



STATE
PLANNING
COMMISSION



PRODUCTIVE ECONOMY



POLICY
DISCUSSION
PAPER

NOVEMBER 2018



Government of South Australia

Department of Planning,
Transport and Infrastructure

saplanningcommission.sa.gov.au

Acknowledgments and further information

This policy discussion paper has been prepared by the State Planning Commission in partnership with SGS Economics and Planning and Deloitte Access Economics. The SGS input focuses on the key drivers of economic prosperity, including how these apply in South Australia, and the current opportunities and gaps in the planning system to better support them. Deloitte was engaged to advise the Commission on South Australia's current and future economic advantages and the role land use planning can play.

For further information refer to the background papers prepared by Deloitte Access Economics and the Department of Planning, Transport and Infrastructure which can be downloaded from the SA Planning Portal.

Infographics acquired from Brand SA from various sources are cited.

Photos used throughout this document are courtesy of the Department of Planning, Transport and Infrastructure, the South Australian Tourism Commission, Renewal SA, Water Sensitive SA and the City of Adelaide and professional photographers contracted to these organisations.



TABLE OF CONTENTS

Introduction	5
Purpose	6
A productive economy for South Australia	8
Key trends influencing change	9
Global trends and influences	10
Local trends and influences	11
South Australia's competitive advantages	12
Supporting our future economic prosperity through the new planning system	21
Strategic Directions	21
South Australian Planning Policy Library	22
Working with other levers	22
How can the new system deliver a productive economy?	23
Theme 1: Supporting and growing key industries	26
Policy Conversation Area – Metropolitan growth management	28
Theme 2: Linking people to jobs, goods and services	31
Policy Conversation Area – Centres policy and retail investment	36
Theme 3: Providing infrastructure to enhance our liveability	39
Policy Conversation Area – Economic and industrial land utilisation / emerging industries	43
Theme 4: Facilitating innovation and enabling investment	44
Transitioning to the Planning and Design Code	51
References	64
Next steps	66
Have your say	66



A future vision for a productive economy

Our vision is to support growth and economic prosperity in South Australia amongst the ever evolving backdrop of change, disruption, emerging technology and our traditional and transitioning industries.

We support a planning system that in turn supports employment and investment and builds jobs, skills and knowledge.



INTRODUCTION

Land use planning and development in South Australia is changing. In response to these changes, the *Planning, Development and Infrastructure Act 2016* (the Act) is being progressively introduced to replace the *Development Act 1993* to enable a more efficient, responsive and effective planning system. The new system will support and enhance the state's liveability and prosperity in ways that are ecologically sustainable and meet the needs and expectations, as well as reflect the diversity, of its communities.

The Act provides for the creation of the Planning and Design Code (the Code) – a single planning rulebook for assessing all development applications across the state that will become the foundation of our new planning system. The Code will replace the complex and at times inconsistent planning rules found within the 72 development plans currently in use across South Australia.

In establishing the Code we have been presented with an opportunity to harness those aspects of our current system that are working well.

Generally, as a state, we are doing a good job, although there is always room for improvement.

We are aware the Code presents us with the opportunity to streamline areas where our current policies aren't quite up to scratch – where there may be conflict, duplication or deficiencies – and to develop new policies where gaps exist.

This needs to be done with the understanding that we may not be able to tackle all these issues in the first generation of the Code, which will be operational by July 2020.

In developing the Code, it is also important to recognise that land use planning is one element of a much bigger system that works together to create liveable, competitive and sustainable places and spaces. Other levers outside the planning system also need to be pulled to achieve success and, where possible, we must recognise their relationship to the development of the Code and its policy content.

At its heart, land use planning plays a significant role in balancing competing priorities and resolving

tensions in order to realise what our communities want when it comes to how we live, how we move, where we work and how we protect our environment.

This discussion paper outlines the key issues and opportunities associated with enhancing South Australia's economic competitiveness as we move into our new planning system.

In particular, it focuses on the role the planning system can play in protecting and growing key industries, linking people to jobs, goods and services, providing infrastructure to enhance liveability, and facilitating greater opportunities for innovation.

We look forward to hearing your views on the recommendations put forward in this paper as well as continuing to work together to build a successful new planning system of which we can all be proud.

What this paper does

Reviews current local, national and global economic trends and opportunities for growth and innovation.

Clarifies the role of planning in supporting those opportunities, in line with current state direction.

Provides policy recommendations for the new Planning and Design Code.

PURPOSE

In March 2018 the State Planning Commission (the Commission) introduced its *Blueprint for South Australia's Planning and Design Code* (Figure 1) which includes:

- A series of policy discussion papers designed to stimulate thought around the policy direction for the Code.
- A series of technical discussion papers to establish the operational framework and content requirements for the Code.
- A series of key policy conversations the Commission would like to have with industry, community and local government in relation to those areas it anticipates will require a greater level of reform. Each policy discussion paper will be closely aligned to at least one of these dedicated conversation areas.

The following policy conversation areas are explored in greater detail within this paper:

- Metropolitan growth management (page 28)
- Centres policy and retail investment (page 36)
- Economic and industrial land utilisation / emerging industries (page 43).

This Productive Economy Policy Discussion Paper is one of four papers that explore land use policies in South Australia. The other papers consider:

- Integrated Movement Systems
- Natural Resources and Environment
- People and Neighbourhoods (still to be released).

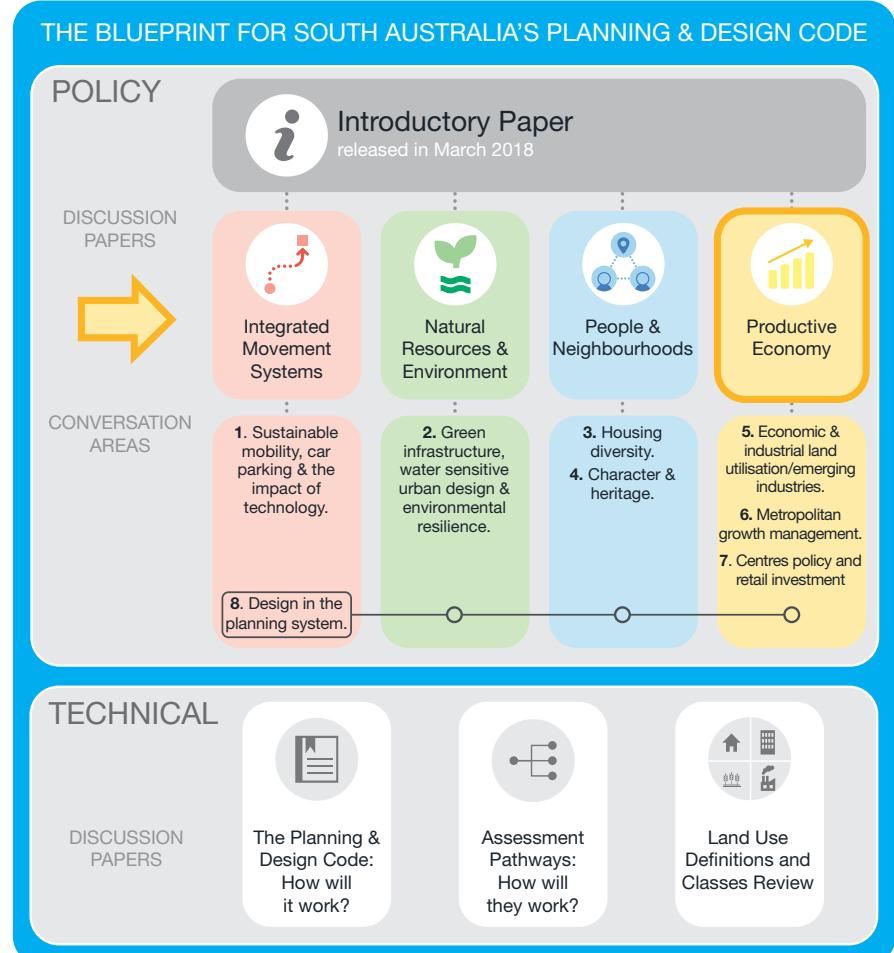


Figure 1: Context of this discussion paper against elements of the Blueprint



The discussion papers are intended to be read as a ‘family’ and will assist the Commission to establish the planning rules for the assessment of development proposals.

The papers recommend policy directions for the Planning and Design Code, including identifying where existing policy is likely to be transitioned to the Code and areas where further investigations or reform are necessary.

The foundation of this paper has been derived from work prepared by Deloitte Access Economics and SGS Economics and Planning. Other inputs to this paper include reviewing existing policy within the South Australian Planning Policy Library, development plans and a range of government strategic documents (refer to Figure 2 and the Background Paper for further detail).

For more detail about the family of policy discussion papers and the process of developing the Planning and Design Code, please see the Blueprint for South Australia’s Planning and Design Code available at:

www.saplanningportal.sa.gov.au

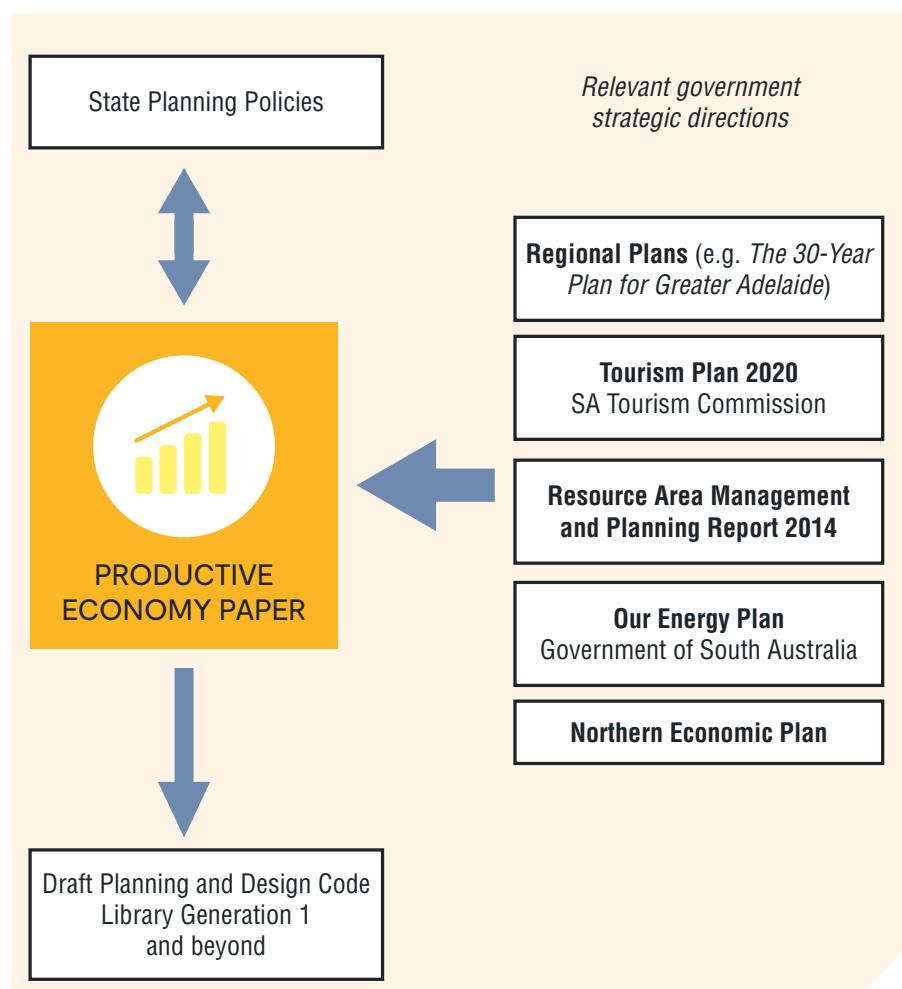


Figure 2: Context of this discussion paper in relation to new planning instruments and government strategic directions

Have your say

In recognition of the importance of collaboration in building our new planning system, discussion questions have been included to provoke thought and seek guidance on the policy recommendations contained within this paper. The following

general feedback questions are also included:

- Are there any other key opportunities and challenges you would like to identify?
- Are there any other potential Code policy solutions you would like to recommend?



A PRODUCTIVE ECONOMY FOR SOUTH AUSTRALIA

Planning plays an important role in ensuring the right signals are sent to the marketplace to attract interest and investment in our state. Industries and businesses should be welcomed by a planning system that is efficient, transparent, predictable and simple to navigate.

Our new planning system brings new opportunities to focus on industries with significant growth potential, to forge inroads into emerging industries, and to support innovation and growth in our already productive businesses. As we continue to develop and implement this new system we have conducted a 'health check' of South Australia's current strategic and policy environment to ensure decisions we make now reflect the needs and aspirations of South Australia going forward.

An evaluation of the strengths and weaknesses, opportunities and threats across a range of industry sectors has been fundamental to framing how we move South Australia forward with a clear planning policy reform platform, together with the benefit of a modern and contemporary planning system.

In an increasingly globalised marketplace for jobs, services, investment and knowledge we seek to create a planning system with the capacity to respond to change and opportunity, and to enhance the prosperity of our cities and regions, while protecting those valuable aspects that make South Australia a unique place to live.

We intend to protect our food bowl, our natural assets and our picturesque landscapes to

ensure we are able to enjoy them long into the future. We will also introduce policies that embrace change, new industries and technologies to grow our cities, towns and regions. We want employment areas that are flexible and located close to housing and activity centres, supported by infrastructure and appropriate transport services.

To achieve these things, we must have a clear approach to planning and maintaining land supply; enabling business flexibility and competition through effective policy; supporting new and emerging industry as well as our traditional strengths; and taking full advantage of our existing and future infrastructure investments.





KEY TRENDS INFLUENCING CHANGE

The South Australian economy has a rich history in agriculture, manufacturing and natural resources but manufacturing has declined over the past two decades – decreasing from 16 per cent of gross value added (GVA) in 1990 to 8 per cent in 2017. Influenced by advancements in technology, globalisation and environmental change, the base of the state's economy continues to move away from manufacturing to services. Some service industries

have already begun to fill the gap left by manufacturing, in particular health care, the construction sector and financial services. However, there is more we can do to unlock the full potential of South Australia's economy. Figure 3 illustrates changes in employment between different key sectors (between 2006 and 2016).

The following section details a range of global and local trends that will drive economic change in South Australia.

It also examines the sectors that will drive economic investment and the creation of jobs into the future and provides an analysis of our key economic advantages.

For further details and references, please refer to the background paper prepared by Deloitte Access Economics.

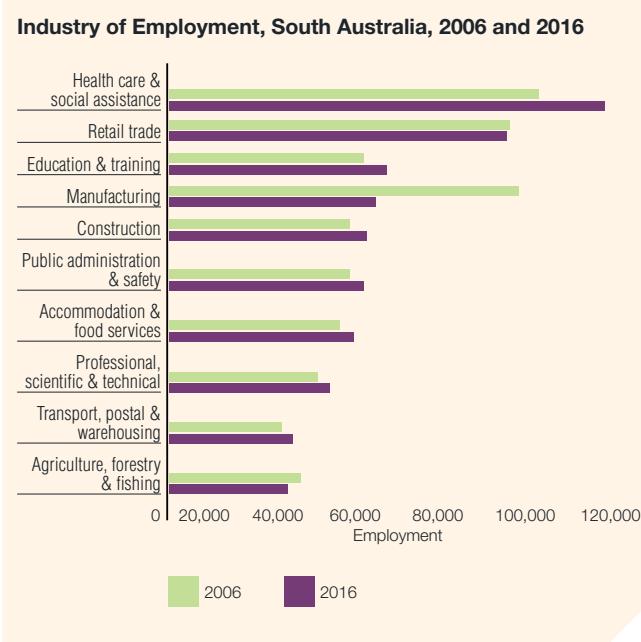


Figure 3 Source: Australian Bureau of Statistics 2006 & 2016 Census of Population and Housing

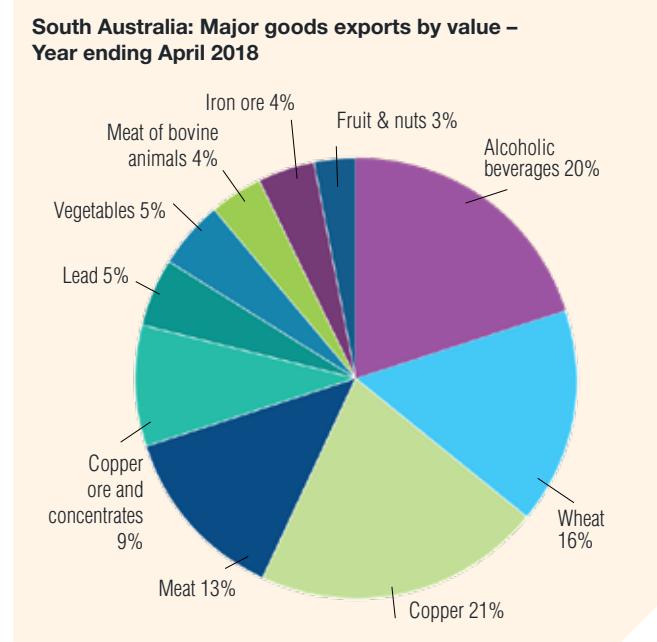


Figure 4 Source: Australian Bureau of Statistics 5368.0

Global trends and influences

Globalisation and emerging markets

Globalisation is affecting both demand and supply in South Australia and across developed nations as a whole.

On the demand side, Australia's close proximity to Asia is providing access to new markets, with more than 3 billion people in Asia becoming part of the middle class by 2030¹. Asia's economic shift will see a new set of opportunities for Australia and South Australia as exports to Asian countries shift to higher value goods and services² such as alcoholic beverages and international education. Globalisation and emerging markets are also affecting South Australia on the supply side, placing pressure on industries which are less competitive compared to those in emerging economies with lower costs of production.

Globalisation will continue to affect overseas demand for South Australian goods and services, including which goods and services are imported rather than produced locally. Figure 4 (see previous page) illustrates the major goods exported by value in the year ending June 2018.

Environmental impacts

Climate change and the depletion of natural resources are expected to have significant effects on Australia's environment³, placing pressure on water and food production systems.⁴

These environmental impacts will have flow on effects for many parts of the economy. For South Australia, these effects may be particularly acute, given its large agricultural sector.

While there are increasing pressures being placed on agricultural lands through climate change, demand for food is also increasing. The Food and Agriculture Organisation (FAO) expects that agriculture in 2050 will need to produce almost 50 per cent more food, feed and biofuel than it did in 2012 to meet global demand.⁵ Climate change may however reduce the productive capacity of some agricultural land thus reducing supply and requiring new technologies or approaches to meet current productive capacity. On the other hand, sustained demand – both locally and globally – for those products would tend to suggest their continued importance into the future.

Emerging technologies

With the introduction of new technologies such as artificial intelligence (AI), automation and 3D printing, economies across the world are being transformed and are impacting both how goods are produced and how services are performed.⁶

These technologies are changing how people work, what is produced, and how people demand and consume goods and services. Land use planning needs to focus on the designation of employment lands and precincts to support industry clustering, arising in part due to emerging technologies.

Changing consumer preferences

Consumer preferences are rapidly changing: what consumers are buying and how they are purchasing goods and services is being redefined by technology and globalisation. Recent times have seen the significant growth of e-commerce⁷, which is driven by consumers seeking greater value, greater variety and increased use of mobile devices.

As consumers' preferences change over time, so does production in global economies. Planning mechanisms therefore need to be flexible to adapt to increased freight, and the continuing demand for physical retailing and new experiences.





Local trends and influences

Population

South Australia's population (latest ABS estimates) is 1.73 million or 7 per cent of the Australian population.⁸

The Government has foreshadowed an agenda to grow the state's population at a higher rate to help support our economy and provide more opportunities for South Australians.

While South Australia's population is heavily concentrated in Adelaide, the Code will apply across the state, meaning that it will be important to consider the different industry and population mix in regional areas. South Australia's regional economies are generally centred on agricultural or mining industries, which will need to be considered in the Code.

As Adelaide's population increases, albeit slower than other cities, the planning system will need to facilitate development to accommodate this growing population and the industries that grow with them. These include activity and mixed-use centres to promote access to jobs; diverse and affordable housing options with services and amenity; and transport-oriented development to reduce costs for government, industry and residents.

The planning system can provide a positive and enabling environment that unlocks development, innovation and liveability that has positive influences on population growth.

Urbanisation and shrinking rural population

From 2006 to 2016 the population of the Greater Adelaide Region grew by 11.9 per cent, while the population of country South Australia increased by only 3 per cent.⁹ As more people choose to live in urban areas this will affect the requirements for housing and other infrastructure in Adelaide and its surrounds.

Slowing growth or declining regional populations will also create skills gaps, which could affect production in regional areas.

Liveability and attracting labour

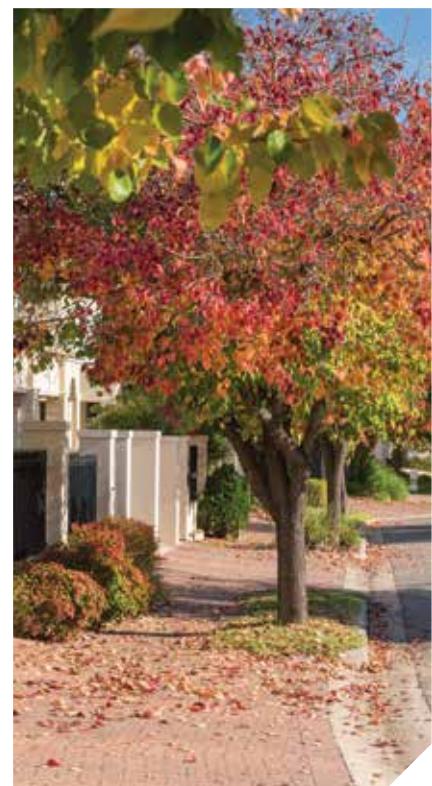
South Australia's challenge is to attract workers to our cities and regions by creating a more ideal lifestyle compared to other states. This means ensuring our state is liveable, affordable and safe and has a range of job opportunities.

Land use planning plays an important role in enhancing liveability and attracting labour by creating the right conditions for housing affordability and ease of transportation, and allowing for other infrastructure, attractions and developments that enhance liveability.

Increased mobility

Workforce mobility is critical to finding the most suitable workers for a particular job. It also allows people to move to where employment is available or to work without having to relocate.¹⁰ This is particularly important in South Australia's regional areas which often have poor transport corridors or are considered less desirable due to their lack of amenities and/or employment opportunities.

Ensuring the right conditions are in place to allow for transport infrastructure development will be crucial in enhancing mobility across our cities and towns for our labour force, and to regional areas for freight routes.



South Australia's competitive advantages

Based on the latest economic trends and evidence, the following sectors have the potential to provide South Australia with the opportunity to capitalise on a greater level of economic growth in the future.

These areas of key competitive advantage include:

- International education
- Energy and resources
- Tourism and visitor attraction
- Agribusiness and value-adding
- Defence industries
- Health and medical industries
- Knowledge and creative industries
- Professional and information technology services.

An efficient and effective planning system will be required as part of a supportive broader regulatory and policy environment to enable these sectors to have a significant positive influence on our state's future prosperity.





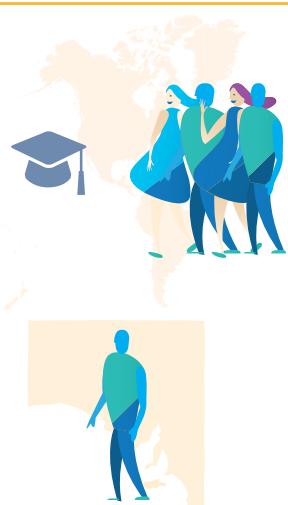
International education

International education is South Australia's largest services export, worth \$1.5 billion to our economy in 2017.¹¹ The sector has grown strongly globally, with the number of outbound tertiary students doubling over a decade – although this growth has slowed in recent years.¹² It is forecast that South Australia's international enrolments will increase from 32,100 in 2015 to 48,000 in 2026¹³, with the sector identified as one of the top five growth industries for Australia.¹⁴

Around half of South Australia's international students are in the higher education sector. There are also students in schools, vocational education and training courses, and other short or non-award courses.

South Australia has a number of advantages which place it well as a competitor to attract international students. These include our high-quality institutions, our affordable lifestyle relative to other cities, our high standard of living and the large number of student accommodation options and employment opportunities available.¹⁵

**EVERY 4
INTERNATIONAL
STUDENTS
ENROLLED**



**EQUALS
one job in
South Australia**

SOURCE: STUDY ADELAIDE*

Our universities continue to innovate

The University of Adelaide and the University of South Australia

The University of Adelaide and the University of South Australia have undertaken large investments in their campuses across the state, particularly in the city of Adelaide. This investment has brought a period of significant growth in the western area of the CBD, building important linkages to the emerging, co-located health and biomedical precinct which includes the new Royal Adelaide Hospital and the South Australian Health and Medical Research Institute. These investments will enable both universities to collaborate closely and build capacity for innovation and research in addition to other strengths, particularly in areas such as defence, health, agriculture, education and engineering.

Flinders University

Flinders University has recently invested \$120 million in the redevelopment of the former Mitsubishi site at Tonsley to contribute to the creation of the Tonsley Innovation Hub. This ambitious undertaking will see the university contribute skills and experience to underpin job creation and community engagement that ranges from inspiring students in schools to supporting commercial ventures. This starts to redefine the traditional role of higher education in a way that binds the university with the future economic and social fabric of our state.

The School of Computer Science, Engineering and Mathematics; New Venture Institute; Medical Device Research Institute; Flinders Partners; Southern Knowledge Transfer Partnerships; and Centre for Nanoscale and Technology have established themselves at the Hub.¹⁶

Energy and resources

South Australia has the largest oil and gas reserves in Australia, located at the Cooper and Eromanga basins in the state's north-east.¹⁷ In 2017, \$140 million was spent on further oil and gas exploration, representing 12 per cent of expenditure across Australia in seasonally adjusted terms, an increase of 9 per cent in 2016.¹⁸

Deloitte Access Economics has also identified the mining sector as one of the fastest growing sectors in the state, forecast to increase by 2.9 per cent each year over the next two decades.

A productive economy is inherently founded upon a diverse, cost-effective and secure network of energy provision – an essential service in a country that has high levels of energy consumption. Australia is forecast to experience a 35 per cent growth in energy consumption by 2030.¹⁹

Minerals make up around
40%
of SA's total exports

SOURCE: DEPARTMENT OF STATE DEVELOPMENT*

South Australia is leading the way in renewable energy

South Australia's reputation as the nation's leader in renewable energy and low-carbon initiatives is creating opportunities for investment by companies with a clean, green focus.

Renewable energy production in South Australia reached record levels in 2017, with 53 per cent of the state's energy generation coming from sun and wind-based sources.²¹

The South Australian renewable energy sector directly employs approximately 1490 people, up from 710 people in 2016.²²

TO DATE
\$7.6
billion
HAS BEEN INVESTED IN THE
RENEWABLE ENERGY INDUSTRY
IN SOUTH AUSTRALIA



SOURCE: CLEAN ENERGY PLAN (2017)*



Tourism and visitor attraction

The tourism industry is important to Australia's economy – people are travelling further and more frequently for a range of reasons including leisure, business and education. Tourism contributes approximately 3 per cent of Australia's GDP.

South Australia's expenditure on tourism has grown to a record high of \$6.6 billion – up 4 per cent (for the year ending December 2017) and tourist expenditure has risen 18 per cent to a record \$1.1 billion in the same period. A total of 36,000 people are directly employed in the industry.²³

In 2017, South Australia had 461,600 international visitors, an increase of 7 per cent from the previous year.²⁴ The majority of international visitor nights are spent in the city of Adelaide (82 per cent). In contrast, more domestic visitor nights are spent in regional centres, rather than in Adelaide.²⁵

South Australia has a comparative advantage in the tourism sector as the state was identified as the one of the top five must-see regions in the world in *Lonely Planet's Best Travel of 2017*.²⁶ With our festivals, wine regions and areas like Kangaroo Island, the tourism sector has significant growth potential.



36,700

People are employed by
TOURISM
in South Australia

SOURCE: SOUTH AUSTRALIAN TOURISM COMMISSION*

The low-carbon and circular economy

South Australia's resource recovery and waste sector is not only a significant supplier of infrastructure, but is also an area of continuing growth for the economy. The sector has an annual turnover of about \$1 billion, contributing \$500 million to Gross State Product (GSP) and employing about 5,000 people.²⁷ The economic contribution of this sector of the economy is greater than the fishing and aquaculture industry and similar to that of the air transport sector.

In a fundamental repositioning of traditional 'linear' economies, South Australia is leading the shift towards a more 'circular' economy, which is a more self-sustaining system driven by renewable energy and an imperative to keep material resources in use or 'circulating' for as long as possible.

It is estimated that the potential benefits of adopting a more circular economy for South Australia could result in up to an additional 25,700 full-time-equivalent jobs and reduce greenhouse gas emissions by 27 per cent or 7.7 million tonnes of CO₂ equivalent.²⁸

Many types of jobs in the circular economy already exist, especially in the waste management, recycling, recovery, reuse and repair sectors. Most of the new jobs created in the circular economy will come from service sectors in the areas of design and technology, as well as through growth in entrepreneurship and innovation in reverse logistics, services and digital technologies.

Agribusiness and value-adding

South Australia has a strong and diverse agricultural history. However, there is still room to grow, with consumer preferences driving a trend towards manufactured food and beverages. South Australia's food processing industry has emerged as the state's largest manufacturing industry, following the closure of automotive manufacturing.²⁹

Deloitte Access Economics has forecast the South Australian agricultural sector to grow at a rate of 1.3 per cent annually over the next two decades excluding food and beverage manufacturing, which is also likely to be significant. South Australia is considered the 'wine capital' of the nation, as the producer of almost 80 per cent of Australia's premium wine.³⁰

Value-adding activities transform a product or service to a more valuable state in the eyes of the consumer. It has economic benefits of increasing employment, improving net (export) performance, reducing exposure to price fluctuations of primary activities, and improving regional and national income.

**FOOD & WINE
IS A MAJOR CONTRIBUTOR
TO THE STATE**



SOURCE: PRIMARY INDUSTRIES AND REGIONS OF SA*

Value-adding in the Adelaide Hills

The Adelaide Hills has always held a special place in the hearts of South Australians as an iconic place to live, visit and stay.

In recent times there has been an increase in the area's value through taking advantage of the produce and resources sourced from close by.

A new initiative known as the *Makers Movement* is gaining pace and drawing together a range of craftspeople and artisans who are making fine wine, furniture, clothing, craft beer, spirits and other products.

All of this work stimulates investment. A recent \$4.5 million project brought together a cider maker with a brewer and a distiller to capitalise on a \$950,000 Regional Development seed grant. The result is a state-of-the-art facility and cellar door which created 35 ongoing jobs.

This *Makers Movement* is supported by, and in turn supports, our tourism industry, which adds \$6.7 billion to the South Australian economy each year (SATC July 2018).

SA's agriculture, forestry and aquaculture industries

South Australia's agriculture, forestry and aquaculture industries are important parts of our state's long-term prosperity. From tourism and service industries to on-farm or product-based value-adding opportunities, the 'value chains' that support primary industry are major generators of economic activity and employment, particularly in the regions.

South Australia's clean marine waters are home to some of the most sought after, premium seafood in the world. Our seafood sectors contribute \$908 million annually to regional economies and are managed to ensure sustainability, to maximise benefit to the community and ensure high levels of aquatic health.

In the finished foods sector alone, increased investment in processing facilities, coupled with strong growth in meat, horticulture, dairy and grain processing resulted in the total value of production growing to \$5.9 billion in 2013-14.³¹



Defence industries

South Australia is home to three large defence industry precincts which house clusters of innovative companies, defence education and training, and defence experts. South Australia is also home to the only state-based defence agency in Australia, Defence SA. The Osborne Naval Shipbuilding Precinct has also been confirmed as the location for the \$50 billion Future Submarine program and the \$35 billion Future Frigate fleet.³²

Australia is likely to be a strategic spender in defence through to 2020, and is placed in the top 14 higher-growth spenders, with a defence budget of annual growth rate between 3 to 7 per cent.³³

Despite the loss of car manufacturing, other types of manufacturing continue to provide a meaningful level of diversification. They comprise a significant share of the state's economic activity and account for approximately 8 per cent of jobs.³⁴ Defence manufacturing in particular is strong, with a quarter of the nation's specialist defence investment concentrated here.

The state has an established and recognised technical skills base which provides a solid platform for new and existing manufacturers to grow and invest in the transition from traditional to advanced manufacturing.



ADELAIDE IS THE LOCATION FOR THE
LARGEST DEFENCE MANUFACTURING PROCUREMENT
IN THE NATION'S HISTORY

SOURCE: INVEST SA*

Health and medical industries

Social infrastructure such as health and medical facilities is required to support the liveability and prosperity of our cities and regions. Technology, lifestyles and demographic change will continue to drive supply and demand for these facilities including their size, location and intensity. While we continue to develop new health and medical social infrastructure, there must also be an emphasis on the utilisation of existing infrastructure, with the flexibility to adapt and diversify to support infill occurring around existing facilities.

With Australia's population increasing and people living longer, health care needs are rising. The health care and social assistance sector is already South Australia's largest employer; BankSA³⁵ and Deloitte recognised that where employment levels in all other industries have plateaued in South Australia, the healthcare sector has grown.³⁶ There is also significant potential in the health and medical research sector. Adelaide is home to Adelaide BioMed City, one of the largest health and life sciences clusters in the southern hemisphere. Located in the CBD, it brings together research, education, clinical care and business development.³⁷



Adelaide BioMed City

Located on North Terrace is one of the
LARGEST HEALTH & LIFE SCIENCES CLUSTERS
in the Southern Hemisphere

SOURCE: HEALTH INDUSTRIES SOUTH AUSTRALIA*

Knowledge and creative industries

The arts and creative services industry contributed a total of \$690 million to the South Australian economy in 2016-17.

This is due significantly to South Australia's reputation as the 'Festival State'. It is home to the largest Fringe festival in the southern hemisphere, as well as WOMADelaide, the Adelaide Festival and Adelaide Writers Week.³⁸

These cultural events attract a significant number of artists and performers, as well as tourists, to the state.

In 2018, the Adelaide Fringe Festival was the largest ticket selling festival in Australia. Of the 1.5 million tickets sold, half were sold in South Australia.³⁹ Temporary events such as these are important to consider in the context of planning as they bring cultural activities and vibrancy to the city.

More broadly, South Australia has strengths in other components of the creative industries such as film production, galleries and museums. The cultural boulevard of North Terrace is a great example of the importance of planning in preserving the heritage and nature of an area and working with other levers such as new tram infrastructure and public realm improvements.

Rezoning has also helped to unlock substantial investment in the Festival Plaza, health and biomedical precinct and the former Royal Adelaide Hospital site.

MORE THAN
32,000
South Australians

are involved with creative employment, from art & music to advertising, publishing & specialised design services



SOURCE: INVEST SA*

Professional and information technology services

Professional services contributed over \$14.7 billion to South Australia's economy in 2016-17.⁴⁰ Although Adelaide is not considered a financial sector hub, these industries are of significant value to the economy – and will be especially so going forward, as the economy transitions to one that is services-focused. BankSA has found that over the past 20 years, total jobs in professional services in South Australia increased by 62 per cent, compared to just 24 per cent across all sectors.⁴¹

Evolving technology and communications continue to change the way business is conducted, how we live our lives, and how our urban and regional environments are shaped. The economy and traditional industries are experiencing fundamental shifts in business models as a result of the digital economy and improved information access. Real time data and smart technology are anticipated to lead to better utilisation of infrastructure, clean energy and energy efficiency, improvements in services, and better benchmarking of development and investment performance.

This provides the basis for a new approach to city development – Smart Cities – where the emphasis is on the integration of public infrastructure, data technology and the internet to improve the quality of life for people living, visiting and working in the area.

City-based technology provides a basis for looking at city functions and development differently. Improvements to the way we move around and how services are delivered can alter on-site requirements normally considered through a planning assessment process. With three quarters of the population living in Australia's major cities, it is critical that these environments are developed to provide for our future.

Some emerging technologies, such as e-commerce, ride sharing and accommodation services are already having impacts on the economy and land use activities and others, such as driverless vehicles, are anticipated.

It is challenging to identify precisely how or when technology will shape the development and function of our cities. As such, both the planning system and policy must be designed to provide for its influence.



Case Study: Innovation drives growth – the Pittsburgh model

Pittsburgh, Pennsylvania is a city in north-eastern United States with a metropolitan population of approximately 2.3 million. Known as North America's 'steel city' throughout most of its industrial glory days, the city experienced an economic downturn and a period of high unemployment in the 1970s and 80s due to the impact of global economic forces on the local steel industry, allied manufacturing and support sectors.

Present-day Pittsburgh is a thriving, modern American city with a rediscovered prosperity underpinned by a solid foundation of advanced manufacturing, world-renowned research institutions, a highly-skilled knowledge sector and focus on emerging technology industries.

The economic transformation of Pittsburgh has been extensively documented, with other places seeking to emulate the factors which have led to its successful economic transition. This is particularly true in places where the decline of traditionally strong industries is forcing change and a reprioritisation of policy designed to boost liveability, incentivise growth and support economic competitiveness.

Pittsburgh's economic resurgence has been assisted by policymakers at all levels (including planners), through recognising and stimulating nascent strengths in advanced manufacturing, research institutions and emerging technologies. The creation and fostering of innovation districts such as the greater Oakland neighbourhood has greatly assisted in this, creating environments where aligned companies and institutions can cluster, partner together and collaborate to attract greater investment and jobs.⁴²

The challenge for South Australia, particularly for Greater Adelaide, is to recognise and support its economic strengths and play to the city's regional advantages. This is to ensure the ongoing economic transition away from declining industries is supported by new opportunities for diversification, value-adding, research, innovation and growth in knowledge sector and other emerging industries, which by some estimates may constitute up to one-third of global GDP by 2025.⁴³

Responding to opportunity in South Australia

We have made positive steps in this direction through, for example, the establishment of Tonsley and the identification of clustering and agglomeration policies within *The 30-Year Plan for Greater Adelaide – 2017 Update*. Further opportunities for complementary development exist for defence industries in Osborne, Port Adelaide and Edinburgh; for health and medical research facilities near North Terrace; for innovative and entrepreneurial enterprises at Lot 14 (The old Royal Adelaide Hospital site); and for renewable energy technologies across many regional areas but centred principally near Whyalla, Port Augusta and Port Pirie.

The next steps to progress these discussions involves the continuation of the Commission's **Metropolitan growth management** and **Economic and industrial land utilisation/ emerging industries** Policy Conversation Areas (see pages 28 and 43 for further information).

Pittsburgh's successful transition from its industrial roots to a modernised economic base has earned it praise as the poster child for managing industrial transition.





SUPPORTING OUR FUTURE ECONOMIC PROSPERITY THROUGH THE NEW PLANNING SYSTEM

One of the most important functions of the new planning system is to facilitate and enable economic growth opportunities to achieve greater prosperity for all South Australians.

Investors and businesses seek clarity, opportunity and security and the planning system has an important role to play in this regard. This can be achieved through a strategically planned supply of land; the identification and provision of supporting infrastructure such as freight networks; and planning policy which is clearly articulated and flexible enough to respond to future challenges and opportunities.

It is important to ensure that planning policies and tools are in place to support new industries while allowing traditional strengths in areas such as primary production, tourism, mining and defence to continue to prosper.

The Planning and Design Code will seek to promote the optimal economic benefit, balanced with social and environmental priorities.

Strategic Directions

This section highlights the key strategic and policy directions currently in place in South Australia and outlines the major productive economy themes for drafting of the Code.

The Code must reflect the policy direction contained within key government strategic documents, in particular the draft State Planning Policies (SPPs) and Regional Plans.

Figure 5 shows how the new planning system's strategic framework will guide Code development.

Refer to *The Planning and Design Code – How Will It Work? Technical Discussion Paper* for further information.

State Planning Policies

Once finalised in early 2019, the State Planning Policies (SPPs) will outline the high-level planning priorities for the state and enable the new system to robustly respond to current and future opportunities and challenges.

In drafting the Code Policy Library, the Commission must ensure the policies align with the direction set out in SPPs.

The following draft State Planning Policies share a direct alignment with the key themes explored in this paper:

- SPP 1: Integrated Planning
- SPP 2: Design Quality
- SPP 3: Adaptive Reuse
- SPP 5: Climate Change
- SPP 6: Housing Supply and Diversity
- SPP 8: Primary Industry
- SPP 9: Employment Lands
- SPP 10: Key Resources
- SPP 12: Energy.

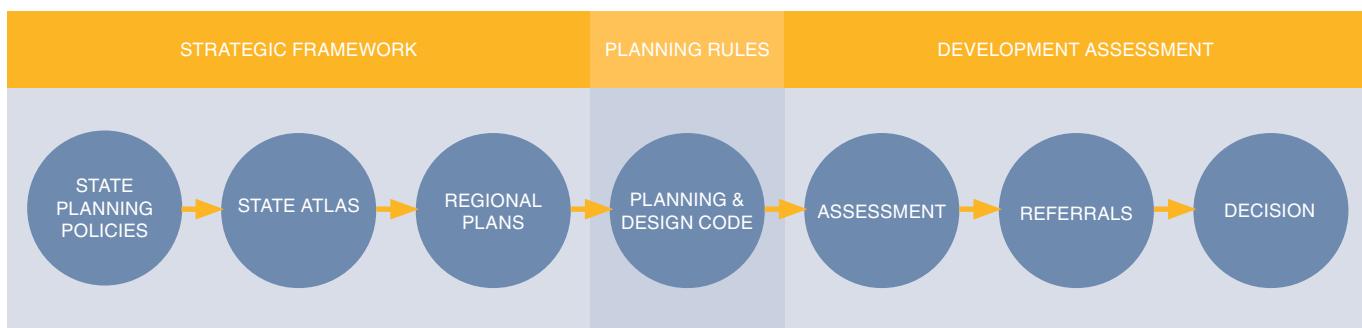


Figure 5: An example of how the new planning system's strategic framework will guide the Planning and Design Code

Regional Plans

The current regional volumes of the Planning Strategy for South Australia will serve as the state's interim regional plans until new versions are prepared. Regional Plans provide a long-term vision for a region or area and include provisions promoting the ongoing strength of key industries, the protection of major infrastructure and the growth of regional economies.

These volumes share a number of similarities in regard to enhancing regional economic prosperity, with policy differences between them reflecting economic and industry specialisation in different areas of the state.

The 30-Year Plan for Greater Adelaide – 2017 Update also has measurable targets to facilitate a productive economy. They include:

- **Target 1:** Containing our urban footprint and protecting our resources: (1.1) 85 per cent of all new housing in metropolitan Adelaide will be built in established urban areas by 2045. (1.2) 90 per cent of all new housing in Outer Greater Adelaide will be built in established townships and designated urban areas by 2045.
- **Target 4:** Walkable neighbourhoods: Increase the percentage of residents living in walkable neighbourhoods in Inner, Middle and Outer Metropolitan Adelaide by 25 per cent by 2045.

South Australian Planning Policy Library

The South Australian Planning Policy Library (SAPPL) contains a suite of General Policy Modules as well as a series of maps and zones focused on specific economic or employment areas, such as Industry, Centres, Mixed Use and Commercial Zones. Refer to the Background Paper for a complete list of relevant SAPPL zones and general policy modules.

The Department of Planning Transport and Infrastructure has worked with councils to undertake development plan reviews. These reviews have shown that while there has been significant uptake of the SAPPL, some councils have fallen behind in providing contemporary planning policy, while others have made variations to policies, some of which may be appropriate state-wide. Where this is the case, this policy has been identified for inclusion in the Code.

Working with other levers

It is important to acknowledge that the planning system plays an important role in supporting a productive economy but also needs to work with other levers.

Examples of other levers include:

- **Infrastructure investment**
(e.g. public realm and transport infrastructure upgrades)
- **Subsidies**
(e.g. local business incentives and grants)
- **Regulation at a local level**
(e.g. differentiated rates)
- **Taxation**
(e.g. small business deductions)





HOW CAN THE NEW SYSTEM DELIVER A PRODUCTIVE ECONOMY?

The planning and development system's impact on economic drivers

The planning and development system generally comprises four key elements (see Figure 6).

Two (shaded blue) relate to administration of planning process and the remaining (shaded yellow) are concerned with making and applying policy. Together, they involve the creation of visions and plans for the development of neighbourhoods, towns, cities and regions and the formulation of policies to regulate land use and development to achieve these visions.

All four elements are important for a productive economy. Efficiency in regulatory process and review affects the risk profile of potential investments and the costs of doing business. The planning reform process is, in part, an effort to ensure these elements are more transparent, consistent and reliable, and to ensure streamlined decision making.

Also motivating reform is the intention to better align the policy content of the system with the state's economic development imperatives and potential. The Code has a vital part to play in achieving this.

The zones, policies and particular requirements applying to various types of land use and construction activity, including buffers, set-backs, heritage, car parking, open space, development contributions and various amenity controls, are tools to enable visions and strategic plans to be put into practice.

These regulatory provisions represent the building blocks with which the planning policies for neighbourhoods, towns, cities and regions will be constructed.

The creation of the Code represents a once-in-a-generation opportunity to comprehensively modernise land use and development regulation in South Australia in keeping with the new and emerging drivers of the contemporary economy.

The Code's policies will need to deliver two essential functions. First, they must continue in their traditional role of managing negative external impacts, that is, the potential conflicts between incompatible land uses. They must also provide the planning tools for the creation and reinforcement of opportunities and innovations as they arise (positive externalities). For example, where businesses can gain an advantage from access to skills and complementary services in industry clusters.



Figure 6: Elements of the planning system
(Source: SGS Economics & Planning Pty Ltd)

Our New Planning System

Our new system has been designed with new tools in these circles. They are aimed at making our system more certain and efficient.

Strategic plans and Policies

- *State Planning Policies*
- *Regional Plans*

Regulatory Provisions

- *Planning and Design Code*
- *Design Standards*
- *Ministerial Building Standards*
- *Offset Schemes*

Regulatory process

- *Regulations*
- *Practice Directions*
- *Accreditation Schemes.*

Managing potential conflicts

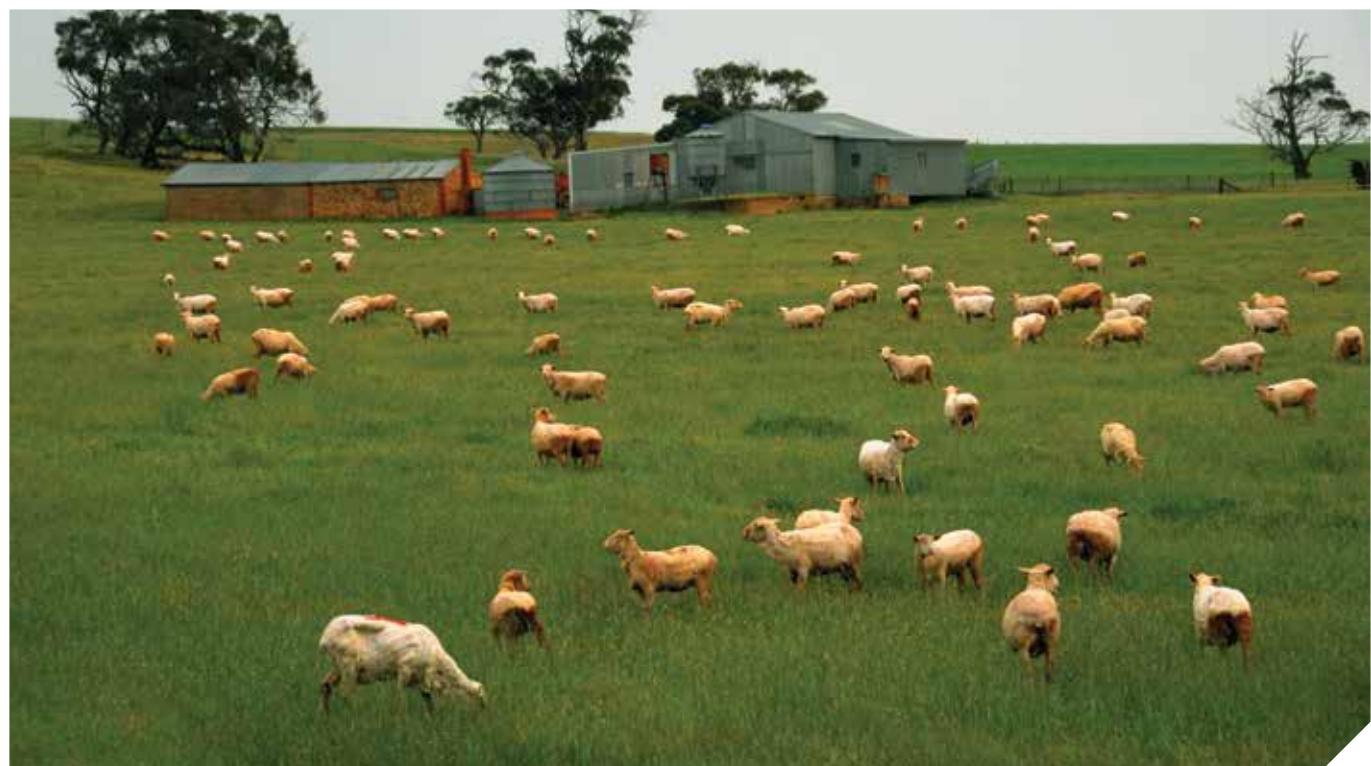
It has been recognised for decades that land use planning policies and regulations are necessary if markets are to do their best work. These regulations deal with, for example, noise, emissions, traffic and overlooking issues that might otherwise accompany developments. If these impacts were left untreated, the liveability and functionality of our towns and cities would be compromised and economic performance would ultimately fall below the state's potential.

This said, changes in industrial processes, including advances in technologies, mean that there is now greater scope to

manage land use impacts, both within the planning system and through non-planning measures such as licensing and trading schemes. The planning system needs to support changes in how impacts are managed in cost-effective ways that minimise the need for traditional solutions such as the separation of uses. This means that planning regulation should be subject to continuous modernisation including, for example:

- **Improved controls to manage external impacts** – removing outdated zones or development controls where new production methods enable nuisance effects between land uses to be better managed.

- **Zoning models that support mixed use and diversification of business and industry** – adjusting and rationalising industrial zones, recognising that contemporary production processes often involve a blending of services delivery, assembly and logistics in the one premises.
- **Planning controls that support emerging business practices and technology** – acknowledging that 'disruptive' ways of doing business, such as the emergence of the sharing economy, may require the introduction of new planning controls to mitigate unanticipated impacts.





Creating and reinforcing opportunities and innovations

Figure 7 shows that the state's metropolitan and regional economies rely on external injections of income, primarily via exports to other regions in Australia and overseas.

Boosting the productivity of South Australia's regional economies therefore depends on maximising the export earning potential of the key sectors described earlier on page 12.

At the same time, income leakages from the state need to be contained. The capacity to meet both these imperatives depends on a number of enabling factors relating to skills, leadership and infrastructure at the economy-wide level, and access to capital and innovation at the business level.

The research and investigations conducted in the preparation of this paper suggest that planning policy and regulations can have a significant impact on the enablers of productivity and competitiveness, namely export industry performance, access to skills, infrastructure and innovation.

Planning can support key export industries by ensuring sufficient land supply for their expansion; managing the incursion of incompatible land uses (e.g. wine regions at the urban interface); and conserving the built form and public realm values that underpin the state's cultural tourism sector.

Good planning and land use regulations play an important part in creating flexible regional labour markets. This includes guiding investment into a metropolitan structure that facilitates ease of movement and improved jobs matching.

It is also vital that urban infrastructure is provided in an intelligent way to support our economy. This applies to infrastructure in its broadest sense, embracing, for example, inclusive and liveable communities, 20-minute neighbourhoods, quality

public realm in activity centres and employment districts, and access to transport, water, energy and communications services.

In the context of a globally integrated and knowledge-based economy (see **Key trends influencing change** at page 9) planning and land use regulation also have a significant role in the formation of innovation precincts and clusters that can incubate creative start-ups and leverage the state's capabilities in knowledge generation and advanced manufacturing.

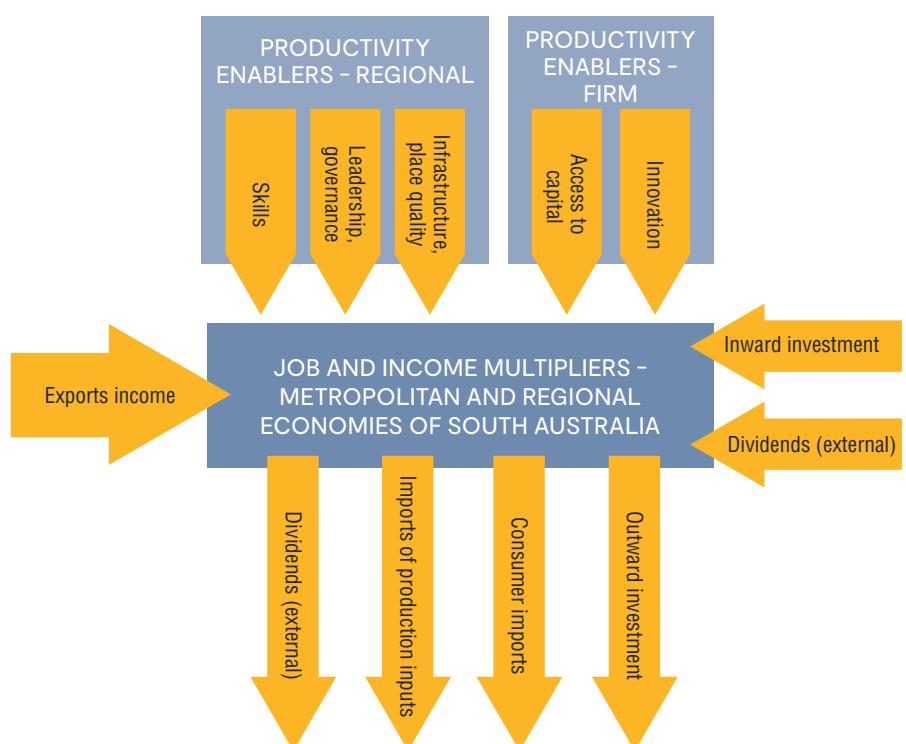


Figure 7: Model of the regional economy. Source: SGS Economics & Planning

How will our new system support the delivery of a productive economy for South Australia?

The following four key themes have been identified as key policy areas that are critical to the delivery of a productive economy through the new Code (Figure 8):

- Supporting and growing key industries
- Linking people to jobs, goods and services
- Providing infrastructure to enhance our liveability
- Facilitating innovation and enabling investment

Taking each of these four themes in turn, the following pages outline how the Code's policies will contribute to a prosperous South Australian economy.



Figure 8: Key planning themes critical to a productive economy

Theme 1 – Supporting and growing key industries

South Australia's key export industries, both those in place now as well as those expected to grow in future, have been discussed earlier in this paper. As noted, these sectors range from traditional 'heavy' industries and manufacturing, which tend to be land intensive, through to new drivers of export income in the cultural tourism economy, where land use and development requirements are more diverse and nuanced.

Primary industries

Primary industries are a key driver of the state's economy. For example food and wine generated approximately \$20 billion annually in revenue and accounted for 50 per cent of the state's total merchandise exports in 2016-17.⁴⁴

With shifting economic patterns, environments and lifestyles, it is critical that land use planning includes strategies and policies that are flexible to support the diversification of compatible activities; encourage innovative land use planning and management; assist in implementing adjustment strategies; add value to activities; and respond to the effects of climate change.

Some good examples include the growth in cellar door sales, distilleries, on-farm produce sales and other value-adding that is complementary to the primary production activities of a region. This has been evidenced in many areas, but is particularly prominent in the Adelaide Hills, Barossa Valley and McLaren Vale. Refer to the breakout box on page 16 for further examples.



Tourism

In its report on Australia's international tourism industry, the Australian Government Productivity Commission identified that poor development assessment frameworks and approval processes can be costly to developers as well as businesses and communities, and are considered by participants to be one of the main impediments to tourism investment.⁴⁵ A number of improvements have been made to the planning policy environment in recent years to better support the tourism sector, and further recommendations are proposed in the development and implementation of the Code.

Continued growth of the state's tourism industry is dependent on the provision of infrastructure such as accommodation – particularly in Adelaide, but also in regional areas. If the planning system is too restrictive to adapt and allow for sufficient development, South Australia's future growth prospects will be affected. In addition, the tourism industry will continue to produce new attractions and experiences to appeal to visitors from both Australia and overseas. Again, the planning system and the Code will need to account for the

importance of these developments to the tourism industry.

A policy response will be particularly important to support eco-tourism in our more pristine areas. Nature-based tourism is a significant growth area for our state and managing development activities within these locations (such as Kangaroo Island and the Eyre Peninsula) requires a level of policy reform to create a more enabling environment.

Mining and exploration

There are three types of commodities mined in South Australia – extractives (construction materials); industrial (commercial value but not fuel or metals); and metallic (valuable metals) minerals and fuels (gas, petroleum). Ongoing resource exploration and development of these resources is vital to the delivery of employment, infrastructure, skills and prosperity to the state.

Increased urban growth, the impacts of infrastructure projects, larger house sizes and longer development horizons have seen an increased demand for resources (particularly extractive) and more intensive mining operations (including

night works, blasting, processing and heavy vehicle traffic).

Land use planning generally, and the Code in particular, must adapt to increasing exploration and production in the energy and resources industries, while also being mindful of environmental concerns. Policies in the Code must consider interactions with other regulatory levers, such as environmental impact statements.

Where can the Code help?

Policies, zoning provisions and development regulations will continue to be needed to maintain sufficient land supply for the retention and expansion of land-intensive industries. This will have to consider market lags and, perhaps allow for short bound uses of the areas in question until take up for the strategic industry in question becomes viable.

The Code will apply suitable buffers and hazard management zones to avoid compromising efficient industrial or agricultural operations.

Other critical factors of production for strategic exporters that need to be protected and enhanced include soils and landscapes for food producers, and heritage buildings and streetscapes in Adelaide and other cultural tourism locations.

The Code needs to continue to protect South Australia's viticultural and horticultural lands from urban encroachment and development that detracts from iconic landscapes (Refer to Map 1 on page 30).

POLICY CONVERSATION AREA – METROPOLITAN GROWTH MANAGEMENT

South Australians have long enjoyed a lifestyle characterised by an abundance of open space and natural landscapes, easily accessible urban and regional centres, and proximity to a vast array of local, high-quality produce from both land and sea. As our population continues to grow, we must consider how best to protect these assets and our uniquely South Australian lifestyle while providing the policy incentives and market signals that support the coordinated, compact and integrated growth of our capital city and regional centres.

Home to 83 per cent of the South Australian population, the Greater Adelaide region is the focus of the state's employment, economic activity and housing growth, particularly in major urban growth areas to the north and south of the metropolitan area. In recent years, market demands have changed considerably as growing demand for housing located closer to jobs, services, recreation opportunities and a more diverse range of transport choices has underpinned a shift from new housing estates at the urban periphery to a wider range of infill housing choices in established suburbs.

Currently, more than three-quarters of all new dwellings are built in established areas, with minor infill (demolition and re-subdivision of an allotment)

contributing an average of 30 per cent or approximately 2000 new dwellings per annum between 2010-2016. This trend is expected to continue, as the targets of *The 30-Year Plan for Greater Adelaide* encourage a wider diversity of housing types located in highly walkable neighbourhoods, close to transport routes, jobs and services.

In focus: Land supply

Since 2010, an extensive rezoning program has increased the supply of residential broad hectare land for future development to more than 20 years' supply across Greater Adelaide.

A series of significant major infill development projects (Bowden, Tonsley, Lightsview, St Clair, Port Adelaide, etc.) will reach completion during the next 10 years and opportunities for further redevelopment of established areas will become increasingly constrained. It is estimated that land supplies to the south of Adelaide in particular are likely to be consumed by existing or planned growth projects over the next six years. Despite relatively low 5-year average land consumption rates of 216 hectares per annum (compared to 2010 consumption of approximately 400 ha/p.a.), it is expected that a renewed focus on the identification of

lands catering to future housing growth will be required.

Key challenges of this process will be to ensure that the pipeline of affordable and well-located land is identified through strategic planning processes which involve effective coordination with infrastructure providers and a meaningful level of engagement with communities.

Key issues:

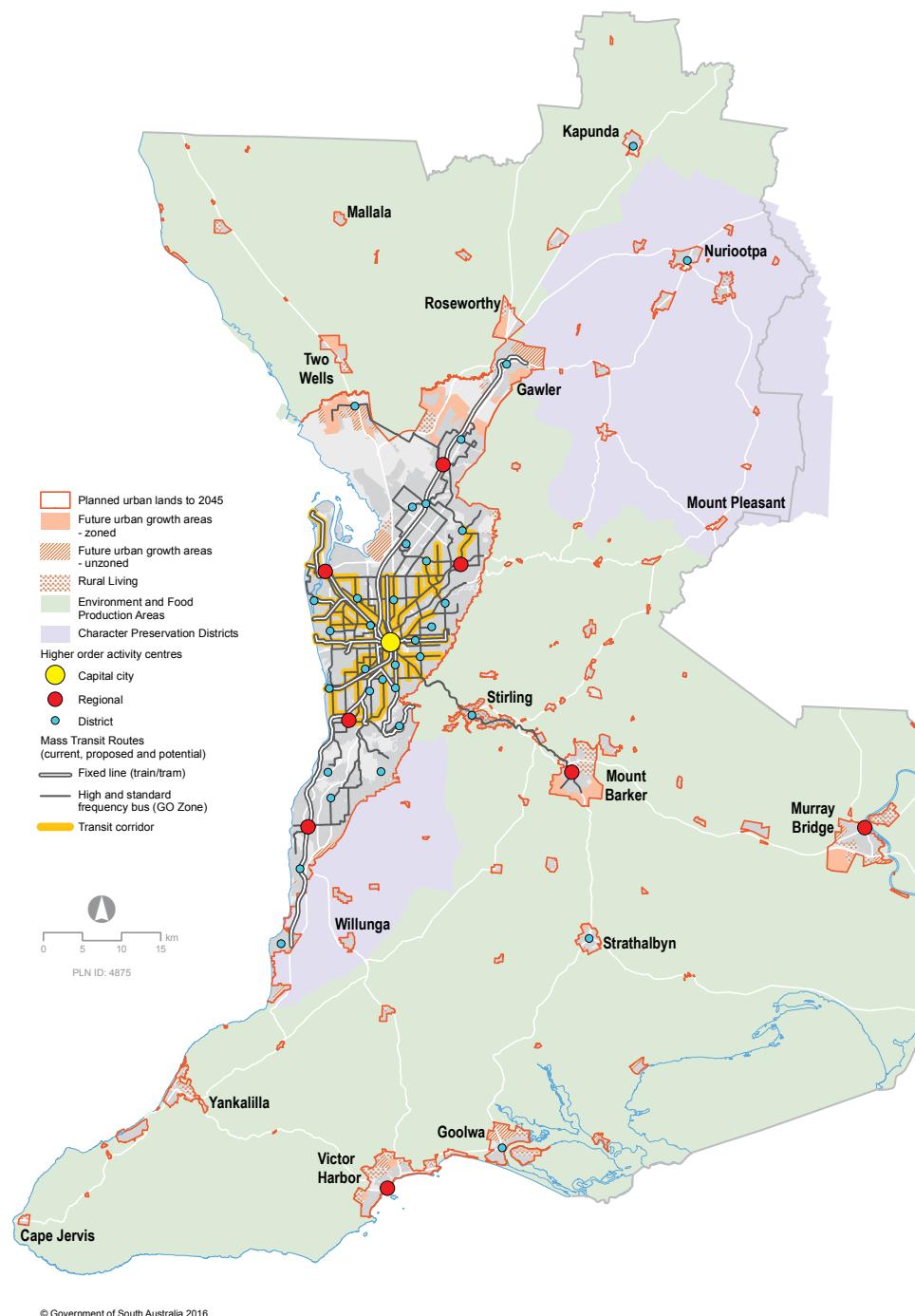
- **The strategic identification of suitably located land** to accommodate new housing and employment industries linked to projected population and economic growth.
- The maintenance of an **integrated land supply and release program** which ensures an efficient pipeline of land supply is maintained and linked to market demand.
- The need for the **timely, coordinated provision of infrastructure and services** in line with staged growth plans and planning policies.

Key question:

- How could a more coordinated metropolitan staging program be achieved which provides greater certainty to all stakeholders and assists more orderly development?



Map 1: Designated urban areas and township boundaries



Source: *The 30-Year Plan for Greater Adelaide – 2017 Update*, Department of Planning, Transport and Infrastructure



Theme 2 – Linking people to jobs, goods and services

This theme relates particularly to the ‘skills’ enabler of productivity in the South Australian economy.

This includes the capacity of businesses and individuals to build commercially valuable knowledge through ‘agglomeration’, that is, knowledge spill-overs from being able to connect and interact with complementary enterprises.

The quantity and quality of human capital available to businesses is crucial to the success of the state’s economy. Human capital can be built through investment in education and training institutions and through programs that encourage workers to enrich their skills throughout their careers. The efficacy of these policies can be enhanced or diminished, depending on how well the spatial development of

the metropolitan and regional economies is managed.

Unstructured urban sprawl, where workers find themselves increasingly distant from jobs aligned to their skills, or where they are increasingly reliant on car travel to access employment and the range of household services, erodes productivity. This is partly because of congestion costs in the road network. It also results from workers – often women – settling for work that does not make full use of their training and skills. This, in turn, impedes skills accumulation in the labour force.

A poly-centric urban structure, where a region includes secondary employment and activity, rather than being dominated by an ever-distant central business district, is widely seen to be important to travel and labour market efficiency. This ‘template’ for metropolitan development

was recently endorsed by a Commonwealth Parliamentary inquiry into Australia’s cities.⁴⁶

This urban structure supports more efficient public transport between concentrations of employment and their labour catchments. Better public transport connections and frequencies, together with the resulting reduction in road congestion, can make it possible for workers to reach a broader pool of jobs within an acceptable travel time. Businesses also gain the benefit of a broader and deeper pool of skills to match their particular needs.

Matching skills to business needs and improving connectivity between complementary enterprises supports innovation in an economy. This is what is meant by ‘agglomeration-driven’ competitive advantage.

Benefits of agglomeration

The strength of agglomeration economies in any city is commonly measured via an index of Effective Job Density (EJD). An EJD ‘score’ can be calculated for any small area – say a postcode district or smaller – by taking the number of jobs in that area (which indicates the intensity of economic activity) and adding all the jobs in other areas reachable from that location, divided by the travel time to these other locations. EJD is therefore influenced by both the spatial concentration of businesses and the efficiency of the transport system.

Australian research shows that a doubling of EJD boosts total productivity by around 8 per cent, all things being equal. In other words, 8 per cent value is added in wages and salaries, profits and taxes by virtue of a business operating in a more dense and connected location. For knowledge intensive, high value-added industries such as advanced manufacturing; biotechnology; technical and scientific services; financial and

higher order brokerage and specialised advisory firms, the productivity from a doubling of EJD is much higher, often upwards of 14 per cent.

Adelaide’s economic geography features a relatively low EJD compared to other Australian cities. This is partially explained by the fact that Adelaide is smaller. However, a lack of spatial concentrations of employment, our high car dependency and resulting traffic congestion dampen agglomeration in this state, and therefore the productivity of our businesses, compared to their interstate counterparts.

A range of land use planning policies and tools can influence the extent to which the Adelaide metropolitan area and other regions in South Australia might optimise the economic advantage from agglomeration. These include activity centres policy, the management of employment lands and the treatment of home industries.

Source: SGS Economics & Planning

Centres, retail and mixed use activities

Activity centres have been one of the pillars of South Australia's growth and development. They have contributed to the form and pattern of development and enabled a more equitable and convenient access to shopping, administrative, cultural, entertainment and other facilities that enable a number of activities in a single trip.

Transport investment that supports our activity centres is critical to achieving more productive settlement patterns. Activity centres policy and its associated planning rules can play an important role in this by facilitating the formation of a poly-centric urban structure. A concentration of higher order retail functions, alongside a range of other major activity generators such as universities, hospitals, cultural institutions, hospitality and entertainment

venues and civic buildings is essential if significant suburban CBDs are to emerge over time.

The challenge in realising the potential of centres policy is to strike the right balance between achievement of the desired urban form and the maintenance of healthy competition and investment in the retail sector, which is a major economic agent and employer in its own right.

There has been a long-standing practice in Australian cities for land use regulation and policy to favour activity centres through establishing a hierarchy of centres, based on the size of the population the centre is expected to serve, supported by land use controls that curtail out-of-centre development, specifically retail activities. Over the past couple of decades, however, some industry and official critiques have argued that this approach shuts out new competitors and new formats in the retail sector,

thereby denying customers choice and price savings.

The State Planning Policies, Regional Plans and the Code will need to navigate the inevitable tensions in centres policy.

One approach is to segment retail development proposals in terms of their potential impact on the formation of successful suburban CBDs. Out-of-centre proposals that compete for the local retail catchment may warrant fewer restrictions because they may have only a marginal impact on travel patterns. However, proposals that drain economic energy from planned higher order centres, draw custom from larger catchments and have the potential to host genuine CBD style activity, may warrant greater scrutiny as to whether they deliver a net community benefit.

Some guiding principles for retail

- Existing centres** – recognise existing activity centres, main streets and mixed use areas as the primary place for commercial and retail activity.
- Expansion** – in existing designated centres, allow for expansion at 'edge of centre' locations, as well as intensifying within those areas.
- New Activity Centres** – allow new activity centres to be established to support equitable and convenient access to services, while also supporting productive settlement patterns.
- Hierarchy** – protect higher order centres that support a productive settlement pattern, while allowing for smaller-scale activity centres to emerge and diversify.
- Urban Design** – reinforce the role of land use policies to guide urban form and place making in mixed use activity centres.

*Refer to the **Policy Conversation Area** breakout box on page 36-37 for further discussion on potential future directions for this policy area.*

Greater Adelaide's poly-centric structure is important to transport efficiency and the ability of the city's businesses to take full advantage of the skills and know-how in the region.

Centres policy and the associated planning rules can help strengthen this structure. (Refer to Map 3 on page 38).



Employment lands (industry, manufacturing and commercial)

Manufacturing in South Australia continues to provide a meaningful level of diversification. It comprises a significant share of the state's economic activity and accounts for approximately 8 per cent of jobs.³² Food and beverage product manufacturing has grown to account for approximately 30 per cent of manufacturing jobs (and continues to grow) and defence manufacturing is also strong, with a quarter of the nation's specialist defence businesses located here.

However, uncertainty about the future of manufacturing as a result of economic instability and rising power, transport and labour costs provides a basis to review the role of land use planning policy in facilitating more innovative and competitive industrial and commercial sectors.

A key question is whether the existing zoning tools for industrial and commercial development adequately recognise the blurring of manufacturing and office functions in the modern economy. As noted earlier, the

historic separation of 'making', distribution, brokerage and general administrative functions may no longer be necessary in land use controls. The Code will need to include an appropriate array of employment zones to match the needs of a changing economy.

The planning system must also include tools to support clusters of businesses which are complementary or have common logistical and supply chain requirements. The defence sector corridor running north to west from Adelaide is a case in point. This corridor stretches from Techport at Outer Harbor through to Edinburgh Parks and Parafield. Other examples are the key business cluster in the Health and Biomedical Precinct on North Terrace and the biomedical services at Thebarton.

Home-based businesses

The operation of low-impact industry and home-based businesses has long been addressed by planning policy in South Australia. Home-based business is becoming increasingly important as more flexible workplace practices enable a

greater capacity for home based work schedules. In well-connected neighbourhoods, home-based businesses will often have potential to grow into bigger enterprises. In this way, housing areas which were once dormitories for workers travelling elsewhere can become business incubators, provided that other local economic development policies are appropriately aligned.

Home industry zones and policies have had a mixed rate of success across councils and development plans.

Of particular concern is the prevalence for encroachment by single-use residential development, rather than areas featuring a sustainable mix of residential dwellings with integrated home industry activities.

A review is required of these zones and policies to determine the overall demand for low-impact home-industry activities and how policy could be better structured to ensure that amenity is retained and that development outcomes are consistent with the intent of the zone.

SAPPL and Mixed Use Zones

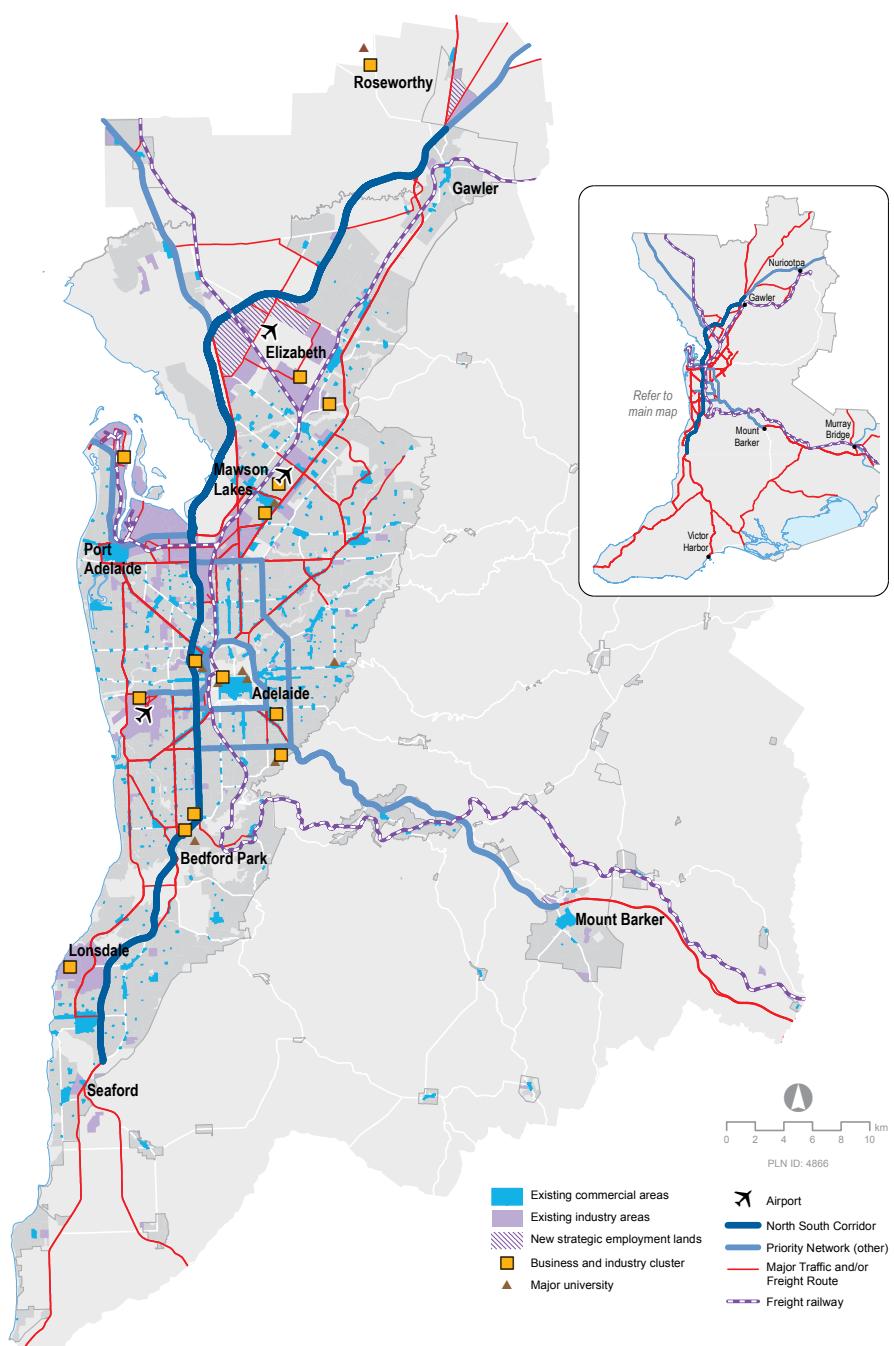
The introduction of the SAPPL began the movement away from restrictive zoning for employment lands. Many of the zones in the SAPPL Library allow for diversification of employment activities and move away from the segregation of land uses.

A good example is the Urban Employment Zone, which provides for industry, commercial, office, small shops and other business-related activity.

The Urban Core, Urban Corridor, and Suburban Activity Node provide for a range of land uses typical of activity centres while also supporting residential development.



Map 2: Business and industry clusters in Greater Adelaide



The defence manufacturing and services businesses to the north of the Adelaide CBD form a crucial cluster for the South Australian economy.

The Code must recognise the blurring of production and office functions in these types of enterprises so that the region maintains its competitiveness.

POLICY CONVERSATION AREA – CENTRES POLICY AND RETAIL INVESTMENT

When properly designed and implemented, activity centres policy can pave the way for a range of benefits to flow to South Australian residents, businesses and visitors, including:

- Better access to consumer goods, and personal and business services
- More sustainable travel, including reduced vehicle kilometres travelled per year per capita, and greater physical activity
- More compact urban forms and settlement, including increased housing diversity, efficient utilisation of infrastructure and resources, better place making and avoided consumption of important rural and agricultural land
- Greater agglomeration-driven productivity.

There is a strong nexus between centres policy and urban consolidation. Vibrant centres of commercial, retail, entertainment, health and civic services provide a focus around which dense housing can form. In areas which contain an abundance of low-density development, increasing the locations where higher density development is possible also enables a welcome expansion of housing choice.

The containment of the urban footprint, facilitated by an activity centre-based approach to land use planning, can reduce the overall consumption of land, particularly rural and good quality agricultural land at the urban fringe. The savings in infrastructure costs brought about by facilitating a more compact form of development also expand the state's capacity to invest in infrastructure.

In line with these principles, prevailing approaches to retail and centres planning policy in South Australia in recent decades have placed a focus on setting aside land for growing suburban and regional centres; the application of a strategic centres zone hierarchy; the separation of land uses; and a policy emphasis on discouraging of 'out-of-centre zones' retailing.

This has resulted in a legible hierarchy of major and minor retailing centre zones of varying scales, which offers the benefits of customer agglomeration for retailers and reduces the constraints for new businesses in establishing a foothold inside a rigid planning policy environment.

It is worth noting that, although centres represent a growing share of total retail spending⁴⁷, most retail spending still occurs outside of centres. More recently, there has been some debate about whether land use regulation that centralises retail activity actually reduces competition, limits market forces, results in monopolisation, stifles innovation and/or impacts productivity growth.⁴⁸





The transitioning shape of the retail sector is creating impacts for planning policy and a review of activity centre zones, as well as the various mixed use zones, is required to check their relevance and update policy as required.

The review could consider:

- Policy flexibility that enables an increased diversity of retail activities to reflect changing retail trends and support emerging formats to ensure their viability and competitiveness
- How established centres could continue to grow by ensuring policies enable flexible arrangements for land use diversity and built form outcomes

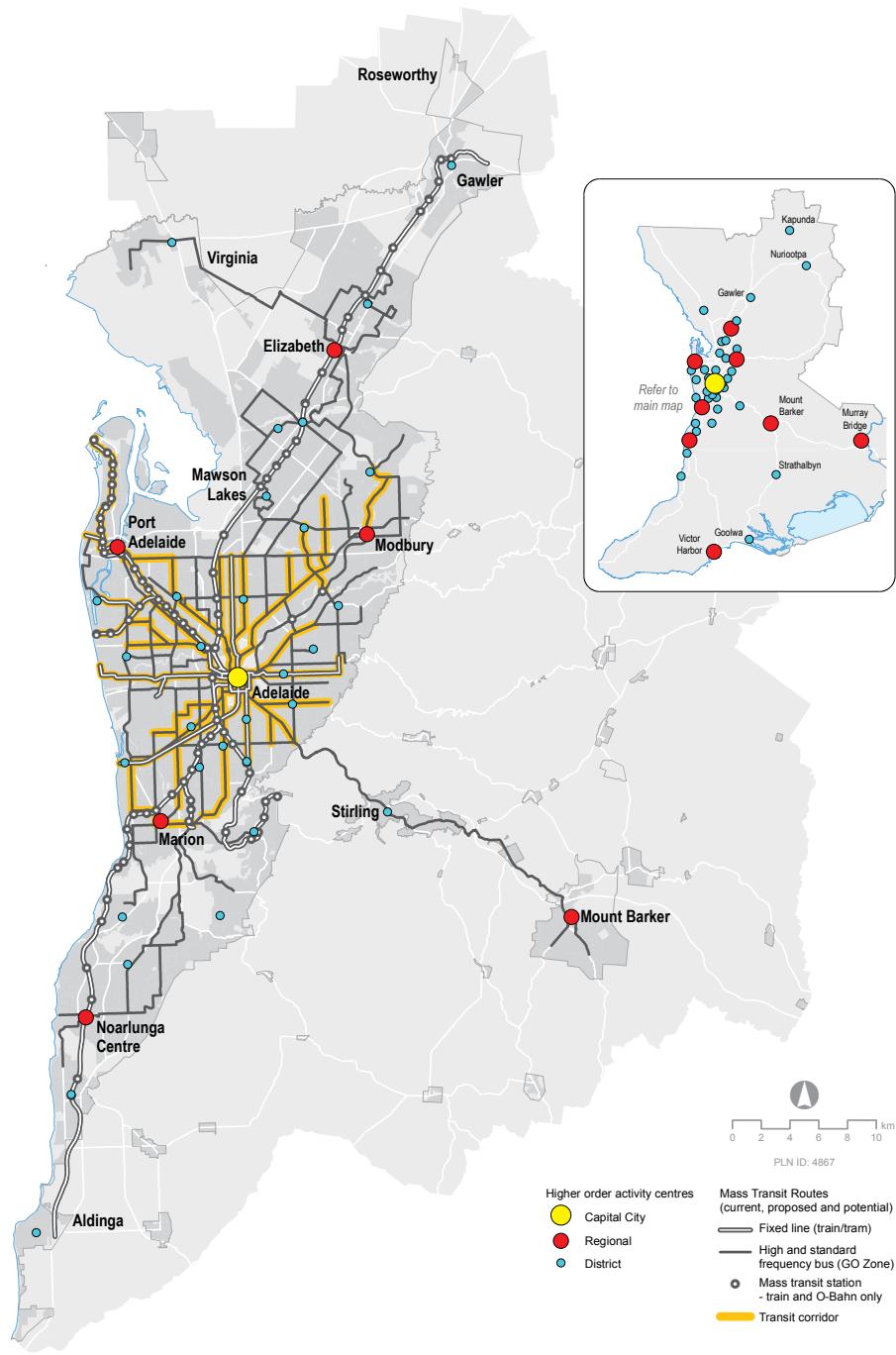
- Reviewing existing regulatory requirements for certain centre development applications as they may no longer be considered necessary if centres policy is updated
- Opportunities to encourage specialist retail clusters where their economic viability is justified.

The resolution of a centres hierarchy need not imply a prescriptive approach to development approvals. In fact, a well formulated centres hierarchy could provide a transparent and accountable benchmark for measuring the costs and benefits attaching to 'out-of-centre' or otherwise non-compliant development proposals.

Key discussion questions:

- What policy approaches or other levers could be used to help ensure South Australia's retailing sector is competitive, well-located and provides ample opportunity for new entrants to the market?
- How do we harmonise planning objectives for an efficient pattern of settlement at the metropolitan level with the need to encourage investment in new retail facilities?

Map 3: Activity centres and mass transit routes



© Government of South Australia 2016

Source: *The 30-Year Plan for Greater Adelaide – 2017 Update*, Department of Planning, Transport and Infrastructure



Theme 3 – Providing infrastructure to enhance our liveability

Renewable Energy

Nationally and locally, the renewable energy industry is undergoing significant change. There has been a shift away from coal-fired stations to increased self-generation, energy efficiencies and a decline in industrial consumption.⁴⁹

Technological growth in the energy sector may outpace land use planning systems in some areas. The Code will therefore need to be regularly updated to reflect new forms of energy generation, storage and distribution and provide improved guidance regarding the intensity, location and impacts of these developments.

There are still relatively few land use planning policies and guidelines dealing with renewable energy and these will need to be updated with each new form that emerges. In particular, policy needs to be updated to:

- Support renewable energy generation where it can co-exist with primary production activities
- Manage impacts from their construction and operations (e.g. heat, dust and glare)
- Incentivise the uptake of renewable energy technologies within developments.

Adaptive Reuse

Adaptive reuse is the process of repurposing buildings for viable new uses other than those originally intended. It is underpinned by the increasing value attributed to the unique character and qualities of older or heritage buildings.

Such reuse brings a range of benefits including energy conservation (avoiding demolition and dumping costs); environmental and public health benefits (remediation of contaminants); enhanced community character and amenity; increased economic investment and community vitality; and reduced costs and time. It can also enable the use of interesting design and innovative ideas.

Additional expenses and challenges resulting from physical limitations and constraints, regulatory standards and potential environmental hazards can however, make incentivising quality adaptive reuse difficult.

As has already been demonstrated in South Australia, relatively minor adjustments to fire and construction regulations can unlock significant floor space in heritage and other ‘character’ buildings for economic production.

The adaptive reuse of buildings requires planning policy that promotes a diversity of uses in a zone, promotes more adaptable building design, and provides a range of incentives and alternative performance provisions where standard policy requirements cannot be met.

Infrastructure

South Australia’s cities, towns and regions must have the transport, water, communications and energy infrastructure required by a modern economy. This requires careful strategic planning of infrastructure networks and the protection of land and corridors to enable future service provision.

Other infrastructure issues that must be addressed include planning for and retaining an adequate supply of ‘serviced industrial land’ across urban areas so that vital inputs into local economic activity, such as repair shops, materials storage and transit depots are maintained at an affordable price.

A traditionally important function of zoning is to support the public acquisition of land for infrastructure provision and other community purposes. Zones and planning policies in the Code must ensure planners and policy makers can make appropriate provision for these lower-profile, but important, economic activities. And, again, these tools need to recognise contemporary production methods and technologies which may obviate or mitigate land use conflicts.

Infrastructure, liveability and competitiveness

Urban liveability is now a widely recognised pre-requisite for prosperity in a global environment where capital and knowledge workers are highly mobile. Residential amenity, housing diversity, access to parks and nature and provision of vibrant town and activity centres are canvassed in other discussion papers in this series, particularly the upcoming

People and Neighbourhoods Policy Discussion Paper.

Liveability is in large part contingent upon a sound overarching pattern or ‘structure’ of development at the town, city and metropolitan level. ‘City shaping’ infrastructure and investment – in particular transport infrastructure – must be deployed proactively to achieve the

desired pattern of development and support our communities. For a further examination of policy matters relating to this, see the **Integrated Movement Systems Policy Discussion Paper**.

Beyond these ingredients, liveability depends on the efficient staging of ‘structural’ and ‘follower’ infrastructure (refer to Figure 9). These are the projects and facilities which give form to neighbourhoods and underpin their overall functionality.

Infrastructure, transport and land use planning can occur in different silos, and within different organisations with different priorities. The strategic deployment of city-shaping infrastructure and the optimal sequencing of lower order facilities and services has proven to be difficult for state and local governments across the country.

It is recognised that a variety of models have been used to fund and deliver infrastructure in the past. The new planning system anticipates a need for greater levels of clarity and transparency around the allocation of responsibilities, specifically the kinds of financing and delivery models to be applied in varying circumstances.

Refer to the breakout box on page 42 regarding infrastructure schemes available under the Act. These are intended to assist in the more effective delivery of infrastructure.

Refer to the Background Paper for an outline of the range of known infrastructure delivery models available for different circumstances.





Strategic Infrastructure

This shifts relative accessibility across the metropolis and therefore influences the location decisions of households and businesses, effectively shaping the pattern of settlement.



Structural Infrastructure

This comprises the high-level network elements and nodes which form the skeletal structure of the metropolis.



Follower Infrastructure

This comprises the local and district services that flesh out the skeletal structure of the metropolis.



Figure 9: Types of strategic transport infrastructure. Source: SGS Economics and Planning



Infrastructure schemes under the PDI Act

Basic and General Infrastructure Schemes are two new financing models, introduced by the Act, which can supplement existing infrastructure planning arrangements. Used to ensure that infrastructure is delivered when and where it is needed, these schemes can be used to unlock growth areas on the fringe, and replace the need for complex and inefficient deed agreements between governments, infrastructure providers and developers, and multiple land owners.

These schemes can also ensure that those who will gain financially from works pay their fair share of the cost of the infrastructure.

Figure 10 illustrates the types of contributions and delivery features of the new infrastructure tools within the new planning system

The legislation also provides for the use of Offset Schemes, which ensure that certain infrastructure requirements that cannot be provided for on-site can still provide an equivalent community benefit. Offset Schemes may be suitable for the provision of open space, car parking or community facilities, where appropriate.

The Minister for Planning has initiated three pilot projects to improve our understanding of how these schemes can be used to deliver infrastructure.

Basic Schemes

- Apply to ‘designated growth areas’
- Ensure delivery of water, gas, sewerage, electricity, communications, roads, stormwater and similar infrastructure
- Provide greater certainty on funding arrangements
- Provide clarity on what is delivered, who delivers it and when it will be delivered.

General Schemes

- Cover health, education, police, justice, emergency services, community facilities and public transport infrastructure
- Used to facilitate partnerships between all levels of government and the private sector
- Require a 100 per cent opt in by landowners within the contribution area
- Have the potential to unlock development and bring forward infrastructure investment, particularly for infrastructure that improves liveability.

Figure 10: New infrastructure tools in the South Australian planning system



POLICY CONVERSATION AREA – ECONOMIC AND INDUSTRIAL LAND UTILISATION / EMERGING INDUSTRIES

Employment lands of all types must be carefully considered and planned for to ensure certainty for existing industries and to provide the right types of flexibility for emerging businesses to establish. South Australia's new planning system must feature policy which encourages new investment, industry diversification opportunities and job creation while protecting our lifestyles and environment.

Key issues:

- The need for integrated land supply for a range of employment activities
- Trends towards services and greater mixed use, as well as new retail formats
- Opportunities for value-adding in rural areas
- The need for land to be protected for agriculture and food production and managing this land's interface with urban areas

- The role of advanced technology and its influence on planning
- Emerging industries, including green industries and renewable energy.

Key discussion questions

- How do we ensure that the new system helps to facilitate economic activity and provide adequate employment lands for current and emerging businesses and industries?
- How could Offset Schemes be used?



Theme 4 – Facilitating innovation and enabling investment

The rise of the knowledge-based economy and the premium placed on innovation across all sectors has generated a new set of planning imperatives. These recognise that certain types of highly sought-after economic activities require particular urban environments to prosper.

There is potential for planning policies to be more responsive to the onset of technological change by anticipating impacts and promoting land use and design solutions that support liveability and retain a sense of identity.

The implementation of South Australia's new planning system provides a unique opportunity to embed advanced technologies and develop policy that complements the anticipated benefits of technological change. The development and progressive roll-out of a fully electronic and interactive Planning and Design Code supported by an ePlanning system that is accessible, accurate and consistent will help with this.

Planning also has a vital role to play in connecting the economic, physical and networking assets that make up innovation ecosystems and precincts. The economic asset refers to a grouping of larger and smaller businesses which have latent capacity for competitive collaboration. The physical asset refers to land and built assets to host this collaboration. Finally, the networking asset refers to the governance arrangements required which turn latent collaboration into actual joint value adding (see Figure 11).

Collaboration and clustering

The precinct level clustering of related economic activities is well known to boost the productivity of businesses. It can facilitate business networks and the sharing of knowledge and unlock economies of scope and scale.⁵⁰

Locating in an area which has a higher density of economic activity (as measured by employment) allows firms to achieve economies of scale via the

large customer base. Within that large customer base, the opportunity for economies of scope arises. That is, with more clients, firms will be able to specialise in a particular field and gain improved efficiencies accordingly. With many businesses within easy reach of each other there will be a high level of technological or knowledge transfer between them, which bolsters innovation. Much of the knowledge transfer is provided by skilled labour moving between firms.

There is also the opportunity to develop industrial ecology precincts where businesses that can share resources or transfer waste from one business as product for another's are co-located.

While the whole state will benefit from embracing the dynamics of the knowledge economy, some places in metropolitan Adelaide will have a heightened potential to develop into innovation precincts.

If these criteria (outlined in the breakout box on page 45) are evident or achievable, special zones or overlays may be justified to unlock the potential of the area in question or to prevent the loss of this potential through short-sighted development. For example, mixed use zones with limits on residential content may be required to ensure that vibrant design, research and making districts in well-connected neighbourhoods are not crowded out by new housing development, which may offer superior financial returns but inferior economic outcomes.

Given government investment in the new Royal Adelaide Hospital and the associated research infrastructure, as well as the strength of the state's universities and cultural and creative industries, the city and some inner suburban precincts are likely to shape up well against most, if not all, the criteria listed. Outside these areas, there is also strong latent potential in transitioning other areas to innovation precincts. Port Adelaide and Tonsley are good examples, with Tonsley's development already well underway. The Code will need to ensure that there are appropriate planning tools to support and unlock this potential.



Innovation precinct criteria

- **Critical mass**

These precincts have a density of assets that collectively attract and retain people, stimulate a range of activities and promote local investment.

- **Competitive advantage**

These precincts will be able to leverage and align their distinctive assets, including historical strengths, to grow businesses and jobs in the region. This can include specialisations in IT and creative industries. Businesses already located in these precincts will gain an economic benefit through access to the region's talent pool and from the transmission of ideas between neighbouring businesses operating in the same market.

- **Quality of place**

These precincts have a strong place identity and offer superior experiences in hospitality, public realm and related services that accelerate outcomes and increase interactions. This typically requires a mix of uses to generate a 'buzz' inside and outside standard office hours.

- **Diversity and inclusion**

These precincts include diverse and inclusive places providing a broad spectrum of opportunities for residents.

- **Collaboration**

These precincts feature formal and informal arrangements to connect people, institutions, economic clusters and places, creating synergies across multiple scales and platforms.

- **Affordability**

These precincts offer a diversity of affordable premises to accommodate start-ups and small, medium and larger businesses. Worker housing is also likely to be an important consideration.

- **Infrastructure**

These precincts have all the necessary utilities, ICT services and building stock to accommodate critical mass and support connectivity, collaboration and innovation.

- **Accessibility**

These precincts, particularly those with high potential, have access to deep pools of labour and other businesses.

- **Anchor institutions**

These precincts tend to have anchor institutions, such as universities, hospitals, research organisations or large corporates, that are relevant and engaged with local industry.

Source: SGS Economics & Planning

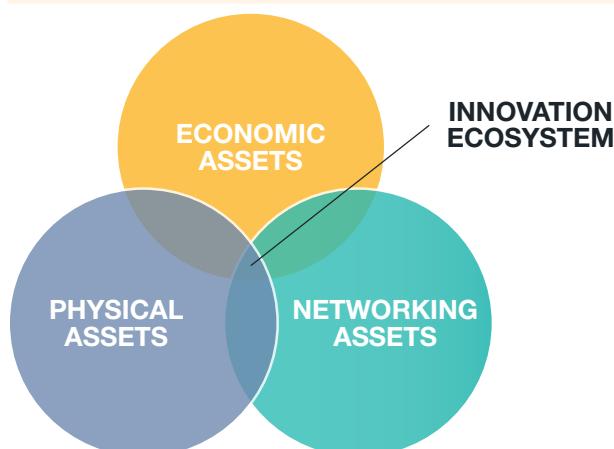


Figure 11: Elements of the local innovation system.
Source: Adapted from Katz and Wagner, 2014

Broad based innovation

The Code should enable a business incubation culture across our cities, towns and regions. It may be even be appropriate to rezone some housing areas as employment areas with residential development and local centres configured to support business start-ups.

Accommodating value-adding activity wherever this can be achieved without affecting neighbouring properties is vital. For example, the planning system could support primary producers moving up the value chain to offer, say, food products or tourist accommodation, or manufacturers could offer design and advisory services alongside their physical product.



e-Commerce and the sharing economy

Advances in technology are beginning to significantly disrupt traditional businesses by enabling new competitors and activities to emerge via digital technologies rather than as a physical presence. The following economies are considered to have potential impacts on land use planning:

- Peer-to-peer economy – the sale of goods between parties (e.g. online retailing)

- Sharing (collaborative) economy – parties rent, borrow or co-own goods, services or spaces (e.g. car sharing, tool libraries, room rental, pop-up shops and urban farming)
- On-demand (access) economy - transactions that match supply and demand in real time and facilitate the delivery of the product or service.⁵¹ (e.g. just-in-time printing).

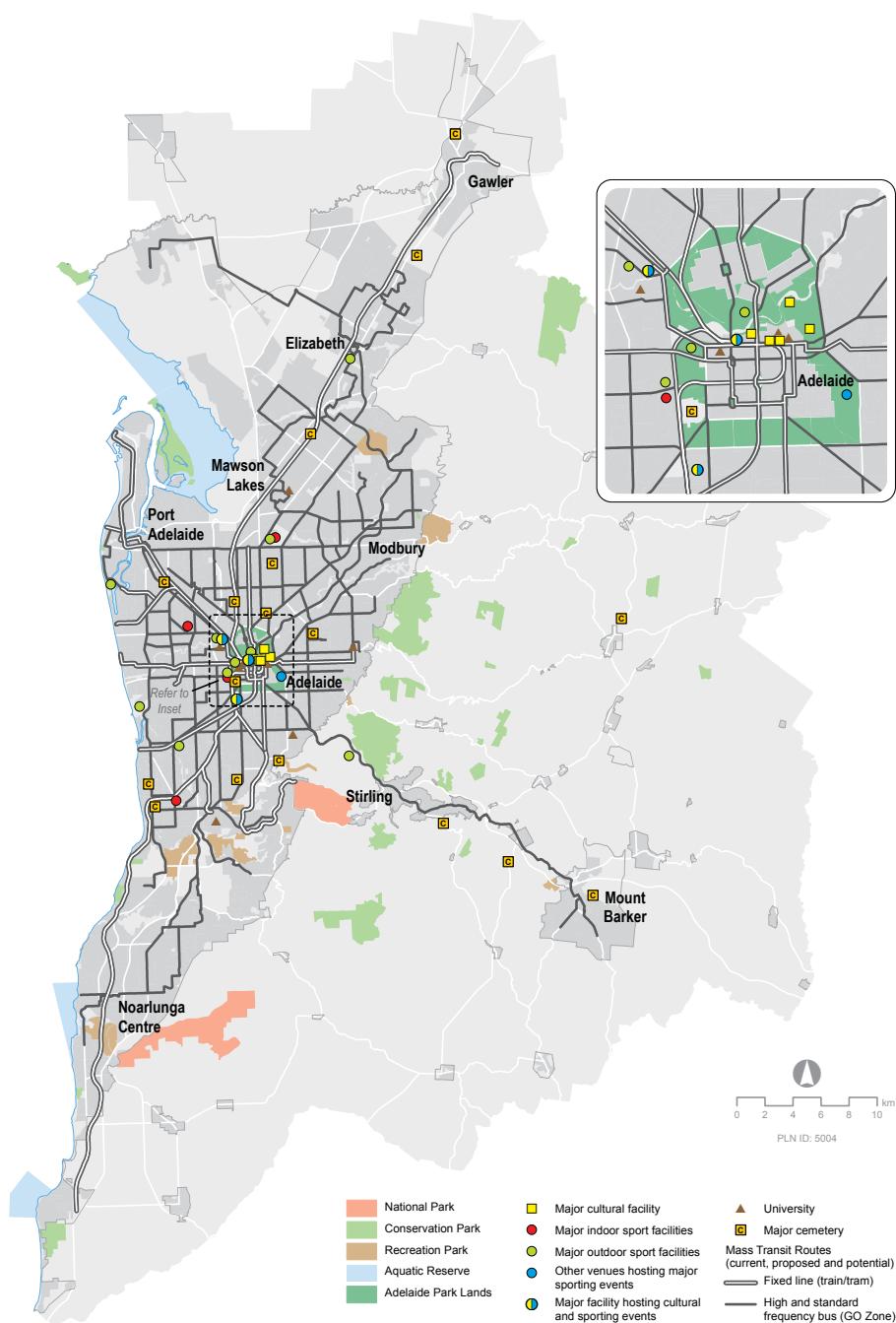
These operations are characterised by their informal nature, lack

of conventional structures, and complexities in managing, monitoring and regulating them.⁵²

The scale, form, effects and development intensity of e-commerce impacts are still to fully manifest. However, existing policy which focuses on mixed uses and provides a good foundation for the changing economic and built environment must be made more flexible so that these new development formats can emerge and grow.



Map 4: Major parks, sporting facilities and cultural facilities



Central Adelaide has all the makings of a leading innovation precinct. Planning rules should continue to evolve to foster the blending of employment, residential and cultural uses to realise this potential.

© Government of South Australia 2016

Source: *The 30-Year Plan for Greater Adelaide – 2017 Update*, Department of Planning, Transport and Infrastructure

How the SAPPL is currently supporting a productive economy

A number of specifications and performance requirements will need to be included in the Code. While some South Australian Planning Library (SAPPL) policies can be transitioned immediately, others

will need improvement, while there are some areas where entirely new policy is required. An overview of the current status of the SAPPL is provided in the following table.

Code's role in promoting SA's prosperity	Economic development theme	Desired requirements in the new Code	SAPPL coverage	Response
Mitigating external impacts	Regulatory modernisation	Remove superfluous zones or development controls	Partial	All themes
		Adjust industrial zones to recognise the blending of services, delivery, assembly and logistics in one premises	Partial	Theme 2
		Fit for purpose controls to deal with unanticipated externalities associated with 'disruptive' ways of doing business	Poor	Theme 4
Creating competitive advantage	Supporting key export sectors	Maintenance of sufficient land supply	Good	Policy Conversation Area (p 28)
		Protection of critical factors of production (soils, landscapes, heritage)	Good	Theme 1
		Application of suitable buffers and hazard zones	Good	Natural Resources & Environment Paper
		Supporting groups of firms which are complementary or hold common logistical and supply chain requirements	Partial	Theme 1
		Maintenance of an efficient, all modes, freight network	Good	Theme 4



Code's role in promoting SA's prosperity	Economic development theme	Desired requirements in the new Code	SAPPL coverage	Response
Creating competitive advantage	Promoting access to skills and know-how	Appropriately configured retail centres, and policy and regulations to promote both retail competition and compact and connected urban form	Partial	Theme 2
		Modernised employment zones that recognise blurring of 'making' and office functions	Partial	Theme 2
		Modernised regulations for home industry	Partial	Theme 2
	Creating liveable communities with good infrastructure	Tools for reserving land for infrastructure and public purposes	Good	Theme 3
		Flexible regulatory arrangements to optimise sequencing of infrastructure supply to greenfield and redevelopment areas	Poor	Infrastructure Schemes (p 42)
		Clear categorisation of infrastructure projects as 'strategic, structural and follower' with commensurate approval tests	Poor	Regional Plans
		Application of transparent, efficient and fair development contribution arrangements	Partial	Infrastructure Schemes (p 42)
		Retention of adequate supplies of serviced industrial land	Good	Regional Plans
		Facilitating adaptive re-use of existing buildings and infrastructure wherever appropriate	Partial	Theme 3
		Flexible regulations to support new energy technologies	Partial	Theme 3, 4
	Promoting innovation	Zones and regulatory provisions that respond to the needs of identified innovation precincts	Poor	Theme 4
		Provisions to generate/support key worker housing for strategic precincts	Poor	People & Neighbourhoods Paper
		Flexible regulations to support innovation across all relevant zones, provided significant negative externalities are avoided	Poor	All themes
		Capacity for rapid and appropriate regulatory response to new forms of e-commerce	Partial	Theme 4





TRANSITIONING TO THE PLANNING AND DESIGN CODE

The following details set out the recommendations for the Code arising from development of this paper under the following key themes:

- **Supporting and growing key industries**, including:
 - Primary Industries
 - Tourism
 - Mining and exploration
- **Linking people to jobs, goods and services**, including:
 - Centres, retail and mixed use activities
 - Employment lands (industry, manufacturing and commercial)
 - Home based industries
- **Providing infrastructure to enhance our liveability**, including:
 - Renewable energy facilities
 - Adaptive reuse
 - Infrastructure
- **Facilitating innovation and enabling investment**, including:
 - Collaboration and clustering
 - e-Commerce and the sharing economy.

The table below outlines the three types of recommendations and their associated timing.

Transition ready	Current policy that requires minimal change and will be transitioned into the first generation (July 2020) of the Code Policy Library (Transitional)
Reform (Gen 1)	Current policy that is recommended for improvement before it is transitioned into the first generation (July 2020) of the Code Policy Library (reform which is minor based on research and engagement which is already well progressed or underway)
Reform (Gen 2 and beyond)	Gaps within existing policy that require further research and discussion before they can be considered for inclusion (Second generation and beyond) of the Code Policy Library (Reform in a new area)

Discussion questions relating to each of the major policy themes are included for consideration when reviewing the recommended policy directions.

For further detail on the information that has led to these recommendations, please refer to the background papers prepared by Deloitte Access Economics and the Department of Planning, Transport and Infrastructure.

THEME 1 - SUPPORTING AND GROWING KEY INDUSTRIES

Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub Theme – 1.1 Primary Industries			
1A	Allow ongoing generational farming, investment, value-adding and job growth in the vital food production sector.	<p>Refine and transition the policy intent of SAPPL policies that support:</p> <ul style="list-style-type: none"> • value-adding activities • ancillary dwellings, dependent accommodation, tourist accommodation and short-term worker accommodation in primary production areas • farm buildings and horticultural buildings • rural living (inside and outside the Environment and Food Production Areas). 	Transition ready 
1B	Planning policy needs to conserve natural environments, biodiversity and agricultural lands to ensure continued productivity.	Include the EFPA and McLaren Vale and Barossa Valley Character Preservation Districts into the Code as an overlay.	Transition ready 
1C	Review the storage, transport and logistics needs of SA farms (in the context of broader primary production use policy) to enable bulk handling in locations with logistical advantage.	Review and update SAPPL bulk handling policies.	Transition ready 
1D	Develop better policy criteria/guidelines for new and emerging infrastructure such as, but not limited to, frost fans, solar farms, telecommunications, and horticultural netting for those cases that are not exempt under the new Regulations.	Review primary production planning policies to ensure that development activities or land uses which are complementary and ancillary to on-farm primary production activities are envisaged in the Code.	Reform (Gen 1)
1E	It is important to modernise definitions and policies that have not kept up with modern farming practices, requirements or directions.	Review definitions in relation to primary production land uses including additional dwellings, tourist accommodation and farm buildings.	Reform (Gen 1)



Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub Theme – 1.1 Primary Industries			
1F	Review and introduce clearer policy regarding urban interface for buffers, spray drift, separation distances, desired mix of land uses and township boundaries.	Adopt a more standardised urban/rural interface buffer policy across South Australia, with locational variation, where required.	Reform (Gen 2)
1G	Retain and improve locational/site specific needs, buffers and interface policy and guidance for intensive animal keeping and stock rates.	Refine and update policies relating to commercial and non-commercial animal keeping (including stock rates).	Reform (Gen 2)
1H	Ensure aquaculture policy addresses the need for required services. This includes ensuring that associated allotments are large enough to cater for on-site processing and other activities, such as storage of baskets.	Review on-land aquaculture policy to ensure consistency with current industry standards, including buffer separation distances.	Reform (Gen 2)
1I	There is an opportunity to better support primary industry businesses to grow, adapt and evolve through technology adoption, intensification of production systems, business diversification, workforce attraction and restructuring.	Review primary industry policies to identify opportunities to better respond to emerging technologies, practices and other changes.	Reform (Gen 2)
Discussion Questions: <ul style="list-style-type: none"> • <i>Should the Code include a 40 metre interface buffer between rural and residential, but allow a smaller buffer distance if it can be justified?</i> • <i>Does policy regarding subdivision and minimum allotment sizes need to be reviewed and strengthened?</i> 			

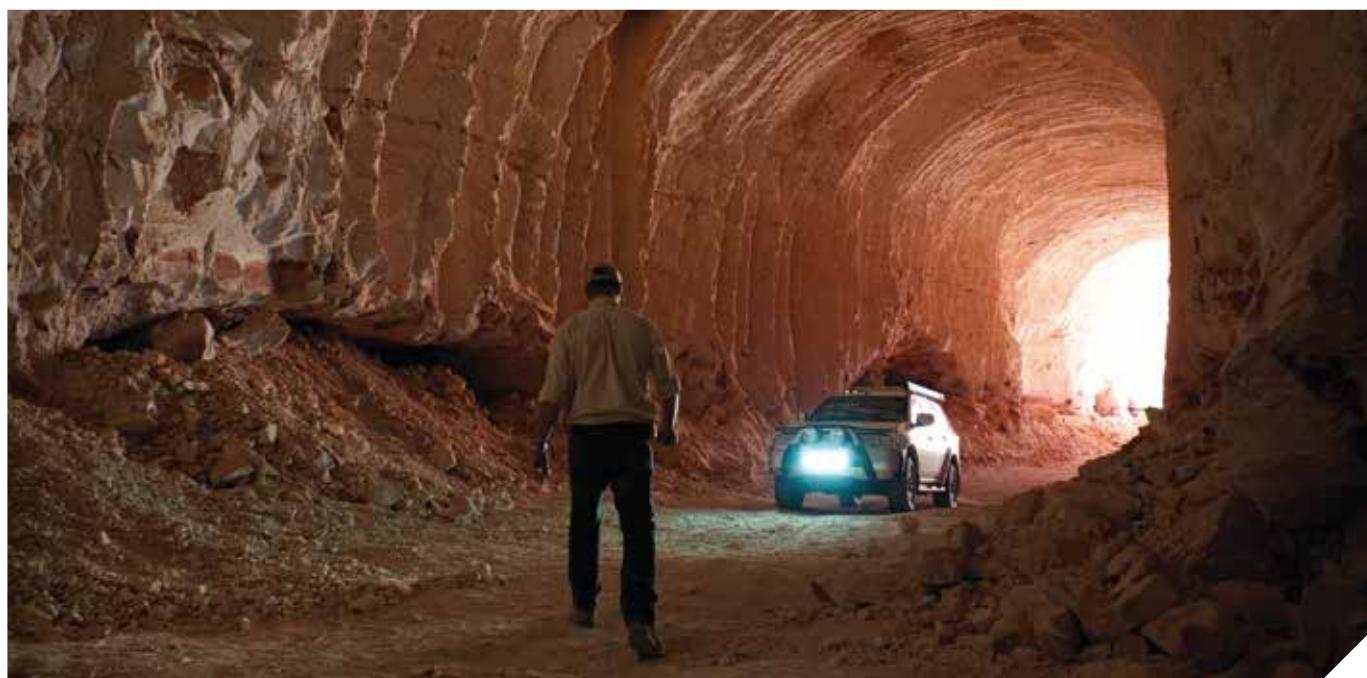
Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub theme 1.2 – Tourism			
1J	Tourism is important for the State's economy and therefore it is important to continue to encourage and support its growth.	Refine and transition the policy intent of SAPPL Tourism Development General Module policy.	Transition ready 
1K	It is important to strengthen and provide greater certainty to tourism, including where it should be located.	Refine SAPPL zones and the land use definitions to: <ul style="list-style-type: none"> • clearly define where tourist accommodation is anticipated • set the appropriate level of assessment • ensure the definitions provide certainty and consistency for the purpose of assessment • provide the flexibility required for the tourism industry to respond to changing markets and explore innovative ideas. 	Reform (Gen 1)
Discussion Question: <ul style="list-style-type: none"> • <i>Do we need to review our signage policies? In particular, do we need facilities for third party advertising and tourism advertising? For example, should there be more scope for tourism signs on arterial roads and outside of townships?</i> 			



Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub theme 1.3– Mining and exploration			
1L	There is a need to provide flexibility for industry/light industry in Mineral Extraction Zones, whilst protecting the viability of mining operations.	Refine and transition the policy intent of the SAPPL Mineral Extraction Zone, in particular, policies that have the flexibility to enable complementary activities to be undertaken within mining areas.	Transition ready
1M	Mining and exploration is a long term investment for the state and, given its vulnerability to market forces, operational intensities may vary over time.	Review policy regarding mining activities to: <ul style="list-style-type: none"> • consider separation distances • enable ancillary and associated developments • provide improved consistency, certainty and transparency • consider appropriate zoning for resource areas. 	Reform (Gen 2)

Discussion Question:

- *Should undeveloped strategic mineral resources be identified and protected from urban encroachment and other incompatible development?*



THEME 2: LINKING PEOPLE TO JOBS, GOODS AND SERVICES

Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub theme 2.1 –Centres, retail and mixed use activities			
2A	Centres are an important part of SA's economy. There is an opportunity to consolidate the range of centre type zones (including regional centre zones) and transition to the Code.	Transition, update and consolidate the existing contemporary retailing, activity centres and regional centre policies and zones.	Transition ready 
2B	Promote mixed use zoning and flexible policy to support innovation, growth and diversity to provide for changing business and market needs, particularly in the right locations.	Review and transition the policy intent of SAPPL mixed use zones.	Transition ready 
2C	Conventional 'bricks and mortar' retail industry is experiencing significant disruption by out-of-centre retailing, international competitors entering the market, online retailing and shared economies and this is changing the form, scale, intensity and locations of retail activities.	Undertake a review of retail policy and consider how it can be strengthened to respond to current and future challenges and opportunities.	Reform (Gen 1)
2D	The Bulky Goods Zone is not consistent with general zone structure and intent as it lacks fundamental policy differentiation to warrant separate zoning / policy identification.	Transition of the policy intent of the SAPPL Bulky Goods Zone into a broader zone option.	Reform (Gen 1)



Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub theme 2.1 –Centres, retail and mixed use activities			
2E	Town centres could allow for a ‘softening of edges’ between business and residential activities and mixed use developments.	Review policy opportunities for expansion of activity centre developments into adjacent zones (where appropriate).	Reform (Gen 2 and beyond)
2F	The recently approved Existing Activity Centres Policy Review DPA introduced a number of policy changes to activity centres in the metropolitan area to improve their economic efficiencies and increase competitiveness. These changes should be considered for application in regional areas where appropriate.	Investigate the opportunities to update centres policies for regional townships and cities.	Reform (Gen 2 and beyond)
2G	Many regional centre type zones are now out of date. Especially if a centre is showing signs of decline, consider approach to re-activate or change scope.	Explore policy options regarding the redevelopment or rezoning of regional activity centres which are in decline or vacant.	Reform (Gen 2 and beyond)

Discussion Questions:

- *Is there a need to retain the centres hierarchy or not – is it still relevant to today’s planning?*
- *Should there be residential development within retail centres? If so, how could / should this occur?*

Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub theme 2.2 –Employment lands (industry, manufacturing and commercial)			
2H	There is a need to provide flexible policy that enables a diversity of industry and commercial activities to reflect changing industry trends.	Review, consolidate and transition the policy intent of SAPPL industry and commercial zones to respond to changing technologies and markets.	Transition ready 
2I	There is increased pressure on industrial lands and the economic viability of industries through encroachment by sensitive uses. Therefore it is important to review and refine these policies.	Review and update SAPPL industry zones to ensure that industrial activities are protected from encroachment by conflicting land uses.	Reform (Gen 1)
2J	There is a need for consideration of residential development that is ancillary to business/industrial activities on land in employment land type zones. For example, accommodation for truck drivers, on-site managers, business owners and other workers.	Review and update policy in relation to the provision of short-term / ancillary worker development in industrial zones to support economic activities (such as defence and mining).	Reform (Gen 2)
2K	Consider opportunities to promote business clusters on the basis of shared knowledge, infrastructure, skills or labour to unlock economies of scope and scale (where appropriate). For example, science and technology hubs, defence industries, ports and intermodals and waste management.	Identify and improve zoning that supports industry and commercial clusters.	Reform (Gen 2)

Discussion Questions:

- *Should there be a more flexible approach to encouraging a wide range of land uses in non-residential zones – with a land use genus, impact and design focus, rather than strict land use definitions?*
- *Is there too much emphasis placed on height and setback criteria in employment lands zones, in particular the ‘core’ of these zones?*



Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub theme 2.3 – Home-based businesses			
2L	The Code provides an opportunity to review home industry policy and decide whether it should be in a residential or light industry zone in the future.	Review and transition home industry policies to an appropriate zone.	Transition ready √
Discussion Questions:			
<ul style="list-style-type: none"> • <i>What innovations and changes to work practices will impact the planning system and how should we respond?</i> 			



THEME 3: PROVIDING INFRASTRUCTURE TO ENHANCE OUR LIVEABILITY

Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub theme 3.1 – Renewable energy			
3A	<p>There are a wide range of renewable energy sources including wind, solar, geothermal, hydrogen, hydropower, tidal and biofuels.</p> <p>Policy needs to be updated to keep up with the new forms of development and technological changes. This means providing improved guidance regarding the intensity, location and impacts of these developments.</p>	<p>Investigate and introduce policy to provide improved guidance in relation to renewable energy generation developments.</p>	Reform (Gen 1)

Discussion Question:

- *How should planning policy respond to growth in renewable energy – what issues should be addressed?*





Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub theme 3.2 – Adaptive reuse			
3B	There are opportunities for policy incentives to encourage adaptive reuse, particularly in relation to heritage or character properties that contribute to the amenity of an area.	Identify further potential policy incentives that can promote the adaptive reuse of buildings.	Reform (Gen 1)
3C	Consider the appropriateness of land division of surplus on-farm dwellings to promote ongoing use of valued heritage type buildings - provided it does not affect the long term viability of farming activities.	Review opportunities and investigate the appropriateness of including policies to facilitate the adaptive reuse of disused farm dwellings.	Reform (Gen 2)

Discussion Question:

- *Should existing unused farm houses be able to be separately titled to allow their adaptive reuse and to facilitate economic activity?*

Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub theme 3.3 – Infrastructure			
3D	There is a variety of infrastructure-type zones across development plans and these can lack fundamental differentiation. These should be reviewed and potentially consolidated to provide overarching consistency and certainty.	Review and transition infrastructure-based zones to provide improved consistency.	Transition ready 
3E	It is important to provide clear direction in regard to appropriate separation distances for infrastructure such as waste water treatment plants and power generation facilities.	Review separate distances for infrastructure (e.g. utilities) and identify opportunities for appropriate uses within buffer spaces.	Reform (Gen 1)

Discussion Question:

- *How can we ensure that land use planning is able to accommodate and support the provision of new and innovative infrastructure?*

THEME 4: FACILITATING INNOVATION AND ENABLING INVESTMENT

Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub theme 4.1 – Collaboration and clustering			
4A	It is important to find the balance between policy certainty and policy flexibility in zones that support economic development and clustering.	Explore options and identify opportunities for improved policies for specialist development clustering within a zone (including business ecology precincts).	Reform (Gen 1)
4B	There is a need for consideration of new manufacturing technologies (that are not dirty, noisy, smelly or impacting) which potentially allow for a mix of uses in residential and business zones.	Review and refine SAPPL policies that support and encourage the adoption of emerging technologies and ensure flexibility to accommodate future ones in land use design and development.	Reform (Gen 1)
Discussion Questions: <ul style="list-style-type: none"> <i>Do we have adequate planning policies in place to encourage/support the aims of innovation districts?</i> <i>How do we ensure that residential development does not monopolise the offering in mixed-use areas of innovation districts?</i> 			

Ref No.	Key opportunities and challenges	Proposed response	Proposed timing
Sub theme 4.2 – E-Commerce and a sharing economy			
4C	Planning processes, policy formulation and regulatory structures all need to be reviewed and, where appropriate, redesigned to take advantage of the development opportunities presented by e-Commerce in a safe, equitable and orderly manner.	Continue to further investigate the anticipated impacts of e-Commerce and respond to these in future generations of Code policy as appropriate.	Reform (Gen 2)
Discussion Questions: <ul style="list-style-type: none"> <i>Does planning policy need to respond better to new ways of doing business such as the emergence of the sharing economy – which may require the introduction of controls to mitigate previously unanticipated effects (for example, the conversion of long term rentals into short stay holiday accommodation via online platforms)?</i> <i>What will be the emerging industry impacts of e-Commerce and how should these be managed by the Code?</i> 			

PRODUCTIVE ECONOMY



REFERENCES

- 1 Deloitte, Building the Lucky Country #3 – Positioning for Prosperity? (2014) <<https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Building%20Lucky%20Country/deloitte-au-btlc-business-positioning-prosperity-2014-230217.pdf>>.
- 2 CSIRO, Our Future World: Global megatrends that will change the way we live (2012) <<https://publications.csiro.au/rpr/download?pid=csiro:EP126135&dsid=DS2>>.
- 3 Department of the Environment and Energy, Climate change impacts in Australia <<http://www.environment.gov.au/climate-change/climate-science-data/climate-science/impacts>>.
- 4 CSIRO, Our Future World: Global megatrends that will change the way we live (2012) <<https://publications.csiro.au/rpr/download?pid=csiro:EP126135&dsid=DS2>>.
- 5 Food and Agriculture Organisation, The future of food and agriculture – Trends and challenges (2017) <<http://www.fao.org/3/a-i6583e.pdf>>.
- 6 Deloitte, the evolution of work: new realities facing today's leaders (2018) <<https://www2.deloitte.com/insights/us/en/focus/technology-and-the-future-of-work/evolution-of-work-seven-new-realities.html>>.
- 7 Deloitte, Meaningful brands: connecting with the consumer in the new world of commerce (2018) <<https://www2.deloitte.com/content/dam/Deloitte/au/Documents/consumer-industrial-products/deloitte-au-cip-meaningful-brands-report-2018.pdf>>.
- 8 Australian Bureau of Statistics, Australian Demographic Statistics, March 2018 cat no 3101.0 (20 September 2018).
- 9 Australian Bureau of Statistics, Regional Population Growth, Australia, 2016-17, cat. no. 3218.0 (24 April 2018).
- 10 Deloitte, Building the Lucky Country #1 – Where is your next worker? (2012)
- 11 Australian Bureau of Statistics, International Trade: Supplementary Information, Financial Year, 2016-17, cat. no. 5368.0.55.003 (2017).
- 12 Deloitte Access Economics, International Education in South Australia, (2016)
- 13 Deloitte Access Economics, International Education in South Australia, (2016)
- 14 Deloitte, Building the Lucky Country #3 – Positioning for Prosperity? (2014)
- 15 Deloitte Access Economics, International Education in South Australia (2016)
- 16 Flinders University (2013) Flinders \$120 million vote of confidence in Tonsley, Flinders University Newsdesk, Adelaide
- 17 South Australia Chamber of Mines and Energy, Oil & Gas Production <<https://www.sacome.org.au/energy.html>>
- 18 Australia Bureau of Statistics, Mineral and Petroleum Exploration, Australia, Mar 2018, cat. no. 8412.0 (4 June 2018)
- 19 PIA – Through the Lens: megatrends shaping our future
- 20 Econsearch et al, Economic aspects of the Zero Waste SA Strategy review (2014) for Zero Waste SA.
- 21 <https://invest.sa.gov.au/wp-content/uploads/2017/01/IASA-Renewable-Energy-2017.pdf>
- 22 ABS – 46310DO001_201617 Employment in Renewable Energy Activities South Australia
- 23 South Australian Tourism Commission, The Value of Tourism, 28 March 2018
- 24 Tourism Research Australia, International Visitors in Australia: Summary results December 2017
- 25 Tourism Research Australia, International Visitor Survey: December 2017 Results (March 2018)
- 26 Lonely Planet Best Travel of 2017 <<https://www.lonelyplanet.com/best-in-travel>>
- 27 Green Industries SA (2018) South Australia's waste and resource recovery infrastructure plan, Green Industries SA, Adelaide
- 28 Green Industries SA (2018) Benefits of a Circular Economy in South Australia – Summary, Green Industries SA, Adelaide
- 29 Australian Bureau of Statistics, Australian Industry 2016-17, cat. no. 8155.0 (25 May 2018)
- 30 Deloitte Access Economics, Shaping Future Cities – Make it big Adelaide (2017)
- 31 Department of Primary Industries and Regions (2015) Agriculture, Food and Wine in South Australia, PIRSA, Adelaide.
- 32 Defence SA, Osborne Naval Shipbuilding Precinct <<http://www.defencesa.com/precincts/osborne-naval-shipbuilding-precinct>>
- 33 Deloitte, Global Defense Outlook 2016: shifting postures and emerging fault lines (2016)
- 34 Australian Bureau of Statistics (2018) Industry of Employment – Proportion of Employed Persons – Census, South Australia (SA1) Statistics (webpage updated 5 Feb 2018), Canberra
- 35 Australian Bureau of Statistics, Labour Force, Australia, Quarterly, Feb 2018, cat. no. 6291.0.55.003 (29 March 2018)



- 36 BankSA, Trends – Health sector in excellent shape (2016)
- 37 Health Industries SA, Adelaide Biomed City <<http://healthindustries.sa.gov.au/adelaide-biomed-city/>>
- 38 Australian Bureau of Statistics, Australia National Accounts: State Accounts, 2016- 17, cat. no. 5220.0 (17 Nov 2017)
- 39 Festivals Adelaide, ‘Adelaide Fringe is the biggest ticket selling festival in Australia’ (2017)
- 40 Australian Bureau of Statistics, Australian National Accounts: State Accounts, 2016- 17, cat. no. 5220.0 (17 November 2017)
- 41 BankSA, Trends – Blue skies for ‘white collar’ professions (2016)
- 42 Andes, S. Horowitz, M. Helwig, R. Katz, B. 2017, Capturing the next economy: Pittsburgh’s rise as a global innovation city, The Anne T. and Robert M. Bass Initiative on Innovation and Placemaking, September 2017.
- 43 Katz, B. Andes, S. 2017, Why the Future Looks Like Pittsburgh, CityLab, accessed 15 August 2018 via <https://www.citylab.com/equity/2017/09/why-the-future-looks-like-pittsburgh/540903/>
- 44 PIRSA (2017) South Australian food and wine revenue hits record \$19.97 billion, (online news article), 21 November 2017, Department of Primary Industries and Regions, Adelaide.
- 45 Productivity Commission – Australia’s International Tourism Industry 2015
- 46 Australian Parliament (2018) ‘Building Up & Moving Out’, Report of House of Representatives Standing Committee on
- 47 Productivity Commission – competition policy review p. 219
- 48 Productivity Commission – competition policy review pg 237
- 49 Government of South Australia, Our Energy Plan (2017)
- 50 Rawnsley, Davies, Szafraniec, Ratnam – Economic and land use impacts of transport projects (2014)
- 51 World Economic Forum – ‘Collaboration in Cities: From Sharing to ‘Sharing Economy” (2017)
- 52 World Economic Forum – ‘Collaboration in Cities: From Sharing to ‘Sharing Economy” (2017)
- Infographics (pages 13-18) *Information correct 2017



NEXT STEPS

The Productive Economy Discussion Paper will be out for public consultation until 22 February 2019.

For information about the specific engagement activities, please visit www.saplanningportal.com.au

The feedback received will inform the preparation of Generation 1 of the Code Policy Library and help prioritise future work and investigations for subsequent generations of the Code. The outcomes of the consultation

process will be released in a ‘What We Have Heard’ Report.

The Commission’s **Policy Conversation Areas** will work through some of the more significant policy issues that will be a focus for reform in 2018 and beyond. These are aligned to one or more of the policy discussion papers and are a key component of the Commission’s engagement process during the development of the Code.

Consultation on the draft **State Planning Policies** concluded on 21 September 2018. Feedback from consultation on this paper will continue to inform the ongoing development of contemporary and current state planning policies in the future.

The draft **Code Policy Library** will be released progressively for consultation commencing early in 2019.

HAVE YOUR SAY

In recognition of the importance of collaboration in building a successful new planning system, the Commission is seeking feedback from planners, the community, industry professionals, educational institutions and other interested parties on this paper.

Your feedback is encouraged via:

- SA Planning Portal: Visit the Have Your Say webpage and lodge a submission at http://www.saplanningportal.sa.gov.au/have_your_say
- Email: DPTI.PlanningEngagement@sa.gov.au
- Post: PO Box 1815, Adelaide SA 5001





HOW YOU CAN GET INVOLVED

We invite you to participate and share your feedback on this policy discussion paper via:
www.saplanningportal.sa.gov.au

For more information, please contact us:
dpti.planningengagement@sa.gov.au



Government of South Australia

Department of Planning,
Transport and Infrastructure

saplanningcommission.sa.gov.au