastructure, and regular technology efficiencies.



Adelaide has the cleanest air of 15 peers and has seen the second biggest reduction in air pollution over the last 2 years.¹⁴⁶



The highest home ownership share (69%) among peers and the lowest share of homeowners and tenants currently in housing stress.¹⁴⁷



House price increases compared to pre-Covid have been more than double those of peers.¹⁴⁸

Adelaide's core offer to a broad base of people is strong

- Adelaide is still the top city among 12 measured peers for basic urban infrastructure (based on air pollution, quality & availability of drinking water, and cleanliness and tidiness of public realm) (HSE Institute).¹⁴⁹
- Adelaide has the cleanest air of 15 peers, and saw the second largest reduction in air pollution between 2020 and 2022 (down 34%), partly because of the pandemic (IQAir).¹⁵⁰
- Adelaide is now among the top half of 25 measured cities around the world for how many people can easily access green space (Global Observatory of Healthy and Sustainable Cities - GOHSC).¹⁵¹
- Adelaide ranks in the middle of the pack (3rd quintile) globally for income inequality (BCG), even though within Australia it has the 3rd most equal income distribution (SGS).¹⁵²

External demand in Adelaide as a place to live is holding up, but less so as a place to work.

- Although Adelaide has a lot of domestic liveable competition, it is an impressive 7th among smaller city-regions globally, or just outside the top 50 across all cities, for search interest in moving to the city (Holidu, based on Google search activity).¹⁵³
- Economic opportunities are not viewed as easy to come by – Adelaide is in the bottom 40% of all cities globally for how quickly residents feel opportunities in the city are changing in alignment with their needs (BCG, resident survey data).¹⁵⁴

Healthy neighbourhoods is an area of competitive challenge for Adelaide.

- Adelaide is in the middle of the pack among 25 global cities for policy ingredients to support health (GOSHHC).¹⁵⁵
- It is the bottom city in this group for the share of the population living in neighbourhoods conducive to physical exercise (Global Observatory of Healthy and Sustainable Cities).¹⁵⁶

Adelaide's affordability advantage is at some risk

- Adelaide has the highest homeownership rate among 7 peers (census data).¹⁵⁷
- For now, Adelaide has the lowest share of homeowners and tenants in housing stress among 6 peers (census data). It ranks in the top 20% of all cities globally for the quality, accessibility

and affordability of housing (BCG, based on performance and citizen survey data).¹⁵⁸

- But signs of decreasing affordability are starting to show. Self-reported citizen data suggest that spending on utilities takes up 2.2% higher share of earnings in Adelaide than in comparable cities. Adelaide also ranks 13th of 20 peer cities for cost of a monthly transport pass. Exposure to rising interest rates is also high, with rates 0.6% higher than in other peer cities (4.3% average among 19 peers) (Numbeo, April 2023).¹⁵⁹
- Pressure on Adelaide's rental market appears to be growing. Adelaide has the lowest residential rental vacancy rate out of 8 measured peers, with a vacancy rate 3% lower than the average (PropTrack and local data sources).¹⁶⁰
- This lack of rental supply seems to be driving prices up. Rents now take up 7% more of a monthly salary on average among 15 peers (based on self-uploaded citizen data for 1-bedroom apartments). On this metric Adelaide is the 3rd most unaffordable rental market. (Numbeo) The city has the lowest residential rental vacancy rate among Australian capitals (PropTrack).¹⁶¹
- House prices are also rising much more quickly in Adelaide than elsewhere. Adelaide saw the 8th highest rate of house price increase in the world over the most recently measured 12-month period. House price increases compared to pre-Covid have been more than double that registered even in other fast-growing peers (+51% in Adelaide vs. +19% among 6 other peers where prices are rising fast) (KnightFrank).¹⁶²
- Since 2020, Adelaide's median house prices have increased at 6.1x the rate of inflation, the highest of Australian capitals measured. This means Adelaide is now the 14th most unaffordable major market to buy a home in the world – only San Diego is more expensive among peers (Demographia).¹⁶³

Access to efficient commuting creates knock-on effects to liveability

- Adelaide's average public transport commute time has increased by 4 minutes since 2020. It now stands at 43 minutes – the 7th longest average time among smaller cities (<2m) and the longest among 5 peers (Moovit).¹⁶⁴
- Only 44% of people who commute by public transport do so for less than 30 minutes on average – nearly 7% lower than the peer average. This share has also decreased by 4% since 2020, though all other peers except Bordeaux have fared worse (Adelaide ranks 4th out of 5 peers for the largest decrease between 2020 and 2022) (Moovit).¹⁶⁵

HOW SHOULD ADELAIDE INTERPRET THESE SCORES?

- Liveability has long been an Adelaide hallmark. Its lifestyle ingredients remain strong and in demand. The quality of core services on the whole are higher than in most cities. Evidence suggests that affordability and low amenity are the main risks to Adelaide's rarefied position for liveability.

HOW CAN ADELAIDE IMPROVE ITS POSITION?

- As more benchmarks look at the whole city, Adelaide's suburbs will have to support healthy lifestyles and time for wellbeing. Ensuring that Adelaide retains its reputation for work-life balance, openness and diversity will be key to retaining its high scores in future.





SUSTAINABILITY AND RESILIENCE

Adelaide

20th

9th

1st

Bottom rated city:
Pune

Top rated city:
Bilbao

WHY DO SUSTAINABILITY AND RESILIENCE MATTER?

How sustainable a city is increasingly shapes the appeal and behaviour of residents, big capital and institutions. Cities that have long competed on quality of life increasingly have to demonstrate they are committed to being resilient in the long run, by decarbonising quickly, rethinking how growth can enhance the environment, and investing in a habitat fit for everyone who lives and enjoys the city. Benchmarks look at cities' sustainable infrastructure, vulnerability to shocks, and custodianship of land-use and natural assets.



The share of electricity consumed that is produced from renewables is currently almost double the average among its peers.¹⁶⁶



Adelaide's carbon footprint per person is still more than 50% higher than that of its peers.¹⁶⁷



The share of Adelaide's land area that is rated as protected for biodiversity is less than half that of its peers.¹⁶⁸

State investment has made Adelaide a leader for renewable energy production

- Adelaide is currently ahead in reducing reliance on fossil fuels for electricity. The share of electricity consumed that is produced from renewables is currently rated as nearly double the average among the 8 peers for which comparable data is available (68% vs 35% on average among peers), and this advantage is set to grow as data and investments come online (CDP & local sources).¹⁶⁹

Adelaide currently enjoys less severe climate effects than other cities

- Adelaide experienced less than half as many “high heat stress” days compared to the OECD average and peer average over the past 5 years (3.2 additional days in Adelaide compared to 1981- 2010 average vs 8.1 days among 15 peers) (OECD).¹⁷⁰
- The urban heat island effect in Adelaide is not yet as strong: the peak summer temperature difference between the city and its surrounds is lower than in 15 peer OECD cities except for San Diego and Valparaíso. This gap has halved in Adelaide, compared to a 7% increase among 15 OECD peers (OECD).¹⁷¹

Big task ahead to reduce carbon intensity

- Adelaide has in general been slower than most of its peers to reduce carbon emissions over the past 15 years. Latest data shows that among 14 peers, it has so far achieved the 3rd smallest reduction in CO2 emissions per person (OECD).¹⁷²
- As a result, Adelaide’s carbon footprint per person is still more than 50% higher than that of its peers (the 5th highest footprint out of 14 peers) (Carbon Monitor, based on real-time geo-located data).¹⁷³

Investment needs into resilient infrastructure are becoming more urgent

- The share of Adelaide’s land area that is rated as protected for biodiversity is less than half that of its peers (5.4% compared to 14% on average among 14 OECD peers) (OECD). This is reflected in Australian data that shows Adelaide has 2nd lowest share of land designated as national parks, reserves or protected land (SGS).¹⁷⁴
- More of Adelaide’s land area is covered by highly flood-prone artificial surfaces (22% compared to 15% on average) (4th highest among 15 peers) (OECD).¹⁷⁵
- Adelaide is behind for the amount of green space per person (7th out of 12 OECD peers) (OECD). Less than half of the city’s residents live within 400m of a high-quality park or green space (Urban Future Exchange).¹⁷⁶

Some promising progress towards sustainable hospitality and sustainable transport systems with room for improvement

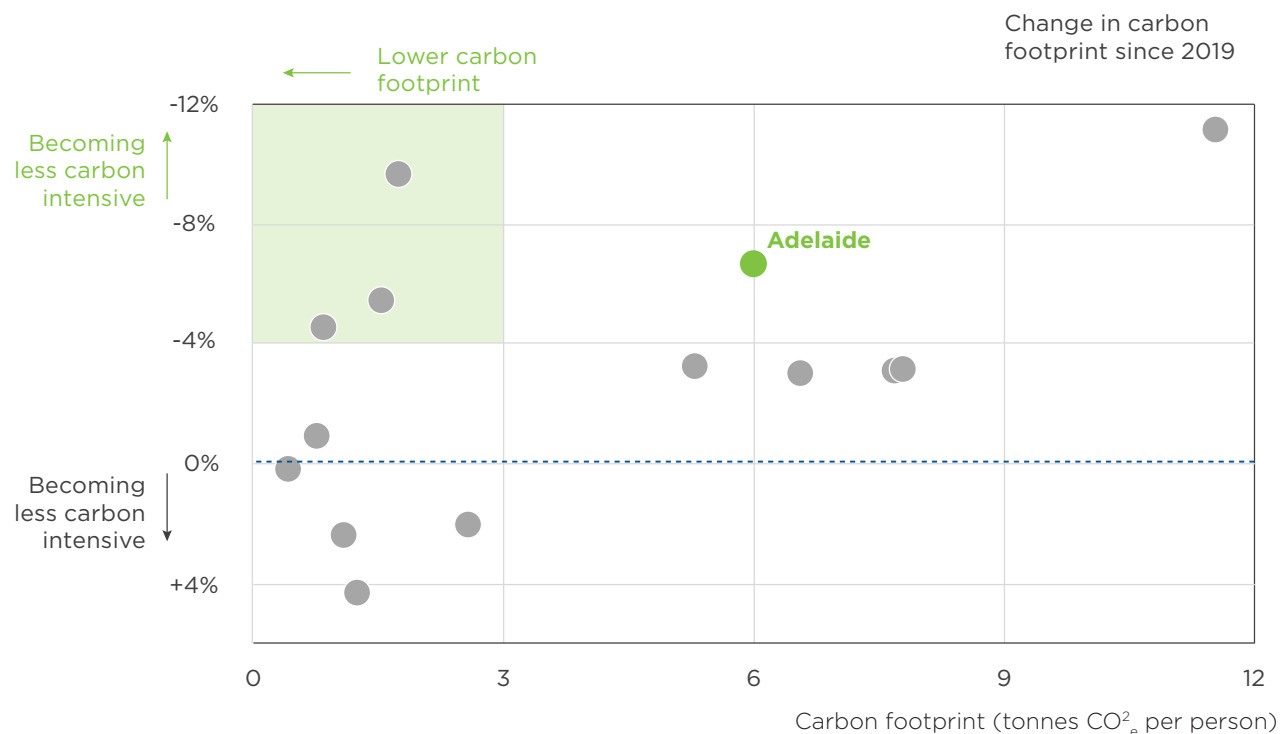
- Adelaide ranks 5th and 6th out of 11 peers respectively for the share of hotels that are sustainable, and the price premium associated with staying in them compared to traditional hotels (Booking.com, based on share of hotels in the city that are part of the ‘Travel Sustainable’ programme and the price difference between those part and not part of the programme).¹⁷⁷
- Adelaide has made more progress than most in making EVs a more financially viable option.¹⁷⁸
- However, there are wider barriers to EV uptake. The density of EV charge points is much lower (-68% compared to 10 peers) (OpenStreetMap, based on EV stations per square mile).¹⁷⁹

Imperative to upgrade the building stock

- Adelaide has Australia’s lowest share of highly rated CBD office stock (NABERS 5.5 or more) (14% vs an Australian city average of 21.5%) and has seen the lowest change in volumes of highly rated stock (>5.5 stars) among Australian CBDs since 2017 (JLL).¹⁸⁰

Behind the curve

Carbon footprint, latest (2021) and change over time (2019-2021), Adelaide and peers



Sources: Carbon Monitor, OECD⁸¹

HOW SHOULD ADELAIDE INTERPRET THESE SCORES?

- The effects of climate change have so far been milder in Adelaide than most others. But the indicators on biodiversity loss, land-use, flood risk and green space point to Adelaide losing some of the advantages it inherits in this area.
- Adelaide's energy resilience is likely to be a larger part of its scores in future. Investment in energy alternatives has the potential to enhance scores across multiple competitive pillars over the next 5-10 years.

HOW CAN ADELAIDE IMPROVE ITS POSITION?

- Ongoing investments and commitments in Adelaide and South Australia are likely to produce improvements over a 3-5 year time frame.
- An important part of Adelaide's potential to improve will be adjustments to the urban form to ensure carbon intensity of travel and services reduces, and access to cool and green space is easy for more people.
- Liveable cities like Adelaide become more well known for sustainability when they demonstrate their role as globally minded and creating sustainable solutions for the planet. Adelaide's environmental stewardship and influence is likely to become an important part of its ratings and reputation in this area.

CASE STUDY: BUSAN

Tech-driven partnerships as a way to accelerate the green transition

Why was change needed?

A secondary city in Korea, Busan has faced up to big challenges in its industrial transition, brain drain and an ageing society. It has used its deep harbour, tidal energy and port industrial capability as the basis to open up to technology partnerships and investment that can speed up a green transition. The result is the city has become one of Asia-Pacific's leading sustainability brands, and is attracting start-ups and corporate partnership.

What did they do, who led and how?

Busan became a Metropolitan City more than 15 years ago and has learned to marshal shared-risk collaboration between government, global and local technology suppliers. It realised to successfully sustain big projects with technology partners needed in-house expertise to manage these relationships and contracts.

Busan's approach owes a lot to government and utilities identifying places in the city where innovation can be piloted that create win-wins.

Three projects initiatives stand out.

First, Busan is pioneering urban technology sensitively in a 30,000 home development in wetlands near the city port.¹⁸² The focus is on 3-5 year living experiments with small communities first to understand citizen behaviour and then test new ways for government and business to co-invest in solar and hydroelectric energy to power the district. K-Water, the Korean state water company, uses these tests to become very proficient at reclaiming land, and collecting and filtering water in innovative ways.

The promise of this project led to UN-Habitat combining with Busan to prototype a sustainable floating city, where blue tech innovators, entrepreneurs, and researchers locally and internationally can experiment together.¹⁸³

Meanwhile closer to the main city a green district called 'U-City' deploys open cloud infrastructure with a view to raising the standard of urban services such as healthcare, welfare, water conservation, waste disposal, and environmental monitoring.¹⁸⁴ These test areas are helping to hone the city's own way to ally data with strategy, and use analytics to save energy and improve the way the city's traffic is managed. Now the city creates incentives for parking spaces to be rented out by those who don't use them to those who need it.

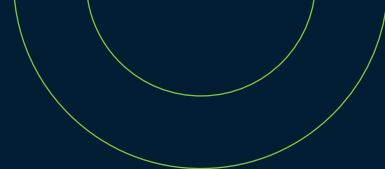
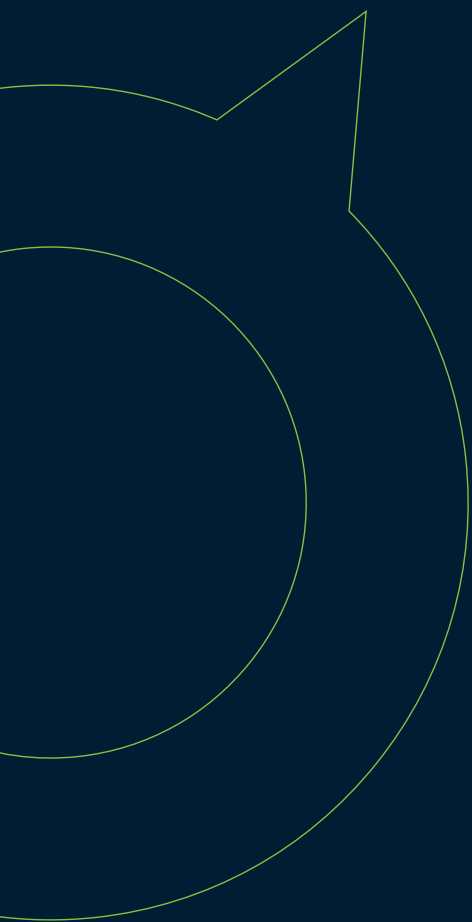
What have been the main impacts?

Busan is now rated a Top 15 city for sustainability, having previously been held back by poor scores in pollution and energy use. For the first time in 2023 it overtook Seoul for the strength of its city brand. It is also a strong candidate city for World Expo 2030.¹⁸⁵

What are the key lessons and success factors?

- Adelaide can explore how to not only how to become sustainable but also to use its progress to serve the world and sell to the world.
- Adelaide will rely on strategic ambition of state and federal government to make government technologically efficient and link it up with local delivery capacity.
- Improving the technical capability of public planners and decision-makers is often critical for cities to tackle wicked sustainability issues.





05

REPUTATION

SUMMARY

There is a foundation of international awareness and appetite for Adelaide. The city is viewed and described as a capable host, a producer of research and resources, and a city of strategic importance.

External interest in Adelaide is fairly buoyant among older people and students. Compared to most of its peers, more people globally are aware of Adelaide's comfortable climate, vineyards, nature and way of life.

The gap for Adelaide is lower recognition as a place for business, careers, innovation and enterprise. International commentators and citizens seem less likely to view Adelaide as dynamic or distinctive than several of its peer cities. Fewer events, discoveries, or celebrity endorsements tend to go viral globally. Adelaide may look to reassess its brand balance if it wishes to appeal to a wider band of innovators and investors.

This section relies on a mixture of global perception studies and a customised city perception analysis of Adelaide and its peer cities in select global media and well-followed social media.

This analytical approach has been used by cities such as Stockholm, Helsinki, Glasgow, Atlanta and Columbus to take an overarching view of how well known and well regarded their city is in different markets and specialisms. It is not an assessment of the success of specific campaigns or events.

OPPORTUNITIES

- Adelaide retains buoyant interest from the wider world of visitors, investors, talent and media.
- Adelaide receives fairly strong favour from locals.
- Adelaide's lifestyle is a positive pull factor for external skilled talent familiar with it.

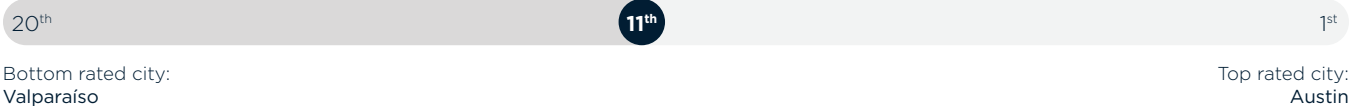
RISKS

- ⚠ A lack of a clear sense as to Adelaide's offer to business and career-seekers.
- ⚠ Less visibility in the international conversation on cities means Adelaide's strengths and potential get overlooked.
- ⚠ Affection of people who get to know Adelaide risk not being translated into wider awareness or brand development.

VISIBILITY AND RECOGNITION

Do they know us?

Adelaide



WHY DO VISIBILITY AND RECOGNITION MATTER?

Visibility shapes whether and how cities are regarded in a crowded global marketplace. The demand to live, work, study, visit, invest and do business in a city is informed by how well people know what it offers, and what things it is thought to be good at. Smaller and mid-sized cities need to develop strong brand recognition to get on the radar of talent, win new business and build specialist interest.



Adelaide gains visibility from its lifestyle reputation

- Adelaide is among the world's 100 most visible cities in global benchmarks, despite being outside the global top 400 cities by size. It is the 6th most frequently featured city out of 20 peers. This puts it ahead of larger cities such as Detroit and Rotterdam. Among small and mid-sized cities, Adelaide is in the global top 25, gaining coverage for trade, defence and science (The Business of Cities research).¹⁸⁹
- Adelaide is the 8th most talked about city across a wide range of English and non-English global media for its size among 15 measured peers, but rises to 5th when comparing number of media hits to how big the city is in population size. It is equally visible among the media with the largest audience (The Business of Cities research).¹⁹⁰
- Adelaide falls in the middle of the pack (6th out of 11 peers) for search interest in visiting the city (Kayak, based on share of global hotel searches).¹⁹¹

Adelaide gets attention outside Australia

- A larger share of influential social media talking about Adelaide comes from international sources (71%) than the city's peers (62%). (The Business of Cities research*). This points to a steady flow of international commentary on Adelaide owing to the city's trade, research and diverse population.¹⁹²
- Yet total audience reach of this international coverage is 2nd last among 15 peers. Many peer cities are generating nearly 10 times the audience reach, suggesting limited engagement or interest among key media and celebrities (The Business of Cities research, see Appendix for methodology).¹⁹³

Adelaide gets talked about on digital platforms but its amenities are less likely to be recommended

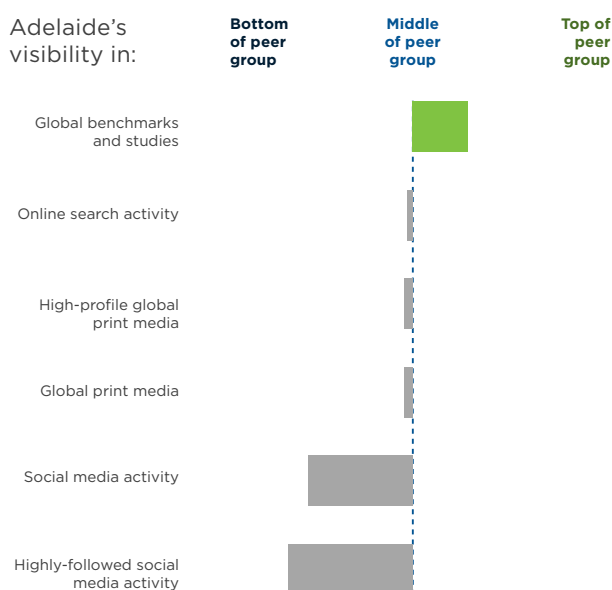
- Adelaide is often talked about on TikTok, at 4th among 10 peers for hashtag views (Holidu).¹⁹⁴
- Adelaide is currently 167th in the world for the total number of stories and recommendations shared about the city online (8th out of 10 peers). (Resonance).¹⁹⁵
- The city is also only 7th out of 10 peers for coverage among millennial influencers. And 13th out of 15 for overall visibility in social media activity. (Holidu, The Business of Cities research*).¹⁹⁶

Adelaide gets less coverage from prominent commentators and celebrities

- Adelaide is among the bottom third of 15 measured peers for the share of highly-followed international accounts that mention the city on social media (11th out of 15 cities) (The Business of Cities research*). More people who talk about Adelaide have smaller reach.¹⁹⁷

Adelaide has yet to translate expert and media attention into social media buzz

Adelaide's visibility across different channels vs peers in 2021-22



*Online search activity = average of search interest in relocating to the city (Holidu data) and search interest in visiting the city (Kayak data).

Sources: All based on The Business of Cities research, except for online search activity (based on Holidu and Kayak data)¹⁹⁸

HOW SHOULD ADELAIDE INTERPRET THESE SCORES?

- Adelaide clearly has a lot of untapped brand potential. The city is on the radar for a wide international range of visitors and media. It gets coverage on defence, wine, aerospace, and its diversity drives interest from a range of markets. This underlying current of visibility is an advantage.
- Although Adelaide is just below average overall, its peer group includes widely talked about cities like San Diego, Cape Town and Pune.

HOW CAN ADELAIDE IMPROVE ITS POSITION?

- Becoming recognised for key competitive strengths will see more studies, commentary and conversation want to feature Adelaide.
- More local and international champions for Adelaide raise the variety and volume of coverage on the city.





PERCEPTION, SENTIMENT AND APPEAL

What do they think of us?

Adelaide

20th

11th

1st

Bottom rated city:
Pune

Top rated city:
Valencia

WHY DO PERCEPTION, SENTIMENT AND APPEAL MATTER?

Global reach and resonance can give mid-sized cities an enduring magnetism to trade, investment and talent. Cities are adapting their reputations as places to discover, innovate and be part of something bigger, as well as being somewhere to raise families and enjoy short-term thrills and experiences. Enduring perceptions of cities are also shaped by how they handle crises, large events, and how they treat new communities or sensitive issues.



Average sentiment expressed internationally about Adelaide is 7% more positive than the average among its peers.¹⁹⁹



Local perceptions are positive – Adelaide rates 10th globally on aggregate across perception studies canvassing opinions of local residents.²⁰⁰



International recognition of Adelaide's innovation potential is among the bottom 20% among peers.²⁰¹

Positive sentiment internationally about Adelaide attaches to its quality of life, natural surroundings and universities

- Across media and social media platforms average international sentiment expressed about Adelaide is 7% more positive than the average among 14 peers. (The Business of Cities research*).²⁰²
- The city is 3rd among 11 peers for how positively the city's nature is talked about, and 5th for how positively people talk about Adelaide's lifestyle. (The Business of Cities research*).²⁰³
- Recognition of Adelaide's natural assets – its wineries, its vineyards and green spaces – is high (4th among 15 peers). So is recognition of the warmth and openness of Adelaide's residents (6th among peers). (The Business of Cities research*).²⁰⁴

Pride and satisfaction among those who experience Adelaide is high

- Adelaide is 10th globally on aggregate across perception studies canvassing opinions of local residents (1st among all peers) (The Business of Cities research*).²⁰⁵
- This partly reflects high levels of satisfaction with the quality of the natural environment (where Adelaide rates in the top 10% across more than 250 cities globally and 1st among peers), and with how safe the city is (top 25% across more than 300 cities globally and 3rd among peers) (Numbeo).²⁰⁶
- Adelaide is the top rated peer and is now back in the top 20 cities in the world for perceived student experience. This is up from 29th in 2022 but down slightly from 16th in 2021. The fall may be cyclical but may also reflect concerns about affordability and contact time (QS).²⁰⁷

- Perceptions among those who are familiar with the city in fact tend to be higher than the city's actual performance. The city on average does 12% better in local perception studies than in performance measures, while among peers this gap is just 3% (The Business of Cities research). This indicates that Adelaide is successful at winning people over.²⁰⁸

International perceptions of Adelaide as a place to do business or make money are more limited

- On average across multiple communication channels, Adelaide is 5th for how strong and positively people internationally refer to its lifestyle and enjoyment, but only 12th for its reputation for economic dynamism and career opportunities (The Business of Cities research*). This aligns with data globally and nationally that indicate more doubts around whether Adelaide is a place for well paid work, career and earning potential (BCG; Immigration2Australia).²⁰⁹
- In ratings that include perceptions of what it is like to start a business in a city, Adelaide rates in the bottom 20%. More broadly there is lower recognition of Adelaide's dynamism (11th among 15 peers), business advantage (8th), and its innovation ecosystem (13th) (The Business of Cities research*).²¹⁰

Perceptions of Adelaide's urban fabric and cultural vibrancy are not as positive as many peers

- Adelaide rates in the bottom 25% among 11 peers for average sentiment expressed in social media discussions of the city's culture, urban fabric and visitor attractions. (The Business of Cities research*).²¹¹

WORDS THE WORLD USES ABOUT...

Adelaide:

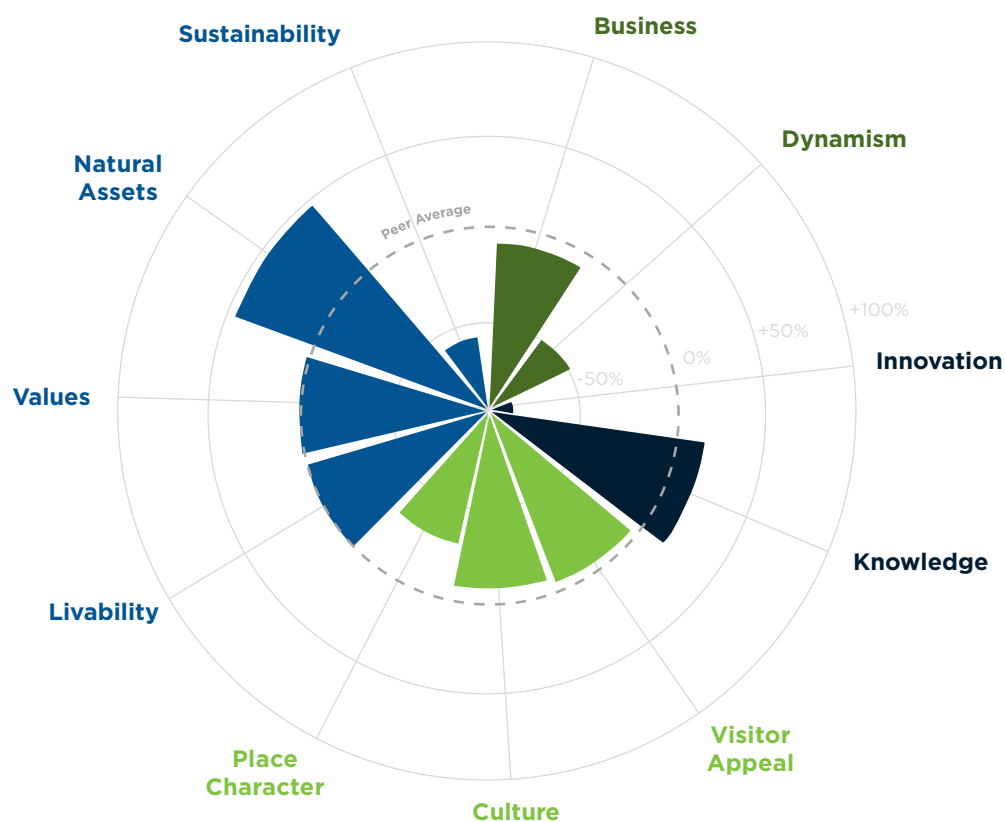


Austin:



Adelaide is known for its nature and its universities

Aggregate recognition across global media coverage, social media and online searches by theme, Adelaide vs. peers



Source: The Business of Cities research²¹³

HOW SHOULD ADELAIDE INTERPRET THESE SCORES?

- The world is positively disposed to Adelaide when it is familiar with what it offers. The data suggests the city is not as well appreciated for the full range of attributes as it needs to be internationally, if it wants to attract a wider base of talent across a range of sectors and skillsets.
- Adelaide seems to lack a business brand. The data points to Adelaide's relatively under-developed identity around innovation, enterprise, creativity, cultural expression and climate responsibility.

HOW CAN ADELAIDE IMPROVE ITS POSITION?

- Cities that have improved in terms of brand perception and global appeal have tended to build a clear unified identity that spans visitors, entrepreneurs, business, students and investors.
- World-class discoveries, events, accomplishments and specialisms are an important driver of visibility for smaller cities. Cities tend to find that these resonate internationally when they communicate something deeper about a city's values or contributions.

CASE STUDY: AUSTIN

An authentic, co-owned brand identity for talent and corporate attraction

Introduction

As the state capital of Texas, Austin has developed one of the most distinctive city brand identities of any medium sized city in the Americas. Much of this was not foreseeable 30 years ago when it was seen as a college town with sports teams, the tech and culture scene was very small and its CBD was only just starting to attract interest.

What the city did

There are three features where Austin has had particular success:

- **Austin avoided becoming simply a 'tech hub'** and built a brand that effectively allied technology with creative industries and entrepreneurship. It attracted big corporates like Dell and IBM, but avoided becoming coterminous with these firms. The city has used its signature investors (Tesla), businesses (Whole Foods, Under Armour) and events (SXSW) to enrich and augment the city brand in unexpected directions.
- **Focus on city character and emotional connection with people.** Keep Austin Weird captured the city's quirky character, spirit of difference, and its commitment to preserving offbeat culture, arts, and independents. This idea became owned and widely used by Austin citizens on bumper stickers – earnestly and ironically. The intimacy of live music has been a cornerstone of the strategy.
- **Strong complementarity with the state brand.** Austin has tried to differentiate itself from the the Texas brand while harnessing its spirit of freedom and rugged individualism. It has explicitly positioned itself as the urban, creative and expressive melting pot, separate to but borrowing from the State's hard-headed business mindset.

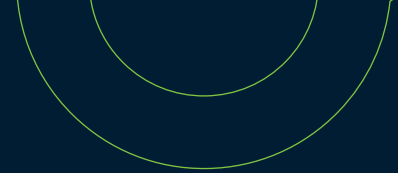
Impacts and implications

These features have helped Austin to evolve into a high-calibre, high-value city that attracts talent in droves. With the tech worker pool growing at more than 4% a year, by 2020 Austin was home to the highest concentration of millennials of any North American city.²¹⁴

The city consistently attracts businesses from larger cities, with recent additions including SpaceX and TikTok, and with 21,000 specialists is one of the leading mid-sized cities for life sciences globally.²¹⁵

These approaches also inform the city's efforts to retain the values that define Austin as it grows into a different kind and shape of city. Business leaders champion 'Work Live Austin' as a way to ensure innovation and lifestyle are inextricably linked.²¹⁶





CONCLUSIONS

This paper is designed to provide an additional evidence base and a fresh international perspective for all those interested in Adelaide's future.

It should encourage a constructive conversation about what policies, reforms and tactics Adelaide should adopt if it wants to compete and succeed over next 10-20 years.

International benchmarking can act as a resource for public, private and civic leaders in Adelaide. The information has many uses in processes of policymaking, promotion and stakeholder engagement.

Benchmarking is not designed to sit on the shelf. It should stimulate a strategic commitment to addressing weaknesses and utilising strengths more confidently.

Other cities have used it to help revise their brand (Philadelphia), shift more purposefully into the innovation economy (Oslo), upgrade the way they organise for investment (Sydney), pursue more integrated governance (Mumbai), identify misperceptions (Tel Aviv), or work better with neighbours (Amsterdam). Learning from the leadership, placemaking and innovation approaches of other city-regions is an important component.

Adelaide can use this paper to:

1. Build a clearer sense of its role on the world stage, its peers, partners and competitors.
2. Agree to track performance and perception every 2-3 years on indicators that matter.
3. Add an international lens through which to view and prioritise Adelaide's next cycle of reforms and opportunities.

Data Appendix and endnotes

DATA NOTES

A. Innovation, R&D & Specialisation (Sub-pillar)

Where data is from Dealroom, every attempt has been made to ensure that the approach, and filters used, align as closely as possible with existing use of the Dealroom platform in local and regional innovation monitoring and reporting (e.g. the South Australia Innovation Ecosystem Dealroom dashboard).

In order to capture real innovation dynamics within the city, the following filters have been applied:

- All locations (not just founding or HQ)
- Founded since 2000

For investment-related metrics, the following filters were also applied:

- Grant and SPAC private placement excluded (from funding rounds)

In some specific cases, other additional filters are applied. These are outlined in the specific endnotes below.

B. Reputation (Pillar)

Publicly available benchmarks and datasets less often measure reputation. As a result, in this pillar of the report, The Business of Cities research is used as a supplement. The Business of Cities research approach draws on a methodology applied previously in cities such as Helsinki, Stockholm and US cities such as Atlanta, in order to gauge how much and how positively people talk about Adelaide, and what parts of its brand they mention the most.

Aside from the publicly available benchmarks and datasets (detail in endnotes), the 3 main sources consulted as part of The Business of Cities' research approach were:

1. Global media

2. Social media (Twitter)

3. Online reviews (Google)

For each of these, Adelaide was compared within a peer group of 15 cities. Some cities in the wider peer group of 20 were excluded – either because:

- there was too much “noise” in the dataset, relating either to other usage of the city name (e.g. Bordeaux – wine, or Porto – FC Porto) or the city name itself including 2 words (e.g. San Diego)
- the total volume of appearance was too small to give a full and accurate picture of how the city is perceived and talked about online (e.g. Pune, George Town/Penang)

Unless otherwise specified in the text within the report, all data points in the Reputation pillar that are

based on this The Business of Cities approach:

- Refer to Adelaide's aggregate scores across these three types of source
- Observe only how Adelaide is seen by media, social media and online reviews from outside of Australia (and equivalent home country in peer cities)

Explanation of each approach in detail

1. Global media

To review how often Adelaide is talked about in the global media, and which characteristics of the city are more or less picked up on, we used a machine-learning powered tool to scrape all mentions of Adelaide in 100 of the world's most widely circulated media outlets between 1st January 2021 and 30th June 2022. This roughly breaks down as:

- 45 newspapers (90% broadsheets, 10% tabloids)
- The 25 most visited globally
- 15 business news outlets turned magazines
- 10 specialist tech media sources

In all measures of visibility in the global media, all events or phenomena that were completely unrelated to Adelaide as a city, or the challenges and opportunities it faces, were removed. This includes for example mentions of sporting events, weather phenomena and other unrelated commentary. The same correction was undertaken for the other cities to enable fair comparison. References to Adelaide from within Australian media were also discounted.

In total around 8,000 media mentions of Adelaide were reviewed.

The 100 media sources consulted were: ABC, United States; AFR, Australia; Aftonbladet, Sweden; Al Jazeera, UAE; America Economia, Brazil; Asahi Shimbun, Japan; BBC News, United Kingdom; Bild, Germany; Bloomberg, United States; Breakit, Sweden; Canal+, France; CBC, Canada; CBSN, United States; China Daily, China; Chosun Ilbo, South Korea; Chunichi Shimbun, Japan; Clarin, Argentina; CNBC, China; CNET, United States; CNN, United States; CNN-News18, India; Corren, Sweden; Corriera della Serra, Italy; CTV News, Canada; Dagbladet, Norway; Dagens Industri, Sweden; Dagens Nyheter, Sweden; De Telegraaf, Netherlands; Der Spiegel, Germany; Die Welt, Germany; Die Zeit, Germany; DongA-Ilbo, South Korea; DW, Germany; Economic Daily, China; El Mundo, Spain; El Pais, Spain; Engadget, United States; Euro News, France; Financial Express, Fox News, United States; France 24, France; FT, United Kingdom; Gizmodo, United Kingdom; Hurriyet, Turkey; India Today, India; Komsomolskaya Pravda, Russia; Korea Economic Daily, South Korea; L'Obs, France; La Repubblica, Italy; La Vanguardia, Spain; Le Figaro, France; Le Monde, France; Malayala Manorama, India; MDR, Germany; Moskovskiy Komsomolets, Russia; NBC News, United States; NDTV India, India; New York Times, United States; Nihon Kezai Shimbun,

Japan; NRK, Norway; Nyteknik, Sweden; O Globo, Brazil; Philippine Daily Enquirer; Philippines; Politiken, Denmark; Reddit, United States; Reuters, United Kingdom; Rossiyskaya Gazeta, Russia; RTL Nederland, Netherlands; RTL Today, Netherlands; Sikyo Shimbun, Japan; Sky News, United Kingdom; South China Morning Post, Hong Kong; SVT, Sweden; TechCrunch, United States; The Age, Australia; The Conversation, United Kingdom; The Daily Mail, United Kingdom; The Daily Telegraph, United Kingdom; The Economic Times, India; The Economist, United Kingdom; The Globe and Mail, Canada; The Guardian, United Kingdom; The Hindu, India; The Independent, United Kingdom; The Jerusalem Post, Israel; The Next Web, Netherlands; The Straits Times, Singapore; The Sydney Morning Herald, Australia; The Times of India, India; The Toronto Star, Canada; The Verge, United States; TV 2 News, Denmark; VentureBeat, United States; Wall Street Journal, United States; Washington Post, United States; WION, India; Wired, United Kingdom; Yomiuri Shimbun, Japan; ZDF, Germany.

2. Social media (Twitter)

For Twitter results, we used a machine-learning powered tool to capture all of the Tweets containing the following 12 phrases, from 1st January 2021 to 21st June 2022.

[Adelaide] is such... city; Is(n't) [Adelaide]...; [Adelaide] does; [Adelaide] doesn't; [Adelaide] could; [Adelaide] should; ...like [Adelaide]; Is [Adelaide]...?; Of [Adelaide] city; [Adelaide] has; [Adelaide] is

In light of the difficulty of accurately capturing descriptions of cities on social media, this was deemed to be specific enough to filter out background noise but broad enough to include a representative sample.

As with the media analysis, all events or phenomena that were completely unrelated to Adelaide as a city, or the challenges and opportunities it faces, were removed. The same correction was undertaken for the other cities to enable fair comparison.

In total around 100,000 Twitter engagements were reviewed as part of the study.

3. Online reviews (Google)

To review descriptions and observations about Adelaide and its peers, we used a machine-learning powered Google scraper to retrieve Google search activity for five different sentences about each city (in English and in the appropriate local languages), from 1st January 2021 to 31st June 2022, across 20 strategic global markets. The 20 global markets selected were: Australia, Brazil, Canada, China, France, Germany, Hong Kong, India, Israel, Italy, Japan, Mexico, Netherlands, Russia, South Korea, Spain, Turkey, UAE, United Kingdom, United States.

For each city, the programme undertook a total of 125 searches – one for each of the five sentences, in each of the 20 global markets, and returned all of the

adjectives and nouns used specifically to describe Adelaide, screening to account for the same article being reproduced multiple times and for “noise” that was not easily associated with any brand segment (see also below).

The five sentences calculated for each city (x) were: (x) is a * city; (x) is a city of *; (x) is famous for *; (x) is renowned for/known for*; and (x) is described as * (where * is any word used to describe the city and (x) is the name of the city).

When exact translations were not possible, the closest possible fit was used.

Overall explanation for understanding and measuring the different elements or segments of Adelaide's brand

One of the core elements of “brand performance” is the share of each city's coverage in the global media, social media and online searches that is related to that sub-segment (or topic).

To calculate this, a machine-learning powered tool grouped all of the nouns and adjectives into 11 categories, based on which brand ‘segment’ they referred to within the city. Several cycles of manual cross-checking and triangulation were undertaken to correct for words that could have been mis-placed. At the end of this process, any adjectives and nouns were discounted if they:

- Were finally classified with less than 85% confidence or were not at least 90% similar to another word already classified; or
- Were too vague (e.g. great, amazing, excellent); or
- Did not fit into any of the brand sub-segments

Wherever data exists on how often certain aspects of Adelaide's brand (e.g. its natural assets, its urban character etc.) are recognised, or how positively they are spoken about, this is the approach that is used.

Measuring sentiment expressed about Adelaide

In cases where we explore how positively or negatively Adelaide is being talked about (e.g. endnotes 199, 202, 203), we used a machine-learning powered tool to gauge the average level of positive or negative sentiment expressed by each noun or adjective used in relation to the city, where -1 is the most negative (e.g. horrific) and +1 is the most positive (e.g. stunning). We then averaged across all nouns and adjectives to obtain a sentiment score for each aspect of each city.

ENDNOTES

- 1 UN World Urbanization Prospects: https://population.un.org/wup/Download/Files/WUP2018-F12-Cities_Over_300K.xls
- 2 Loughborough University - The World According to GaWC: www.lboro.ac.uk/microsites/geography/gawc/world2020t.html
- 3 Numbeo Quality of Life Index (Mid-Year 2023): www.numbeo.com/quality-of-life/rankings.jsp
- 4 Great Wine Cities Global Network: www.greatwinecapitals.com/
- 5 Dealroom (accessed on <https://app.dealroom.co/companies>). Data not publicly available). Based on amount of VC invested, 2016 to 2021.
- 6 Based on census data. Data for Adelaide: <https://profile.id.com.au/australia/industries?WebID=290>. The Business of Cities research, based on % of global comparative benchmarks Adelaide appears in; CDP - 'South Australia's 100 Renewable Energy Transformation': www.cdp.net/en/articles/states-and-regions/south-australias-100-percent-renewable-energy-transformation (equivalent data for peers taken from CDP reports: www.cdp.net/en/cities#5c689a4c73ac96d8c4de43b2ffd9f8ef) ; Google Environmental Insights Explorer - % of total combined kilometers by mode: <https://insights.sustainability.google/places/ChJP7Mmxcit2oRQMaOYIQ2AwQ?transportation?hl=en-US> ; Carbon Monitor - Cities: <https://cities.carbonmonitor.org/> ; OECD - Inter-regional mobility, large TL2 and small TL3 regions, Young new residents share: <https://stats.oecd.org/Index.aspx?DataSetCode=CITIES> ; OECD - Inter-regional mobility, large TL2 and small TL3 regions, Net inter-regional mobility, All persons: <https://stats.oecd.org/Index.aspx?DataSetCode=CITIES> ; Moovit Public Transit Index - Average Commute Time: https://moovitapp.com/insights/en/Moovit_Insights_Public_Transit_Index-countries
- 7 Loughborough University - The World According to GaWC: www.lboro.ac.uk/microsites/geography/gawc/world2020t.html
- 8 OECD - GDP per capita: <https://stats.oecd.org/Index.aspx?DataSetCode=CITIES>
- 9 Metroverse City Profiles - Adelaide: <https://metroverse.cid.harvard.edu/city/12977/industry-position>. Aggregates share of employees working in the following sectors, all of which command an average hourly salary of >30 USD: Finance; legal and administrative business services; publishing & IT services; commercial real estate services; technical services; TV, film & related services; miscellaneous business services; air transport; energy and waste management; rail, water and pipeline transportation; insurance; oil and gas; chemicals; electronics manufacturing; medical supplies & pharma; machinery manufacturing; aeronautics and weapons; optical goods. Does not include peers with low data quality as per Metroverse platform, or peers with high informal quotient to their economy. Leading peer city = Antwerp (39%).
- 10 fDi Intelligence - Best Locations for Regional HQs - www.fdiintelligence.com/content/locations/global/asia-pacific/singapore/bankable-luxembourg-shines-as-best-regional-hq-80840
- 11 Loughborough University - The World According to GaWC: www.lboro.ac.uk/microsites/geography/gawc/world2020t.html
- 12 Metroverse City Profiles - Adelaide: <https://metroverse.cid.harvard.edu/city/12977/industry-position>. Manufacturing compared to 15 peers (some cities excluded due to low data quality on the Metroverse platform).
- 13 Metroverse City Profiles - Adelaide: <https://metroverse.cid.harvard.edu/city/12977/industry-position>. Aggregates share of employees working in the following sectors: professional, scientific & technical services; telecoms; management of companies & enterprises; data processing, hosting and related services; other information services. Does not include peers with low data quality as per Metroverse platform (Adelaide compared to 13 other cities).
- 14 OECD - Labour productivity per worker: <https://stats.oecd.org/Index.aspx?DataSetCode=CITIES> ; SGS Cities & Regions Wellbeing Index - Gross Value Added per hour worked: <https://sgsep.com.au/projects/sgs-wellbeing-index>
- 15 OECD - GDP per capita: <https://stats.oecd.org/Index.aspx?DataSetCode=CITIES>
- 16 Resonance World's Best Cities 2023 - Prosperity: www.worldsbestcities.com/best-cities-report/?r=dXJlYVITb29KZBhQ0x6SXZCNFN2QT09
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- 19 Turning Research into Economic Competitiveness for South Australia (SAPC) (DRAFT): www.sapc.sa.gov.au/inquiries/inquiries/turning-research-into-economic-competitiveness-for-south-australia/documents/Turning-research-into-economic-competitiveness-for-SA-Draft-Report-for-Publication.pdf
- 20 OECD - GDP per capita: <https://stats.oecd.org/Index.aspx?DataSetCode=CITIES>
- 21 fDi Intelligence - 'Kollywood' capital shines as best film and TV location: www.fdiintelligence.com/content/data-trends/kollywood-capital-shines-as-best-film-and-tv-location-80405
- 22 UN World Urbanization Prospects: https://population.un.org/wup/Download/Files/WUP2018-F12-Cities_Over_300K.xls
- 23 fDi Intelligence - India and China stand out as world's best places for AI labs: www.fdiintelligence.com/content/locations/global/asia-pacific/india/india-and-china-stand-out-as-world-s-best-places-for-ai-labs-80947
- 24 fDi Intelligence - 'Kollywood' capital shines as best film and TV location: www.fdiintelligence.com/content/data-trends/kollywood-capital-shines-as-best-film-and-tv-location-80405
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- 26 UN World Urbanization Prospects: https://population.un.org/wup/Download/Files/WUP2018-F12-Cities_Over_300K.xls
- 27 UN-Habitat Global Urban Competitiveness Report 2020-2021: https://unhabitat.org/sites/default/files/2021/11/1_report_on_competitiveness_of_cities_worldwide2020-2021.pdf
- 28 HSE Global Cities Innovation Index 2023 - Cost of Doing Business: <https://gcii.hse.ru/mirror/pubs/share/825769733.pdf>
- 29 Cisco Australia Digital Readiness Index 2022: www.cisco.com/c/dam/m/en_au/digital-readiness/pdfs/cisco-aus-dri-report-2022.pdf
- 30 Arcadis International Construction Costs 2023: www.arcadis.com/en/knowledge-hub/perspectives/global/international-construction-costs ; Arcadis International Construction Costs 2022: <https://media.arcadis.com/~media/project/arcadis.com/en/perspectives/global/icc/international-construction-costs-2022-2.pdf?rev=9f0a9b844ca1437d91f2fb0ed356961>
- 31 Immigration2Australia - Australians vote on the most welcoming cities for immigrants: <https://immigration2australia.com/best-city-for-immigration/>
- 32 JLL Global Office Market Dynamics - May 2023: www.jll.co.uk/en/trends-and-insights/research/global/gmp/global-office-market-dynamics ; JLL APPD Market Report Article - Adelaide (February 2023): <https://research.jllapsites.com/appd-market-report/q4-2022-office-adelaide/>
- 33 Property Council of Australia - Office Occupancy February 2023: www.propertycouncil.com.au/research/office-occupancy-february-2023 ; Kastle Back to Work Barometer: www.kastle.com/safety-wellness/getting-america-back-to-work/#workplace-barometer
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- 35 UN World Urbanization Prospects: https://population.un.org/wup/Download/Files/WUP2018-F12-Cities_Over_300K.xls
- 36 UN-Habitat Global Urban Competitiveness Report 2020-2021: https://unhabitat.org/sites/default/files/2021/11/1_report_on_competitiveness_of_cities_worldwide2020-2021.pdf
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