

Link to South Australia's Strategic Plan Objectives

The development of an efficient, affordable and safe transport system throughout South Australia will contribute toward the achievement of the following targets:

Objective 1: Growing Prosperity

Business climate	Maintain Adelaide's rating as the least costly place to set up and do business in Australia and continue to improve our position internationally. (T 1.4)
Exports	Treble the value of South Australia's export income to \$25 billion by 2013. (T1.12)
Tourism industry	Increase visitor expenditure in South Australia's tourism industry from \$3.4 billion in 2001 to \$5 billion by 2008 by increasing visitor numbers and length of stay and, more importantly, by increasing tourist spending. (T1.13)
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

Road safety	Reduce road fatalities by 40% by 2010, with an ongoing focus on reductions in fatalities and serious injuries across all modes. (T2.9)
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Objective 3: Attaining Sustainability

Use of public transport	Double the use of public transport to 10% of weekday travel by 2018. (T3.9)
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Objective 5: Building Communities

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

The transport network is financed, owned and operated by a large number of public (Australian, State and local government) and private organisations. The State Government is responsible for the provision, operation and maintenance primarily of roads and has a role in other components including rail lines, ports, jetties, ferries and aerodromes. The users of the transport network are primarily private sector people and organisations that pay infrastructure owners access fees either via direct access charges or indirectly through registration/licensing fees and fuel excise.

The Australian Government AusLink Green Paper indicated that the current approach to planning, developing and funding our national land transport network will not meet the challenges of supporting economic growth, social development or personal mobility. 'Without major reform now, Australians over the next twenty years will have a transport system that increasingly fails to meet their needs.

Nationally, the majority of domestic freight, measured by tonnage and value, is moved by road (72%), followed by rail, sea and air. However, when distance carried is taken into account (by assessing tonne kilometres), road, rail and sea have very similar use (37%, 35% and 28% respectively).

There are almost 97,000 km of road in South Australia, including 75,000 km of local government roads (80% of which are unsealed) plus 10,000 km of unsealed roads out of council boundaries. The replacement value exceeds \$13,000 million. The current maintenance program for State Government roads is extensive, with local governments facing a similar requirement. Continuing traffic growth, in particular freight, will increase the rate of wear and tear on transport infrastructure.

The quantity of freight moved has increased by 70% during the past two decades and is anticipated to double again from 2002 to 2020. If the proportion carried on roads is maintained, it will have a major impact on urban congestion, pollution, energy depletion and safety. While metropolitan Adelaide has a fully developed arterial road network, there are bottlenecks on some of the identified freight roads through the city that can be removed by well-targeted investment in road and intersection upgrades. In regional areas the network in many places is underutilised; however, hot spots have developed, particularly where industry has outgrown the existing infrastructure, e.g. such as the Barossa.

Marine assets in South Australia range from major ports to jetties, boat ramps and marinas, navigation aids and breakwaters. The major ports (with the exception of those that service Kangaroo Island) are privately owned or controlled by Flinders Ports under Government administered 'port operating agreements'.

In 2001, Port Adelaide (including Outer Harbor) was the sixth ranked port in Australia in value of goods moved (\$5,900 million) and moved 34% more TEUs of containers in 2002 than in 1998. Other export ports include Thevenard, Port Lincoln, Whyalla, Port Pirie, Wallaroo and Port Giles, primarily concentrating on grain exports and farm inputs, such as fertilizers.

There are about 5,000 km of rail line in South Australia, including 240 track-kilometres for the metropolitan train and tram system. The Australian Government's Australian Rail Track Corporation manages 40% of the network and private companies own or lease half of the system. The State Government manages the remainder of the network, which includes the metropolitan, South East and heritage lines. The network is a mix of narrow, standard and broad-gauge track.

Adelaide is connected to all mainland capital cities including Darwin via the recently completed \$1.4bn Adelaide to Darwin rail project.

There are 400 airports, aerodromes and airstrips in South Australia. Of these, 46 are owned by local governments, 14 by the State Government, 6 by the Australian Government and the remainder by community and private interests.

The State's main air freight and passenger gateway is Adelaide Airport, with its recently completed runway extension. A new state-of-the-art international and domestic terminal will provide quality passenger and freight facilities and services for the foreseeable future. Both freight and passenger movements are expected to grow. Adelaide's other airport, Parafield, houses the State's primary civilian flight training centre and small craft airport.

Challenges and Opportunities

Road

The Bureau of Transport and Regional Economics has estimated that the cost of congestion on Adelaide roads in 1995 was \$0.8 billion and will grow to \$1.5 billion by 2015. While this is significantly lower than the congestion cost in any other mainland state capital city, decreases in these costs will have a positive impact on the economy of the state. Reduction in congestion levels will be more efficiently achieved by changes in network user decisions (e.g. greater use of rail for freight and public transport for passengers); however, strategic infrastructure developments such as the Port River Expressway (PRExy), establishment of dedicated freight routes and the construction of passing lanes will also have an impact.

To this end the State Government has pledged to build a 600m tunnel on South Road under Grange Road, Port Road and the Outer Harbor to Adelaide passenger rail line. An underpass at the South Road-Anzac Highway intersection will also be built. The tunnel and underpass will improve the flow of traffic at two of the states most congested bottlenecks.

Most of the road network in regional South Australia was laid out a century ago to connect town centres. The heavy freight traffic passing through these towns may conflict with the retail, commercial and tourism activities and the social hearts of these communities.

Road freight companies have been moving to larger vehicles. These vehicles have improved transport efficiency. Some of the older industrial estates do not permit approved B-double access. Rail operators are increasingly prohibiting the use of B-doubles and other over-dimensional vehicles on routes that cross rail lines.

These impacts can be contained in metropolitan and regional areas by the identification and protection of designated freight routes. Movement of freight along these designated freight routes should be facilitated by the use of extended time clearways, traffic signal coordination matched to truck speeds, and road surface treatments that minimise road noise.

The location of major metropolitan industrial areas in a broadly north-south alignment to the west of the city centre results in substantial and growing demand for freight movement along this axis, to take freight to and from the port, out of Adelaide to the North and to distribute it within the metropolitan area. A series of strategic upgrades along the existing South Road and consideration of the corridors (rail and road) will greatly increase the capacity of this axis. It will also support the development of new industries in the southern suburbs.

Strategic priorities

- Improve the State's competitiveness through efficient freight transport networks and improved international links.
- Minimise the impact of freight vehicle movement on the community and environment by appropriately locating and protecting freight routes.
- Concentrate resources on maintaining and improving existing assets rather than extending the network.

Marine Assets

International shipping is moving to increase efficiency by using larger panamax and post-panamax class vessels requiring more than 14 m water depth. Deepening all of the state's harbours to accommodate these vessels is not commercially viable.

In March 2005 the South Australian Government announced it would increase to \$30m the amount of government money committed to the \$45m deepening of Outer Harbor due to be completed in 2007.

The export ports, along with many smaller harbours around the coast, provide facilities to the fishing/aquaculture industries and recreational fleets. At some locations such as Port Lincoln export vessels and fishing fleets are competing for space on wharfs. Depending on the growth of the fishing and agriculture industry, improved facilities may be required in the South East, Port Adelaide, eastern and western Yorke Peninsula, Whyalla district, Arno/Lucky Bay, Port Lincoln, Elliston and Ceduna.

Ferries carry the majority of freight and passengers to and from Kangaroo Island. Three mainland and five Island harbours serve various parts of the regional economy. The social and economic viability of Kangaroo Island depends on maintaining competitively priced services and sufficient fit-for-purpose harbours to meet Islander needs.

River Murray ferries provide the primary cross-river access in several locations supporting communities and visitor activities.

The number of cruise ships calling into Adelaide is increasing and this trend is expected to continue.

Strategic Priorities

- Facilitate the redevelopment of the State's export and import harbours to ensure the most efficient access to international markets.
- Ensure any changes in land use on or near ports and harbours do not preclude current or future transport and harbour activities.
- Ensure owner/operators develop and maintain appropriately located wharfing and associated facilities to support tourism, fishing and aquaculture industries.

Rail Network

The use of rail for freight and passenger transport has the potential to reduce road congestion, improve safety and reduce environmental impacts from road vehicles. This is especially the case for bulky goods on long haul. There are, however, a number of infrastructure challenges to increasing the role of rail:

- the existence of several non linked gauges
- diverse management of rail lines
- few intermodal facilities feeding the standard gauge network

While the existing rail network has a large reserve capacity that could be exploited at relatively low incremental cost, upgrades will reduce running costs and improve efficiencies. The long-term strategic aim for rail is to develop a connected metropolitan, regional and interstate standard-gauge network, capable of supporting the axle weights and lengths of modern freight trains. The network should be serviced by intermodal terminals that facilitate rapid transshipment between road and rail.

Real freight rates have fallen during the past 35 years by 50% for road, 70% for rail and 40% for shipping; this reduction is expected to continue at 0.5% per annum. In some regions prices have approached the marginal cost of providing the service and do not provide for any reinvestment in infrastructure, whether road or rail.

In regional South Australia, the rail network is a significant carrier of grain, both intrastate and interstate. With grain freight expected to grow by 30% to 2030, it is in the interests of the farming and grain handling organisations to ensure decisions on logistic maintenance and upgrades of the rail system are based on comparisons of the full costs of alternatives.

Strategic Priority

- Encourage the shift to rail transport for passenger and freight movements where justified by environmental, economic or social imperatives.

Aviation

Owners of aviation assets are trying to maximise their return by using the large tracts of land for commercial purposes. Increased road traffic in and around airports is being addressed.

Parafield Airport is surrounded by residential developments with additional residential growth planned as part of the Mawson Lakes development. Noise complaints about training flights are increasing; further residential growth may add to the pressure on the airport.

Air freight is crucial for the transport of time-critical high-value products. Adelaide Airport is the State's only international export airport; however, several regional centres are looking at extension of facilities to allow direct export to international markets. At present no regional commodity has sufficient regular freight quantities to justify the upgrading of regional facilities, but if a commodity and carrier are identified this could be considered, e.g. seafood from Eyre Peninsula.

Sustaining infrastructure at most local airports is a challenge because low traffic levels do not produce sufficient income to meet maintenance needs. Only eight regional airports (Ceduna, Port Lincoln, Kingscote, Whyalla, Port Augusta, Roxby Downs, Coober Pedy and Mount Gambier) have scheduled passenger and freight services. Extension and expansion of these airports to cater for larger passenger craft may be required as tourism or freight transport grows.

Strategic Priorities

- Maintain an efficient transport network to Adelaide Airport to support anticipated passenger and freight movements.
- Ensure any change in land use on or adjacent to export airports does not preclude future transport development.
- Provide for the orderly expansion of facilities at regional airports to meet growing visitor and freight activities.

People Movement

Cars are the primary mode of transport for people throughout South Australia, with 80% of CBD trips made by car, higher percentages in suburban areas and close to 100% in regional areas. The long-term forecast is for fuel prices to continue to rise, which will impact on people's choice of transport mode, particularly in metropolitan Adelaide where alternatives exist. However, cars will continue to be the principal mode of transport for people in South Australia well past the life of this plan.

Roads are not the sole province of motorised vehicles. Realising South Australia's potential as a leading cycling destination will generate increased tourism, improved levels of health and contribute to the state's environmental standing.

Traffic congestion in Adelaide has not reached the levels in the eastern seaboard or overseas but should be addressed before serious problems arise. Simply increasing the capacity of the roads is not the answer as experience elsewhere shows that traffic volumes expand to fill the capacity.

This is not to say that travel times for motorists should not and cannot be reduced. More attention will be given to selected effective interventions, such as tunnels, bridges or underpasses at key intersections, redesign of other congested intersections, better sequencing of traffic signals and more flexible operation of the road system. Travel times will also be improved by better road maintenance.

The number of fatalities on South Australian roads has dropped 64% from a peak in 1974 to 139 in 2004. This decrease, however, still leaves South Australia 24% above the national average. In infrastructure terms, the primary response is to ensure the engineering of the State's roads meet appropriate standards for the various classes of roads. However, even the best roads cannot prevent accidents.

The government aims to support public transport as a significant mode of metropolitan/CBD travel, because of the substantial community and environmental benefits that can be gained from replacing private motor vehicle trips with public transport trips. The Mawson Lakes interchange, the Glenelg tram replacement and new tram line extension represent the first major discretionary investments in the system since 1988.

At a replacement value of \$1,350 million, the utilisation and efficiency of the metropolitan public transport system must be maximised through further targeted investments such as these.

The Glenelg tram line will be upgraded and extended to the railway station on North Terrace. Electrification and strategic extensions of the metropolitan heavy rail network to the north and south of the city, are possible options for improving the efficiency of service.

An efficient passenger network is also essential to the tourism industry in South Australia, with the majority of visitors carried to their destinations across the road network. The tourism industry needs a road network that provides affordable, well sign-posted access to attractions/destinations.

The government has a high level strategy for achieving South Australia's Strategic Plan target of greater use of public transport, including development of an Adelaide rapid transit system. The strategy is based on maximising the use of the north-south heavy rail spine with new and upgraded interchanges providing bus links and car parking facilities.

Recent terrorist attacks have placed the issue of transport security at the forefront of transport policy in South Australia. The State Government is taking a leadership role in ensuring an appropriate level of counter terrorism preparedness in collaboration with the Australian Government and other states and territories. Preventative security projects will be a key feature and will include a variety of measures from security cameras on buses and at public transport interchanges, to the protection of potential targets. These terrorism driven interventions will also provide a broader level of personal safety across the entire public transport system. Given the importance of personal safety it is anticipated that increases in the public transport patronage will emerge from this approach.

The State Government will address a range of infrastructure issues across the public transport system to make it more accessible to people with disabilities and ensure compliance with the *Disability Discrimination Act, 1992* (DDA). This will include the provision of access paths, ramps and tactile indicators for people with sight impairment, through to major alterations to levels of lighting at public transport interchanges and stations.

Strategic priorities

- Coordinate public transport networks and facilities to maximise access to social services.
- Transform Adelaide's urban passenger transport system into a cost-effective, environmentally friendly and modern metropolitan network.
- Reduce the impact of passenger transport on the environment by supporting the utilisation of environmentally friendly fuels and transport modes.
- Coordinate the development of urban planning and transport systems to maximise the economic, social and environmental benefits.
- Reduce injuries and fatalities from transport related accidents.
- Ensure necessary counter terrorism measures are undertaken.
- Deliver a more accessible public transport system in line with DDA requirements.

Access to Australian Government Funding

South Australia's share of AusLink funding is not commensurate with either the state's population or the length of national highways South Australia has to manage. Despite strong representations to the Australian Government during the formulation of the AusLink program, South Australia continues to be left behind.

Strategic priority

- Ensure South Australia receives a fair share of Australian Government funding commensurate with our population and transport network responsibilities.

Projects

Project	Priority #	2005/6– 2009/10	2010/11– 2014/15	SASP Targets
Road				
Address priorities for safety related maintenance and upgrades on roads with high crash rates (including the Black Spot Program) Lead – State Government	U/way	*	*	2.9
Implement endorsed improvements to the metropolitan road network e.g. Bakewell Bridge replacement, Britannia roundabout upgrade Lead – State Government	U/way	*		1.16
Explore options for a bypass of Gawler to manage increasing traffic, including the option of a north-east bypass Lead - State and local government	U/way	*		1.13 2.9
Develop reliable and efficient transport links for the north-south corridor through Adelaide focusing on the upgrade of South Road: ■ construct an underpass at Anzac Highway and a tunnel under Port and Grange Roads and the Adelaide - Outer Harbor train line and upgrade South Road between Port and Torrens Roads ■ undertake further improvements to South Road traffic flow Lead – State Government	1 1	*	*	1.16
Complete the link from Sturt Highway to the Port River Expressway (PRExy) and upgrade of Port Wakefield Road to freeway standard. * Lead – State Government	1	*	*	1.16
Construct opening road and rail bridges over Port River and complete the road and rail link to Outer Harbor	1	*		1.16
Enhance existing priority strategic freight routes throughout the state in order to minimise community impacts of road freight Lead – State Government	1	*	*	1.12
Improve travel times throughout metropolitan Adelaide by upgrading selected intersections and major routes and coordinating traffic signalling Lead – State Government	1	*	*	2.9
Implement the strategic town bypass policy Lead – State Government	2		*	1.16 2.9 5.11

* 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

Projects

Project	Priority	2005/6– 2009/10	2010/11– 2014/15	SASP Targets
Marine				
Complete development of deep sea grain port at Outer Harbor Lead – private sector	U/way	*		1.16
Complete River Murray ferry refurbishment program Lead – State Government	U/way	*		5.11
Deepen the channel to Outer Harbor Lead – private sector	1	*		1.16
Develop marine facilities to support the fishing/aquaculture industries Lead – private sector	2	*	*	1.12
On Kangaroo Island, designate Penneshaw as the primary freight and passenger ferry harbour. Lead – State Government, private sector	2	*	*	5.11
Rail				
Complete the Port River Expressway rail link and upgrade Le Fevre Peninsula rail corridor Lead – State Government	1	*		1.16
Develop intermodal facilities in northern Adelaide and the Barossa Valley and consider intermodal developments at Port Augusta, Riverland and Port Stanvac Lead – private sector	1	*	*	1.16
Optimise the Eyre Peninsula grain transport system Lead – Australian and State Governments, private sector	1	*	*	1.16
Standardise and upgrade the state rail network where it has connectivity to the interstate main line. Lead – Australian Government, private sector	3		*	1.12

Projects

Project	Priority	2005/6– 2009/10	2010/11– 2014/15	SASP Targets
Aviation				
Redevelop Adelaide Airport Lead – private sector, State government	U/way	*		1.16
Extend runways and upgrade terminals at Port Lincoln and upgrade Whyalla and Kingscote airfields when justified by growth in demand for services Lead – local government	2	*	*	5.11 1.13
Upgrade intersection of Sir Richard Williams and Sir Donald Bradman Drives an corridors to the city Lead – State and Australian Governments	3		*	1.16
People movement				
Redevelop Adelaide Airport Lead – private sector, State Government	U/way	*		1.16
Implement an ongoing program for the replacement or refurbishment of the bus fleet to ensure the South Australian fleet remains the cleanest in Australia through increasing use of bio-diesel fuel Lead – State Government	U/way	*	*	3.9
Implement tram replacement program and upgrade the Glenelg light rail line Lead – State Government	U/way	*		3.9
Implement a range of measures on the public transport system commensurate with national terrorism alert levels Lead – State and Australian Governments	U/way	*		1.16
Provide a more accessible public transport system, in line with requirements of the <i>Disability Discrimination Act, 1992</i> Lead – State Government	U/way	*		3.9
Extending the light rail network to North Terrace Lead – State Government	1	*		3.9
Develop urban passenger infrastructure to support growth in train and bus services and patronage by: <ul style="list-style-type: none"> ■ developing key train/bus interchanges, with a focus on the Marion shopping centre interchange ■ upgrading stations and stops to improve safety Lead – State Government	1 1	* *	*	3.9
Develop and implement walking and cycling plans to create a connected network Lead – State Government, local government	1	*	*	3.9
Investigate extension of the Noarlunga rail corridor to Seaford including new stations at Seaford and Seaford Meadows Lead – State Government	1	*		3.9
Investigate the electrification of the metropolitan heavy rail network Lead – State Government	3		*	3.9



Transport