



InfrastructureSA

CAPITAL INTENTIONS STATEMENT 2020

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S T R A T E G Y C O N T E N T S

Introduction	2	Key economic corridor planning studies	10
Infrastructure SA	2	Strzelecki Track	10
What is the Capital Intentions Statement (CIS)?	2	Passenger transport	11
Why develop the CIS?	2	Education	11
What is the scope of and terms of reference for the CIS?	2	Corrections and forensic mental health	12
Foundations for the CIS	3	Health	12
		Tourism	13
		Sport	13
		Culture	13
Key themes emerging from 20-Year State Infrastructure Strategy	5	Outline of 'Productive Infrastructure for South Australia'	15
Prioritise infrastructure that contributes to economic and jobs growth	5	Ten major projects	15
Sustainability, resilience and liveability must be considered when planning over the long term	5		
Maintenance and more efficient use of existing assets	5	Infrastructure Australia	16
Evidenced-based integrated planning and decision-making	6	Attachments	17
Consideration of alternative procurement models	6	1: Ten major projects	17
		2: Infrastructure Australia priority list – South Australian projects	20
Existing infrastructure commitments	8	3: Current forward estimates	21
		4: ISA assurance process	25
Specific projects or opportunities for focus	9		
Asset maintenance	9		
Water for growth	9		

Acknowledgement of Country

Infrastructure SA acknowledges and respects Aboriginal people as the State's first people and nations, and recognises Aboriginal people as traditional owners and occupants of South Australian land and waters.

Infrastructure SA acknowledges that the spiritual, social, cultural and economic practices of Aboriginal people come from their traditional lands and waters, and that Aboriginal people maintain cultural and heritage beliefs, languages and laws which are of ongoing importance today.

INTRODUCTION

Infrastructure SA

Infrastructure SA (ISA) was established and operates under the *Infrastructure SA Act 2018* to serve as an advisory and assurance body in relation to major State infrastructure projects.

ISA is required to issue a *20-Year State Infrastructure Strategy* assessing the needs, strategic goals and priorities for infrastructure in the State for the next 20 years. In conjunction with the 20-Year Strategy, ISA is required to prepare a *Capital Intentions Statement*, updated annually, focusing on infrastructure priorities within the next five years.

ISA's role is to promote the adoption and use of policies, practices, information and analysis to support sound decision-making in relation to infrastructure.

What is the Capital Intentions Statement (CIS)?

The CIS identifies major infrastructure projects or programs which, in ISA's opinion, should be given specific consideration or implemented in South Australia as a priority within the next five years. In order to provide greater context, this document also outlines major projects that have been funded, appear in the current forward estimates and are currently being implemented.

In preparing this CIS, ISA has regard for the *20-Year State Infrastructure Strategy* prepared by ISA and adopted by the Premier of South Australia. ISA has also undertaken consultation with the relevant public sector agencies to determine projects currently under consideration and the respective priorities and timeframes.

Why develop the CIS?

ISA has developed the *20-Year State Infrastructure Strategy* to identify the key needs and challenges to guide government policy and investment in infrastructure. The Strategy takes a longer term view to form a vision for coordinated and efficient policy and investment planning that will facilitate, among other things, economic and population growth in the State.

The CIS complements the 20-Year Strategy by identifying the priorities to be actioned in the immediate five-year time horizon. ISA is mindful of the impacts that COVID-19 will have on the economy and the role infrastructure can play in the recovery phase through direct investment and employment in infrastructure projects as well as positioning the economy to rebound quickly through efficient supply chains. The COVID-19 crisis will have significant impacts on government budgets across the globe and this will make the efficient prioritisation of capital budgets going forward even more important.

The CIS will also further inform the State's submission to Infrastructure Australia for the *Infrastructure Priority List*.

What is the scope of and terms of reference for the CIS?

South Australia has a significant program of infrastructure investment planned over the next four years amounting to circa \$12.9 billion. In addition, significant Commonwealth and private sector investment is planned. While projects or programs that are already funded as part of the current infrastructure program are not considered as part of the CIS, a brief description of the forward estimates is provided for context.

This CIS examines only those new projects that are large in terms of capital value, generally greater than \$50 million. All smaller capital value projects or those which are anticipated to commence business case development or implementation beyond the five-year time horizon have been excluded from consideration and may not appear in this document.

Foundations for the CIS

The CIS will serve to inform Government and assist its infrastructure prioritisation and efficient allocation of capital through the budget process. The CIS is designed to draw upon information about project proposals that have supporting business cases and cost-benefit analysis and which have been assessed on merit.

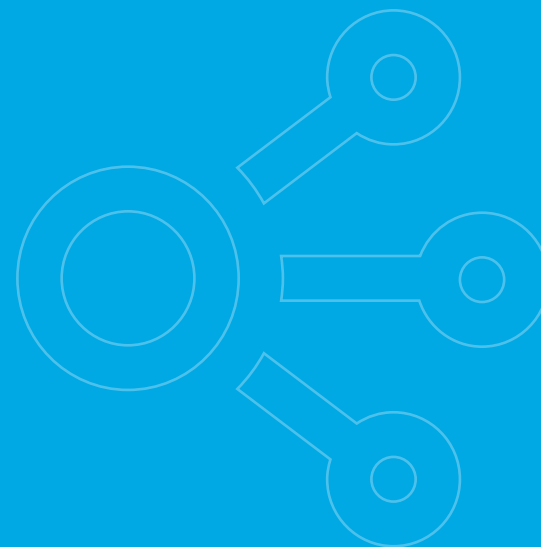
As the first CIS it is recognised that further planning work is required on many of the identified priorities before specific solutions can be arrived at. It is anticipated that as further work is undertaken, future iterations of the CIS will be more specific in their recommendations.

ISA will support the development of the evidence base for future CIS iterations through its project assurance function.

The ISA assurance process is applied to projects at key decision points in their lifecycle. It looks ahead to provide assurance that they can progress successfully to the next stage. The initial assurance gates focus on project identification and justification and detailed business cases.

It is anticipated that as the ISA assurance process is implemented across government agencies, there will be a greater depth of evidence and quality of business cases for prospective major infrastructure projects, thereby allowing more rigorous assessment and prioritisation.

Refer to *Attachment 4* for an outline of the assurance process and the projects that are in the pipeline.





Best practice in risk and impact management

In 2019, Flinders Ports Holdings completed widening of the Outer Harbour shipping channel and swing basin at the Port of Adelaide, securing the State's position as a major import and export hub. The company worked closely with relevant authorities, community groups and stakeholders and applied best practice techniques to minimise risks and impacts on the marine environment during dredging operations and vessel movements through the channel.

KEY THEMES EMERGING FROM THE 20-YEAR STATE INFRASTRUCTURE STRATEGY

The 20-Year Strategy was developed to support the following objectives:

- **Sustained economic and jobs growth**
- **Planned population growth**
- **Connected and productive regions**
- **A vibrant, global Adelaide**
- **Envable liveability.**

Key themes have been drawn from the 20-Year Strategy that support those objectives and are particularly relevant in the context of a shorter-term CIS.

Prioritise infrastructure that contributes to economic and jobs growth

Infrastructure has the capacity to support and catalyse economic growth by attracting direct investment and improving productivity and access to jobs and markets. This will be even more important as the economy rebuilds following the COVID-19 crisis.

The *Growth State: Our plan for prosperity*¹ identifies key growth sectors: Energy and Mining, Food, Wine and Agribusiness, Tourism, International Education, Defence, Space, Creative Industries, Hi-Tech and Health and Medical Industries. These industries are considered to be key drivers of economic and jobs growth into the future. Infrastructure that has the potential to unlock growth and export opportunities in these sectors should be identified and prioritised where there is a supporting business case. To achieve a step-change in growth, it will be important to identify opportunities that have scale and global demand.

Sustainability, resilience and liveability must be considered when planning over the long term

Ensuring that South Australia's infrastructure can cope with factors such as a growing population and climate change while increasing the quality of service delivery in both urban and rural areas is fundamental to underpin growth. Factors such as flood, drought and heatwaves will be placing greater stress on infrastructure and play an ever-increasing role in the design of cities and communities.

The recent bushfires are a good case in point. Rebuilding essential infrastructure damaged by fire provides an opportunity to enhance and strengthen the resilience of infrastructure solutions through integrated planning and good design. The COVID-19 crisis has shown the benefits of having flexible and adaptable infrastructure or strategies that enable a response to service peak demand.

Maintenance and more efficient use of existing assets

Many existing assets – be they social infrastructure such as hospitals or schools, or economic infrastructure such as roads or rail – must be maintained in order to optimise economic life, overall efficiency and benefit from capital investment. There is a significant infrastructure maintenance backlog across most sectors which needs to be addressed.

Recognising the latent capacity of existing assets to enable multi-use or repurposing will often provide better value-for-money outcomes than simply building new facilities. Investing in new infrastructure should only be

¹ Government of South Australia (2019). *Growth State: Our Plan for Prosperity*. Available from: growthstate.sa.gov.au

considered where existing assets cannot provide the necessary services. 'Build last' should be the mantra. Investment in maintenance also tends to be well distributed and labour intensive.

Evidenced-based integrated planning and decision-making

For infrastructure planning and investment to be efficient and effective, it cannot be done in silos. An integrated whole-of-government approach to planning and economic forecasting is critical to maximise benefits. This should include all relevant stakeholders including local government and industry where appropriate.

To ensure that South Australia is getting value for money and that benefits are maximised, emphasis must be placed on evidence-based decision-making.

Investment decisions must be informed by business cases that clearly define the problem or opportunity that is being addressed and contain a thorough options analysis before identifying the preferred solution. Business cases should include whole-of-life and operating costs in the comparison of alternatives and determining the cost to government.

Investment decisions should be deferred until a business case has been completed and assessed. The quality and timeliness of business case development will be a key factor in the success of future projects.

Consideration of alternative procurement models

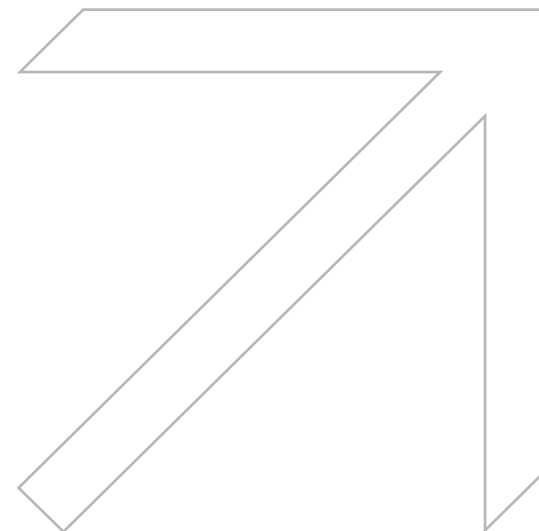
Consideration should be given to the use of alternative procurement models that reduce reliance on traditional government funding for infrastructure and encourage private sector involvement. Examples of models that should be considered when determining the most appropriate procurement method

include public-private partnerships (PPPs), social impact bonds, user-pays, public sector development company, government/private sector co-investment and minimum guarantees.

In many cases, alternative funding models for procurement of infrastructure, both social and economic, can not only reduce the call on public sector funding from government but also serve to bring forward projects and better match capital outflows with the economic and social benefits derived from infrastructure. Alternative funding and commercial structures can also facilitate better governance, transfer of risk away from government to the private sector, timely completion and better cost management.

In addition, outsourcing and private sector provision of services may be efficient alternatives for service delivery and need to be properly evaluated when determining the most appropriate commercial procurement model.

Active consideration of both alternative funding models and outsourcing of services should be mandatory for all major infrastructure projects.





South Australia's first vertical school

Increasing school capacity in established areas can entail costly land acquisition. Adelaide Botanic High School has maximised available space by adapting and integrating an existing building into a new seven-storey construction. It leverages easy access to the Botanic Gardens, Adelaide Zoo, universities, the Lot Fourteen technology precinct and CBD sporting facilities to occupy a relatively small footprint.

EXISTING INFRASTRUCTURE COMMITMENTS

The CIS does not specifically address projects that have commenced implementation or are currently included within the forward estimates or projects that are funded by the private sector. However, it is worthwhile to outline large capital projects that are currently funded. This provides additional context and background to recommendations made in the CIS. Government has committed to capital expenditure in relation to South Australian infrastructure totalling approximately \$12.9 billion over the next four years.

Refer to **Attachment 3** for further details.

Artist's impression, Flinders Village
Image courtesy of Flinders University



SPECIFIC PROJECTS OR OPPORTUNITIES FOR FOCUS

Asset maintenance

A consistent theme identified across all sectors when developing the 20-Year Strategy was a growing asset maintenance backlog. Poorly maintained assets can reduce service levels, shorten asset lives and be more prone to expensive and disruptive breakdown maintenance. ISA has identified a clear need for greater investment in asset maintenance to improve service levels and more efficiently manage the capital budget by maximising benefits from current assets and deferring the need for significant new capital expenditure. Increased investment in asset maintenance is also an effective and efficient means to distribute government investment across the State and support regional jobs.

To facilitate the efficient allocation of capital towards effective asset maintenance programs, the 20-Year Strategy sets a priority for agencies to develop 10-year asset management plans and business cases for funding. These should be developed to a consistent standard and within a consistent framework. This is currently a challenge as ISA has observed the maturity of strategic asset management to be mixed across government and, at times, there is insufficient data to properly inform asset management plans. These are capabilities that need to be invested in.

RECOMMENDATION

Greater investment in asset maintenance in accordance with well-developed asset management plans.

Water for growth

Water is the State's most valuable resource, and securing reliable and affordable supplies is key to unlocking growth opportunities in key industries such as mining and agriculture. The 20-Year Strategy sets a priority to develop a South Australian Sustainable Water Resources Framework that will look at all available water resources to match demand and supply in the most efficient and sustainable way.

As the framework is being developed, business cases should be expedited for the following opportunities to determine whether further investment to expand current production to meet global demand is justified:

- Government announced funding to develop a business case for the expansion of the Northern Adelaide Irrigation Scheme (NAIS) to deliver recycled water to the Barossa. This project has potential to secure water supplies for a region where there is proven global demand and capacity for expansion.
- South Australia has over 68% of Australia's demonstrated resources of copper. Global demand for copper is forecast to double over the next 30 years as it serves as the foundation of the growing electric vehicle industry. There are already significant copper mining operations in the far north of the State, with the BHP Olympic Dam and Oz Minerals Carrapateena mines; however, there is potential to expand these as well as unlock other resources in the region. The supply of secure and sustainable water is a key input to any further development. In addition to mining operations, there should be other demand from Woomera, pastoralists and regional communities. Given the existing demonstrated demand in these regions, there is a potential opportunity for the private sector and government to work together to develop an integrated solution to renewing and extending industrial and potable water supply in the region. This should encourage further investment in mining and agricultural activities and provide a greater level of service to regional communities. The development of a concept design, commercial structure and business case to evaluate this opportunity is necessary.

RECOMMENDATION

Develop detailed investment cases for private sector investment in water infrastructure to expand production to meet global demand for produce from the Barossa, and copper and other minerals in the Far North.

Key economic corridor planning studies

The 20-Year Strategy sets a priority to identify key economic corridors and plan interventions to create more efficient supply chains. Efficient access to markets through the supply chain will be key to improving productivity and supporting economic growth. The greatest efficiency will be achieved via a strategic approach to planning the necessary interventions across the whole corridor rather than spot intersection upgrades.

The Government is undertaking the necessary investigations into the options to complete the North-South Corridor, and its business case will be subject to a thorough cost-benefit analysis to understand the economic impacts of the preferred options. The completion of investigations into Globelink identified potential for a new non-stop corridor from the South Eastern Freeway to the southern end of the North-South Corridor in the long term; however, priority should be given to incremental improvements to the existing corridors, including along Cross Road, Portrush Road and Hampstead Road, and the existing rail corridor through the Adelaide Hills. There is also a need to plan for a more efficient ring-route network to improve connectivity and support the city's growth and liveability.

Government should work with industry to identify those urban and regional corridors and nodes (e.g. ports) that make the greatest contribution to economic growth and prioritise investment to address constraints or unlock growth opportunities. This process should take an integrated approach and consider any other services that may benefit from the corridor/node and impact on land use in its vicinity, as well as the resilience of the network. Any major new corridors to unlock significant new resources will need to be driven by market demand, have a preference for multi-users to maximise utilisation and consider the commercial frameworks necessary to attract private capital and partnerships. A program of evidence-based incremental interventions that address constraints and contribute to economic growth should be developed. This program should be able to be rolled out swiftly to provide a short-term impact.

Following the devastating bushfires on Kangaroo Island, planning studies are needed to identify the preferred solution for the immediate freight task to take goods and materials on and off the island and what may be required to build a more resilient freight network.

RECOMMENDATIONS

- Liaise with industry to identify and prioritise incremental improvements to key transport corridors that make the greatest contribution to economic growth.
- Identify a preferred freight access solution for Kangaroo Island.

Strzelecki Track

This project appears in the Infrastructure Australia 2020 *Infrastructure Priority List*² as a priority initiative.

The Strzelecki Track was identified in the 2015 Australian Infrastructure Audit as a key freight route. It is the only viable land route between Adelaide and the Cooper Basin and will be increasingly important in servicing the expanding oil and gas industry in the Cooper and Eromanga Basins and the pastoral industry in the north-east of South Australia, as well as tourism through the region.

The Track is unsealed and suffers from potholes, corrugation, a lack of drainage and high maintenance costs. The road's condition and alignment severely reduces travel speed, damages vehicles, causes unpredictable closures due to flooding and results in road safety risks.

The proposed project comprises an upgrade to 426 km of the Strzelecki Track between Lyndhurst and Innamincka, and 26 km of the Nappa Merrie Access Road.

² Infrastructure Australia (2020). *Infrastructure Priority List: Project and Initiative Summaries*. Commonwealth of Australia. Available from: infrastructureaustralia.gov.au/sites/default/files/2020-02/2020%20Infrastructure%20Priority%20List%20LOW%20resolution.pdf

This will provide an upgraded connection between South Australia and Queensland. Improvements to mobile phone coverage along the route should also be considered.

Recent analysis incorporating wider economic benefits to tourism, mining and agriculture has been undertaken in order to better understand the full spectrum of benefits to the State. Further options analysis to ensure the optimal solution is identified would be advantageous. Following completion of an updated business case and review by ISA, a further submission to Infrastructure Australia in accordance with Infrastructure Australia's Assessment Framework is proposed. Funding would comprise both State and Commonwealth contributions; however, funding models should also consider taking into account benefits accruing to existing private sector stakeholders.

Refer also to **Attachment 1, Section 1.10** and **Attachment 2, Section 2.2**.

RECOMMENDATION

Complete an updated business case that incorporates wider economic benefits derived from upgrades to the Strzelecki Track.

Passenger transport

The 20-Year Strategy identified a long-term need to increase public transport patronage within Adelaide. This will ensure the network can maintain efficiency and reliability as the population grows so that Adelaide remains a productive and liveable city. A range of interventions will be required; however, in the short term, planning studies are needed to identify transport solutions for the north-west of Adelaide to cater for increased activity on the LeFevre Peninsula due to the naval shipbuilding program and potential urban growth in the north-west. There is also a need to identify the preferred mass transit solution to Mount Barker and the Adelaide Hills to support urban growth. The key trunk public transport corridors for the bus network should be identified as part of the rollout of new service contracts so that interventions can be strategically

planned to improve the overall efficiency of those corridors. The grade separation or removal of some rail level crossings should be prioritised, and stations upgraded or rationalised to improve facilities and increase efficiency. This could be supported by the development of a place-based program.

Infrastructure to support active travel and other 'last mile' travel options for mass transit public transport should also be identified. Any projects arising from these planning studies should be subject to thorough business cases that will be assessed by ISA.

RECOMMENDATIONS

- Complete necessary planning studies to identify the preferred mass transit solution to Mount Barker and the Adelaide Hills, as well as the necessary transport solutions to support the forecast increased activity in the north-west of Adelaide.
- Develop a place-based program of level crossing removals to improve efficiency of key public transport corridors.

Education

Significant investment is being made in the government education sector. This includes two new schools delivered via a PPP, which have the combined capacity of 3,350 students, a new high school at Whyalla with a student capacity of 1,500 and investment in technology. In addition, further capital works at 99 existing schools throughout the State are being undertaken to improve facilities and support enrolment growth and the transition of Year 7 to high school. These programs are currently funded and included in the forward estimates.

Meanwhile, new enrolments have been increasing at higher rates in recent years and have not been evenly distributed, with much of the enrolment growth occurring at schools in the Greater Adelaide region.

Development of business cases to address current demand pressure for primary and secondary schools in the eastern suburbs should be given priority.

The highest and best use of the recently closed Rostrevor campus should be considered, including whether it should be retained to meet future educational demand in the region. The PPP procurement model should also be considered to identify and maximise opportunities for private sector financing.

Options for current schools, including private sector schools that are under-capacity, to serve a growing population need arising from infill development should also be investigated. Plans should be developed to continue to manage the uneven growth in demand for educational infrastructure across the State and ensure current asset utilisation is maximised.

Capital investment needs to be supported by appropriately trained and skilled human capital. Training and skills development, particularly in the traditional trades, must be encouraged. Tertiary education providers, including TAFE SA and private vocational education and training (VET) organisations, must be adequately resourced to provide these services, particularly in regional areas. ISA supports the ongoing TAFE SA reform and master-planning and revitalisation program to meet the training needs of human capital through smart use of technology and facilities.

Corrections and forensic mental health

ISA anticipates that further prison infrastructure will be required in the short to medium term. Timing will be based on prisoner growth projections and development of a business case to support investment.

Department for Correctional Services analysis suggests prisoner growth is expected to reach 3,945 by 2023/24 with a shortfall of 368 beds, increasing to 1,080 beds by 2027/28. The increase in South Australia's prison population has placed pressure on over-utilised and old infrastructure.

Similarly, the key forensic mental health facility at James Nash House is an old facility that is not fit for contemporary approaches to forensic mental health, and bed numbers have not kept up with demand. The Department for Health and Wellbeing's *Mental Health Services Plan 2020–2025* recommends that it is demolished and replaced.

Due to the interactions between services, an integrated approach to planning should be undertaken to understand the possible synergies and to make a determination whether all or part of the facilities should be co-located or exist as separate facilities. A business case should then be developed to identify the preferred solution for the new facilities. Various procurement methods could be used including a PPP model, and this could be implemented in stages to match demand growth.

RECOMMENDATION

Identify solutions for additional capacity for corrections and forensic mental health.

Health

Significant investment has occurred in recent years in the health sector, with substantial additional planned investment included in the forward estimates in facilities such as the new Women's and Children's Hospital and the Queen Elizabeth Hospital redevelopment. SA Health has also been dedicating significant resources to increase capacity in response to the COVID-19 crisis and ISA supports the efforts to utilise existing assets – and contracting with the private sector to utilise their assets – to meet the peak demand.

The 20-Year Strategy seeks to prioritise investment that avoids hospital presentations, whether through promotion of health and wellbeing, more effective utilisation of technology or greater use of community care or sub-acute facilities. The *South Australian Health and Wellbeing Strategy 2020–2025* emphasises the importance of keeping people healthy and focuses on prevention, promotion and early intervention initiatives, as well as expanding service capacity in community settings to support people in avoiding unnecessary interactions with the hospital sector. Priority Care Centres are examples of initiatives that should be pursued to more efficiently treat patients outside of a hospital environment.

The *Mental Health Services Plan 2020–2025* has identified a need for more mental health facilities. It further recommends the possible modernisation of Woodleigh House be examined and urgent mental health facilities developed to avoid emergency department presentations. It is noted that Government has recently gone to tender for the provisions of a mental health urgent care centre.

Any investment in new health infrastructure needs to be supported by a business case that considers ways to service demand outside of the hospital environment, whether existing facilities can be adapted to meet service needs in lieu of building new assets, and how infrastructure fits in the broader health system.

Tourism

In 2018, the State Government announced a competitive tender process for the provision of the Kangaroo Island ferry service in preparation for SeaLink's current licence expiring in July 2024. The new contract is likely to consider requirements for marine infrastructure at Cape Jervis and Penneshaw, and any significant investment in infrastructure or facilities at either port should be subject to a business case that considers private sector contribution.

The 20-Year Strategy identified the need for more tourism experience and infrastructure product to act as an attractor and provide experiential offerings to increase visitor spend. Ways in which government investment or policy settings can facilitate private investment should be considered, and proposals should be subject to a viable business case informed by thorough market analysis. While it is important to plan at a regional level to provide scale and diversity of product to attract visitation, often relatively incremental investments can also have significant impact on existing product.

RECOMMENDATION

Develop business cases for new tourism infrastructure and product that supports the growth targets for the visitor economy and leverages private sector investment.

Sport

Government is in the process of developing a *State Sport and Active Recreation Infrastructure Plan*. The plan aims to identify the infrastructure needed to support sports participation and active recreational pursuits at all levels. While the plan is not yet finalised, ISA understands it is likely to identify several opportunities that may require significant capital investment to update facilities for the South Australian Sports Institute, State Sports Park precinct development at Gepps Cross and the International Sports Gateway at Mile End, along with critical asset management priorities across the portfolio. The Governor of South Australia, the Hon. Hieu Van Le AC, in his address to Parliament in February 2020, noted planning for additional major inner-city sporting and entertainment infrastructure.

RECOMMENDATION

Develop business cases for any major capital works supported by the *State Sport and Active Recreation Infrastructure Plan*.

Culture

The *Arts and Culture Plan South Australia 2019–2024* will guide the growth of, and investment in, the arts and culture sector. The Government has responded to the recommendations in the plan, several of which relate to potential significant investment in infrastructure. The necessary planning studies and business cases arising from this plan will be assessed by ISA once completed.

RECOMMENDATION

Complete necessary planning studies and develop business cases as required.



Instant icon

A destination combining wine, food and art has been a boon to McLaren Vale tourism, attracting around 1,000 visitors a day. The d'Arenberg Cube comprises a five-storey multi-function centre that combines a cellar door, private tasting areas, modern art gallery and a (recently closed) multi-award winning restaurant. The attraction showcases how entrepreneurial thinking can transform a region and help put it on the world map.

OUTLINE OF 'PRODUCTIVE INFRASTRUCTURE FOR SOUTH AUSTRALIA'

As part of its pre-election commitment: 'Productive Infrastructure for SA', the Government identified 10 major projects of potential significance. ISA has been tasked with reviewing and analysing these following further development of business cases.

Ten major projects

The following projects are outlined in **Attachment 1**:

1. Completion of the North-South road corridor through metropolitan Adelaide
2. A grain/minerals port on Eyre Peninsula
3. The GlobeLink upgrade of major export infrastructure
4. An extension of tram services in the CBD
5. An underground rail link in the CBD
6. Completion of the Gawler rail electrification
7. An extension of the O'Bahn between Tea Tree Plaza Interchange (current terminus) and Golden Grove
8. Grade separations at major metropolitan area intersections
9. Infrastructure development on LeFevre Peninsula
10. Sealing the Strzelecki Track.

Artist's impression, Kidman Park streetscape
Image courtesy of Housing SA



INFRASTRUCTURE AUSTRALIA

Infrastructure Australia prepares an *Infrastructure Priority List* for nationally significant investments that is updated regularly. It contains both projects (being specific, well-defined solutions to defined problems or opportunities for which a full business case has been developed) and initiatives (which are early-stage solutions to potential problems or opportunities for which a business case has not yet been developed).

The list is compiled in close collaboration with proponents and jurisdictions and using the Australian Infrastructure Audit. The *Infrastructure Priority List* is a live document and updated regularly to reflect changes and additions. The CIS will serve to inform South Australia's future submissions to Infrastructure Australia.

The current *Infrastructure Priority List* includes several South Australian projects. These are set out in **Attachment 2**.

Adelaide central business district
Image courtesy of South Australian Tourism Commission



ATTACHMENTS

Attachment 1: Ten major projects

1.1 Completion of the North-South road corridor through metropolitan Adelaide

This project comprises the upgrade of the Torrens to Darlington section of the North-South Corridor to allow a free flow of traffic and assist freight movements. Other sections are complete or underway (Regency Road to Pym Street). This capital intensive project is currently undergoing further review and final business cases are being developed for assessment. The project is currently partially funded to \$5.4 billion by State and Commonwealth Governments in equal proportions and appears in the Infrastructure Australia *Infrastructure Priority List* as a priority initiative. ISA will undertake a further review of this project when the final business case is developed, which should include a full options analysis and BCR calculations. These will be important factors in ISA's review to ensure the most appropriate solution to the identified transport issues is implemented.

1.2 A grain/minerals port on Eyre Peninsula

The State Government committed to analyse a grain/minerals port and logistics on the Eyre Peninsula to ensure the optimum location for this facility. As a first step in this process, KPMG has been contracted to assess future opportunities for the State-owned Port Bonython, including use of latent capacity, as part of mineral, grain and other natural resource supply chains, how the port could interface with other ports (especially Whyalla), and the potential role for the State Government.

Further analysis is necessary to ensure the best use of any latent port capacity and the optimum location for any enhanced port facilities is chosen. It is anticipated that any further development would need to be market led. ISA will review specific proposals by Government when they are sufficiently developed.

1.3 The Globelink upgrade of major export infrastructure

Globelink is a proposed road and rail corridor behind the Adelaide Hills to connect the National Highway and rail link from Victoria to northern Adelaide, as well as an intermodal export park and freight-only airport at the Murray Bridge end of the corridor. The South Australian Government engaged KPMG to develop a business case, which found Globelink to be economically unviable at this stage, although potentially able to provide benefits as a long-term solution.

Overall, the study recommended optimising the existing road and rail corridors in the short to medium term in order to achieve increases to productivity, while considering further studies and corridor preservation for the long term.

ISA recommends working with industry to identify the incremental investments to existing corridors that will provide the greatest benefits.

1.4 An extension of tram services in the CBD

This project seeks to increase the capacity of the tram network to better distribute movement around the CBD. It comprises a tram loop within the CBD, and may also extend the tram to North Adelaide.

The current priority is to identify preferred routes and develop a preliminary business case. This is being undertaken by the Department of Planning, Transport and Infrastructure (DPTI) as part of the development of a City Access Strategy. Planning will occur in conjunction with the South Australian Public Transport Authority (SAPTA) to ensure that infrastructure service planning takes an integrated approach, including bus and train services, and facilitates active transport. Planning should encompass delivery methodology, funding options and a quantification of the benefits, including urban uplift benefits of an extended tram network.

This project appears in Infrastructure Australia's 2020 *Infrastructure Priority List* as a Priority Initiative.

1.5 An underground rail link in the CBD

An underground rail link between the northern and southern train lines could enhance the efficiency of the rail network and provide greater connectivity for commuters; however, this may be costly and would require justification.

A planning study would be required to identify options for project scope, define system benefits and determine wider functional impacts on the CBD. If it proceeds, this project would likely be implemented in the longer term. ISA will review project documentation when this becomes available.

1.6 Completion of Gawler rail electrification

The electrification and modernisation of the Gawler rail line will deliver a faster, cleaner and more reliable service in the high-growth northern Adelaide area, and will complete an electrified spine through Adelaide from Gawler to Seaford. The Adelaide-to-Gawler works will increase capacity on one of Adelaide's busiest rail lines.

The project has a capital value of \$440 million and received funding from both State and Commonwealth Governments. The scope of works includes overhead wiring, signalling, a power sub-station, and up to 15 new three-car electric train units to meet requirements for the next decade. ISA will review this project as part of its regular assurance function upon completion (expected late 2020).

1.7 An extension of the O'Bahn between Tea Tree Plaza Interchange (current terminus) and Golden Grove

The O-Bahn guided busway is the most patronised public transport service in Adelaide. The O-Bahn fixed track has excess capacity to carry more buses, yet access to rapid transit services in the north-eastern suburbs is currently limited by full car parks, unattractive or unavailable bus feeder services and limited active travel options.

A North East Public Transport Study that investigates a potential extension to the O-Bahn and other network infrastructure needs is currently being considered by Government. The objective is to increase public transport

patronage and support mode-shift for bus interchange arrivals away from private vehicles.

ISA will review recommendations once the feasibility study is complete.

1.8 Grade separations at major metropolitan area intersections

The road network in Greater Adelaide intersects the interstate and metropolitan rail networks at grade at 126 locations. Of these crossings, 82 are on the Adelaide Metropolitan Passenger Rail Network. Many (26) are on arterial roads, impacting traffic (commuter, business and bus services) and freight movements. The removal of level crossings will improve productivity and increase safety as well as enhancing urban connectivity.

Grade separations at Hove and Ovingham are included in the forward estimates. ISA will review these projects following further analysis as part of its assurance function, and recommends a program of further place-based level crossing removals is developed, which will improve the efficiency of key public corridors.

1.9 Infrastructure development on LeFevre Peninsula

The Northern LeFevre Peninsula is located in the north-west of the Adelaide metropolitan area and comprises the suburbs of Osborne, North Haven and Outer Harbour. The area has strategic importance to South Australia as the site of the State's key port and the location of industrial and freight-related development. The area contains numerous assets of importance including a deep-water shipping channel, international container terminal, grain handling and berth facilities, freight rail corridors, Port River Expressway connections and the Osborne Shipyard (currently under redevelopment).

Renewal SA prepared a master plan for the area in late 2019, which sets out a vision to "transform the Northern LeFevre Peninsula into a world-class industry precinct."³

It plans to "capitalise on Osborne's expanded naval shipbuilding role, together with established port industries, strengthen transport links, improve services, improve 'green infrastructure' and the public realm."

3 Jensen PLUS (2019). Northern LeFevre Peninsula Master Plan, Prepared for Renewal SA.

Key aspects of the master plan include a shipbuilding supplier precinct close to the north and south naval shipyards, dedicated port-related industry precinct with flexibility for future expansion, an east-west green space link, improved access including a new east-west road link, local centre improvements and a multipurpose centre.

The LeFevre Peninsula is an important development precinct. In order to maximise its potential and to accommodate the needs of the Naval Shipbuilding Program at Osborne, focus should be directed towards the development of infrastructure including key access corridors, commercial, retail, residential and recreational facilities in the area. This would serve to enhance industrial efficiency and promote residential and community development.

The formulation of a coordinated and integrated plan to inform further transport infrastructure development along the peninsula and its surrounding areas is currently underway and an important step in supporting pragmatic, well-considered infrastructure investment decisions. ISA will review individual projects when business cases are available.

1.10 Sealing the Strzelecki Track

The Strzelecki Track is a vital supply line for outback communities, tourism and pastoralists, and a major road link for the nationally significant existing oil and gas extraction operations in the State's north. This project upgrades the Strzelecki Track to a sealed highway to provide greater connectivity to key rural areas, reduced transport costs and better safety. ISA will review the updated business case that incorporates wider economic benefits once completed.

This project appears in Infrastructure Australia's 2020 *Infrastructure Priority List* as a priority initiative.

Attachment 2: Infrastructure Australia priority list – South Australian projects

2.1 Priority projects

Priority projects are defined by Infrastructure Australia as those for which a full business case has been completed and been positively assessed by the Infrastructure Australia Board.

Currently, there is one priority project listed for South Australia, which is the Eyre Infrastructure 'Iron Road' Project. Development may be implemented in stages, with the initial stage being the development of a deep-water port at Cape Hardy. The proposed infrastructure would be available for other users (open access), including grain exporters and other miners in the region. This is a private sector development.

2.2 Priority initiatives

Priority initiatives are defined by Infrastructure Australia as potential infrastructure solutions for which a business case has not yet been completed. Currently there are seven South Australian projects listed as priority initiatives:

- Adelaide North-South Corridor upgrade, remaining sections – Upgrades to Anzac Highway to Darlington; River Torrens to Anzac Highway; and Regency Park to Torrens Road.
- Adelaide Tram Network expansion – Once complete, this would expand tram services across inner Adelaide and the CBD, including to: Outer Harbour, Port Adelaide, Semaphore, Grange and West Lakes; Adelaide Airport and Henley Beach; Unley and the south; Norwood and Magill Campus; Prospect and the north; and a tram loop around the CBD.
- Spencer Gulf crossing capacity – Improving the crossing capacity of the Spencer Gulf at Port Augusta could be achieved by developing alternative routes, upgrading the existing Joy Baluch AM Bridge or by constructing a new crossing. There has been \$160 million committed by

the Commonwealth Government and \$40 million by the South Australian Government. Planning work has been completed and procurement is underway.

- Strzelecki Track upgrade – Upgrade 426 km of the Strzelecki Track between Lyndhurst and Innamincka, and 26 km of the Nappa Merrie Access Road.
- Sturt Highway high productivity vehicle (HPV) capacity enhancement – Realignment of the Sturt Highway through the Truro Hills, including a bypass of the town of Truro, will improve safety and allow use of HPVs on the highway.
- Gawler Craton rail access – The initiative proposes that a third party builds, owns and operates a 350 km freight rail connection to Gawler Craton mineral province.
- South Australian regional bulk port development – Options for the development of bulk commodity port capacity in the Spencer Gulf region.

Attachment 3: Current forward estimates

The following tables set out capital expenditure details for all government-funded infrastructure projects with a capital value greater than \$50 million that are currently included within the forward estimates. Table 2 identifies the relevant projects within each sector and the anticipated spend profile for each (excluding privately funded projects).

	2018/19 Outcome	2019/20	2020/21	2021/22	2022/23
General government sector	1,794	2,514	2,634	2,736	2,313
Non-financial public sector	2,576	2,832	3,492	3,480	3,131

Table 1:
Investing expenditure aggregates as at the 2019/20 Mid-Year Budget Review (\$million)

Source: Department of Treasury and Finance

	2019/20	2020/21	2021/22	2022/23	Total over four years	Total project cost
General government sector						
Attorney-General						
SA Government Radio Network	38,834	—	—	—	38,834	135,449
Correctional Services						
Yatala Prison – 270 beds	14,904	87,700	44,600	—	147,204	149,000
Education						
Improved internet services for South Australian Government schools (Stage 1, Implementation of high speed fibre optic carriage services to public schools)	17,422	14,546	14,406	14,410	60,784	89,514
Northern & Southern Adelaide Schools PPP (budget profile shown in this table includes associated stormwater, water/sewer and road infrastructure works delivered by other government agencies to reflect total project cost)	34,619	190,563	43,941	—	269,123	269,123
Sustainable enrolment growth and other school projects	149,027	386,836	236,058	46,536	818,457	890,476
Whyalla secondary education renewal	17,000	60,000	21,958	—	98,958	100,000

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	2019/20	2020/21	2021/22	2022/23	Total over four years	Total project cost
Environment and Water						
South Australian Riverland Floodplains Integrated Infrastructure Program (SARFIIP)	57,447	—	—	—	57,447	105,123
Health and Wellbeing						
Country Health SA sustainment and compliance	21,572	14,200	14,000	14,000	63,772	140,000
Lyell McEwin Hospital emergency department expansion	11,819	26,842	14,500	—	53,161	57,986
Modbury Hospital – Upgrades and additional services	31,791	39,668	18,345	—	89,804	96,546
New Women's and Children's Hospital	10,000	12,000	130,000	400,000	552,000	TBA
Repatriation health precinct reactivation	34,075	40,600	21,000	2,000	97,675	97,675
The Queen Elizabeth Hospital Redevelopment Stage 3	63,158	91,700	85,080	3,047	242,985	261,594
Upgrade to existing Women's and Children's Hospital	22,700	20,100	3,809	—	46,609	63,639
Planning, Transport and Infrastructure						
Adelaide Festival Centre Precinct – Plaza and integration	14,000	37,000	31,000	23,448	105,448	140,853
Brighton Rd (Hove) level crossing upgrade	—	12,000	39,000	40,000	91,000	171,000
Bus Fleet Replacement Program (annual program)	22,489	20,903	21,112	21,325	85,829	N/A
Cockburn to Burra (under Roads of Strategic Importance)	—	750	1,000	9,750	11,500	62,500
DPTI Annual Program	154,574	125,591	127,285	127,064	534,514	N/A
Duplication of Joy Baluch AM Bridge	15,000	70,000	112,700	—	197,700	200,000
Extension of the Tonsley rail line to the Flinders Medical Centre	106,552	8,000	—	—	114,552	141,000
Fullarton and Cross Road intersection upgrade	1,000	20,000	30,000	10,000	61,000	61,000
Gawler line electrification	300,714	143,250	88,295	—	532,259	615,000
Horrocks Highway corridor	4,000	7,000	35,000	9,000	55,000	55,000
Improving critical road infrastructure	8,830	—	—	—	8,830	66,185
Main South Road duplication from Seaford to Aldinga	16,331	65,900	164,000	41,000	287,231	287,500
North-South Corridor, Darlington Upgrade	122,957	45,500	—	—	168,457	754,500
North-South Corridor, Northern Connector	129,346	10,000	13,934	—	153,280	868,365
North-South Corridor, Regency Road to Pym Street	38,200	141,100	124,110	—	303,410	354,300

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	2019/20	2020/21	2021/22	2022/23	Total over four years	Total project cost
North-South Corridor, Torrens River to Darlington	24,700	60,000	132,000	30,000	246,700	TBA
Oaklands Crossing	28,818	—	—	—	28,818	151,340
Port Wakefield overpass and highway duplication	15,000	74,000	33,100	—	122,100	122,500
Portrush and Magill Roads intersection upgrade	2,000	16,000	45,000	35,000	98,000	98,000
Princes Highway corridor	—	5,000	7,500	12,500	25,000	250,000
Pt Augusta to Perth project (under Roads of Strategic Importance)	10,000	41,000	66,000	8,000	125,000	125,000
Renmark to Gawler (under Roads of Strategic Importance)	—	1,000	1,375	13,625	16,000	87,500
Road Safety Package	40,000	42,000	52,000	9,000	143,000	143,000
Torrens Rd (Ovingham) level crossing upgrade	11,000	110,000	110,000	—	231,000	231,000
Upgrade of the Goodwood Road, Springbank Road and Daws Road intersection	23,000	21,000	15,800	—	59,800	60,000
Victor Harbor Road duplication	14,000	9,000	46,000	23,000	92,000	92,000
Premier and Cabinet						
Aboriginal Art and Cultures Centre	—	10,000	50,000	90,000	150,000	TBA
Adelaide Festival Centre Precinct – AFC upgrade	5,826	13,084	—	—	18,910	76,397
International School of Culinary Excellence, Hospitality and Tourism	—	5,000	25,000	30,000	60,000	TBA
Public non-financial corporations sector						
Adelaide Festival Centre Trust						
Her Majesty's Theatre redevelopment	31,285	—	—	—	31,285	66,153
SA Water						
Eyre Peninsula desalination augmentation	15,000	82,100	—	—	97,100	99,600
Kangaroo Creek Dam safety	13,056	—	—	—	13,056	107,176
Mount Bold Dam safety	1,296	22,823	23,394	23,978	71,491	76,533
Northern Adelaide Irrigation Scheme	32,500	1,000	1,000	27,171	61,671	155,600
Zero Cost Energy Future	228,806	124,437	—	—	353,243	390,300

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	2019/20	2020/21	2021/22	2022/23	Total over four years	Total project cost
South Australian Housing Authority						
Affordable Housing Initiative	7,711	61,916	106,122	129,014	304,763	398,690
Better Neighbourhoods Program	44,282	14,377	15,000	15,000	88,659	299,118
Neighbourhood Renewal Program	468	10,821	14,578	13,487	39,354	53,923
Playford North urban renewal	9,285	8,474	6,737	7,228	31,724	148,425
Preventative maintenance and upgrade (includes operating expenditure)	143,708	130,381	131,270	132,960	538,319	N/A
Remote Indigenous housing	18,603	8,796	7,108	4,257	38,764	239,682

Table 2:
Infrastructure spending – Total project cost greater than \$50 million and other significant programs (\$000s)*

Source: Department of Treasury and Finance

* Table includes both investing and operating maintenance spend for housing and education infrastructure assets. Consequently, table will not reconcile to tables summarising investing spend only.

Figure 1 below shows the comparative government infrastructure spend over a 20-year period. It excludes the NRAH in 2017. The last four periods equate to the current forward estimates and demonstrate a consistent level of increased spend over and above the previous five-year period.

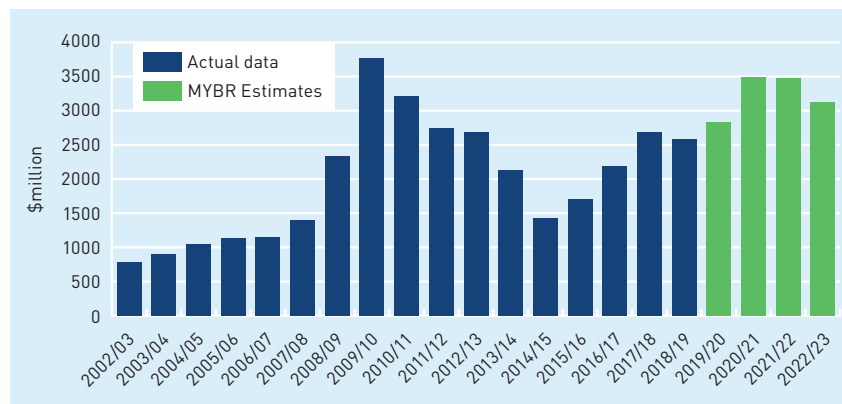


Figure 1:
Purchases of non-financial assets by the public sector*

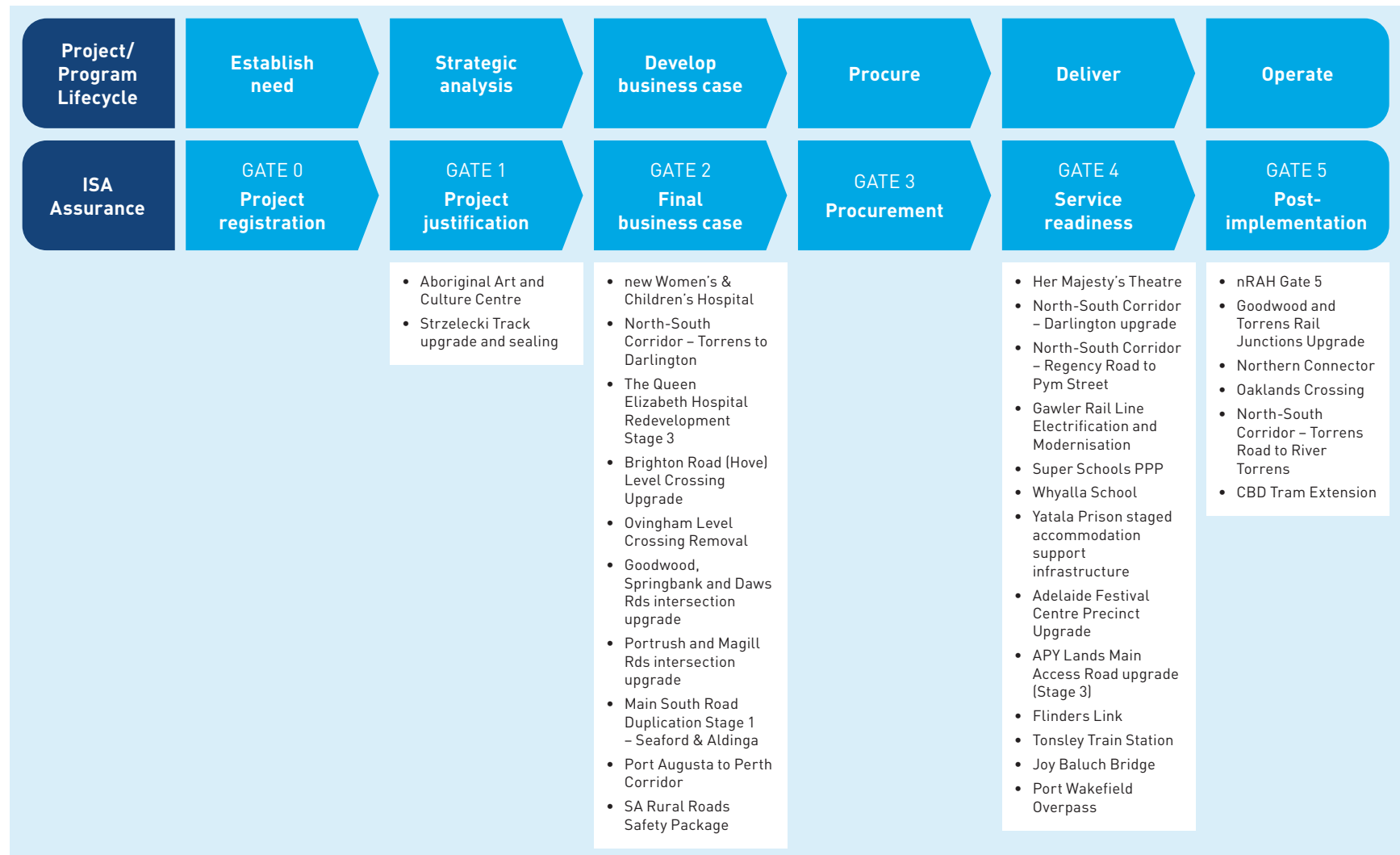
Source: Department of Treasury and Finance

*Non-financial public sector represents government investment in non-financial assets.

In particular, the following projects have allocated funding included in the forward estimates:

- new Women's and Children's Hospital – ISA has commenced assurance review; business case development currently in process
- Aboriginal Art and Cultures Centre – Currently undertaking concept planning and design, and
- Further sections of North-South Corridor road upgrade – ISA has commenced assurance review; options analysis and business case development currently in process.

Attachment 4: ISA assurance process



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