Innovation Framework – Former Royal Adelaide Hospital Site
Renewal SA
February 2018
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Executive summary

The former Royal Adelaide Hospital (RAH) site is one of the most significant urban renewal opportunities in South Australia’s history. Located in Adelaide’s East End precinct across seven hectares, the site could be repurposed for a multitude of different uses. This report considers those uses in the context of South Australia’s economic development, and identifies options to match development opportunities to economic outcomes.

To do this, we use Deloitte’s Make it Adelaide industry framework, aligning the former RAH’s unique value proposition and the current state of key industries in the East End and Adelaide’s CBD.

Adelaide’s economic future and the development objectives for this site

- Adelaide’s economy is shifting, and our built form needs to as well
- This report therefore sets out economic development criteria to consider potential uses for the site
- These economic criteria and analysis do not necessarily argue for public subsidies for most uses, and this is a question that needs to be answered in more detail in subsequent analysis.

Adelaide’s economy has shifted from a historical manufacturing focus to an increasing reliance on service industry sectors. This transition is apparent in Adelaide’s central business district, particularly through the growth of tourism and international education related services.

In Deloitte’s Make it Adelaide framework, we identified eight sectors which will drive South Australia’s economic growth. For the activities which we identify for the former RAH neighbourhood, these sectors connect well with existing Government policy such as the ten economic priorities. These sectors are parts of the South Australian economy where the state has a competitive advantage, where there is an opportunity to take advantage of global growth, or those sectors which have other strategic advantages for South Australia.

This shifting industry mix needs to be supported by the development of Adelaide’s built form.

Renewal SA and the South Australian Government have resolved that the former RAH site should be a flagship for this economic transition, given its strategic location, existing built form and the opportunity to leverage the profile of the site.

As a result, our analysis has been framed by a series of criteria:

- To maximise the economic contribution that the site can make through the development of industries where we have an advantage
- To address genuine unmet demand existing in the market
- To contribute to shifting the perception of South Australia as a destination for people, and for investment.
Importantly, while public investment may be necessary to support some of this activity, this analysis does not necessarily argue for public subsidy. In fact, full commercial recovery is likely to be most appropriate for several uses identified. Further detailed evaluation will be necessary to determine these questions.

**Site context and its competitive advantages**

- Embedded in Adelaide’s **East End retail and hospitality precinct** and North Terrace cultural boulevard, with close proximity to universities and their capabilities
- Increasingly connected to commercial Adelaide
- Combination of differing types of built form are well suited to a **major mixed-use precinct**.

The site’s location in Adelaide’s East End and its existing built form, pairing heritage buildings with more contemporary built forms, presents a series of unique opportunities for activation.

The site is in close proximity to key lifestyle destinations, including Rundle Street, the Ebenezer Place/Vardon Avenue laneways, the Botanic Gardens and the Adelaide Zoo. During March, the former RAH site will benefit from the activation of Adelaide’s summer festivals, including the Adelaide Fringe and WOMADelaide. There is also potential for those destinations to ‘spill over’ to the former RAH neighbourhood – whether that be more green space linking the former RAH to the Botanic Gardens, or an extension of the retail offering on the Rundle Street precinct.

It will benefit from the South Australian Government’s tram extension running along the length of North Terrace, meaning that the precinct will be better connected to the rest of Adelaide’s CBD. This will bring the site into much closer practical proximity to the business community in the CBD, as well as increasing its accessibility from suburban Adelaide.

The former RAH is also located next to the University of Adelaide’s North Terrace campus and UniSA City East, presenting opportunities for collaboration across campuses or a university presence on the site. This proximity is a distinct competitive advantage compared to other similar sites. Given the diversity of education and research at both universities, this raises broader questions as to potential focus areas at the former RAH – questions which can be informed by South Australia and Adelaide’s industry advantages, as well as the other unique features of the former RAH site.

The current footprint of former RAH also affects its unique value proposition – with a number of heritage buildings on the perimeter of the site. There are many potential uses for these buildings: in the short term, their condition would suit roles which either don’t require state of the art facilities or might struggle to commercially support them, such as a student hub or co-working space. But in the longer term, they could be completely repurposed, renovated and tailored for new uses, such as premium office space, co-working, or research labs. This is addressed in more detail later.
What economic uses would complement the site’s advantages?

- Attracting digital and technology businesses connected to the research activities of the universities across multiple sectors of the economy, which would underpin office uses and leverage university research and technology at the site
- Developing the site as the hub for creative and cultural industries
- A major cultural investment could anchor a number of complementary economic uses including a boutique hotel, retail and commercial activity.

The location of the former RAH – nearby some of Adelaide’s premier universities – is one of the key differentiating factors of the site. As such, any economic use that maximises the benefits from that research is advantageous.

Digital technology is of the sectors identified in Make it Adelaide as a key driver of future economic growth. As we detail in this report, Adelaide already has a number of technology precincts, including some currently under consideration or in development. However, our initial analysis suggests that there is the need for a site which attracts businesses interested in directly collaborating with researchers at the University of Adelaide.

Ubiquitous and high-speed internet will support any potential tenants or start-ups using a fast internet network to transfer data between firms based in Adelaide and overseas. It would also complement future research activities of the adjacent universities. Similarly, the site could act as a hub for the digital creative sector and bring together South Australia’s higher education institutions and digital private sector firms.

We understand that there are a number of partnerships currently under consideration by Government to leverage the former RAH site together with the University of Adelaide, including through establishing the Australian Institute for Machine Learning on the site. Further detailed market sounding, conducted in collaboration with the university sector, is necessary to scope the extent and nature of this opportunity.

A second focus sector identified by Deloitte is the creative industries, with Adelaide and South Australia already performing well, but with plenty of room to grow. This growth could be facilitated at the former RAH site by forming a creative industries cluster. With a landmark cultural asset at its heart, other buildings around site, particularly the heritage buildings, could be quickly repurposed to host artists, makers and start-ups in the creative sector. The former RAH site could become a flexible hub for businesses engaged in complementary industries such as design, digital media and supporting the arts industry. There are also synergies between the creative industries and the digital technology uses referred to earlier.

If the Government separately determined that the earlier criteria for investment were met, a demand driver such as a cultural investment would significantly shape the development at the former RAH. The investment would be a significant use of the site in its own right, and would underpin complementary uses such as a hotel and retail. It would also shape the ‘office’ uses, by making the precinct more attractive to cultural and creative industries, and other services more broadly.
One option for this space that is currently under consideration is Adelaide Contemporary, a new art gallery and multipurpose creative and cultural destination. The site flagged is the easternmost two hectares of the former RAH, adjacent to the Botanic Gardens. This, however, is but one of several options for a cultural investment on the site.

Other options include clustering South Australia’s performing arts institutions under one roof, and tying these in with education and training disciplines through collaboration with the universities and TAFE. Another is to bring together and display the many significant pieces of Aboriginal art, artefacts and the knowledge of indigenous living culture and heritage currently spread across South Australia’s many cultural institutions into one purpose-built facility. There could also be investment in visual art, such as a sculpture park, or an extension of the Botanic Gardens – both of which would attract visitors to the former RAH. Many of these investments are complementary and could sit alongside other creative uses, such as the development of a digital creative hub.

The establishment of a new and significant cultural asset would complement the cultural institutions that already exist along North Terrace – our cultural boulevard. The size and scale of such an asset would also be a key anchor institution on the former RAH site, forming the centrepiece development as part of the former RAH’s unique value proposition. As a result, it could affect the use of other buildings and spaces – with complementary investment and tenancies crucial to ensuring a coherent, productive site.

Making this new cultural asset a destination in its own right is also likely to generate significant new activity on the site and around Adelaide’s East End. This would require new tourism infrastructure in the vicinity. One proposition already under consideration is a new large-scale hotel for the former RAH site, with an expressions of interest process already in progress. Although the feasibility of a new large-scale hotel is subject to specific analysis (which is ongoing) – with consideration of the current Adelaide and Australian hotel market – it is likely that its viability would be reliant on the co-location of a landmark destination, which would act as a new driver of tourism (and therefore hotel) demand in the market.

Bespoke retail and hospitality uses will produce activation at ground level in a targeted series of locations across the site, and will be necessary to support workers and other visitors – regardless of whether a hotel is on the site. Careful curation of the hotel and tenancies will be crucial to ensuring the success of the precinct. As highlighted by the work of Woods Bagot and Right Angle Studio, decisions about the ‘fine grain’ of the precinct’s tenancy mix will be important to its success.

What will the site need to look like to enable the identified economic uses?

- Central to all uses will be developing the **digital infrastructure** and a unique approach to the ‘fabric’ of the site
- The spaces developed will need to be **flexible** and **accommodate collaboration and connection** between researchers and businesses across different sectors
- Significant **adaptive reuse** of buildings would complement the economic uses identified
There are further opportunities to develop **residential uses**, including co-living or short-stay temporary accommodation, but these options need greater development to confirm viability.

Residents, workers and researchers require a functional and liveable site, which attracts commercial activity and ensures ease of connectivity.

The nature of the proposed economic uses at the former RAH will have significant implications for the design of the site, and the shape of its surrounding neighbourhood.

Infrastructure, including digital infrastructure, was identified in *Make it Adelaide* as one of five key drivers underpinning South Australia’s economic and population growth – and it’s something the former RAH needs to get right to ensure its success.

Underpinning the former RAH site’s unique value proposition, as well as many of its potential uses, is digital technology. It is crucial that the site is connected physically through the tram and pedestrian network, as well as digitally using the most advanced technologies such as the Gig City or Ten Gigabit Adelaide initiatives. Investment in digital infrastructure at the site through such an initiative is another way further private-sector investment could be attracted.

Many of the older buildings – particularly, but not entirely limited to, those with heritage features or listing – should be adaptively reused to accommodate small to medium businesses and start-ups which are related to research activities on the site, in both the technology and creative industries. Rather than forming a general co-working space, tenancies should be targeted and aim to attract small to medium businesses and start-ups which are aligned to South Australia’s focus industries and which would benefit from co-location and university research.

There are also buildings on the former RAH site which can be activated in the short term, but may be appropriate to demolish in the longer term. This would free up land for new builds, as well as more open space. New build uses on the site are likely to include: a landmark cultural asset, elements of the hotel development, and high-grade office accommodation for major corporate entities from either the technology or creative sectors. Both new builds and those adaptively reused should be developed such that the spaces are flexible and adaptable to different uses, and encourage collaboration. The site should also be designed with a view to ensure it is functional for workers, researchers, visitors and residents – with the provision of green space and key facilities – in line with the work of Woods Bagot and a key driver identified in *Make it Adelaide*, our liveability.

Connected to the sectors identified for the site is the question of how residential uses would be introduced to the precinct. While the Government has ruled out the private sale of apartments on the site, there is the potential for co-living or medium-term accommodation for international students and visiting researchers, as well as for other workers in the precinct (for example, for workers attached to the technology or creative sector industries). However, these options require detailed assessment in the context of Adelaide’s residential property market.

**Next steps**
Based on the potential industries and uses identified – as well as complementary uses in other industries - Deloitte will subsequently create an Economic Development Strategy, which will build upon the profile of the site and the opportunities identified in the Innovation Framework.

This Strategy will make recommendations as to the best uses of the site, and will be informed by additional market sounding and research.
1 Background

1.1 About the former RAH site and Adelaide’s East End
Nestled in amongst the northeast parklands of Adelaide’s CBD, the former Royal Adelaide Hospital (RAH) site has the potential to link with Adelaide’s East End - home to some of Adelaide’s best cafes, bars and boutiques, as well as many businesses in the creative and fashion sectors.

Fronting onto North Terrace, the former RAH site is adjacent to the campuses of South Australia’s premier universities and cultural institutions – these include the University of Adelaide, the University of South Australia (UniSA), the Art Gallery of South Australia, the South Australian Museum, and the State Library of South Australia. The site is also flanked by the Botanic Gardens, the Adelaide Riverbank Precinct, Botanic Park and Rymill Park. In March of each year, these areas play host to festivals and other events, such as the Adelaide Fringe, WOMADelaide and the Adelaide 500.

The former RAH site itself has a rich historical legacy dating back to 1840. Buildings with heritage Georgian revival architecture from the early 20th century occupy over one hectare of the site. This includes the Sheridan Building, the Women’s Health Centre, the Allied Health Building, the Margaret Graham Building, the McEwin Building and the Bice Building. Most of these heritage-listed buildings are on the south-west of the site and visible from North Terrace.1

1.2 Redeveloping the former RAH site
For 175 years, the RAH was the centre for healthcare in South Australia – attracting a critical mass of social and economic activity in Adelaide’s East End. Following the redevelopment, it has the potential to have a similar – if not greater – gravitational pull for economic and social activity. Thus, it is important that the former RAH redevelopment be viewed as an anchor point in developing an East End neighbourhood, and the influence it will have in shaping the personality of the East End area.

The former RAH redevelopment should build upon the strengths which already surround the site, rather than try to compete against the growth of other industry sectors in locations across Adelaide. The redevelopment should not try to be a microcosm of Adelaide, but rather contribute to the broader ‘fabric’ of Adelaide.

The redevelopment must therefore have a clarity of purpose from the outset. Clearly articulating the vision of the site – what it stands for and how it sits within its surrounds – will be beneficial for attracting stakeholders, private sector investment, and visitors to the site.

1.2.1 Key objectives of the redevelopment
Renewal SA is a South Australian Government agency tasked with managing and facilitating urban renewal through government land holdings. Through the Riverbank Authority, it is responsible for coordinating and promoting Adelaide’s Riverbank precinct. Renewal SA is also charged with

the planning, demolition, reconstruction, management and activation of the former RAH site. It has determined the following development objectives for the former RAH:

According to Renewal SA, the former RAH redevelopment must align to the following redevelopment objectives:

**A world class neighbourhood** Social and community value for South Australians, innovative and world-class buildings and public spaces, significant tourist or cultural attractor.

**An economic focus** Advancing South Australia’s economic priorities, creating new employment, delivering a viable, economically integrated neighbourhood. Lease tenure of no longer than 99 years.

**Activated through a mix of uses** An optimal mix of cultural, accommodation, commercial and recreational uses. Investment in tourism and cultural attractors.

**Connected** Connections to Adelaide’s East End, the Riverbank’s Education and Cultural Precinct and the Botanic Gardens. 70 per cent of the site open to the people of South Australia for public use. 2 hectares integrated with the Botanic Garden.

**Sustainable** Carbon neutral, sustainable design, reuse of built form, health places and people. Retention and adaptive reuse of heritage buildings.

1.3 **This project**

Renewal SA engaged Deloitte to develop an Innovation Framework and an Economic Development Strategy for the redevelopment of the former RAH site. This report represents the first phase of Deloitte’s engagement, the Innovation Framework. This report uses prior analysis of the site performed by Woods Bagot, MacroPlan and SGS.

This Innovation Framework:

- Describes strategic sectors for the former RAH site, in line with South Australia’s comparative advantages and the *Make it Adelaide* framework
- Identifies opportunities within those sectors for further analysis
- Contributes to the unique value proposition of the site.

Deloitte will subsequently create an Economic Development Strategy, which will build upon the profile of the site and the opportunities identified in the Innovation Framework. This Strategy will make recommendations as to the best uses of the site, and will be informed by additional market sounding and research.

This document is structured as follows:

- **Chapter 2** outlines Deloitte’s *Make it Adelaide* framework and how it has been applied to consider the future potential of the former RAH site.
- **Chapters 3, 4, 5 and 6** focus on each of South Australia’s growth industries which we have determined are most suited to the former RAH site.
- **Chapters 7 and 8** consider other growth industries which, although significant, may be less suitable for the former RAH site, except as adjacent to other industries.
It is noted that there are a number of threshold questions for policymakers about investment into a major cultural project on the former RAH site, as well as other projects under consideration. Our work has not evaluated this site compared to others, nor has it considered the value for money for taxpayers from the considerable investment which would be necessary to underpin such a project.

1.4 The current investment pipeline
Before considering those sectors and projects which may be suitable for the former RAH site, it is first useful to understand the current investment pipeline in the surrounding area. There is currently a high number of construction projects underway in the Adelaide CBD, with a number of projects in the East End. Table 1.1 lists identified projects valued at $20 million or more.

Table 1.1: Overview of large current capital investment projects in Adelaide

<table>
<thead>
<tr>
<th>Development</th>
<th>Description</th>
<th>Status</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>East End</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-Bahn Upgrade</td>
<td>Underground tunnel extending busway to Grenfell St</td>
<td>Recently completed</td>
<td>End 2017</td>
</tr>
<tr>
<td>ADELink Tram Extension Stage 1</td>
<td>Extension of tramline to East Terrace along North Terrace</td>
<td>Under construction</td>
<td>March 2018</td>
</tr>
<tr>
<td>East End Living</td>
<td>16-storey apartment building</td>
<td>Under construction</td>
<td>2019</td>
</tr>
<tr>
<td>Adelaide Botanic High School</td>
<td>1250-student places focusing on STEM</td>
<td>Under construction</td>
<td>Early 2019</td>
</tr>
<tr>
<td>Frome Central – Tower One</td>
<td>4-star hotel, 88 residential apartments, 400 lot car park</td>
<td>Under construction</td>
<td>2019</td>
</tr>
<tr>
<td>(Adelaidean)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frome Central – Tower Two</td>
<td>268-bed student accommodation</td>
<td>Under construction</td>
<td>2018</td>
</tr>
<tr>
<td>Adelaide Casino</td>
<td>New gaming facilities, sports bars, car spaces</td>
<td>Committed</td>
<td>Early 2019</td>
</tr>
<tr>
<td>Monument</td>
<td>20-storey apartment complex with 74 apartments</td>
<td>Committed</td>
<td>2020</td>
</tr>
<tr>
<td>Student accommodation</td>
<td>34-storey student accommodation complex with 680 beds</td>
<td>Under consideration</td>
<td>2019</td>
</tr>
<tr>
<td><strong>Outside the East End</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bohem</td>
<td>21-storey apartment complex with 223 apartments</td>
<td>Recently completed</td>
<td>End 2017</td>
</tr>
<tr>
<td>Uniting the City Retirement</td>
<td>20-storey mixed-use retirement living</td>
<td>Under construction</td>
<td>2019</td>
</tr>
<tr>
<td>Living</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Franklin</td>
<td>271 residential apartments and commercial space</td>
<td>Under construction</td>
<td>Early 2019</td>
</tr>
<tr>
<td>Project Name</td>
<td>Description</td>
<td>Status</td>
<td>Completion Date</td>
</tr>
<tr>
<td>----------------------------------</td>
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</tr>
<tr>
<td>Park Square</td>
<td>18 storey apartments complex with 141 apartments</td>
<td>Under construction</td>
<td>Late 2019</td>
</tr>
<tr>
<td>Realm Adelaide</td>
<td>40-storey apartment complex with 320 apartments</td>
<td>Committed</td>
<td>2020</td>
</tr>
<tr>
<td>Echelon Apartments</td>
<td>Commercial space and 141 apartments</td>
<td>Committed</td>
<td>2019</td>
</tr>
<tr>
<td>Luminesque Sofitel</td>
<td>32-storey hotel and apartments</td>
<td>Committed</td>
<td>2019</td>
</tr>
<tr>
<td>Rockford Hotel redevelopment</td>
<td>Refurbishment and additional 259 rooms</td>
<td>Under consideration</td>
<td></td>
</tr>
<tr>
<td>185 Vic Square</td>
<td>Apartments, retail space, 96 lot car park</td>
<td>Under consideration</td>
<td>Late 2019</td>
</tr>
<tr>
<td>Hummingbird Kent Town</td>
<td>Boutique supermarket, 40-bed hotel</td>
<td>Under consideration</td>
<td>2019</td>
</tr>
<tr>
<td>Tribe Adelaide</td>
<td>17-storey hotel with 240 rooms</td>
<td>Under consideration</td>
<td>2019</td>
</tr>
<tr>
<td>Hutt St Maras development</td>
<td>16-storey building with 38 apartments</td>
<td>Under consideration</td>
<td>Mid-2020</td>
</tr>
</tbody>
</table>

Source: Deloitte Access Economics Investment Monitor

The O-Bahn upgrade was completed in 2017, while the ADELink Tram Extension is due for completion in March. Both infrastructure projects will improve the East End’s accessibility. The O-Bahn upgrade links the existing O-Bahn exit in Gilberton to the priority bus lanes in Grenfell St. The upgrade has the potential to better connect individuals living in north-east Adelaide to the former RAH precinct, while the tramline extension will connect the north-west and south-west suburbs of the city to the East End without charge – with further connectivity if the full ADELink proposal goes ahead.
2 Make it Adelaide

In our Make it Adelaide framework, Deloitte identified eight sectors which will drive South Australia’s economic growth. These sectors are those where South Australia has a competitive advantage, and where there are opportunities to take advantage of global growth. There is also a high degree of overlap between these sectors and government policy, such as the ten economic priorities. From these sectors, we further identify the activities best suited for the former RAH site based on the criteria that the site:

- maximise its economic contribution through the development of industries where we have an advantage
- address genuine unmet demand existing in the market
- contribute to shifting the perception of South Australia as a destination for people, and for investment.

This chapter provides an overview of the Make it Adelaide framework.

2.1 Our burning platform

The South Australian economy has been in a state of transition over the past few decades. While it's not all bad news – unemployment rates are trending down, while economic growth is trending up – Adelaide hasn’t transitioned to a services-driven economy as successfully as other Australian and international cities. As a result, South Australia has struggled to retain and attract young people, with many of the state’s brightest seeking opportunities elsewhere. There are fewer young people living in South Australia today compared to the mid-1980s, even though the population has increased by over 300,000 people.

2.2 Driving growth in South Australia

In Make it Adelaide, Deloitte investigated how we could drive economic and population growth in South Australia, with a view to increase South Australia’s population from its current 1.7 million people to 2 million by 2027. Importantly, this plan for growth is driven by private sector investment, with the public sector the supporting act – not the star.

Make it Adelaide identified eight key sectors for South Australia to focus on, and the key drivers that we need to get right to support population and economic growth.

2.2.1 Our sectors

Deloitte identified eight growth sectors for South Australia. The first four are those where global growth is strong, and where both South Australia and Australia have an advantage over our competitors:

- International education
- Energy and gas
- Tourism
- Agribusiness.

The other four sectors are specific to South Australia, which build on our existing strengths to grow our share in services sectors. These sectors are those where the state is already performing well, but we still have room to grow:
- Defence industries
- Professional and information technology services (digital technology)
- Health and medical industries
- Creative industries.

These sectors provide the structure for the Innovation Framework – by considering those sectors where South Australia and Adelaide show strong potential, we can consider how the former RAH site may be well suited to driving growth across some or all of these sectors.

2.2.2 The drivers of growth

Success won’t come from a focus on sectors alone. Deloitte also considered the areas or ‘drivers’ we need to get right to enable these sectors to grow, while also supporting population growth.

Infrastructure

Great infrastructure is the foundation of any city. Both physical and digital infrastructure are required to connect Adelaide (and the former RAH site) to the surrounding areas, to the rest of Australia and across the world. Digital connectivity will be particularly important for the former RAH, which is centrally located but currently not connected to high-speed internet or data transfer services. Modern, high-quality infrastructure enables businesses – especially those in technology industries – to collaborate and reach out to new consumers.

Liveability

Adelaide’s already known as a liveable city, but it’s important to ensure we both maintain that liveability and use it to attract new residents to the city. In our report, we discuss how to foster liveability through a city of villages design, with a focus on connectivity across those villages and a cosmopolitan lifestyle.

Risk-taking

South Australia has a long history of social, political and industrial innovation, however we’re now known as the city that ‘plays it safe’ and harbours conservative attitudes. We need to do better at backing innovation and taking risks to drive entrepreneurship and business growth in Adelaide.

Workforce

Adelaide’s population needs to grow, but so does its workforce – and in a way that suits the key sectors of our economy and future technologies. There are many parts to this story – from retaining and attracting young talent, to adapting our education system and preparing for the jobs of the future.

Perception

There are many negative attitudes that pervade the way South Australians think about themselves – that we live in an old country town, and that you need to leave in order to be successful. But we need to change our perceptions before changing the perceptions of others around the world. Adelaide is larger than vibrant cities like Oslo, Toulouse and New Orleans – we have the potential to be a successful mid-sized city, and need authentic conversations led by the private sector to get there.

2.3 Applying Make it Adelaide to the former RAH redevelopment

2.3.1 Opportunities for the former RAH

While Make it Adelaide identified eight key growth industries in which South Australia has a comparative advantage, there are four growth industries
which align particularly well with the former RAH site based on its location and existing built form:

- digital technology
- creative industries
- international education
- tourism.

The final report in the Make it Adelaide also outlines a series of 25 opportunities to develop the state’s economy across all eight sectors and encourage population growth. Many of the opportunities identified are directly related or well suited to the former RAH redevelopment, and are discussed further in the following chapters.

2.3.2 Opportunities for elsewhere
Some of the sectors identified in Make it Adelaide are less suitable for the former RAH neighbourhood, and may be better pursued elsewhere. Clearly, the opportunities for agribusiness and energy and gas are more likely in regional areas. For health and medical industries and the defence sector, we consider that the former RAH could potentially host activities relating to technology and innovation, and those linked to the research activities of the nearby universities – but note that both sectors are already well established in other parts of Adelaide, and it’s imperative for the success of the site that existing operations aren’t replicated. Chapters 7 and 8 discuss these sectors in more detail.
3 Digital technology and innovation

3.1 The importance of digital technology and innovation
Digital technology presents one of the greatest opportunities for the former RAH neighbourhood – both as an industry to develop, but also as the underlying infrastructure that supports other activities at the site.

Digital technology and innovation are often considered together due to the inherent linkages between the two. Advances in technology support innovation across many industries, while the technology industry itself moves ahead in leaps and bounds. But it’s important to remember that not all innovation requires technology. A start-up pursuing a new idea might not require technology – though of course, many do, which is why the two concepts are considered as one in this chapter.

Developing and applying new technologies represents one of the most significant opportunities for the former RAH site. The close proximity of the University of Adelaide and its research institutions could lead to new collaborations, commercialisation of research and industry-led development. Indeed, establishing the Australian Institute of Machine Learning on the site, together with the University of Adelaide, will drive research activity and new applications of that research. PwC estimates that AI could contribute up to US$15.7 trillion to the global economy in 2030, with around 40 per cent of that effect due to increased productivity. AlphaBeta also estimates that if Australia were to accelerate its automation uptake, the economy stands to gain up to $1 trillion over 15 years. The Australian Institute of Machine Learning can drive research and its application in local companies, and its location at the former RAH means that there are further opportunities for industry to benefit.

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**What is digital technology?**

Digital technology is a broad term that encompasses many emerging fields. We focus on four key technologies due to their prominence and their relevance to research centres in Adelaide. These are **artificial intelligence**, **machine learning**, **big data** and the **Internet of Things**.

**Artificial intelligence (AI)** is a broad field of computer science that seeks to emulate the cognitive ability of humans through devices and programs. Artificial intelligence provides the potential to assist or automate many processes that are currently completed by workers, enabling us to be more productive by focusing our energies on tasks that require more advanced cognitive abilities. Applications of AI can also improve our lifestyles, such as through autonomous vehicles.

**Machine learning** refers to the ability of computers to learn and improve their performance based on data – in essence, an application of AI. Rather than prescribing particular actions or outcomes in a program, with machine learning, the program is able to 'learn' based on access to data and feedback. Applications of machine learning include speech or image recognition and medical diagnosis.

**Big data** refers to the availability of increasingly large datasets generated through our daily activities, and the analytical techniques and programs used to assess them. Big data underpins machine learning, but is also significant itself – with new insights generated and discovered, which can inform better decision-making.

**Ubiquitous computing** is a concept in which computing ability is installed into everyday objects (such as a fridge) – with that ability improving the functionality of the object. Related to ubiquitous computing is the **Internet of Things**, where everyday objects also have the ability to communicate through the internet. The efficacy of these objects is improved through that communication, while other technologies – such as smart sensors – also contribute to that functionality.

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**3.2 Suitability**

There are a number of factors which suggest that the former RAH site could be well suited to hosting a digital and technology cluster.

It is located adjacent to the University of Adelaide, which has a number of research institutes and centres dedicated to technology and its applications. Co-location of relevant businesses could allow for collaboration between researchers and industry. This leads to benefits for both industry (which can apply research to develop new products) and universities (as research can be commercialised at a greater rate) – as well as allowing for the cross-pollination of ideas and requirements between industry and researchers.

The footprint of the site could also be easily adapted to support different tenants and their needs. Many of the older buildings could be adaptively reused to accommodate small to medium businesses. These businesses should be those that would benefit from co-located research activities – to ensure that collaboration between researchers and industry is maximised. The former RAH site should also be designed to include spaces that are required by researchers and entrepreneurs, such as adequate meeting space or labs, as well as the right amenities, including retail and hospitality uses.

Connecting the former RAH neighbourhood to a high-speed internet network (such as GigCity) or an ultrafast data transfer network (such as TenGigabit Adelaide) will also be crucial in ensuring the suitability of the
site. Both researchers and industry will benefit from – and demand – these services. Such services, combined with the technology cluster as a whole, may also work to attract new activities to the site. For example, there is the potential to form a hub for the digital creative sector, and bring together South Australia’s higher education institutions and private sector firms in digital media.

How can we foster innovation?

Innovation is a term that refers to creating something new or an idea or concept that can be developed into a business idea. There are a number of ways that governments and the private sector can foster and support innovation – including innovation precincts, research commercialisation, startup incubators and startup hubs. The explanations following are based on information provided by TechInSA.

An innovation precinct refers to a centre that has a focus on research and in particular, the translation of that research into new products, techniques and businesses. These precincts tend to focus on the very early stages of concept development, such as a business building its first prototype or finding first customers. In addition to the co-location of university researchers (or other researchers, such as for companies), an innovation precinct may also provide support services such as pre-incubation programs, which offer exposure to investors and the industry.

Research commercialisation is a concept in which universities partner with businesses in the early stages of development to bring a product or service to the market. Universities may participate in the process in a number of ways, such as filing for patent protection, undertaking research and development, writing business strategies and answering technical queries. Research commercialisation may occur when universities develop a product for a specific industry with the intent to commercialise, or commercialisation may be a flow-on benefit of existing research.

A startup incubator is usually referred to as ‘business school’, which specialises in developing and scaling early-stage businesses. They often offer short training programs for entrepreneurs to develop their business ideas. An incubator may also provide assistance with product development and design, provide access to capital, organise networking events with investors and other businesses, or offer workshops. Incubator membership is for a temporary period and usually ends when the entrepreneur is ready to pitch their startup to investors.

A startup hub is a space which co-locates different services for startups, including workspaces, incubator or accelerator programs, event and meeting rooms, and venture capital or angel offices. The purpose of a startup hub is to create a pocket of startup density, where different participants in the process (such as founders, investors and advisors) can connect. Tenancies are usually for a short period, while the startups based in hubs are usually more developed than those recently spun-out from universities, or are private sector companies.

3.3 Opportunities

The opportunity to develop a technology cluster or precinct could meet an important gap in the current market. Adelaide currently has four existing technology precincts:

- Technology Park, Mawson Lakes: focused on defence and aerospace, health, training, engineering, advanced electronics and information communication technology. Key tenants include Codan, Lockheed Martin and Saab Australia.
• Techport, Osborne: focused on naval shipbuilding, with tenants including ASC, Raytheon and Babcock. It is the build location for the Future Frigates project.
• Tonsley Innovation District, Clovelly Park: focused on health technologies, cleantech and renewable energy, software and simulation, and mining and energy services. Tenants include Flinders University’s New Venture Institute (which assists with research commercialisation), SAGE Automation and Siemens.
• Thebarton Technology Precinct: Supported by TechInSA, the Thebarton Precinct hosts the TechInSA Business Incubator, the TechInSA Tech Hub, and a number of health technology companies.

Importantly, a technology cluster located at the former RAH site could be differentiated from other technology precincts across Adelaide, as well as existing startup hubs. It could be more akin to an ‘innovation precinct’ – which focuses on research translation with an incubator program, and targets businesses of all sizes, from global corporates to startups, which are looking to partner with universities. Given that one of the former RAH’s greatest assets is its proximity to some of Adelaide’s leading universities, the benefits from this proximity should be maximised. It is important that the cluster is accessible to existing businesses – particularly small and medium businesses – wanting to ‘scale up’ through leveraging the universities’ capabilities.

Noticeably, none of the four major precincts across Adelaide are located in the CBD – which provides access to a number of centrally-located businesses. A CBD location would also be favourable with the connection of the precinct to the State Government’s Gig City initiative and the City of Adelaide’s Ten Gigabit City initiative. The accessible location of the precinct, combined with the opportunity to collaborate with universities nearby, could attract global technology businesses to anchor the cluster. These businesses could share knowledge with smaller enterprises, in addition to leveraging and commercialising research.

3.3.1 Current status of the sector around Adelaide and the East End

The following sections outline the current status of the digital technology and innovation sectors around Adelaide’s CBD and the East End. A complete list of activities is found in Appendix A.

University research and other activities

• The University of Adelaide hosts the Machine Learning Group, which focuses on big data and deep learning. There are also machine learning and big data applications researched in the University of Adelaide’s Australian Centre for Visual Technologies.
• The Data to Decisions Cooperative Research Centre in Kent Town was established through an Australian Government grant. Its participants include state and federal departments, industry and universities across Australia.

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• The Auto-ID Lab is the University of Adelaide’s research group for ubiquitous computing, and is part of the global Auto-ID Labs network.7
• The announced Australian Institute of Machine Learning will be based at the former RAH site and build on the University of Adelaide’s current research initiatives.

Incubators and co-working
• Several incubator and co-working spaces exist across Adelaide. Most have been curated by large technology companies, non-profits and government organisations. A full list of incubators and co-working spaces in Adelaide is included in Appendix B.
• One of Adelaide’s prominent incubators is the Microsoft Innovation Centre South Australia, which aims to nurture local talent by supporting startups, entrepreneurs and students to drive growth of small to medium businesses. It has engaged with 120 startups, created more than 60 jobs and reached over 3,500 people in its two years of operation.8
• Not all incubators have been successful. Elevate61, the Hills Innovation Centre, SouthStart, That Space, and Sass Place are incubators that have shut down in the past few years.

Digital start-up programs
• Several programs are available to assist startups in Adelaide. These include the Entrepreneurs Organisation, LESANZ, eChallenge, Student to Entrepreneur Weekend, Centre for Business Growth and Business SA Entrepreneurs’ Programme.

Funding support for digital technology
• Traditionally, Australian entrepreneurs have had limited avenues to secure early stage funding. Several options now exist in South Australia as well as nationally. While many sources are government-backed, there are a number of private and non-profit sources.
• Publically funded sources include the South Australian Venture Capital Fund, the Incubator Support program, the Accelerating Commercialisation program, the South Australian Early Commercialisation Fund and the Innovation Voucher Program.

Entrepreneurship programs
• Several entrepreneurship programs are offered in Adelaide. These are predominantly provided by universities including Flinders University, UniSA, the University of Adelaide and Torrens University. These courses are typically full programs of study, ranging in length up to two years. However, individual courses are also available for enrolment as part of other degree programs.

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4 Creative industries

4.1 The importance of creative industries to South Australia
Creative industries are a comparative advantage for South Australia. The former RAH redevelopment presents a once in a generation opportunity to establish a new cultural asset or to cluster and house South Australia’s performing arts organisations and training institutions. This would complement the cultural assets that already exist along North Terrace – our cultural boulevard. An investment in cultural capital on the former RAH site would enhance South Australia’s reputation as a creative state, and further contribute to the arts and festival scene, and associated tourism, around the East End.

Historically, the number plates of South Australian vehicles bore the slogan *The Festival State* or *The Creative State*. While this no longer occurs today, it is arguable that festivals – and the creative industries more broadly – remain part of South Australia’s identity. In 2016, the creative industries employed around 20,000 people, while in 2013-14, 87 per cent of South Australians attended cultural venues and events. South Australia has a higher attendance rate to performing arts events compared to the Australian average, as shown in Chart 4.1.

Chart 4.1: Attendance rates at selected cultural venues and events, South Australia and Australia, 2013-14

Source: Australian Bureau of Statistics

Adelaide is known for its festivals, with the largest open access arts festival in the southern hemisphere, the well-recognised Adelaide Festival and Adelaide Writers’ Week, and Australia’s only World of Music, Arts and Dance (WOMAD) festival. Combined with smaller events, South Australia’s festivals

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10 Australian Bureau of Statistics, *Attendance at Selected Cultural Venues and Events, Australia*, 2013-14, cat. no. 4114.0 (18 February 2015).

11 Ibid.
account for over 50 per cent of nationwide attendance.\textsuperscript{12} The Adelaide Fringe Festival attracted 2.5 million visits in 2017, with over 650,000 tickets sold and 18,655 interstate and international visitors – an increase of 38 per cent compared to 2016.\textsuperscript{13}

However, our creative potential goes beyond Mad March – with arts and recreation services contributing a total of $682 million to the South Australian economy in 2016-17.\textsuperscript{14} While this is small in the context of the economy overall, it shows that we have room to grow. The creative and cultural industries are also important from a tourism perspective, with around 220,000 interstate visitors attending festivals or other cultural events (around 4 per cent of all visitors), and over 520,000 (around 9 per cent) visiting museums or art galleries in the year ending September 2017.\textsuperscript{15} Similarly, almost 50 per cent of international visitors saw museums or art galleries on their trips to South Australia, with around 23 per cent attending festivals or other cultural events.\textsuperscript{16}

### What is meant by creative industries?

For the purposes of this report, reference to the creative and cultural industries is consistent with definitions used by the Australian Bureau of Statistics and includes: museums, environmental heritage, performing arts, electronic or digital media, film, music composition and publishing, libraries and archives, literature and print media, design, broadcasting, visual arts and crafts, fashion, other cultural goods, manufacturing and sales, and supporting activities.\textsuperscript{17}

This definition centres on the fact that human creativity is a ‘significant output’ and may be related to the creation, production, manufacture and distribution of creative goods and services.\textsuperscript{18}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{creative_industries_framework.png}
\caption{Australian Bureau of Statistics’ creative industries definition framework}
\end{figure}

\textbf{Source: Australian Bureau of Statistics}\textsuperscript{19}


\textsuperscript{14} Australian Bureau of Statistics, \textit{Australian National Accounts: State Accounts, 2016-17}, cat. no. 5220.0 (17 November 2017).


\textsuperscript{18} Australian Bureau of Statistics, \textit{Australian National Accounts: Cultural and Creative Activity Satellite Accounts, Experimental, 2008-09}, cat. no. 5271.0 (10 February 2014).

\textsuperscript{19} Ibid.
Under this definition, the creative and cultural economy includes three types of workers, which ensures that all creative outputs are accounted for:

- Specialist creatives (e.g. an artist)
- Support workers (e.g. a finance worker at an architecture firm)
- Embedded creatives (e.g. a website designer at an accounting firm).

4.2 Suitability of the former RAH site

Already Adelaide’s premier cultural precinct and grandest mile, North Terrace is home to State Parliament, the Convention Centre, the South Australian Museum, the State Library and the Art Gallery of South Australia, as well as Elder Hall, Bonython Hall and the Barr-Smith Library located at the University of Adelaide. Following the completion of the tramline extension in March, the former RAH will become increasingly connected to these sites, in addition to the rest of the CBD.

A new asset, institution or creative cluster on the former RAH site would further cement North Terrace as a cultural precinct, building on its current brand. Further cultural capital investment along North Terrace would also be well suited to Adelaide’s East End. The East End is already a hub of creative activity, with some of the best cultural institutions, fashion boutiques and cinemas located in the neighbourhood. A preliminary stocktake of the creative institutions, events and organisations that are located within Adelaide’s CBD and the East End are detailed in Appendix B, and include:

- Ebenezer Place is home to some of Adelaide’s best boutiques and cafes
- The pubs on and around Rundle Street are a favourite for live and local music
- In March each year, the East End is the hub of Fringe activity, with the Garden of Unearthly Delights and Gluttony taking up residence in the eastern parklands.

The North Terrace cultural boulevard

The South Australian Museum holds collections of national and international significance together, with the largest collection of Aboriginal artefacts in Australia. In 2016-17, over 770,000 people visited the museum. In 2016-17, around 62 per cent of visitors were from South Australia, 20 per cent from interstate and 18 percent international visitors, based on survey results. Visitors from Asia represented 30 per cent of the museum’s international visitors.

The Art Gallery of South Australia is located at the heart of the cultural boulevard and includes approximately 42,000 works of art and design from Australia, Europe, North America and Asia. It is a major attraction for interstate and international visitors. In 2015-16 the South Australian Art Gallery

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20 Ibid, citing academic literature.
22 Ibid.
attracted over 788,453 visitors, an increase of 31 per cent from 2014-15. Over the next five years, the Art Gallery plans to advocate for support of the Gallery’s expansion and redevelopment.

The State Library of South Australia is the largest public reference library in the state and focuses on general reference material for information and research purposes. As the State Library has an online presence, it is accessible to a large and broad range of people. The State Library has plans to increase their digital presence over the next few years.

The Botanic Gardens of South Australia aim to build an understanding and appreciation of the botanical world and maintain a strong presence in Adelaide’s education sector. Each year, over 2.6 million people visit the gardens, including approximately 25,000 school students. Over the next five years, the Board of the Botanic Gardens and State Herbarium plan to focus on the Mount Lofty and Wittunga Botanic Gardens to enrich visitor opportunities, in addition to developing each of the three gardens as ‘destination gardens’ for all, deepening their science applications, and widening the reach of learning programmes.

Ayers House is named after its original owner Sir Henry Ayers, and is an example of South Australia’s colonial architecture. The museum allows visitors to experience what it was like to live in the 19th century. In 2015-16, over 38,000 people visited the museum, including interstate and international tourists. Going forward, the National Trust of South Australia aim to expand Ayers House Museum operations by increasing its digital presence and attracting more unique exhibitions over the next few years.

4.3 Opportunities
While North Terrace is already home to many of South Australia’s premier cultural institutions, its position could be strengthened through the former RAH site. A range of opportunities exist given the current gaps in the market. Considerable further research would need to be done to confirm these opportunities, as only very limited market sounding has taken place so far. Many opportunities are closely related to tourism, and as such, are further considered in Chapter 6.

One such gap in the market is around the performing arts. Currently, South Australia’s premier music and performing arts companies are scattered across Adelaide. The former RAH redevelopment provides an opportunity to

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25 Ibid.
cluster and house these companies under one roof. There is also the potential to cluster the administration arms of our cultural institutions – thereby generating potential efficiencies as well as cross-collaboration.

Clustering Adelaide’s performing arts companies and other cultural institutions may allow for further development of education and training programs in these disciplines. It could also be the impetus for greater collaboration between South Australia’s universities and TAFE across disciplines and with these cultural institutions – such as the Conservatorium of Music at the University of Adelaide, or the drama and acting program at Flinders University.

The addition of co-working spaces near a creative cluster could provide further benefits. These are spaces where creative professionals and businesses can work together and closely alongside Adelaide’s premier cultural institutions. A targeted approach could ensure that this space is consistent with the other objectives of the site – for example, if digital technology is a focus, then this space could support creative workers in adjacent sectors, such as gaming or film. There are currently at least nine creative co-working spaces in the CBD and North Adelaide (see Appendix B). As such, it would be important to focus any co-working space on different areas, although the co-location of other major cultural institutions and universities would be a point of difference.

There is also a significant opportunity surrounding Aboriginal art and culture. The South Australian Museum has the largest collection of Aboriginal artefacts in Australia, while both Tandanya and the Art Gallery have significant collections of Aboriginal art. The former RAH site could be a prime location to house an integrated indigenous cultural offering, building on the success of events such as the Art Gallery’s Tarnanthi. Any institution or offering would need to be carefully designed in collaboration with Aboriginal and Torres Strait Islander peoples.

A related opportunity exists in the Adelaide Contemporary proposal. Only 1 per cent of the Art Gallery’s 4,000 contemporary works are displayed in the current gallery.31 The proposed Art Gallery would display these contemporary works, as well as enabling full access to the Art Gallery’s entire collection for the first time.32 There is currently an international design competition underway to find a design team for the proposed project. Other public art projects could also generate visitation to the site, such as a sculpture park, while the extension of the Botanic Gardens would represent an important upgrade to one of Adelaide’s most popular cultural attractions.

Overall, there are a number of opportunities related to the creative industries to explore for the former RAH site. The creative industries also have the potential to generate spillover effects, such as improving South Australia’s brand value interstate and overseas, leading to subsequent tourism benefits. The possible opportunities for tourism and the former RAH site are explored in Chapter 6.

5 International education

5.1 The importance of international education
International education is South Australia’s largest services export. In 2016-17, international students studying at South Australia’s educational institutions contributed $1,468 million in export revenue to the state’s economy. Given that the former RAH site is adjacent to the campuses of two universities – the University of Adelaide and UniSA – as well as a new secondary school, there are opportunities for the site to leverage this proximity and contribute further to the growth of South Australia’s education sector.

What is international education?
International education and training can consist of both:

- Onshore international students studying at Australian educational institutions in Australia, on student visas
- Offshore international students studying at Australian educational institutions overseas.

There are five key sub-sectors, including:

- Higher education
- Vocational education and training (VET)
- Schools
- English Language Intensive Courses for Overseas Students (ELICOS)
- Non-award and other programs.

5.1.1 Current snapshot of the international education sector
In November 2017, there were 35,719 international student enrolments in South Australia. Since November 2005, international student enrolments have almost doubled. All sub-sectors have grown in enrolments since 2005 (see Chart 5.1). Higher education is the largest sub-sector overall, although is growing slower than the national average. VET enrolments have seen the fastest rate of growth since 2015, despite a five-year period of persistent decline in enrolments.

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Enrolments declined across all sub-sectors in 2010 due to a combination of domestic and international factors, including changing regulations, damaging incidents to Australia's reputation as a safe study destination, the GFC, and a strong Australian dollar increasing the price of study.\(^{36}\)

Increasing enrolments in higher education led the recovery of the sector since 2013. Enrolments in ELICOS and schools have almost reached the peaks of 2009, while VET enrolments are yet to recover, currently standing at around 70 per cent of 2010 enrolments. Non-award programs have also become relatively more popular, with enrolments peaking in 2016.\(^{37}\)

The majority of South Australia’s international education enrolments are students from only two countries of origin: China and India. As at November 2017, students from China represented 43 per cent of the state’s enrolments, while students from India comprised 11 per cent. Around 5 per cent of enrolments are students from Malaysia and Vietnam. Enrolment patterns for commencements in the year to November 2017 are similar; however, there is a range of more diverse nationalities.\(^{38}\)

The University of Adelaide and UniSA are the most popular choices for onshore international students, while Flinders University, private universities and non-university higher education institutions are attended by relatively more offshore students (see Table 5.1). Within the private university and non-university higher education institution category, most international students enrol at the Australian Institute of Business and the South Australian Institute of Business and Technology, which acts as a pathway into UniSA. In the schools sector, students’ choices of institutions

\(^{35}\) Ibid.  
\(^{38}\) Ibid.
are evenly distributed across Adelaide. There is a slightly greater tendency for international students to enrol at schools in the CBD, inner eastern and southern suburbs.\textsuperscript{39}

Table 5.1: South Australia’s international student higher education enrolments by institution, 2016

<table>
<thead>
<tr>
<th>Institution</th>
<th>Onshore enrolments</th>
<th>Offshore enrolments</th>
<th>Total enrolments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flinders University</td>
<td>2,935</td>
<td>1,637</td>
<td>4,572</td>
</tr>
<tr>
<td>University of Adelaide</td>
<td>6,695</td>
<td>663</td>
<td>7,358</td>
</tr>
<tr>
<td>Torrens University</td>
<td>2,589</td>
<td>264</td>
<td>2,853</td>
</tr>
<tr>
<td>UniSA</td>
<td>5,104</td>
<td>575</td>
<td>5,679</td>
</tr>
<tr>
<td>Private universities and non-university higher education institutions</td>
<td>3,449</td>
<td>2,766</td>
<td>6,215</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20,772</strong></td>
<td><strong>5,905</strong></td>
<td><strong>26,677</strong></td>
</tr>
</tbody>
</table>

Source: Department of Education and Training\textsuperscript{40}

Most international student enrolments are concentrated in a small range of fields of study. At a bachelor level, these are management and commerce, health, and engineering. At the non-research postgraduate level, nearly two-thirds of enrolments are in management and commerce, with society and culture, engineering, and education comprising the majority of the remainder. At the research-based postgraduate level, enrolments are spread across a number of broad fields of study.

Further data as to South Australia’s share of the international student market is contained in Appendix C.

5.1.2 The economic benefits of international students to South Australia

In 2016-17, international students studying at South Australia’s educational institutions represented $1,468 million in export revenue for South Australia – the state’s largest services export. In 2006-07, this figure was only $663 million.\textsuperscript{41}

In 2016, Deloitte Access Economics estimated that the international education and training sector (including onshore international students and the activities of visiting friends and relatives) contributed $954 million to South Australia’s economy in 2015, and supported 7,536 full-time equivalent (FTE) jobs. Onshore international students contributed a total of $950 million to the state’s economy. Visiting friends and relatives – whose primary purpose of coming to South Australia was to visit an international student – contributed a further $3.7 million and 48 FTEs to the economy.

Due to different student spending profiles and course lengths across sub-sectors, the economic contribution per student varies. Higher education

\textsuperscript{39} Australian Bureau of Statistics, \textit{Schools, Australia, 2016}, cat. no. 4221.0 (2 February 2017).
\textsuperscript{41} Australian Bureau of Statistics, \textit{International Trade: Supplementary Information, Financial Year, 2016-17}, cat. no. 5368.0.55.003 (24 November 2017).
enrolments contribute the most per student, while ELICOS enrolments contribute the least, as shown in Table 5.2.

Table 5.2: Economic contribution of one onshore international student enrolment by sub-sector, 2015

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>Total value added per student</th>
<th>Full-time equivalent jobs created per student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher education</td>
<td>$43,700</td>
<td>0.33</td>
</tr>
<tr>
<td>Schools</td>
<td>$33,200</td>
<td>0.32</td>
</tr>
<tr>
<td>VET</td>
<td>$16,800</td>
<td>0.13</td>
</tr>
<tr>
<td>ELICOS</td>
<td>$6,000</td>
<td>0.08</td>
</tr>
</tbody>
</table>

Source: Deloitte Access Economics

5.2 Suitability of the former RAH

Immediately adjacent to the University of Adelaide and UniSA, the former RAH site is uniquely placed to both complement and further leverage the research and teaching activities of two world-class institutions. The buildings on the former RAH site provide both universities – as well as those located in other parts of Adelaide – the potential to expand their campuses, increase their research activities and improve student amenity through the development of new social spaces, student services, and accommodation. However, the extent and nature of any university involvement should be targeted at advancing South Australia’s economic priorities, in line with Renewal SA’s goals. As such, the best use of the site may not be to simply build additional classrooms.

In the short-term, the RAH’s heritage buildings could be activated by attracting small to medium businesses as tenants, which are aligned with the creative or digital technology industries, and would benefit from the co-location of university research. Similar activities could also occur over the medium to long term, pioneered by the universities, with a targeted partnership or program to drive the application of research and innovation. International researchers could take part in these activities, boosting South Australia’s international education sector.

In the longer term, the demolition of buildings without heritage features could free up land for new purpose-driven buildings or other spaces. There are many different options which could be pursued for the site going forward; these may be considered in the later stages of this project. One potential option is accommodation, either for university students, or visiting researchers or workers on the site. The former RAH development is well-placed to capitalise on the natural amenity of the Adelaide Riverbank connections through improved pedestrian access and view corridors of the Torrens.

As noted previously, establishing the right digital infrastructure will be essential to support the research activities of universities, to attract businesses and startups, and allow for collaboration.

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A profile of higher education around Adelaide’s East End

The University of Adelaide accounts for most of the education activity in the East End. The vast majority of its students, including around 6,700 international students, study at the North Terrace campus.\(^4\) However, the relocation of the medical school to the new Adelaide Health and Medical Sciences Building, located in the West End, opened in 2017, will result in around 1,600 students relocating from the University’s previous medical school on Frome Road.\(^4\) Approximately 700 international students were enrolled in health courses at the University of Adelaide in 2016.\(^5\)

UniSA’s City East campus is also located in the East End, opposite the former RAH. This is home to the University’s Health Sciences faculty, while most other courses are taught in the City West campus, and engineering courses at Mawson Lakes. Around 750 international students were enrolled in the study field of health at UniSA in 2016.\(^6\) UniSA is in the final stages of constructing its Health Innovation Building, which will house the Centre for Cancer Biology, the Museum of Discovery, and an ICT-focused Innovation and Collaboration Centre. The majority of students will remain at City East, however, with only second and third year pharmacy students to be based at the Health Innovation Building.\(^7\) The South Australian Institute of Business and Technology is also located at UniSA’s City East campus, and is one of the few non-university providers in the East End.

Other university and higher education offerings are spread throughout the city. Flinders University has a small campus at Victoria Square, with other providers including the Australian Institute of Business, Eynesbury, Carnegie Mellon and University College London also based nearby.

5.3 Opportunities

There are a wide range of opportunities to expand and develop the international education sector, and the educational sector more broadly, on the former RAH site. A number of these opportunities were explored in the previous section, and relate to repurposing the former RAH’s existing buildings for businesses and university research activities. New buildings could also be tailored for research and innovation purposes, and in particular the commercialisation of university research, as discussed in Chapter 3. New areas of research and purpose-built facilities may be one way to attract leading international researchers to the site.

The former RAH precinct will also be adjacent to a new secondary school, Adelaide Botanic High School, due to open in 2019. The school’s core focus will be on science, technology, engineering and mathematics (STEM). The school may be able to benefit from its location adjacent to the former RAH site, depending on how it is used. As an example, students could undertake

\(^{6}\) Ibid.
\(^{7}\) University of South Australia, Health Innovation Building <http://unisa.edu.au/Campus-Facilities/Maps-Tours/Health-Innovation-Building/>. 
placements with university researchers or businesses, or participate in entrepreneurship courses.

The former RAH site also presents an opportunity to expand the supply of student accommodation. Jones Lang LaSalle found in 2016 that purpose built student accommodation (including privately-operated, university-run and residential colleges) occupancy rates tend to run at or near full capacity.\textsuperscript{48} However, a number of new facilities are due to open in 2018, with another development (not yet approved by the State Commission Assessment Panel) planned for the site directly across from the former RAH.\textsuperscript{49} Further detail as to the student accommodation market is shown in the box on the following page.

One potential option is to increase the types of accommodation available in Adelaide, with most purpose-built accommodation currently resembling a dormitory system. Another model, such as co-living (which is more similar to a share-house arrangement) could attract and suit a different segment of the international student market – such as leading researchers – thereby acting as a drawcard for Adelaide. The co-living accommodation model has a focused on shared living spaces, which particularly appeals to those who lack a social network in a city, but seek to form those connections. Spaces such as the kitchen and living areas are shared, while bedrooms and bathrooms are privately occupied. Some co-living accommodation developments overseas have additional features, such as meeting rooms or gyms – shifting them into a class more suited to young professionals and entrepreneurs, compared to undergraduate students. Further analysis as to the suitability of a co-living accommodation development could be undertaken to understand how it fits within the broader Adelaide accommodation market, and the amenities demanded by students or other potential tenants.

\begin{table}[h]
\centering
\begin{tabular}{|l|}
\hline
\textbf{A snapshot of student accommodation around Adelaide’s CBD and East End} \\
\hline

Student accommodation in Adelaide and the East End is a growing market. In the East End there are currently 1,363 student accommodation beds. This includes two new developments – Urbanest at the University of Adelaide and Atira Student Living on Waymouth Street. These are scheduled to open in February 2018. Further to this, there is the 268-bed Frome Central development, which is currently under construction.

A further 2,508 beds are offered in the remainder of the Adelaide CBD. The largest of these offerings is the Unilodge Metro Adelaide on Victoria Street. In North Adelaide and the surrounding inner suburbs, a further 1,287 beds are offered. The total number of beds across Adelaide and the inner suburbs is 5,158. Of the 24 developments offering student accommodation, nine of these are Unilodge developments, offering 1,524 beds. A full list of purpose-built student accommodation is included in Appendix C.

\hline
\end{tabular}
\end{table}


Both university and commercial student accommodation generally operates at full capacity, as at 2016. This may change following the opening of Atira and Urbanest, as well as Frome Central. There is also a proposal to develop a 34-storey, 680-bed student accommodation tower on the corner of North Terrace and Frome Road, directly opposite the former RAH site.

Alternatives to student accommodation exist, but with the exception of private rentals, they are generally too expensive or inappropriate for students. There are a number of serviced apartments available in the Adelaide CBD. However, with prices ranging from $75 to $500 per night, this is not considered as a competitor to purpose-built student accommodation. There are also a number of backpacker hostels and guesthouses in the CBD, although the nature and price of this accommodation also means it is not a direct competitor.

The private rental sector tends to be more affordable compared to purpose-built student accommodation. Nationally, in 2014, over half of international students privately rented a house, flat or room. A number of apartment blocks have been recently completed or are nearing completion in the Adelaide CBD and surrounds.

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6 Tourism

6.1 The importance of tourism to South Australia

Adelaide and South Australia are popular tourism destinations that have received international acclaim. Adelaide was listed in the top ten cities in Lonely Planet’s Best in Travel 2014 list, while South Australia was recognised as one of the top ten regions in 2017. The former RAH site presents a unique opportunity for South Australia to grow its tourism industry, and further benefit from this international acclaim.

In the year ending September 2017, international and domestic tourists spent $6.3 billion across South Australia. Overnight domestic trips declined slightly over the year to 6.1 million trips, while domestic day trips increased by 3.8 per cent to 13.6 million. 442,000 international tourists visited South Australia over the same period, as international visitor nights increased by 10 per cent to 10.9 million. While South Australia captures 5.5 per cent of international tourists coming to Australia, only 4.1 per cent of visitor nights are spent in the state.\(^53\) Tourism is an important part of South Australia’s economy, directly contributing 3.1 per cent of the state’s GSP in 2015-16.\(^54\)

What is meant by tourism?

The term ‘tourism’ is not restricted to leisure activities. It also includes travel for business or other reasons, such as education or to visit friends or relatives, provided the destination is outside the person’s usual environment.

A visitor is:

’a traveller taking a trip to a main destination outside his/her usual environment, for less than a year, for any main purpose (business, leisure or other personal purpose) other than to be employed by a resident entity in the country or place visited’\(^55\)

Visitors can be classified into domestic and international visitors. National or domestic visitors consist of Australian residents who travel outside of their usual environment within Australia. They include both overnight (staying one or more nights at a different location) and daytrip visitors. International visitors are those persons who travel to a country other than that in which they usually reside.

Tourism, or the ‘visitor economy’, is not a single sector within the broader economy. Rather, connected tourism industries include but are not limited to:

- Accommodation


• Cafes, restaurants and takeaway food services
• Clubs, pubs, taverns and bars
• Rail, taxi, bus, water and air transport
• Travel agency and tour operator services
• Cultural services
• Casinos and gaming
• Sports and recreation
• Education.

Over the year to November 2017, international passenger movements through Adelaide Airport reached 961,476 – a 5.6 per cent increase on the previous year (see Table 6.1). Of note, passenger movements on the Adelaide to Doha route reached 101,318, after the service began in May 2016 and increased to daily flights in December 2017. Fiji Airways also commenced flights from Adelaide to Nadi in June 2017, while Malaysia Airways and China Southern increased to five-weekly flights on the Adelaide to Kuala Lumpur and Adelaide to Guangzhou flights respectively. Capacity has also increased on the Adelaide to Auckland route, with Air New Zealand now flying the Boeing 787-9 Dreamliner on the route.

Table 6.1: International passenger movements through Adelaide Airport

<table>
<thead>
<tr>
<th>Australian port</th>
<th>Foreign port</th>
<th>Year end November 2017</th>
<th>Year end November 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide</td>
<td>Auckland</td>
<td>75,723</td>
<td>76,434</td>
</tr>
<tr>
<td>Adelaide</td>
<td>Denpasar</td>
<td>135,699</td>
<td>179,127</td>
</tr>
<tr>
<td>Adelaide</td>
<td>Doha</td>
<td>101,318</td>
<td>71,380</td>
</tr>
<tr>
<td>Adelaide</td>
<td>Dubai</td>
<td>189,313</td>
<td>188,712</td>
</tr>
<tr>
<td>Adelaide</td>
<td>Guangzhou</td>
<td>57,486</td>
<td>NA</td>
</tr>
<tr>
<td>Adelaide</td>
<td>Hong Kong</td>
<td>104,227</td>
<td>105,291</td>
</tr>
<tr>
<td>Adelaide</td>
<td>Kuala Lumpur</td>
<td>97,690</td>
<td>88,610</td>
</tr>
<tr>
<td>Adelaide</td>
<td>Nadi</td>
<td>8,095</td>
<td>NA</td>
</tr>
<tr>
<td>Adelaide</td>
<td>Singapore</td>
<td>191,925</td>
<td>201,265</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>961,476</strong></td>
<td><strong>910,819</strong></td>
</tr>
</tbody>
</table>

Source: Bureau of Infrastructure, Transport and Regional Economics (BITRE)

Domestic passenger movements through Adelaide Airport increased by 1.8 per cent over the year to November 2017, reaching 7.1 million – the fifth busiest domestic airport in Australia. The Adelaide to Melbourne route is the fifth most popular trip nationally, with 2.4 million passengers each year. The number of passengers carried on each domestic route departing Adelaide in November 2017 increased compared to November 2016, by between 0.7 per cent (Adelaide to Port Lincoln) and 5.9 per cent (Adelaide to Alice Springs). However, some routes, including the Adelaide to Gold

Coast and Adelaide to Port Lincoln, experienced declines over the 12 months to November 2017, compared to the same period in 2016.\textsuperscript{57} It is noted, however, that the majority of routes in decline nationally relate to decreased mining activity.

Adelaide is an attractive destination, not only due to the activities and experiences it offers, but also as a gateway to South Australia’s regions. Adelaide’s top ten tourist attractions, according to TripAdvisor, are highlighted below, with those connected to the former RAH neighbourhood, North Terrace or the Riverbank in bold:

1. \textbf{Adelaide Botanic Gardens}
2. Wine Tours and Tastings
3. \textbf{Adelaide Oval}
4. Adelaide Central Market
5. Glenelg Tram
6. \textbf{Art Gallery of South Australia}
7. Adelaide Zoo
8. \textbf{South Australian Museum}
9. Adelaide Metro Free City Connector Bus and Tram
10. Private Tours.

6.1.2 What is Adelaide competing against?
There is a healthy level of competition between Australian states and territories in the tourism sector, with many cities investing heavily in their tourism and leisure offerings in order to gain a competitive advantage.

\textbf{Sydney}, traditionally viewed as the primary entry point to Australia, continues to capture a majority share of Australian tourism expenditure. The city is reinforcing its tourism offering through significant investments in cultural icons such as the Sydney Opera House, Australian Museum, the New South Wales Art Gallery and a $2 billion reinvigoration of ANZ Stadium.

\textbf{Melbourne} is also investing heavily into its tourism economy, with a particular focus on the concept of the ‘experience economy’, as well as branding and marketing to attract private sector investment.

With the completion of its second runway, \textbf{Brisbane} will have the largest airport capacity in Australia, increasing its accessibility for visitors, particularly those from Asia.

The introduction of \textbf{Perth} to London direct flights in 2018 may shift the entry point to Australia to the west coast. However, it is yet to be seen how this will impact Adelaide, given that Sydney and Melbourne continue to be the most popular tourism destinations in Australia.

\textbf{Hobart} is also emerging as a competitor, with tourism directly and indirectly comprising almost 11 per cent of Tasmania’s GSP. Total visitors to Tasmania increased by 8 per cent over the year to September 2017, while visitor expenditure increased by 11 per cent.\textsuperscript{58} Hobart and Tasmania are well regarded as nature tourism and food and wine destinations.


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27
Interestingly, only Tasmania and South Australia escaped a decline in the number of Australian tourists visiting wineries on their trip in 2016-17.\(^{59}\)

### 6.1.3 Who is Adelaide competing for?

Tourism has long been both an important and high profile sector of the Australian economy. In 2016-17, the tourism industry contributed 3.2 per cent to national gross domestic product (GDP) and 4.9 per cent of overall employment, and is growing as a faster rate compared to the overall Australian economy.\(^{60}\)

In recent years, the Australian tourism sector has performed remarkably well in light of modest global economic conditions. Australia’s tourism market has been able to capitalise on the strong influx of international visitors from China and other emerging Asian economies. Chinese visitors now account for 15 per cent of all visitor arrivals into Australia, and a quarter of total international visitor expenditure – reaching $10.3 billion across the nation in the year ending September 2017.\(^{61}\) However, despite posting significant growth in recent years, arrivals from China are slowing – while visitor arrivals from Indonesia, India, Hong Kong, the Netherlands, the United States, Thailand and Canada all posted double-digit growth in the year to September 2017.\(^{62}\)

Projected economic growth in this region in coming years is set to continue to buoy Australia’s visitor economy. Deloitte forecasts international visitor trips to grow by 6.9 per cent per annum and visitor nights by 6.4 per cent per annum on average over the next three years.\(^{63}\) If this were to occur, visitor arrivals would reach 10 million persons by 2020, and international visitor nights would overtake domestic visitor nights in 2023.

**Domestically**, there has been a stalling in the leisure market, reflecting a pattern of weaker consumer spending by Australian households as growth in wages has slowed. This has been partially counterbalanced by an increase in corporate travel. However, stronger economic conditions over the next three years are anticipated to further increase domestic corporate travel and discretionary consumer spending. Domestic trips are therefore forecast by Deloitte to grow by 3.4 per cent each year, and visitor nights by 3.3 per cent each year on average over the next three years.

### 6.2 Suitability of the former RAH site

The suitability of the former RAH site for tourism infrastructure is not only dependent on the current Adelaide tourism market, but also the direction of the RAH redevelopment as a whole.

The closeness of the site to Adelaide’s main tourist attractions, combined with its location along North Terrace and proximity to lifestyle destinations in the East End, means that the site is strategically placed to benefit from

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\(^{62}\) Ibid.

the spillovers from those destinations. The East End, for example, offers leading restaurant, café, bar and retail experiences. And, during March, the area is a magnet for visitors as the East End plays host to multiple major festivals and events – including the Adelaide Fringe, WOMADelaide and the Adelaide 500.

Heritage buildings on the site may be suitable for redevelopment into a hotel, to capitalise on this nearby tourism activity. However, the former RAH site could also become a destination in itself, depending on what other developments occur on the site as older buildings are demolished.

6.3 Opportunities
An expressions of interest process is already in progress for a new large-scale hotel. However, the demand for a hotel and the quality of this development would be reliant on the co-location of a landmark destination, and other drivers of tourism demand in the surrounding area. These include:

- the North Terrace cultural boulevard and institutions
- investment in digital infrastructure and the industry and business ecosystem that this would generate, potentially leading to corporate travel
- expansion of the universities and international education on the site, potentially leading to visiting friends, relatives and researchers
- catering to spillovers from activity in the East End.

The viability of a hotel on the site would also depend on the investment pipeline of similar projects around Adelaide. A summary of current and proposed hotels developments around Adelaide is provided in the following box, with a full outline in Appendix B.

Bespoke retail and hospitality uses would be required to support a hotel development, and would produce activation at ground level. While these uses would occur regardless to support workers and other visitors, careful curation of the tenancies surrounding the hotel will build the overall experience of the neighbourhood.

One option under consideration as a landmark destination – which would drive tourism to the area, and tourists to the hotel – is Adelaide Contemporary. There is currently an international design competition underway to search for an architectural design for Adelaide Contemporary. Similar to the Sydney Opera House or the Guggenheim in Bilbao, Adelaide Contemporary could become a global icon. However, as previously identified in Chapter 4, there are a number of other cultural investments that could drive visitation to the site, such as housing an integrated indigenous cultural offering or a publicly-accessible sculpture park.

The chosen landmark destination would be a key anchor for the former RAH site, and whichever option is chosen, the size and scale of such an endeavour would underpin any complementary uses, such as a hotel and retail. As a centrepiece development, it would form the fabric of former RAH’s unique value proposition. As a result, it could affect the use of other buildings and spaces – with complementary investment and tenancies crucial to ensuring a coherent, productive site.
Tourism infrastructure around Adelaide’s CBD and East End

Adelaide’s higher-end hotel offerings are clustered along North Terrace and around King William Street, while four and three star hotels are spread more evenly across the city. Notably, a number of four star hotels and one five star hotel are located in the East End precinct, as shown in Figure 6.1.

Figure 6.1: Hotels in Adelaide and North Adelaide

Source: Deloitte Access Economics, using Google Maps and publicly available information

According to Deloitte’s most recent Tourism and Hotel Market Outlook, published in October 2017, Adelaide’s hotel market saw healthy gains in the first half of 2017. Trend average daily rates (ADR) increased by 1.7 per cent to $147, while the revenue per available room (RevPAR) increased by 2.6 per cent to $114. Trend occupancy rates reached an average of 77.8 per cent, an increase of 0.9 per cent. These gains were demand-driven, with room nights sold increasing, while room nights available remained flat. Around 32 per cent of all visitor nights in Adelaide were spent in hotels.

Going forward, Adelaide’s performance is expected to moderate as new hotel developments come online, with growth in room nights available exceeding the forecast growth in room nights sold. Upper class hotels currently in the pipeline include the Sofitel Adelaide and SkyCity Hotel at the Adelaide Casino. No new rooms are expected to be added to the market in 2018, with all new developments due for completion in 2019 and beyond.

Other developments have been abandoned in recent times. This includes the Enigma 8 hotel which was approved for the corner of North and West Terrace, the Aloft Adelaide which was planned for central Adelaide, and the Sheraton Hotel which was planned for the North Adelaide Le Cornu site, which was subsequently purchased by the City of Adelaide.
7 Health and medical industries

The heritage of the former Royal Adelaide Hospital is firmly rooted in health and biomedical sciences. The presence of the Hospital on the site since the 19th century drove the development of other health sciences activities nearby, such as the former clinical schools on Frome Road and SA Pathology on the site.

The development of the other components of Adelaide BioMed City along the west end of North Terrace, with the new hospital and South Australian Health and Medical Research Institute as its centrepieces, are key considerations in determining whether health and medical industries are an appropriate focus for the former RAH site.

7.1 Benefits of clustering

Given the presence of Adelaide BioMed City in the West End – and the scale of the agglomeration of health and biomedical activity in that part of the city described in Section 7.2 – it is likely that further investment into health sciences on North Terrace would likely yield additional economic returns if it is located in the Adelaide BioMed City precinct rather than at the former Royal Adelaide Hospital.

Network effects are economic gains from innovation and information spill-over caused by workers in the same industry being geographically close. This results in increasing returns to scale – up to a point – and is the reason why the Health Precinct co-locates thousands of researchers, clinicians and students of health science. Any development in health sciences at the former RAH would gain less from the network effects in the West End.

However, as a caveat to this general point, it is likely that there might be health technology businesses which could be connected to the digital and technology uses contemplated in Chapter 3, particularly for businesses which might choose to collaborate with a university. For example, a business exploring a medical application of machine learning might be best located in a technology cluster at the former Royal Adelaide Hospital.

7.2 Adelaide BioMed City

The Adelaide BioMed City precinct incorporates four major institutions and is the result of an aggregate $3.6 billion in investment. Once complete, the precinct will host between 10,000 and 15,000 people involved in research, teaching and clinical care at any one time.64

7.2.1 The new Royal Adelaide Hospital

The new Royal Adelaide Hospital marks the western edge of the Health Precinct and contains world class clinical facilities. The Hospital is South Australia’s flagship hospital and is the principal clinical services provider in the Precinct. The Hospital has 800 beds and can accommodate 85,000 inpatients and 400,000 outpatients per annum.

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64 Royal Adelaide Hospital, Adelaide BioMed City
The NRAH will also provide researchers in other institutions in the cluster to conduct clinical trials at the hospital. The NRAH has 150 staff working on around 280 clinical trials at any one time.\(^{65}\)

### 7.2.2 SAHMRI

Adelaide BioMed City also includes the South Australian Health and Medical Research Institute (SAHMRI). Currently there are 600 researchers use the world class purpose built laboratory space at the institute. These researchers are grouped together into seven themes:

- Aboriginal Health
- Cancer
- Healthy Mothers, Babies and Children
- Heart Health
- Infection and Immunity
- Mind and Brain
- Nutrition and Metabolism.\(^{66}\)

SAHMRI also includes the South Australian Health Science Translation Centre, whose purpose is to turn recent research breakthroughs into usable medical procedures for patients.\(^{67}\)

Despite considerable achievement in a short timeframe SAHMRI’s eyes are firmly looking forward as the planning for SAHMRI 2 goes ahead. SAHMRI 2 will be a new building to expand the original SAHMRI to the east along with providing private sector health science more space to locate in South Australia. The project is already fully costed, with a majority of the funding coming from the private sector. SAHMRI will occupy the first four floors, which will include Australia’s first proton therapy unit, and the remaining 11 floors will be dry lab space. SAHMRI 2 is expected to be completed in 2021.\(^{68}\)

### 7.2.3 UniSA Health Innovation Building

UniSA’s Health Innovation Building is being built just east of the University of Adelaide’s Health and Medical Sciences Building. The Health Innovation Building will not only contain teaching and research spaces for UniSA students and researchers but also three institutions within the building. The first will be the Centre for Cancer Biology. A joint venture between UniSA and SA Pathology, the Centre for Cancer Biology will contain 22 separate research teams.\(^{69}\)

The second is the Museum of Discovery (MOD). The MOD will be a museum aimed at giving young people a window to see what a life in STEM subjects might be like, and to expose them to the role of science in everyone’s life.\(^{70}\)

The final institute will be the Innovation and Collaboration Centre (ICC). The ICC is a venture funded by UniSA, Hewlett Packard and the

\(^{65}\) Royal Adelaide Hospital, About the RAH <https://www.rah.sa.gov.au/about/about-the-new-rah>.

\(^{66}\) South Australian Health and Medical Research Institute, SAHMRI (2017) <https://www.sahmri.org/>.


\(^{68}\) South Australian Health and Medical Research Institute, SAHMRI 2 – Incorporating the Australian Bragg Centre for Proton Therapy and Research (2017) <https://www.australianbraggcentre.com/>.

\(^{69}\) Centre for Cancer Biology, Centre for Cancer Biology <http://www.centreforcancerbiology.org.au/>.

\(^{70}\) The University of South Australia, What is MOD?, Museum of Discovery <https://mod.org.au/about/>.
Government of South Australia and acts as a business incubator and shared office space for start-ups.71

7.2.4 University of Adelaide Health and Medical Sciences Building
To SAHMRI’s east is the University of Adelaide’s Health and Medical Science Building, which replaced the old medical school on the former RAH site as the teaching, research and administrative space for the university of Adelaide’s Adelaide Medical School, Adelaide Nursing School, Adelaide Dental School and the School of Public Health.

It includes two lecture halls, state of the art teaching and research equipment as well as four floors of laboratories to accommodate 1,600 students and 600 researchers.

8 Defence industries

South Australia plays an important role in Australia’s defence industry. Preparations for the future submarines project are underway in Osborne and some of the world’s largest defence companies have offices in Adelaide. With all of this activity in Adelaide’s defence industry, there is an opportunity for South Australia’s entrepreneurial scientists and engineers to find a niche in the supply chain and integrate themselves into 21st century advanced manufacturing. We note also that the adjacent space industry is emerging in South Australia, which equally draws on the technology and advanced manufacturing capabilities of the defence industry.

But what role should the former RAH site play in the future of Adelaide’s defence industry? Much like in the case of health sciences, to answer this question, we should consider where else in Adelaide investment in the defence industry has already been directed by analysing the current state of the industry in Adelaide. Currently, there are three defence precincts across the state, all of which respond to different market opportunities.

8.1 Existing defence industry clusters

8.1.1 Techport Australia

Techport Australia in Osborne is home to the Australian Submarine Corporation (ASC). ASC holds the contract for several government projects including the maintenance of the Collins Class submarines, the maintenance of the Hobart-class air warfare destroyer and, most importantly, the Future Submarine Project. This ship and submarine building activity has attracted the offices of top global defence companies and companies further up the supply chain in submarine building. Among the companies with offices in Techport are Raytheon Australia, Babcock and PMB Defence.

Techport is also in the midst of being upgraded to accommodate the capital needs of the future submarines program. These improvements will also allow the precinct to fulfil capital requirements to build and service a larger variety of surface vessels in the future. In order to fill the skills requirements required of the industry in the future, the Commonwealth Government has also decided to open a multi-site college of Naval Shipbuilding which will likely have a presence in or around Techport.72

But it is not just the ASC and defence companies that will grow their employment base due to these projects. There are already upstream suppliers located in Techport, such as the steel cutting company Ferrocut, but this is likely to increase as the projects in the precinct progress. The Future Submarines Program will see $50 billion spent from now until the

2040s implying that Techport will remain an important economic precinct to the state for quite some time.73

8.1.2 Edinburgh Defence Precinct
The Edinburgh Defence Precinct focuses on aerospace. The precinct encompasses the RAAF Edinburgh Base and is home to the headquarters of BAE Systems Australia as well as having the presence other private companies like Lockheed Martin, Airbus, CAE, Raytheon and Meggit training systems.74

RAAF Base Edinburgh is one of only two Defence super-bases in Australia and is the workplace of 3,500 defence personnel75. The base has two runways and is home to many of Australia’s military intelligence capabilities including maritime patrol aircraft and unmanned aerial vehicles. The base also houses the Horseshoe Barracks of the Australian Army.76

The precinct is also home to the Adelaide branch of the Department of Defence’s Defence Science and Technology Group (DST Group). DST Group has industry partnerships with most of the companies present at Edinburgh.77

8.1.3 Technology Park
Technology Park Adelaide is a technology and defence orientated business precinct 12 kilometres from the central business district in Mawson Lakes. Lockheed Martin, Daronmont Technologies and Saab have offices in Technology Park.78

The precinct is also across the road from UniSA’s Mawson Lakes Campus which houses the Defence and Systems Institute as well as the Institute for Telecommunications Research. The Institute for Telecommunications Research not only conducts research in areas relevant to defence but also conducts research specifically for private sector clients.79

The Defence and Systems Institute conducts “research in the design, integration, and modelling of complex Defence and Engineering Systems. It has research programs in autonomous and unmanned systems, exploitation of biology for sensing systems, micro air vehicles, acoustic propagation, tomography, multi-user/multi-vehicle autonomy, creativity/innovation, and systems engineering competencies”80. It also offers industry focused

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75 Ibid.
postgraduate engineering degrees to supply South Australia with defence industry focused engineering skills. 81

8.2 The former RAH and the defence industry

With this picture of Adelaide’s defence industry in mind, it is possible to draw conclusions about the future of defence at the former RAH site. The site is not suited to most kinds of defence manufacturing. It is too small but does have comparative advantage in sciences and services due to its position next to two universities and the CBD. This is where the former RAH site may find a niche within the defence and space industries, though perhaps not as an entirely specialised precinct.

Though Technology Park does have access to defence industry related research groups, there are research groups with defence applications at the University of Adelaide without equivalent at UniSA Mawson Lakes. These include the Data to Decisions Cooperative Research Centre, the Centre for Defence Communications and Information Networking, Centre for Traumatic Stress Studies, the Institute for Photonics and Advanced Sensing and the Australian Centre for Visual Technologies.

As the former RAH site is suited to digital technology and innovation (see Chapter 3), businesses and entrepreneurs could take advantage of the University of Adelaide’s research cluster, and may end up on the ‘soft’ side of defence development and assist the wave of SME’s to make the most of South Australia’s defence contracts.

Appendix A: Digital technology and innovation

The following tables summarise activities in Adelaide relating to digital technology and innovation. The information is sourced from publicly available material on the websites of each organisation.

A.1. Incubators and co-working spaces in Adelaide

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Features</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide Business Hub</td>
<td>Co-working</td>
<td>Co-working space offered to SMEs, with incubation and mentoring programs. Sponsored by the State Government, Department of State Development and Port Adelaide Enfield Council</td>
<td>Port Adelaide</td>
</tr>
<tr>
<td>Adelaide Microsoft Innovation Centre</td>
<td>Incubation/ Mentorship</td>
<td>Innovation hub aimed at SA’s digitally enabled economy, providing training, business development and connection to industry</td>
<td>CBD</td>
</tr>
<tr>
<td>Adelaide Smart City Studio</td>
<td>Co-working</td>
<td>Partnership with City of Adelaide, Department of State Development and CISCO Co-working space with focus on bringing business and technology together to develop smart cities</td>
<td>CBD</td>
</tr>
<tr>
<td>Base64</td>
<td>Co-working</td>
<td>Privately owned co-working space, located in a heritage listed 19th century property</td>
<td>Kent Town</td>
</tr>
<tr>
<td>Co-Hab</td>
<td>Co-working</td>
<td>Not-for-profit co-working space with Gig City internet connection. Run by Innovyz</td>
<td>Tonsley</td>
</tr>
<tr>
<td>eNVIision</td>
<td>Incubation/ Mentorship/Co- working</td>
<td>Co-working space within the New Venture Institute at Flinders University, with startup and innovation programs</td>
<td>Tonsley</td>
</tr>
<tr>
<td>Hub Australia</td>
<td>Co-working</td>
<td>Privately owned co-working space with premium facilities and technology, offering industry focused events</td>
<td>CBD</td>
</tr>
<tr>
<td>Innovation and Collaboration Centre</td>
<td>Co-working/ Mentorship</td>
<td>Partnership between the University of South Australia, the Government</td>
<td>CBD</td>
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</table>
of South Australia and DXC Technology
Co-working space with mentorship and funding programs offered to students, SME's and entrepreneurs

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovyz</td>
<td>Incubation/ Mentorship</td>
<td>Sponsored by ASX, the Government of South Australia and PwC, offers nine-month courses in the areas of health &amp; wellness, advanced manufacturing, water, food and agriculture and waste and recycling</td>
</tr>
<tr>
<td>Moonshine Lab</td>
<td>Incubation/ Mentorship</td>
<td>Located on a Renew Adelaide site within the Distillery, a start-up hub that provides space to less technically skilled entrepreneurs and partners them with technical experts and advisors</td>
</tr>
<tr>
<td>Regus</td>
<td>Co-working</td>
<td>A large multinational office company, operates in over 100 countries and has 2,300 locations. Offers standard co-working space in three locations in Adelaide, also offers virtual office space around the world</td>
</tr>
<tr>
<td>TechInSA (formerly BioSA)</td>
<td>Incubation/ Mentorship</td>
<td>High-tech startup accelerator, customised programs, lab and office space and access to global networks</td>
</tr>
<tr>
<td>Techstars</td>
<td>Incubation/ Mentorship</td>
<td>Defence and technology focused start-up accelerator, local start-ups receive funding in exchange for equity in the company</td>
</tr>
<tr>
<td>ThincLab</td>
<td>Incubation/ Mentorship</td>
<td>Partnership with the University of Adelaide and the Government of South Australia, incubator which offers space for start-ups, also has sister sites in Singapore and Champagne</td>
</tr>
</tbody>
</table>

A.2. Programs and associations available to startups

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian eChallenge</td>
<td>Program</td>
<td>Competition run by the Entrepreneurship, Commercialisation and Innovation Centre at the University of Adelaide, to develop business thinking for early-stage entrepreneurial ventures</td>
</tr>
<tr>
<td>Name</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>BlueSky Association</td>
<td></td>
<td>Privately owned, provides capital and late-stage venture capital to rapidly growing businesses, by partnering with companies and providing them with expertise, capital and resources</td>
</tr>
<tr>
<td>Encore Entrepreneur</td>
<td>Program</td>
<td>Workshop and mentoring program run by Business SA for South Australians aged 35 or above looking to establish a business or grow an existing one</td>
</tr>
<tr>
<td>The Entrepreneur’s Program</td>
<td>Program/Mentorship</td>
<td>Run by Business SA in partnership with the Department of Industry, Innovation and Science, matches an entrepreneurial venture with a business advisor who works with them to develop and grow the business</td>
</tr>
<tr>
<td>Entrepreneurs Organisation</td>
<td>Association</td>
<td>Global online network of like-minded entrepreneurs, offering resources and development programs</td>
</tr>
<tr>
<td>LESANZ</td>
<td>Association</td>
<td>Australian and New Zealand chapter of LES International, members are experts in Intellectual Property and share their knowledge via seminars, networking events and conferences</td>
</tr>
<tr>
<td>Student to Entrepreneur: The Weekend Event</td>
<td>Program</td>
<td>Held at UniSA’s Innovation and Collaboration Centre, a weekend event run by UniSA’s entrepreneurial club and the Intellectual Property, Innovation &amp; Technology Society to assist entrepreneurs in developing and pitching business concepts</td>
</tr>
<tr>
<td>SAYES</td>
<td>Program</td>
<td>A 12-month program run by the Chamber of Commerce and Industry SA (Business SA) and sponsored by the Government of South Australia, assisting young Australians (18-35) to run successful businesses</td>
</tr>
<tr>
<td>Social Ventures Incubator Program</td>
<td>Program</td>
<td>Incubator program run by the City of Adelaide for socially minded businesses that improve community life</td>
</tr>
</tbody>
</table>

A.3. Early stage funding available in South Australia

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerating Commercialisation</td>
<td>Federal Government</td>
<td>Provides businesses with access to expert advice and matched funding of $1 million to cover commercialisation costs to help them make new products and services</td>
</tr>
<tr>
<td>Acumen Venture Capital Fund</td>
<td>Private</td>
<td>Investors in cloud &amp; SaaS in Australia and SEA</td>
</tr>
<tr>
<td>Advanced Food Manufacturing Grants Program</td>
<td>State Government</td>
<td>Supports co-funded projects which develop new or improved food products or manufacturing processes, by bringing together research and technical experts with SA food businesses to solve product development and processing challenges</td>
</tr>
<tr>
<td>BioAngels</td>
<td>Private</td>
<td>Non-profit association of successful business executives, scientists and entrepreneurs from a wide range of backgrounds, who invest time as mentors</td>
</tr>
</tbody>
</table>
as well as capital in potentially high-growth early stage companies

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>University</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>BioSA Industry Development Program</td>
<td>BioSA grant to assist SA researchers, entrepreneurs, university research &amp; commercialisation organisations and technology companies to develop their businesses or projects to become investor ready</td>
<td>State Government</td>
<td>BioSA</td>
</tr>
<tr>
<td>Incubator Support Initiative</td>
<td>Federal Government funding for new and existing incubators to help them develop or expand and funding for support for an expert in residence, providing them with access to quality research and managerial talent</td>
<td>Federal Government</td>
<td>Incubation</td>
</tr>
<tr>
<td>Innovation Connections</td>
<td>Provides SMEs with access to expert technology advice to address technology and knowledge gaps, and collaborate with the research sector to develop new ideas</td>
<td>Federal Government</td>
<td>Innovation</td>
</tr>
<tr>
<td>Innovation Voucher Program</td>
<td>Funding of up to $50,000 to eligible research and development projects that partner with SMEs</td>
<td>State Government</td>
<td>Innovation</td>
</tr>
<tr>
<td>Small Business Development Fund</td>
<td>Funding for small businesses and start-ups to grow and create sustainable jobs, exclusively in the Playford, Port Adelaide Enfield and Salisbury Council areas</td>
<td>State Government</td>
<td>Small Business</td>
</tr>
<tr>
<td>South Australian Venture Capital Fund (run by Blue Sky Venture Capital)</td>
<td>State-funded venture capital fund invests in high growth and export potential companies that have demonstrated a market and commenced generating revenue, funding administered by Blue Sky Venture Capital</td>
<td>State Government</td>
<td>Venture Capital</td>
</tr>
<tr>
<td>Medical Technologies Program</td>
<td>Provides SA medical research and manufacturing businesses with up to 250 hours of research to develop new medical devices and assistive technologies</td>
<td>State Government</td>
<td>Medical Technologies</td>
</tr>
<tr>
<td>South Australian Early Commercialisation Fund</td>
<td>Assists SA’s entrepreneurs and innovative organisations looking to commercialise new products and services, providing grants of up to $500,000</td>
<td>State Government</td>
<td>Commercialisation</td>
</tr>
</tbody>
</table>

A.4. Technology research activities

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>University</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Centre for Visual Technologies (will form core of Australian Institute for Machine Learning)</td>
<td>High-impact areas within computer vision, tracking, surveillance, augmented reality, machine learning</td>
<td>Adelaide</td>
<td>Computing, Hardware, Defence</td>
</tr>
<tr>
<td>Machine Learning Group</td>
<td>Core machine learning theory, including focus on image understanding</td>
<td>Adelaide</td>
<td>Computing</td>
</tr>
<tr>
<td>AILab</td>
<td>General artificial intelligence focusing on language, learning, cognition</td>
<td>Flinders</td>
<td>Computing</td>
</tr>
<tr>
<td>Organization/Group</td>
<td>Description</td>
<td>Location</td>
<td>Category</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>CHiPTec</td>
<td>Microelectronics, hardware for artificial intelligence, digital hardware development and verification</td>
<td>Adelaide</td>
<td>Computing, Hardware</td>
</tr>
<tr>
<td>Internet of Things - Auto ID Lab</td>
<td>One of seven 'Auto-ID' labs worldwide, research includes RFID, connected device security, smart cities, wearables</td>
<td>Adelaide</td>
<td>Hardware</td>
</tr>
<tr>
<td>Robotics Research Group</td>
<td>Most areas within robotics, including drones, UAVs, vision systems, control</td>
<td>Adelaide</td>
<td>Defence, Hardware</td>
</tr>
<tr>
<td>Advanced Computing Research Centre</td>
<td>Data analytics, wearable technology, health information technology, strategic information management</td>
<td>South Australia</td>
<td>Computing</td>
</tr>
<tr>
<td>Health Technology Research Group</td>
<td>Development of biomedical devices and medical monitoring devices</td>
<td>Adelaide</td>
<td>Medical Devices/Sensors</td>
</tr>
<tr>
<td>Flinders Medical Device Research Institute</td>
<td>Areas of health technology: rehabilitation tools, implants, biomechanics, devices and sensors, health informatics, image analysis, simulations.</td>
<td>Flinders</td>
<td>Medical Devices/Sensors, Health (General)</td>
</tr>
<tr>
<td>Flinders Centre for NanoScale Science and Technology</td>
<td>Materials science; carbon materials, smart/functional coatings, optical properties.</td>
<td>Flinders</td>
<td>Defence, Other</td>
</tr>
<tr>
<td>Centre for Drug Discovery and Development</td>
<td>Accelerated cancer drug testing</td>
<td>South Australia</td>
<td>Drugs, Cancer</td>
</tr>
<tr>
<td>Medicine and Device Surveillance CRE</td>
<td>Testing the safety of medicine and medical devices</td>
<td>South Australia</td>
<td>Drugs, Medical Devices/Sensors</td>
</tr>
<tr>
<td>SAHMRI</td>
<td>Cancer research, heart disease, infection and immunity, mother and child health, mental health, nutrition, aboriginal health</td>
<td>Non-university research institute</td>
<td>Cancer</td>
</tr>
<tr>
<td>Institute for Photonics and Advanced Sensing</td>
<td>Large group; precise and small medical probe development, and timing precision, lasers, secure fibre-optic communication for defence</td>
<td>Adelaide</td>
<td>Medical Devices/Sensors, Defence</td>
</tr>
<tr>
<td>CMAX</td>
<td>Early-phase clinical testing, including first-time human studies</td>
<td>Non-university commercial</td>
<td>Health (General)</td>
</tr>
<tr>
<td>Centre for Maritime Engineering, Control and Imaging</td>
<td>Researching autonomous underwater vehicles, material and structural fatigue analysis, maritime electronics, robotics, video and imaging processing</td>
<td>Flinders</td>
<td>Defence</td>
</tr>
<tr>
<td>Centre for Knowledge and Advanced Sensing</td>
<td>Development of data mining techniques, and the</td>
<td>Flinders</td>
<td>Defence, Computing</td>
</tr>
</tbody>
</table>
A.5. Entrepreneurship programs at South Australian higher education institutions

Flinders University | Bachelor of Business (Entrepreneurship)

Includes business degree core courses at Flinders University plus the following specialisation core courses:

- Entrepreneurship and small business
- Financial Management
- Business planning for new ventures
- E-Business
- Innovation Management

Flinders University | Bachelor of Business (Innovation and Enterprise)

Includes business degree core courses at Flinders University plus the following specialisation core courses:

- Innovation and creative thinking: recognising opportunities
- Collaboration, Co-Creation and the Crowd: leveraging your Ecosystem for Innovation
- Innovation for Social Impact: Doing Good While Doing Well
- From Intuition to Insight: Validating Desirability, Feasibility and Viability
- From Innovation to Impact: Creating a Roadmap from Opportunity to Action
- Going Live! Entrepreneurial Strategies, Resources and Activities

And two of the following:

- Entrepreneurship and small business
- Finding Backers and Champions: Pitching for Financial Resources and Support
- Early Wins Matter: Nothing Happens Without a Sale
- Business planning for new ventures
- E-Business
- Innovation Management

Flinders University | Bachelor of Design and Technology Innovation
The first year of this course includes design and engineering courses, plus five innovation subjects as core courses in the final two years.

**University of Adelaide | Bachelor of Innovation and Entrepreneurship**

Aimed at providing insight into how businesses grow. Includes thirteen core courses relating to entrepreneurship and innovation, and includes a double credit research project.

**UniSA | Bachelor of Business (Innovation and Entrepreneurship)**

20 core courses, many of them general business topics. Does include tech-related courses as core courses including Introduction to Computer Modelling for Product Design and Engineering Design and Innovation.

**University of Adelaide | Master of Innovation and Entrepreneurship**

Two year full time course:

Includes a research track and a normal track and is taught in trimesters. There are 8 core courses (plus an additional research methods course for the research stream) 6 closed electives in innovation and entrepreneurship subjects (3 for research stream) and a research project.

**University of Adelaide | Master of Applied Innovation and Entrepreneurship**

1.5 year full time course:

Same as the regular stream of the Master of Innovation and Entrepreneurship but only allows one closed elective to be taken.

**University of Adelaide | Graduate Diploma in Innovation and Entrepreneurship**

1 year full time

Similar to above but allows two closed electives to be taken.

**University of Adelaide | Graduate Certificate in Innovation and Entrepreneurship**

0.5 year full time

Two core courses in Entrepreneurship and Innovation and Opportunity Assessment and two units of closed electives.

**Torrens University | Graduate Certificate in Collective Entrepreneurship**

1 year part time only

The certificate is made up of four core courses:

- Unleashing the Entrepreneur
- Entrepreneurship in Action A, B and C
- Risk Factors: Tolerance and Tipping Points
- Developing a Resilient Mindset
Appendix B: Creative industries

B.1. Stocktake of creative and cultural institutions and businesses around the Adelaide CBD and the East End neighbourhood

### Institutions

<table>
<thead>
<tr>
<th>Institution</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>The South Australian Museum*</td>
<td>Adelaide Entertainment Centre</td>
</tr>
<tr>
<td>The Art Gallery of South Australia*</td>
<td>Adelaide Convention Centre</td>
</tr>
<tr>
<td>The State Library of South Australia*</td>
<td>Her Majesty's Theatre</td>
</tr>
<tr>
<td>Adelaide City Library*</td>
<td>JamFactory Contemporary Craft &amp; Design</td>
</tr>
<tr>
<td>The Migration Museum*</td>
<td>South Australian School of Art Gallery</td>
</tr>
<tr>
<td>Botanic Gardens of South Australia*</td>
<td>Australian Dance Theatre</td>
</tr>
<tr>
<td>Tandanya National Aboriginal Cultural Institute*</td>
<td>Bob Hawke Prime Ministerial Library</td>
</tr>
<tr>
<td>City Gallery*</td>
<td>Mercury Cinema</td>
</tr>
<tr>
<td>Ayers House Museum*</td>
<td>Arts Main Theatre</td>
</tr>
<tr>
<td>Adelaide Zoo*</td>
<td>Better World Arts</td>
</tr>
<tr>
<td>Adelaide Masonic Centre Museum*</td>
<td>Royalty Theatre</td>
</tr>
<tr>
<td>St Paul’s Creative Centre*</td>
<td>The Arts Theatre</td>
</tr>
<tr>
<td>Palace Nova Cinemas*</td>
<td>Bakehouse Theatre</td>
</tr>
<tr>
<td>Hutt Street Library</td>
<td></td>
</tr>
<tr>
<td>Adelaide Festival Centre</td>
<td></td>
</tr>
</tbody>
</table>

### Events

<table>
<thead>
<tr>
<th>Event</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide Fringe Festival*</td>
<td>OzAsia Festival</td>
</tr>
<tr>
<td>Adelaide Biennial of Australian Art*</td>
<td>SALA Festival</td>
</tr>
<tr>
<td>WOMAdeleide*</td>
<td>South Australia’s History Festival</td>
</tr>
<tr>
<td>Adelaide Fashion Festival*</td>
<td>DreamBig Children’s Festival</td>
</tr>
<tr>
<td>Adelaide Film Festival</td>
<td>Adelaide Cabaret Festival</td>
</tr>
<tr>
<td>Open State Festival</td>
<td>Feast Festival</td>
</tr>
<tr>
<td>Adelaide International Guitar Festival</td>
<td></td>
</tr>
</tbody>
</table>

### Government organisations

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acess2Arts*</td>
<td>Royal South Australian Society of Arts Inc.</td>
</tr>
<tr>
<td>Music SA*</td>
<td>State Opera of South Australia</td>
</tr>
<tr>
<td>Radio Adelaide*</td>
<td>State Theatre Company of South Australia</td>
</tr>
<tr>
<td>University of Adelaide Theatre Guild*</td>
<td>Adelaide Symphony Orchestra</td>
</tr>
<tr>
<td>Arts Industry Council of South Australia Inc.*</td>
<td>The Mill Adelaide</td>
</tr>
<tr>
<td>Adelaide Festival Corporation</td>
<td></td>
</tr>
<tr>
<td>Creative Partnerships Australia</td>
<td>Felt Space</td>
</tr>
<tr>
<td>History Trust of South Australia</td>
<td></td>
</tr>
</tbody>
</table>

### Private businesses

<table>
<thead>
<tr>
<th>Business</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Mag*</td>
<td>Sydac Australia</td>
</tr>
<tr>
<td>Tuxedo Cat*</td>
<td>WDM Design &amp; Advertising</td>
</tr>
<tr>
<td>The Rhino Room*</td>
<td>NRG Advertising</td>
</tr>
<tr>
<td>SA Writers’ Centre*</td>
<td>Short Focus Films</td>
</tr>
<tr>
<td>Rising Sun Pictures*</td>
<td>South Australian Jazz Archive</td>
</tr>
<tr>
<td>Showpony Advertising*</td>
<td>Powwwow Media</td>
</tr>
<tr>
<td>Resin*</td>
<td>Executive Media</td>
</tr>
<tr>
<td>Blankspace*</td>
<td>Hardy Milazzo Architects</td>
</tr>
<tr>
<td>Interiors Australia*</td>
<td>Totalspace Design</td>
</tr>
<tr>
<td>Soundpond*</td>
<td>Dash Architects</td>
</tr>
<tr>
<td>Fiveaa*</td>
<td>Triple M 104.7</td>
</tr>
</tbody>
</table>
B.2. **Creative co-working spaces and incubators in Adelaide**

### St Paul’s Creative Centre | Co-working space | Adelaide CBD

Shared office space on the corner of Pulteney St and Flinders St for those working in the arts and creative industries. The space is connected to Gig City with creative spaces, training rooms, private meeting rooms, song writing rooms and Fab Lab Adelaide. Fab Lab Adelaide is a digital fabrication workshop open to members as well as the public for particular events.

### The Mill | Co-working space | Adelaide CBD

The Mill is an art gallery as well as a creative space in the CBD. Among the creative spaces offered by the Mill are artist studios and darkrooms, hireable shared co-working space, as well as private offices for those in the creative industries. The gallery can also be hired as an event space.

### 313 Halifax Street | Co-working space | Adelaide CBD

313 Halifax street is a co-working space specifically designed with the creative industries in mind. It hosts web developers, app developers, interior designers, marketers, architects and event coordinators. Includes a shared office space and meeting and presentation rooms.

### BlankSpace | Co-working space | Adelaide CBD

BlankSpace is a co-working space in the East End geared towards those working in film, animation, photography and graphic design. It offers both permanent and hot desk plans all in an open plan office.

### Gray Street Studio | Artist Studio | Adelaide CBD

The Gray Street Workshop is an artist run space that provides studios for established and up and coming artists in the field of jewellery and object making.

### Writers SA | Office Space | Adelaide CBD

This organisation incubates and runs workshops for South Australian writers. They also have a writer in residence program in which selected South Australian writers can work on their projects from within Writers SA. Writers SA is sponsored by the Council for the Arts, the City Libraries, Arts South Australia, the Regional Arts Fund and Country Arts SA.

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Drink Eat Work | Co-working | Adelaide CBD

Drink Eat Work (DEW) is a co-working space in the CBD that is geared towards creative professionals. DEW also offers a photographer’s studio. The space is also a wine bar and café.

Fifth Quarter Carclew | Incubator and Co-working | North Adelaide

Fifth Quarter is the incubator/co-working program of the Carclew Organisation based at Carclew House in North Adelaide. Hotdesks are available as well as private rooms. In the first year of residency, artists receive a 1.5 hour mentoring session every 3 weeks (twice a year for subsequent years) and access to professional development seminars.

Mâché | Co-working | Adelaide CBD

A co-working space in the CBD that also has artist studios and recording studios for hire.
Appendix C: International education

C.1. South Australia’s current share of the international student market

The current level of enrolments in each sub-sector is shown in Table C.1, along with South Australia’s share of the national total.

Table C.1: International student enrolments in South Australia and Australia by sub-sector (as at November 2017)

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>South Australia</th>
<th>Australia</th>
<th>South Australian share of national total</th>
<th>South Australian sector composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher education</td>
<td>18,840</td>
<td>350,390</td>
<td>5.4%</td>
<td>53%</td>
</tr>
<tr>
<td>VET</td>
<td>6,038</td>
<td>213,814</td>
<td>2.8%</td>
<td>17%</td>
</tr>
<tr>
<td>Schools</td>
<td>2,681</td>
<td>25,752</td>
<td>10.4%</td>
<td>8%</td>
</tr>
<tr>
<td>ELICOS</td>
<td>5,214</td>
<td>152,606</td>
<td>3.4%</td>
<td>15%</td>
</tr>
<tr>
<td>Non-award</td>
<td>2,946</td>
<td>49,860</td>
<td>5.9%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35,719</strong></td>
<td><strong>792,422</strong></td>
<td><strong>4.5%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Department of Education and Training

South Australia’s share of Australia’s international student enrolments has declined since peaking in 2011 (see Chart C.1). In September 2005, South Australia represented 5.2 per cent of enrolments across all sub-sectors, and 5.7 per cent at its peak in September 2011, but only 4.5 per cent in November 2017. International student enrolments in South Australian schools represent 10.4 per cent of the national average, far exceeding South Australia’s population share. Growth in school enrolments have also exceeded that seen across Australia.

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84 Ibid.
C.2. **Overview of purpose-built student accommodation in the East End, Adelaide CBD and inner suburbs**

This table excludes the recently proposed development on the corner of North Terrace and Frome Road, which is yet to receive approval from the State Commission Assessment Panel.

<table>
<thead>
<tr>
<th>Development</th>
<th>Location</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urbanest at the University of Adelaide</td>
<td>North Terrace</td>
<td>689[^85]</td>
</tr>
<tr>
<td><em>Opening February 1 2018</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Globe Apartments</td>
<td>Synagogue Place</td>
<td>156</td>
</tr>
<tr>
<td>Unilodge Bent Street</td>
<td>Bent Street</td>
<td>300</td>
</tr>
<tr>
<td>Unilodge Tobin House</td>
<td>North Terrace</td>
<td>29</td>
</tr>
<tr>
<td>Unilodge East West Apartments</td>
<td>North Terrace</td>
<td>91</td>
</tr>
<tr>
<td>UniHouse Rundle Mall</td>
<td>Pulteney St/Rundle Mall</td>
<td>98</td>
</tr>
<tr>
<td>Frome Central</td>
<td>Synagogue Place</td>
<td>(268)</td>
</tr>
<tr>
<td><em>Under construction</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>East End Subtotal</strong></td>
<td></td>
<td><strong>1,363 (1,631 incl Frome Central)</strong></td>
</tr>
<tr>
<td>Urbanest North Terrace</td>
<td>North Terrace</td>
<td>503</td>
</tr>
<tr>
<td>Unilodge Tower Apartments</td>
<td>King William St</td>
<td>152</td>
</tr>
<tr>
<td>Unilodge Metro Adelaide</td>
<td>Victoria St</td>
<td>600</td>
</tr>
</tbody>
</table>

[^85]: Ibid.
[^86]: David Ellis, *Urbanest and Uni of Adelaide team up to deliver 689 new student beds* (3 August 2016) The University of Adelaide
<table>
<thead>
<tr>
<th>Location</th>
<th>Address</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unilodge Thomas House</td>
<td>Hindley St</td>
<td>7</td>
</tr>
<tr>
<td>Unilodge City West</td>
<td>Gray St</td>
<td>345</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beds across Unilodge City West, Edge Apartments, and Waymouth</td>
</tr>
<tr>
<td>Unilodge Edge Apartments</td>
<td>Gray St</td>
<td></td>
</tr>
<tr>
<td>Unilodge on Waymouth</td>
<td>Waymouth St</td>
<td></td>
</tr>
<tr>
<td>University of Adelaide Village</td>
<td>210 Grote St</td>
<td>403</td>
</tr>
<tr>
<td>UV Apartments</td>
<td>King William St</td>
<td>70</td>
</tr>
<tr>
<td>Atira Student Living BlueSky</td>
<td>Waymouth St</td>
<td>428</td>
</tr>
<tr>
<td><strong>Other Adelaide CBD Subtotal</strong></td>
<td><strong>2,508</strong></td>
<td></td>
</tr>
<tr>
<td>Bradford Lodge</td>
<td>Rose Park</td>
<td>110</td>
</tr>
<tr>
<td>Australian Lutheran College</td>
<td>North Adelaide</td>
<td>100</td>
</tr>
<tr>
<td>Aquinas College</td>
<td>North Adelaide</td>
<td>195</td>
</tr>
<tr>
<td>Lincoln College</td>
<td>North Adelaide</td>
<td>215</td>
</tr>
<tr>
<td>St Ann’s College</td>
<td>North Adelaide</td>
<td>185</td>
</tr>
<tr>
<td>St Mark’s College</td>
<td>North Adelaide</td>
<td>245</td>
</tr>
<tr>
<td>Kathleen Lumley College</td>
<td>North Adelaide</td>
<td>81</td>
</tr>
<tr>
<td>Mattanya University of Adelaide</td>
<td>North Adelaide</td>
<td>18</td>
</tr>
<tr>
<td>Highgate Lodge</td>
<td>Highgate</td>
<td>138</td>
</tr>
<tr>
<td>North Adelaide &amp; Inner Suburbs</td>
<td></td>
<td>1287</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,158 (5,426 incl Frome Central)</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Various – including Jones Lang LaSalle\(^8\)


Appendix D: Tourism

D.1. Current hotel developments in Adelaide CBD and surrounds

Sofitel Adelaide

Source: Palumbo

Adelaide’s first Sofitel Hotel will be located on Currie St. The 32-storey development will be one of the state’s tallest mixed-use developments: the top eight levels will feature 80 apartments, while the remaining floors will contain the hotel’s 250 rooms.

The hotel targets both the business and leisure markets and will feature a restaurant, four bars, ballroom, swimming pool, health and fitness centre and meeting rooms, according to its development plan.

The Palumbo Group will develop the hotel, and have chosen the hotel chain Accor, Australia’s largest hotel operator, to manage it. The hotel will be the sixth Sofitel in Australia, and is due to open in 2019.

89 Palumbo, Luminesque – Sofitel Hotel
SKYCITY Entertainment Group in undertaking a $330 million expansion of the Adelaide Casino, with an anticipated completion date of 2020. The expansion includes a luxury hotel, VIP gaming rooms, three bars and three restaurants. The new hotel will form part of the upgraded Adelaide Riverbank Precinct.

The hotel will include 123 rooms, an increase on the originally planned 89 rooms, based on anticipated demand for quality hotel rooms in Adelaide from both domestic and international visitors.91

The hotel and casino leverages the heritage aspects of existing architecture. The existing Adelaide Casino in the historic Railway Station will be remodelled in alignment with the new development, while protecting the characteristics of this heritage location.92

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91 Ibid.
92 Ibid.
Frome Street Complex

Frome Central Tower One is a mixed-use tower incorporating a four-star hotel, serviced apartments, 400 parking spaces, and 88 residential apartments. Construction commenced in late 2017, with completion anticipated for 2019.

The planned construction of a second tower on Synagogue Place is due in 2018, which will house student accommodation. The 268 bed development will include a mix of self-contained studios, shared apartments, twin rooms, a rooftop terrace, lobby and reception area. The complex will be within walking distance of Adelaide’s two main universities.

Source: Kyren Group

93 Kyren Group, Current Projects
Tribe Adelaide

Source: Tribe Hotel Group

A Tribe Hotel at 124 Wakefield Street is currently at the development application stage, and is planned to be completed by 2019. Tribe is a new hotel brand which is targeted at the "affordable luxury" segment of "global nomads", "independent travellers" who are tech savvy and time poor. The construction will use a modular construction system with a contemporary facade. Tribe is part of the Mantra Group.

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LGB Australia and the Park Hotel Group are proposing to develop a four-star, 30 storey hotel and apartment offering in Adelaide’s CBD, the value of which has been estimated at $175 million. Additional to the proposed 280 residential apartments, the hotel will include 250 rooms and suites, a concept café and bar, gymnasium, swimming pool, sauna and car park.

The hotel integrates a heritage façade into a modern GHD Woodhead building. The development is to be constructed atop the old State Bank building on Pirie Street.

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