Link to South Australia's **Strategic Plan Objectives**

Strengthening the capacity of the health system's essential infrastructure to achieve improved health and wellbeing for all South Australians will contribute to the achievement of the following targets:

Objective 1: Growing Prosperity

Strategic infrastructure	Increase investment in strategic areas of infrastructure, such as transport, ports and energy to support and achieve the targets in South Australia's Strategic Plan. (T1.16)

Objective 2: Improving Wellbeing

Quality of life	Improve Adelaide's quality of life ranking on the William M Mercer Quality of Life Index to be in the top 20 cities in the world within 10 years. (T2.1)
Healthy South Australians	Increase healthy life expectancy of South Australians to lead the nation within 10 years. (T2.2)
Infant mortality	Continue to be the best performing state in Australia. (T2.3)
Psychological distress	Equal or lower than the Australian average within 10 years. (T2.4)
Overweight	Reduce the percentage of South Australians who are overweight or obese by 10% within 10 years. (T2.6)

Objective 4: Fostering Creativity

Internet usage	Increase the level of internet use in metropolitan and regional South Australia by 20% within 10 years. (T4.7)
Cooperative Research Centres	Have based in South Australia either the headquarters or a major node of at least 40% of all existing CRCs, Major National Research Facilities and Centres of Excellence within 5 years. (T4.8)

Objective 5: Building Communities

Regional infrastructure	Build and maintain infrastructure to develop and support sustainable communities in regions. (T5.11)

Objective 6: Expanding Opportunity

Aboriginal wellbeing	Reduce the gap between the outcomes for South Australia's Aboriginal population and those of the rest of South Australia's population, particularly in relation to health, life expectancy, employment, school retention rates and imprisonment. (T6.1) Increase the percentage of the Aboriginal population in the South Australian public sector from 1.2% to 2% within 5 years. (T6.2)

Background

The South Australian health system is complex. It is distributed across three levels of government and the private sector, and directly involves over 30,000 workers with varying professional backgrounds working in many different service delivery sites. The system is a mixed public, private and not-for-profit service model. The current value of SA Government owned health built assets is $2.4 billion, and $337 million for biomedical equipment.

There are 134 hospitals located in South Australia, of which 82 are public. Health infrastructure, however, is much more than hospitals and includes general practices and community health centres and clinics, sports medicine centres, mobile health clinics, specialised facilities, emergency vehicles and home provided services.

Essential health infrastructure includes major metropolitan hospitals, country regional hospitals, emergency transport and retrieval services, the Institute of Medical and Veterinary Science and major hospital accident and emergency rooms. It is essential that these services function effectively at all times, including post-disaster, both as stand-alone units and in a coordinated way.

Health services, together with schools, form the backbone of infrastructure in communities, particularly in rural and remote areas. Health services are often the major employer in rural communities (not just for the town in which they are located but more widely) and are a major purchaser and user of supplies – both locally and regionally.

The Generational Health Review (GHR) proposed substantial reform of the South Australian health system. The focus of the South Australian health reform agenda is to reorientate the health system to a population health approach, achieving gains in population health outcomes and improving health status by moving emphasis to early intervention and prevention and thus better management of chronic disease, the provision of community- based services and the refocusing of the acute care system. This requires new more localised primary health care facilities that can deliver a range of services, from less complex clinical procedures to health promotion and advice.

Health

Challenges and Opportunities

To achieve the government's health reform agenda and South Australia's Strategic Plan targets over the next 10-15 years, the overarching priorities in health infrastructure are:

■ sustain and reconstruct health infrastructure
■ establish primary health care centres
■ improve health connectivity and introduce new technology
■ build and improve facilities to enhance health education, training and research.

Sustaining and Reconstructing Health Infrastructure
Health reform requires government to maintain the current system while reforming and reinvigorating it. Experience in rolling out major health system reform, nationally and internationally, demonstrates that this requires building capacity for reform in parallel with the maintenance and reconstruction of the existing system.

Investment in health infrastructure has not always kept pace with its level of usage and continually growing demand. Investment is needed, to sustain the safety and quality of our health services. While the introduction of innovative solutions for health services is also needed, sustaining existing infrastructure, particularly hospitals, will continue to be a focus for investment to ensure quality and safety of services.

Strategic Priority

■ Ensure continued quality and safety of health services through redevelopment of built infrastructure and major equipment repair and replacement (including the adoption of new technology), while maximising opportunities to move outpatient services, chronic disease prevention and management into primary health care settings.

Effective and efficient infrastructure can only be developed if there is a very clear picture of how the health system plans to deliver its services. The state's existing health infrastructure is not easily adaptable to the changing demands on the health system. These demands include:

■ changing population profiles and redistribution, where the ratio of old to young is increasing and life expectancy is rising. Population movement, from inner to outer metropolitan areas coupled with redistribution in country regions is also a significant factor
■ the changing types of disease burden with increases in mental illness, heart disease, cancer, chronic respiratory failure and Alzheimer's disease, many of which are associated with ageing and would be preventable through better health practices when young, but most of which are characterised by much higher costs than the disease burden of past decades
■ an imbalance in the mix and distribution of health services as a result of historical practices.

There is a growing requirement for provision of aged care residential accommodation due to the ageing demographic profile of South Australians. The Australian Government has primary responsibility for funding infrastructure for public aged care and for setting the standards for all aged care provision.

The public health system has become the aged care provider of last resort in South Australia. Hospitals, both country and metropolitan, are providing aged care accommodation for people with non-acute clinical requirements. Hospital accommodation is expensive and does not meet Australian standards for aged care accommodation. There is a growing need to build new aged care facilities or convert existing facilities.

In reforming the health system, there is a need to plan and define new approaches to providing health care. This is especially the case in areas requiring rebuilding or redevelopment where infrastructure is aged and where services can be more effectively delivered from primary health care facilities.

Strategic Priority

■ Develop service models that better integrate hospital and primary health services; coordinate the safe delivery of services; and increase and improve access, particularly for vulnerable people. Use of existing infrastructure will be maximised and duplication reduced.

Primary Health Care

The Government has committed to work towards the provision of a South Australian health system with a better coordinated range of services, provided where possible at a more local level.

Opportunities for health infrastructure that can be linked in a coordinated, whole-of-government approach include the development of public spaces that provide physical and mental wellbeing, and better access to local primary health care services such as co-located private facilities integrated with transport networks. There is a need for more integrated planning (and funding) in concert with the Australian Government, the private and not-for-profit sectors and other state departments such as education, justice, transport, recreation and sport, and arts. Examples include active ageing programs and healthy weight initiatives in communities.

The government will investigate opportunities for co-location of health, education and community services to achieve greater integration between agencies responsible for provision of services to children. (See Community Services and Housing section.)

Creation of primary health care infrastructure will enable better provision of health care services at more accessible points throughout the state. This will usually entail a refit/upgrading or extension of hospitals or other existing government facilities to provide a central focus for primary health care, rather than building new infrastructure. It will also require the provision of appropriate medical centres/consulting rooms in other rural and remote centres. In the metropolitan area the aim would be to have one primary health care facility (a 'Primary Health Care Centre'), per 100,000 people.

A new focus will be to work more closely with private health providers and funders, e.g. the Australian Government, general practitioners, pharmacists and allied health professionals as service providers which are an essential part of primary health care networks.

In addition, localising primary health care services, including more delivery of services directly into homes will require the use of mobile technology and facilities to support workers in the community, rather than just the construction/refit of fixed assets.

Strategic Priorities

■ Upgrade and expand primary health care infrastructure, both mobile and fixed, to enable integrated provision of primary and allied health services, in collaboration with government, private and not-for-profit service providers, to minimise duplication of infrastructure.

■ Coordinate development of transport and health services to improve transport access to health facilities throughout the state.

Health

Development, learning capacity, behaviour and health in early childhood are strongly linked to lifelong wellbeing of individuals. There is overwhelming evidence that the early years, from pre-natal to age eight, provide the foundation for competence and coping skills that will affect learning, behaviour and health throughout life.

Co-location of primary health care support services for families and young children within existing primary schools is proposed as a way of maximising infrastructure use and successful program outcomes based on international best practice models. This involves some relocation of health and family support services and the refurbishment of existing primary schools at selected locations throughout the state. The Departments of Education and Children's Services, Health and Families and Communities will investigate the establishment of child and family centres. (See Education and Training section.)

Strategic Priority

- Investigate developing primary health care infrastructure in schools to enable integrated provision of services to families and children.

Evidence indicates that primary health care is crucial to wellbeing throughout life, particularly in old age, and to keep people out of acute care and residential aged care for as long as possible. This requires good home support programs. Strategies for minimising overall costs and infrastructure costs for aged care will therefore be developed in conjunction with primary and home care programs.

Opportunities for collaborative urban design and planning with other sectors, with infrastructure initiatives such as locating retirement villages and schools in close proximity, sharing common spaces and facilities (e.g. gardens and meeting places) will continue to be explored.

In the last three years the government has made a significant commitment to building the foundation for a modern mental health system through considerable investment in new acute services in mainstream hospitals, and has begun to build the capacity of community-based services. The sustainability of the system is now dependent upon the capacity of those community services that provide various packages of support including, for example, respite and rehabilitation programs, as well as the building of new community based mental health rehabilitation centres.

Aboriginal people fare worse than non-Aboriginal South Australians on major indicators such as income levels, unemployment and labour force participation, education, life expectancy and health risks. The health and wellbeing of Aboriginal South Australians is also more likely to be affected by exposure to a range of environmental risk factors.

For many Aboriginal people, particularly those in more remote communities, health infrastructure requirements are significantly different from those of the rest of the population. In addition to clinical services they include public health issues such as safe food storage and food transport, access to and the storage of clean drinking water, and dust and pollution control. These are basic health needs required to achieve the state's targets of improving quality of life and life expectancy. The concept of Aboriginal Wellbeing Centres, with services delivered primarily by Aboriginal people, will be investigated.

Strategic Priority

- Progress the improvement of Aboriginal health services and supported accommodation services for people in crisis or requiring support after periods of hospitalisation or to avoid hospital admissions.

Health Connectivity

Achieving connectivity of the entire health care system will improve the quality and safety of health services, help to ensure that appropriate care is delivered and support a stronger customer focus. Health connectivity will also contribute to improved planning and resource utilisation and, through the provision of population data, help measure progress of the implementation of the government's health reform agenda.

South Australia is in a prime position to lead the nation in establishing infrastructure to support the linking of existing patient information, enabling a patient's history to be contained in integrated electronic health records. The continued rollout of the clinical information system OACIS is fundamental to achieving this goal.

Connectivity of the whole health system based on upgraded communications capacity is projected to provide:

- system-wide benefits, assisting service design and delivery and improving capacity for population health research, measuring and monitoring
- improvements in safety performance and a reduction in errors and adverse events
- the realisation of other key SA reform initiatives, such as clinical and primary health care networks and efficiencies in the management and treatment of chronic disease
- more coordinated services in areas such as psychiatry and mental health, and support for other state-wide health management systems
- the successful integration of key health information, leading directly to improvements in efficiency and standards of patient care and safety
- the further development of telemedicine to support rural clinical networks and provide improved communications with and between tertiary health sites in Adelaide.

The Australian Government's Broadband for Health Program, which is aimed at encouraging high bandwidth broadband connection for Australia's general practitioners and Aboriginal Community Controlled Health Services, will continue over the next 3 years. Improved broadband access will support the Australian Government's national investment from 2004 to 2008 to implement some of the recommendations of the National Health Records Taskforce, known as Health*Connect*.

Health*Connect* will lead to the collection of health-related information about patients in a standard form, accessible at any point in the health system. This will enable swifter and better informed medical decisions. South Australia will be one of the trial states for Health*Connect*.

Strategic Priority

- Further develop a connected system, integrating new technology and supporting an integrated, localised response, to enable better clinical and consumer decision-making and provide data and intelligence to inform planning and efficient resource use.

Health Workforce, and Health Education, Training and Research

Apart from built infrastructure, the health system is reliant on a highly skilled and educated workforce. Within the next 10 to 15 years we face a decline in the health workforce. Innovative infrastructure solutions in rural and remote areas to recruit and retain a skilled health workforce are now urgent to provide accessible, safe and affordable accommodation. In addition, there is a need to provide infrastructure to support local education and training.

For rural and remote communities, particularly for Aboriginal people, it is important that training and education be delivered as close as possible to communities to maximise the success of local recruitment. This minimises the loss of people from those communities. Infrastructure requirements include distance learning capacity that also supports ongoing professional development.

Strategic Priority

- Attract, retain and increase a skilled health workforce, especially in rural and remote areas, through the creation of accommodation infrastructure and local education and training facilities.

Health

The state's health research capacity is a powerful magnet for all health professionals. New infrastructure to enable health and medical research can assist in reducing the loss of health professionals, both from the state's regional areas to urban areas, and to other states or overseas.

The development of programs that facilitate and support medical research offers strategic opportunities for the state, with benefits in the areas of health innovation and learning, and the commercial spin-offs that can result from success in these areas. It also provides an added incentive for health professionals to locate in South Australia. Opportunities to work closely with education and research organisations will require the development and integration of health-related infrastructure (e.g. laboratory facilities). Infrastructure projects to support this priority may include the redevelopment of facilities in the Frome Road medical research precinct to create the proposed 'National Centre for InterGenerational Health', including an Institute of Population Health. (See Science, Technology and Innovation section.)

Strategic Priority

- Redevelop and expand infrastructure to support medical and population health research, commercialisation and technology transfer in both the public and private sectors.
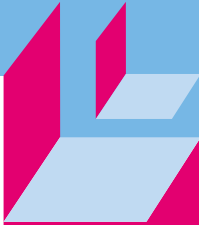
Projects

Project	Priority #	2005/6–2009/10	2010/11–2014/15	SASP Targets
Sustaining and Reconstructing Health Infrastructure				
Continue to redevelop metropolitan and regional hospitals and other health facilities, including maintenance and replacement of equipment, sustainment and compliance programs at: ■ Royal Adelaide Hospital (stages 2 to 5), Women and Children's Hospital, Queen Elizabeth Hospital (stages 2 & 3), Lyell McEwin Hospital, Modbury Hospital, Repatriation General Hospital and Flinders Medical Centre ■ country hospitals and aged care accommodation and rehabilitation facilities ■ mental health units ■ ambulance service buildings *** Lead – State Government**	U/way	✳	✳	1.16 2.2 5.11
Replace major medical and ICT equipment and ambulances **Lead – State Government**	U/way	✳	✳	1.16 2.2 5.11
Primary Health Care				
Create three new community mental health rehabilitation centres (southern, central and northern metropolitan Adelaide) **Lead – State Government**	U/way	✳		2.1 2.4 6.1
Establish new Primary Health Care Centres (PHCC) throughout the State **Lead – State Government, local government, private sector**	2	✳	✳	2.2 2.3 2.6 6.1
Establish Aboriginal Wellbeing Centres in conjunction with PHCCs across the State **Lead – Australian Government, State Government**	2	✳	✳	5.11 6.1 6.2
Redevelop and build Aboriginal health accommodation, health clinics and step-down facilities across the State **Lead – Australian Government, State Government**	2	✳	✳	5.11 6.1 6.2

* Lead – lead responsibility for promoting, developing and evaluating the project.

Priority – preliminary rankings. Priority numbers do not represent a final commitment by the State Government or other lead entities. See the Delivering the Plan section for further details..

Health

Projects

Project	Priority #	2005/6–2009/10	2010/11–2014/15	SASP Targets
Health Connectivity and New Technology				
Expand the Health*Connect* medical broadband project for general practitioners and Aboriginal health services as part of the foundation for establishing the electronic patient health record system **Lead – Australian Government**	U/way	✻		4.7 5.11
Expand the capacity of OACIS (Open Architecture Clinical Information System) to electronically transfer clinical information (e.g. test results) between hospitals and general practitioners **Lead – State Government**	U/way	✻	✻	4.7 5.11
Establish a health call centre, subject to Australian Government funding **Lead – Australian Government, State Government**	2	✻		2.2 6.1
Workforce, Education, Training and Research				
Establish the Cancer Innovation Centre at Flinders Medical Centre **Lead – State Government, charitable sector**	1	✻		4.8 6.2
Build a new Royal District Nursing Service major facility (to house education, research, customer contact centre, nursing division, Advanced Community Care SA) **Lead – non-government sector**	2	✻		4.8 6.2
Provide additional rural and remote workforce accommodation **Lead – State Government**	2	✻	✻	5.11 6.2

Health