

31 July 2019

Mr Anthony F Shepherd
Chair of Infrastructure SA
Infrastructure SA

Email: infrastructure@sa.gov.au

Dear Mr Shepherd

20-Year State Infrastructure Strategy Discussion Paper – June 2019

The Planning Institute of Australia SA (PIA) would like to thank Infrastructure SA for the opportunity to provide feedback on the *20-Year State Infrastructure Strategy Discussion Paper – June 2019* (the discussion paper).

PIA is the national body representing planning and the planning profession. Through education, communication and professional development, PIA is the pivotal organisation serving and guiding thousands of planning professionals in their role of creating better communities.

On behalf of the members of PIA we also acknowledge the effort and topics raised within the discussion paper. The alignment with a strategy such as this with PIA's position statements and also the planning system is critical to ensure a prosperous and successful South Australia.

I welcome the opportunity to discuss the development of the strategy in more detail with Infrastructure SA and invite representative of Infrastructure SA to meet with the executive of the PIA SA in order to do so.

PIA's Policy Platform

PIA has stepped forward to lead the debate on the need for a coordinated national strategy to manage population growth. PIA commissioned *Through the lens:*

megatrends shaping our future which identifies a range of demographic and disruptive megatrends that will shape the future of Australia through the 21st century. This report forms a baseline when working with stakeholders, such as Infrastructure SA, to develop a range of future scenarios which will help shape informed policy positions.

The report is the first part of PIA's *Journey towards 50 million* initiative, which aims to stimulate an informed national debate on the future needs of a changing population.

A megatrend is a major shift in environment, social and economic conditions that will substantially change the way people live. Once in place, megatrends influence a wide range of activities, processes and perceptions, both in government and in society, possibly for decades. The report explores nine megatrends in the Australian context:

- Increased Urbanisation
- Health and ageing
- Resource dependency
- Biodiversity
- Climate change and disaster resilience
- Global connectedness
- Infrastructure
- Smart settlements and new technology
- Collaborative consumption and social change

PIA SA draws your attention to this work as it aligns directly to the trends identified and noted in the discussion paper and will be relevant as the *20-Year State Infrastructure Strategy* (the Strategy) is developed further. It can be found here:

<https://www.planning.org.au/policy/journey-towards-50-million>

Infrastructure and its funding: Implications for planning

As the discussion paper alludes there is a critical nexus between infrastructure, planning, design, and development. The provision of appropriate, effective, efficient and timely infrastructure is essential to achieve affordable and sustainable living conditions in our cities and regions – and for the movement of goods to market.

In the context of current infrastructure provision, population increase, climate change and infrastructure institutional management, devising the means to fund and provide necessary infrastructure is a major and urgent national challenge.

Planners have an important role in devising and communicating scenarios that take account of growth and change, expressing visions, spatial outcomes and the implications of trade-offs to set realistic infrastructure priorities for communities and businesses.

Planners interpret and sequence development needs in ways that define the delivery task for both social and economic infrastructure. Planners and the development industry are well placed to determine where value is created along the supply chain for the allocation of development rights and to balance benefits with potential sources of funds.

The overarching finding of the paper is that the achievement of place outcomes based on sound strategic planning should drive infrastructure planning and option appraisal. Funding (including value capture) and delivery mechanisms should be consistent with meeting these outcomes. To achieve this, integrated land use and infrastructure planning is essential to ensure that community expectations are met for improvements to living conditions and economic performance to accompany population growth and change.

PIA has a paper and position statement *Infrastructure and its funding: Implications for planning* which can be found here:

<https://www.planning.org.au/documents/item/8890> and

<https://www.planning.org.au/documents/item/8889>.

Planning and Infrastructure

Planning strengthens communities, promotes economic development and improves the choice of where and how people live and work. It helps identify hazards and reduce risks; it identifies, protects and enhances environmental, social, cultural and heritage values. It goes hand in hand with infrastructure provision.

Planners enhance decision-making and help balance private, government and community interests for a better and more sustainable future. Planners help lead and manage change in the built and natural environment at a local, regional, state

and national scale. They develop policy, identify and deliver agreed community outcomes; they contribute to solutions by encouraging vision, engaging and listening.

Good planning reduces risk and creates a level of certainty that enable households and businesses to invest in the purchase or development of land. Planning systems provide processes for fair and transparent assessment of proposed land use changes. By reducing risk and adding certainty to the decision-making process, planning adds value. That value can then be partially captured (e.g. through municipal rates and State land taxes) and reinvested in infrastructure and public facilities.

PIA SA young planners have prepared responses to some of the questions asked in the discussion paper. Please find these for your consideration in **attachment 1**.

PIA SA looks forward to working with you further on the development of the *20-Year State Infrastructure Strategy*. Please feel free to contact the undersigned if any further comment is sought via sa@planning.org.au or [DELETED].

Yours Sincerely

[DELETED]

Kym Pryde RPIA
PIA President SA

Attachment 1

What infrastructure investment would make the biggest impact to unlocking economic growth in South Australia in the next 0-5, 5-10 and 10-20 years?

Within the next 0-10 years, it will be most important for any current existing projects that are nearing completion in relation to transport and digital connectivity, to be completed and realised. These range from road projects including the Northern Connector, Darlington Interchange and Torrens to Torrens sections of the North – South Corridor.

Congestion busting projects in relation to intersections and identification of other key intersections throughout Adelaide’s metropolitan road network that have recently been announced by both the State and Federal Government’s will also play a key role.

In addition, grade separation of key level crossings not currently in the project pipeline, which have been identified but where no commitment has yet been made. A good example includes the level crossing at Cross Road, Unley Park which contains both the national Australian Rail Track Corporation (ARTC) freight line, along with the Adelaide Metro Belair Line rail service.

The South Australian Young Planners (SAYP) see that in the next 10-20 years, other projects, such as the South Australian Government’s 2018 election commitment – Globelink will also be realised. Globelink will be effective in creating extra capacity in terms of the National Rail Freight Network, along with diverting freight out of the Adelaide Hills, and the long inefficiencies this has always created in moving freight both too and through Adelaide.

The sheer growth of the rail freight task nationally, means that Globelink can and will play a significant part in keeping SA relevant within the national Freight network. Globelink also creates an opportunity for the Adelaide Metro Rail system to be fully electrified, where this includes the construction of a CBD Tunnel or loop, thereby creating connecting rail journeys through the CBD, and new stations and development opportunities around those stations. Such a proposal could certainly become a key long-term initiative within a new City Access Strategy to be progressed with the State Government in association with City of Adelaide.

A faster rail service to Mt Barker could also be considered, which would include further consideration of a proposal by Luigi Rossi to build a viaduct through Brown Hill Creek along with other amendments in order to straighten out the current ARTC Freight line corridor, in order to allow for 160Km/hr rail rolling stock, and a train service offering a maximum 30 minute running time between Adelaide CBD and Mt Barker. Such linked projects would be transforming from a State economic perspective.

In terms of the North – South Corridor, the Torrens to Darlington section will become one of the largest infrastructure projects in the state’s history. SAYP believes that the two current options to be further progressed and considered involving tunnels are the best in terms of keeping economies and communities located along the current corridor intact.

In terms of digital connectivity, any remaining parts of the National Broadband Network (NBN) which are not currently online need to be, and other projects such as the Gig City Adelaide project within the CBD, which are currently available now for use to be fully utilised by businesses and relevant spaces. The current rollout of the 5G Mobile network is also integral.

How would Adelaide’s infrastructure need to change if its population hit two million?

PIA has a comprehensive set of positions papers and discussion papers that are relevant. These are discussed in letter above.

What strategies should be adopted to ensure Adelaide maintains its liveability as it grows?

It is essential that in order to maintain liveability both planning and infrastructure provision are aligned.

How should infrastructure be planned in increasingly urban environments with ageing populations?

The future infrastructure should be planned with a view of changing population structure and style of living.

People are living longer, and population is ageing. Older people are living in smaller households, have more issues with health and less income. However, they still want to live in their houses and have active life. The infrastructure should respond to all those needs, which will require:

- Walking and compact neighbourhoods
- Health, retail and community services, sport and recreational facilities, as well as green areas in a walking distance – for better health outcomes
- Affordable housing options – those should be integrated into high- and medium-density developments, mixed-use projects and located near transportation hubs to minimise transportation costs
- Housing options need to be planned for older people and smaller households and be environmentally sustainable to allow affordable maintenance.
- 5G / internet coverage to allow work options for active older people. That will also help to provide remote services to older people (health assessment, banking, etc.).
- Investment to rapid public transport and road infrastructure to provide access to jobs and services.
- All the above will require long-term strategic higher-scale planning and cooperation between different layers of government.

How can infrastructure provide resilience against bushfires, drought, flooding, sea level rises and the like?

Educating kids on safety rules etc. via schools programs. Supporting CFS. Proper infrastructure planning – environmental impact assessment with identification of all risks and providing mitigation measures.

What strategies should the Government adopt to ensure the necessary infrastructure is in place so our regions can thrive?

Infrastructure planning for regions should start with strategic planning for development of each territory / regional centre, defining their goals, opportunities and competitive advantages. Each region has a number of priority projects so the infrastructure should support those.

Where possible the consideration should be given to utilising existing infrastructure and providing digital infrastructure to allow remote jobs and services provision and minimise costs for new physical infrastructure.

Provision of jobs and services remotely is especially important in regional SA with lack of jobs and ageing population trend.

Good internet coverage in regions (5G rollout and WiFi locally) can assist in provision of some remote jobs and services such as health self-assessment, banking, etc.

The other alternative solutions can include provision of government supported multifunctional information centres (combining libraries, Centrelink and community centres) which assist and educate people how to access services remotely and search for remote job options.

How can we best plan and accommodate the infrastructure needed to create vibrant and economically productive precincts?

Refer to PIA's letter above.

What challenges and opportunities does South Australia have in supporting our cultural, sporting and tourism activities to ensure our global competitiveness and vibrancy as a location?

Explore and use global ratings and score to attract more travellers from abroad. Engage with local start-ups to develop apps and services providing better access to information on places of interest and events (see for example – <http://goingtoplaces.com.au/goingtoplaces-travel-apps/>).

Also can use the idea of creating some major touristic routes across main South Australian paces to visit and support them by relevant infrastructure (cheap transport options, hotel deals, discount plane tickets).

How will technology change the transport system in South Australia?

In the future it is envisaged that on demand public transport through a Mobility as a Service (MAAS) system and online platform will be fully utilised and operational.

Such a system will bring together all current transport providers who may currently view themselves as competitors, in terms of transport modes, to better collaborate with the end user/commuter/customer of the service, in order to create a seamless journey service. Thereby, train, bus, tram, uber,

cycling, scooter, taxi, walking or other ride sharing services will or could all be connected together and integrated. Thereby, when a commuter requests a service, they are able to be presented with multiple options from their origin to their destination. They then choose which option suits them in real time. Ticketing is done via subscription to the MAAS Service provider. This could be Adelaide Metro, or more likely to be a private provider contracted by the SA Government to offer the service.

End of mile service autonomous vehicles will be able to offer connection straight to a commuter's home door, or near as possible to an end or starting destination. Many countries already using similar systems, for example, it is widely used throughout Japan, which makes using public transport easy even for tourists.

Minimising car traffic and offering other options in highly densely populated areas with lots of people such as Adelaide CBD and inner rim, will require creative combination of alternative transport modes such as car sharing, scooters and bikes, and relevant supporting infrastructure (such as car parking areas for car sharing, payment terminals for public transport).

In less crowded suburbs and towns, smaller shuttle buses (probably autonomous) can be exploited instead of buses.

From a freight perspective, driverless trains and/or trucks on the road may become commonplace, in lieu of community acceptance, where safety may be seen to be improved via external remote-control operation of such vehicles through computer algorithm type technology.

In addition, Electric vehicles and the relevant infrastructure required, along with reducing charging times (in order to make them in line with current fossil fuel technologies (internal combustion engines)) will enable a major shift to take place which will have a significant effect on reducing emissions within the transport sector.

What options are there to establish a reliable, decarbonised energy system that presents export opportunities?

Employ micro-grid approach –
<https://microgridknowledge.com/microgrids-in-japan/>.