

# South Australia's Freight Transport Infrastructure

**Moving Freight**  
– Setting a  
Strategic Framework  
for the Future



March 2006

South Australia's ability to achieve its maximum growth potential is linked to the timely development of efficient and cost-effective transport infrastructure.

In this update to the inaugural *South Australia's Freight Transport Infrastructure: Principles and Project Priorities* released last year, the South Australian Freight Council (SAFC) has identified seven projects which, in its view, are urgently required to ensure the State continues to grow – free of costly transport bottlenecks that reduce the State's competitiveness.

The transport initiatives identified by SAFC, with an overall cost in the order of \$2.8 to \$4.2 billion, comprise the centrepiece of the Council's submission to the State Government which has been developing a Transport Plan.

In the absence of financial support for the projects identified, and given that efficient transport infrastructure is integral to intrastate, interstate and overseas trade, SAFC believes the State Government's Strategic Plan goal of trebling SA's exports to \$25 billion by 2013 will not be realised.

Ensuring the free flow of commercial and private sector transport will also deliver significant environmental and social gains for the community with a reduction in greenhouse gas emissions high amongst them.

The Council also believes the Commonwealth Government has "short-changed" South Australia over other States, with the lowest per capita payments for new road and rail developments under the Auslink funding program.

Our State has many critically-needed projects that should be more appropriately funded under the scheme. With population and economic centres that are widely dispersed, and the highest road fatality rate per head of population of any mainland state, SAFC believes the case for increased funding is compelling.

SAFC has a critically important role to play in highlighting the freight and logistics industry's current and future infrastructure needs.

This document – an update of the Council's highly successful Infrastructure Statement released in April 2005 – also includes regional projects and maintenance priorities, gleaned through SAFC's program of Regional Forums and consultation.

In its submission, SAFC's members encourage the Government to categorise a number of projects as "Urgent", including:

- A comprehensive upgrade of the entire North-South Corridor (based around South Road) from the Port River Expressway at Wingfield to the Southern Expressway at Bedford Park including grade separation at all intersections;
- Addressing a dire \$160 million-plus backlog of road infrastructure maintenance – and growing by the day;
- Duplication of the Riddoch Highway in the South East, and construction of bypasses at Penola and Mt Gambier;
- Upgrading the Marion Road/Holbrooks Road/Hanson Road corridor to cater for increasing freight and passenger flows, and to act as an alternative North-South route;
- Completion of the Inner Ring Route, in particular the urgent redesign of the Britannia Roundabout;
- Completion of the Outer Ring Route, including grade separation at Gepps Cross;
- Commitment to an expanded Passing Lanes and Shoulder Improvements Program to improve road safety and the interaction of freight and passenger vehicles.

SAFC's submission is underpinned by a Statement of Principles that highlight the economic, social, and environmental benefits of effective and comprehensive freight transport infrastructure.

Safe and efficient freight transport is **an absolute** requirement of today's world.

It underpins every aspect of the South Australian economy. It must also be provided in a way which is sustainable from an economic, social and environmental perspective.

The provision and maintenance of effective and comprehensive freight transport infrastructure is a core responsibility of government. Achieving a regime that strikes the best balance of air, sea, rail and road transport use throughout the State, interstate and overseas is a fundamental pre-requisite for the economic and social viability of South Australia.

The South Australian Freight Council (SAFC) advises the State and Federal governments on all aspects of South Australia's freight-related infrastructure needs. It is focussed on identifying key freight logistics issues and developing solutions for implementation by governments and industry. SAFC's members are drawn from all industry sectors along the supply chain, ranging from buyers and users of freight to freight service providers and governments – both State and Federal.

SAFC has released this position paper – including a prioritisation of South Australia's most urgent seven projects – to clearly and objectively identify the infrastructure requirements of the State to support the emerging business and community demand for freight movement over the next 20 years.

SAFC has prepared this document to assist governments and other stakeholders by communicating its views on:

- The core principles that must underpin the State's infrastructure and its management;
- The priorities in infrastructure planning and implementation; and
- A qualitative triple bottom line assessment of the freight infrastructure priorities.

## Fundamental Objective

The fundamental objective in the provision of freight infrastructure must be to ensure that South Australia has an efficient, effective, internationally competitive, multi-modal, state-wide freight system to meet the economy's ongoing and projected freight demands.

# Core Principles and Policy Issues:

**Freight Transport Underpins the Community:** Freight infrastructure and the industry exist to serve the interests and daily needs of business and the community.

- Freight transport is a derived demand – it arises from the original demand from businesses and the community for specific products and their transport and handling. People demand the product, the freight transport sector moves it to them, and it also removes the by-products and waste of the community and manufacturing.

**Core Government Responsibility and Community Acceptance:** The State and Federal governments have a core responsibility to provide and properly maintain transport infrastructure to meet the needs of the community and the commercial sector today and for future generations.

- Proper and full funding of transport infrastructure, for new projects and maintenance, must be a first priority of governments. Funding may be by government, through private-public partnerships (PPP) or other funding mechanisms.
- Governments and businesses must raise the community's awareness and acceptance of the necessity of transport infrastructure to support the community's needs. In turn, the community must acknowledge, rather than ignore, the need to allocate substantial government funding for infrastructure as a high priority.

**Long-term Confidence and Certainty:** Freight infrastructure planning and development must be managed in a manner which provides the community and the business sector with the necessary certainty and confidence to undertake sound commercial decisions and the long-term investments required for the State to be nationally and internationally competitive.

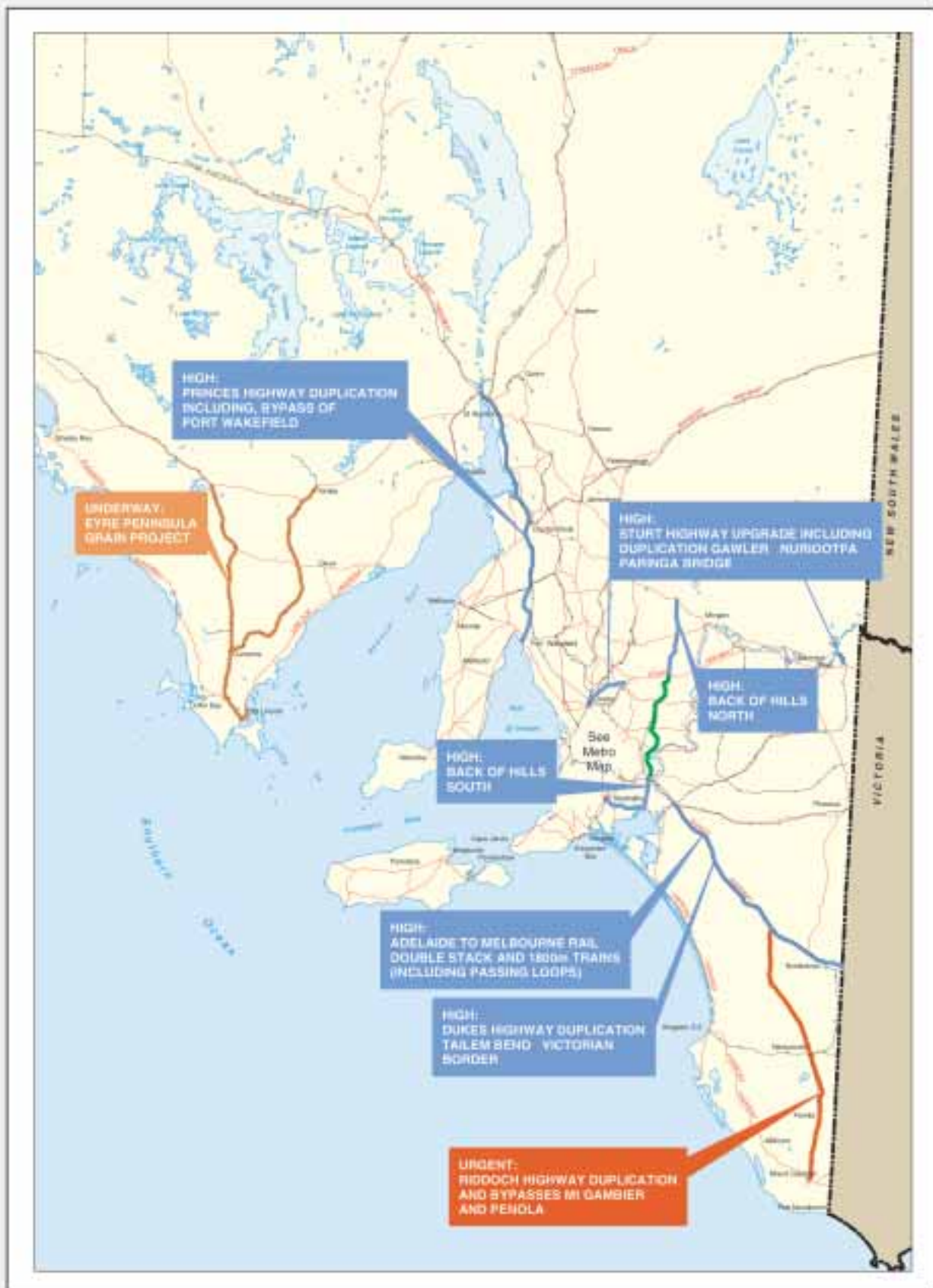
- Governments and industry partners must deliver the infrastructure as planned, and on-time, and the network must perform reliably, to the desired standard, on a consistent and sustainable basis.

**Freight corridors, infrastructure and precincts must not subsequently be encroached upon or be denigrated or downgraded by urban sprawl and inappropriate adjacent developments.**

**Facilitate Multi-modal Balance:** The infrastructure assets, policies and regimes implemented by governments must facilitate genuine and effective modal choice and a sound balance in the use of the various modes – air, sea, rail and road.

- The SAFC has no underlying preference for any given mode and it therefore supports, as a fundamental cornerstone, the utilisation of the most appropriate mode(s) for any given freight task and region.
- Governments should **not** artificially manipulate modal choice, through subsidies or other means, as this will result in inefficient outcomes, which can only be counter-productive for the economy and the environment.
- Where governments do exercise their powers in influencing modal choice, it should only do so on a basis that is genuinely commercially sustainable in the medium-to-long term, as far as freight rates and service are concerned.

# SA Urgent and High Priority Projects Map



Prepared by: Infrastructure Development  
 Date: 15/08/2011  
 Version: 1.0

**KEY**  
 URGENT  
 HIGH  
 UNDERWAY



This map is a representation of the current state of affairs and is not intended to be a contract. It is subject to change without notice. The Department of Infrastructure and Transport is not responsible for any errors or omissions in this map.

# Adelaide Urgent and High Priority Projects Map



Approved by: [Infrastructure Development Authority](#)  
 Date Approved: [12/01/2018](#)  
 Prepared by: [Infrastructure Development Authority](#)  
 Version: [1.0](#)

**KEY**  
▬ URGENT  
▬ HIGH  
▬ UNDERWAY



Infrastructure Development Authority  
 Department of Infrastructure, Transport, Planning and Public Works  
 Adelaide  
 12/01/2018

# Outer Metro, Urgent and High Priority Projects Map



# Priority Projects

The projects listed below have been assessed and prioritized in terms of their adherence to the core criteria, and the contribution they can make to the achievement of economic, social and environmental objectives as per a triple bottom line assessment .

## URGENT PROJECTS – BRINGING SA IN LINE WITH OTHER STATES

These projects **must** be fully-planned including route development, architecture and engineering, and be fully-costed this Auslink period, with all projects (except items 1 and 2 which require larger timeframes) funded and completed by the end of 2009.

PROJECT NAME & DETAIL	REASONING
<p><b>1 North – South Corridor</b> (South Road Upgrade)</p> <p>Cost: \$700 million to \$2 billion</p> <p>Function: The “Spine of Adelaide” for both freight and passenger movements, the primary North – South Corridor runs from the Port River Expressway at Wingfield, along South Road, to the Southern Expressway at Bedford Park.</p> <p>Delivery Timeframe: All planning – including community and industry consultation – completed by 2007, with staggered delivery of corridor projects from 2007 to 2016.</p>	<p>Several elements of this route are at capacity already, with upgrades to improve trip times and maximise transport efficiency a critical and urgent need.</p> <p>While the State Government has announced two significant projects to assist in alleviating the gridlock, and they have indicated that a non-stop route is the ultimate goal, a government vision for the entire corridor has not been released.</p> <p>In this policy vacuum, many disparate solutions have been suggested by various community and industry groups with price tags ranging from \$700m to potentially over \$2 billion.</p> <p>Whatever solution is preferred, the free flowing movement of freight vehicles must form the centerpiece of the outcome.</p>
<p><b>2 Accelerated Maintenance</b></p> <p>Cost: Over \$160 million</p> <p>Function: Poorly maintained transport networks increase operating costs, discourage business investment and can increase total maintenance costs. Safety outcomes also improve on well-maintained networks, as do environmental outcomes through smoother running leading to reduced emissions.</p>	<p>The State Government’s Draft Transport Plan outlined the desperate need to alleviate the maintenance backlog on SA roads.</p> <p>Despite this acknowledgement, the SA Government is yet to make the necessary funding increases to clear the backlog and to maintain the network in a “fit for purpose” condition through its useful life. “Whole of life” costs should be standing policy when funding new projects.</p> <p>Specific priorities within an accelerated maintenance program will also need to be identified, including a plan and funding to address the backlog within 15 years.</p>
<p><b>3 Riddoch Highway Expansion</b></p> <p>Ten new Passing Lanes (\$10m), Reduce Roadside Hazards (\$1.5m), bypasses of key centres including Penola &amp; Mt Gambier</p> <p>Cost: \$40 million</p> <p><b>Leading to Duplication</b></p> <p>Cost<sup>3</sup>: \$ 400 million</p> <p>Function: this key route connects the State’s Upper and Lower South East regions to the Dukes Highway and key ports, airports and facilities. The route also plays a vital role in the movement of freight within the region, connecting key producing areas to processing facilities and onwards to the port of Portland.</p>	<p>Improvements such as new passing lanes and town bypasses are urgently needed, while duplication of the full route is an investment in our future.</p> <p>Duplication of the relatively heavily trafficked Penola to Mt Gambier section should proceed as a priority</p> <p>The State’s South East is a key producing region (grain, meat and livestock, seafood, timber and timber products (including woodchips, paper and panelboard), horticultural products, wine, dolomite and more) and safety benefits will accrue from improved interaction between trucks and other users, especially tourists visiting the region’s many attractions.</p>

<sup>3</sup> Backwater to Benchmark, RAA, November 2005



PROJECT NAME & DETAIL	REASONING
<p><b>4 Marion/Holbrooks/Hanson Road</b> (Secondary North – South Corridor)</p> <p>Cost: \$110 million</p> <p>Function: this route serves as a an alternative route for North-South freight movement in the Adelaide metropolitan area. It performs a vital function in linking businesses in the south to key facilities in the north, including rail terminals and the port. Access to Adelaide Airport is also facilitated by this route.</p>	<p>These roads form a secondary North – South Corridor in parallel to South Road.</p> <p>Already on the brink of capacity, this route will likely be forced to support numerous more vehicle movements during any upgrade of South Road (including the State Government’s tunnel and underpass proposal). Currently handling an average 20,000 – 30,000 vehicle movements per day, if South Road was constrained by 50% during construction (ie one side at a time) this road could be asked to handle an extra 20,000 vehicle movements per day. These additional movements will include heavy vehicles up to HML B-Doubles, for which the corridor is not currently rated.</p> <p>Upgrade to this corridor will support further development of the Adelaide Airport precinct as per the Master Plan, including the “Freight Park” and is required before construction of the “Airport Connector” (see High Priority Projects).</p> <p>Specific concerns include the: Marion/Henley Beach/Holbrooks Road junction. Holbrooks/Grange/East Avenue junction. Holbrooks Road Bridge. East Avenue width (2 lanes each way required). Holbrooks Road width (2 lanes each way required).</p>
<p><b>5 Inner Ring Route Completion – Britannia Roundabout</b></p> <p>Cost: Over \$9 million</p> <p>Function: A fully-functional Inner Ring Route will increase the efficiency of traffic flow around the city fringe, improve safety for all road users and create more pleasant streetscapes for residents and road users.</p>	<p>Road users are receiving a lower return from investment due to failure to complete critical, yet minor links on the Inner Ring Route – in particular the Britannia Roundabout.</p> <p>Considerable investment has been made in this route over recent years (eg: upgrade to Robe Tce, Torrens Rd junction and ongoing works on the City West Connector). Additional investment is required in areas such as the notorious Britannia Roundabout for continuing enhancement and upgrades.</p> <p>Several feasible plans have been put forward, only to be withdrawn soon after. Both the freight industry and local communities need this long-term problem fixed immediately.</p> <p>The Inner Ring Route will be finally completed with a significant upgrade to that portion which travels along South Road (costs included under North South Corridor).</p>

PROJECT NAME & DETAIL	REASONING
<p><b>6 Outer Ring Route Completion – Gepps Cross Grade Separation</b></p> <p>Cost: \$45 million</p> <p>Function: This route performs a role in linking freight entering the city at the Toll Gate (SE Freeway) to Pt Wakefield and Main North Roads at Gepps Cross. The route also loops around the city providing alternative links between industrial premises and lowering traffic near the CBD.</p>	<p>There are two primary concerns about the current Outer Ring Route</p> <ul style="list-style-type: none"> <li>– the portion that travels along South Road (costs included under North-South Corridor project); and</li> <li>– the five road Gepps Cross intersection.</li> </ul> <p>The Gepps Cross intersection is difficult to navigate, and creates a major bottleneck for vehicles entering and exiting the inner city area to/from the north. Turning is not permitted for some vehicle combinations during peak times, forcing vehicles to use alternative, less direct routes.</p> <p>Completion of this route will increase the efficiency of traffic flow around the city fringe and to/from the port, airport, rail terminals and key facilities. It will improve safety for all road users including the freight industry.</p>
<p><b>7 Statewide Highway Passing Lanes and Shoulder Improvements Program.</b></p> <p>Cost: \$10 million per annum (Additional State funding)</p> <p>Function: Passing lanes significantly reduce the incidence of head-on collisions, and improve the interaction of slow moving vehicles (inc trucks) with faster vehicles. Average speed is increased safely, benefiting all road users.</p> <p>Wider shoulders (at least 1 metre wide) provide a greater leeway in handling errors before a vehicle leaves the pavement surface, allowing time to return to the road.</p>	<p>Engineering improvements (including passing lanes and shoulder sealing) to highways can reduce the number of fatal and serious injury crashes by up to 40%<sup>4</sup> – a massive safety and financial saving to the community.</p> <p>Together, these two improvements will provide a large, immediate safety benefit.</p> <p>Particular attention needs to be paid to:</p> <ul style="list-style-type: none"> <li>Bordertown – Naracoorte Rd;</li> <li>Sturt Highway (Federal Government works underway);</li> <li>Riddoch Highway (shoulder improvements to be undertaken as part of duplication – see item above);</li> <li>Yorke Peninsula Coast Road (shoulder improvements to standard, multiple passing lanes Ardrossan to Pt Giles);</li> <li>Eyre Highway (road width).</li> </ul>

<sup>4</sup> Australian Transport Safety Bureau, 2000, *National Road Safety Strategy 2001 – 2010*

## At a Glance: North – South Corridor

Adelaide is a north/south oriented city – not surprising considering the geographical limitations of the ocean to the west and the Mt Lofty Ranges to the east.

The primary port and airport, as well as rail terminals, are in the central-west area of the city, with major industrial and employment areas located to the north and south.

In combination, this makes for a large volume of road vehicles of all descriptions requiring north/south transport movements; whether to and from work, to export ports/airports or for commercial reasons.

For this reason, SAFC contends that the full route (Port River Expressway to the Southern Expressway) should be added to the Auslink national network as soon as possible.

East/west transport is also enhanced by grade separated north/south oriented cross routes, reducing long waiting periods at intersections.

Each section of the primary North–South Corridor along South Road handles, on average, between 30,000 and 52,000 vehicle movements each day, with key intersections handling higher volumes due to cross traffic and turning vehicles. **This route is at capacity today.**

Supporting South Road is the secondary Marion Road/Holbrooks Road/Hanson Road (MHH) Corridor, handling 12,800 to 45,500 vehicle movements per day. This route also has problems that require attention.

The State Government has announced two much needed projects to alleviate traffic congestion along South Road – a tunnel under Port and Grange Roads, and an underpass under Anzac Highway.

While these projects will assist in upgrading the corridor, they will not solve the traffic flow problems that extend along the full corridor.

Moreover, during the **three** year construction period for these two key projects, traffic disruption will be exacerbated, with traffic increasingly diverted to alternative routes, such as the MHH corridor.

East Avenue, (Allenby Gardens) – with 12,800 vehicles per day – could be required to cater for as many as an **extra** 20,000 vehicles every day during construction of the tunnels.

South Australia's strong reputation as a place to do business will not be sustainable if we can not move people to work or goods to export ports efficiently. A visionary solution to protect and enhance the State's productivity is needed. **A full corridor approach is necessary.**



12000 Annual Average Daily Transits (AADT)

## “Assets not maintained are assets lost”

– LGA Wealth of Opportunities Study

South Australia’s roads are in generally poor condition.

In 2003<sup>5</sup>, State Government figures placed the maintenance backlog at \$160 million, with industry estimates and continued inadequate funding pointing to a substantially higher figure today.

This figure merely covers state and federally-funded roads – not local government roads, which has a maintenance backlog of a further \$105 million<sup>6</sup>.

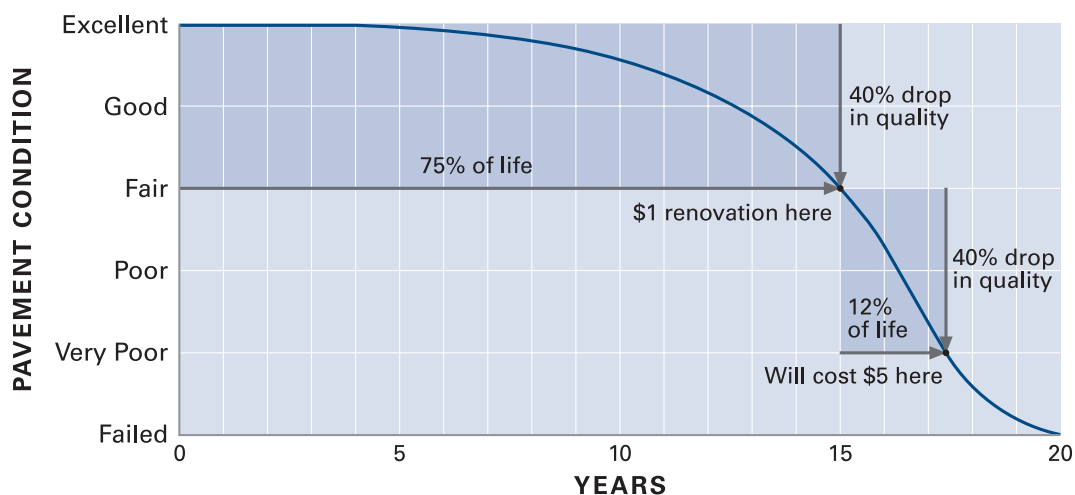
Our roads are so poor that Engineers Australia’s 2005 “Infrastructure Report Card – South Australia” recommended that:

“All levels of government must recognise that the amount of funding allocated to the maintenance of infrastructure is insufficient to maintain assets in their current condition, let alone address maintenance backlogs. Therefore urgent steps need to be taken to budget accordingly”

South Australia has the highest number of road fatalities per head of population of any mainland state (9.06 deaths per 100,000 population). In comparison Victoria’s rate is 6.9 and New South Wales 7.77.

Where maintenance and pavement repair has been delayed past it’s effective service life, the work and funds required to renew it is more extensive and costly than regular maintenance. The USA Surface Transportation Policy Project found that failure to spend \$1 in the 15th year of pavement life (Pavement Condition “Fair”), will require expenditure of \$5 within 3 years (Pavement Condition has declined to “Very Poor”).

“Deferring Maintenance costs more in the long term” Chart<sup>7</sup>



*Time varies depending on traffic, climate, pavement design, etc.*

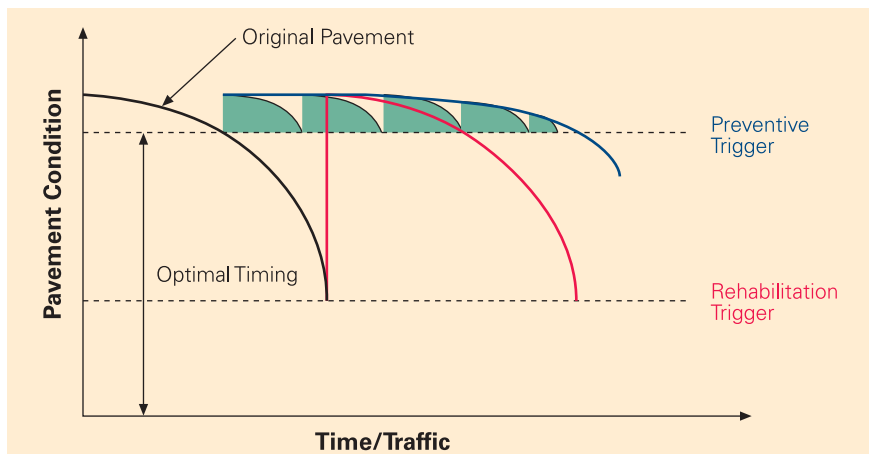
<sup>5</sup> Draft South Australian Transport Plan, Department of Transport and Urban Planning 2003

<sup>6</sup> “A Wealth of Opportunities” Local Government Infrastructure Management Group, April 2001

<sup>7</sup> Surface Transportation Policy Project, <http://www.transact.org/library/decoder/roadconditiondecoder.pdf>, accessed 6 Dec 2005

# At a Glance: \$160 Million Road Maintenance Backlog

Continued



The Chart at above, prepared by the US Department of Transportation shows that Preventative Maintenance, over time, will result in significant savings<sup>8</sup>.

In its November 2005 publication, *Backwater to Benchmark*, the RAA rated the States major road corridors on a scale of 1 – 10.

A road which received a rating of 5 narrowly achieved being regarded as “fit for purpose”. Only two roads achieved a rating above this mark.

Lane widths (<3.5 metres is inadequate and is the benchmark of the AusLink network), and shoulder seal widths (<1 metre is deficient) were assessed on all roads rated. 68% of the Eyre Highway has a lane width of less than 3.5 metres (2.9 metres for a great distance) whilst only 8% of the route has a shoulder seal of 1 metre or greater. Half of the Sturt Highway has shoulders less than 1 metre, whilst there are significant sections of the Stuart Highway with lane widths less than 3.5 metres.

Name	To	Rating	Vehicles Per Day	Heavy Vehicle %	Roadside Hazards	Rest Areas	Shoulder Width	Lane Width	Infrastructure Issues
Dukes	Vic	6/10	1900-3600	29-45%	X	X			Duplication
Sturt Hwy	NSW	6/10	1700-8300	16-33%		X	X	X	Bypass Renmark; Paringa Bridge
Princes Hwy (Pt W – Pt Aug)	NT & WA	5/10	2200-4200	17-27%	X	X	X		Bypass Pt Wakefield Duplication
Eyre Hwy	WA	4/10	340-900	29-40%		X	X	X	Widening
Stuart Hwy	NT	5/10	300-700	19-27%	X		X	X	
Riddoch Hwy	SE SA	5/10	1100-4500	14-21%	X		X	X	Overtaking Lanes Duplication
Yorke Peninsula Coast Rd	YP	4/10	300-2100	5-5.5%			X	X	Overtaking Lanes
Barrier Hwy	NSW	4/10	340-1200	13-41%	X		X	X	Junction with Main North Rd
Main North Rd (Barrier Hwy to Clare)	Mid North SA	4/10	1400-7000	5-7%			X	X	Overtaking Lanes Edge Lines Guard Rails

Compiled from information contained in *Backwater to Benchmark*, RAA, November 2005.

<sup>8</sup> US Department of Transportation, Federal Highways Administration (<http://www.fhrc.gov/pubrds/jan00/pavement.htm>) accessed 6 Dec 05

## HIGH PRIORITY PROJECTS – MAINTAINING OUR POSITION

All projects listed as High **must** be completed by the end of the next Auslink period (2014) to maintain SA's economic & export competitiveness. In particular, **State Strategic Plan** goals, including the initiative to to treble the value of our exports, will not be achieved without completion of these projects.

PROJECT NAME & DETAIL	REASONING
<p><b>Statewide Restricted Access Vehicle (RAV) Facilitation Program, inc additions to the Gazetted Restricted Access Vehicle routes, and improved Parking Bays and Staging Points.</b></p> <p>Cost: \$10 million per annum</p> <p>Function: RAV's facilitate efficient and effective freight movements, delivering reduced freight rates and a reduction in the number of trucks on the road. Facilities on key freight routes are a priority, as is access to key transport facilities, including rail terminals, ports and airports.</p>	<p>Throughout the state, the lack of parking bays suitable for heavy combination vehicles is a serious safety and regulatory compliance issue.</p> <p>Truck drivers can not park to gain their regulated sleep if there are no parking bays!</p> <p>In addition, some parking bays are not large enough or designed to permit combinations traveling on adjacent routes to utilize them – SAFC has had reports of sleeping truck drivers being moved along due to the parking bay being deemed unsuitable by local authorities.</p> <p>Staging points also need to be provided for heavy vehicles wherever a route changes from being Gazetted for one RAV type to another. As it is illegal for heavy vehicles to split configurations on a public road verge, areas for this activity must be provided. Lack of these facilities results in inefficient combinations being used, higher costs for consumers and more trucks in total.</p> <p>Some additions to Gazetted Restricted Access Vehicle routes are also required.</p>
<p><b>Back of Hills Route – South</b> (Ferries McDonald/Kangaroo Road)</p> <p>Cost: \$10 million</p> <p>Function: The Back of Hills Route links the SE Freeway (near Monarto) to the Sturt Highway (via Sedan). It is already B-Double capable and provides a link for freight to Bypass the Adelaide metropolitan area. This extension of the Route to the South links Langhorne Creek and Strathalbyn into the route.</p>	<p>This extension is particularly important for the wine industry, allowing grapes from the Langhorne Creek area to be transported to the primary processing and bottling facilities in Nuriootpa, Angaston and Tanunda (Barossa Valley).</p> <p><b>Note:</b> SAFC supports the "outer Back Of Hills route" concept preferred by the State Government. This position was reached after consultation with community and industry interests in the affected areas at SAFC Regional Forums. While a circuitous route to the Barossa Valley, this route is already B-Double capable, allowing valuable transport infrastructure funds to be spent on other priority projects.</p>
<p><b>Back of Hills Route – North</b> (Bower Boundary Road)</p> <p>Cost: \$30 million</p> <p>Function: The extension of the Back of Hills Route to the North links Burra via Bower to the Sturt Highway (and the Back of Hills route).</p>	<p>This project is important for livestock industries in particular, linking saleyards and emerging Intensive Animal Keeping Precincts in the Mid-North of the State with existing slaughter and dressing facilities.</p> <p>Construction of this link, coupled with other recent and planned improvements will lead to the creation of a route from Monarto, through Sedan, Bower and Burra and on to Hallett, Jamestown and Crystal Brook, linking the Princes Highway (Highway 1) to the Sturt Highway and South-East Freeway.</p>

PROJECT NAME & DETAIL	REASONING
<p><b>Airport Connector (Richmond Road Extension)</b>            Cost: \$10 million (estimated)            Function: Access route to Adelaide Airport Freight Park (concept).</p>	<p>Richmond Road leads to the boundary of Adelaide Airport – then stops. Adelaide Airport is currently in an important building phase in line with its Master Plan – and this road, built to 26m B-Double standard, is important to lead to new export oriented on-airport freight facilities located on the eastern side of Adelaide International Airport.</p>
<p><b>Adelaide Airport Freight Facilities</b>            Cost: \$Unknown (depends upon developments proceeding)            Function: efficient and effective air freight handling.</p>	<p>The Adelaide International Airport Master Plan includes a proposal to develop a freight park on the eastern side of the Airport. This is important for facilitating air freight exports into the future, and achieving the State Strategic Plan export target of a trebling of SA's export income to \$25 billion by 2013.</p> <p>Efficient connections between the park and the freight network will facilitate the movement of freight and will assist industry expansion (see "Airport Connector" project above).</p>
<p><b>Adelaide – Melbourne Rail</b>            (Double stack capability + 1800m train length)            Cost: Over \$300 million            Function: expanded rail access to interstate markets and exit/entry points.</p>	<p>This key rail freight route is rapidly approaching capacity.</p> <p>Currently the Interstate Main Line (IML) route to Melbourne is constrained by low bridges, short passing loops and steep gradients. This means that containers on this route can only be single-stacked, and trains can not reach the full legal limit of 1800m, available from Adelaide to Perth, Darwin and Parkes (NSW).</p> <p>The East – West Rail Corridor (including the Adelaide to Melbourne segment) captures the highest percentage of total freight of any of the interstate rail corridors – some 80%. As such, it is in the National interest that these constraints on efficient freight movement are removed.</p> <p>This route comprises part of the Auslink Network.</p>
<p><b>Princes Highway Duplication &amp; Enhancement</b>            (Pt Augusta to Pt Wakefield Road including Pt Wakefield Bypass)            Cost: \$470 million            Function: Main road route to Northern and Western areas of SA, as well as WA and NT.</p>	<p>The Princes Highway is already duplicated from Gepps Cross to just before Port Wakefield. Many passing lanes have been installed over recent years yet safety is still a major concern. The junction at Pt Wakefield and Kadina roads is notoriously dangerous, particularly during peak holiday periods when tourists converge on the Yorke Peninsula.</p> <p>As the major freight and passenger corridor leading to the North and West, traffic volumes warrant continuing duplication around Pt Wakefield (through a Pt Wakefield Bypass) to Pt Augusta.</p>

PROJECT NAME & DETAIL	REASONING
<p><b>Sturt Highway Upgrades</b> (Dual Carriageway Gawler – Nuriootpa &amp; Paringa Bridge replacement/remedial engineering)</p> <p>Cost: \$80 million approximately</p> <p>Function: the Sturt Highway is South Australia's primary link to the Barossa, Riverland, and NSW.</p>	<p>This route has arguably the worst safety reputation of any highway in the state. While there is significant ongoing investment in safety upgrades, principally through the installation of a series of Passing Lanes, much more needs to be done in this area.</p> <p>The Sturt Highway Deviation Project (see Projects Underway and Funded) will improve access from Gawler to Port Adelaide, via Pt Wakefield Rd and the Port River Expressway project.</p> <p>The Barossa Valley is an important export centre for South Australia, and is Australia's, leading wine producing area. In combination with through traffic, the freight and passenger transport movements from this region through to Adelaide justify duplication from Gawler to Nuriootpa.</p> <p>The Paringa Bridge in the Riverland (Renmark to Mildura) reduces speed on a national highway to 30km per hour. Clearly this is an impediment to both interstate and inter-regional trade. This bridge needs to be replaced so that traffic can continue along the highway unimpeded at 100km per hour.</p>
<p><b>Dukes Highway Duplication</b> (Tailem Bend – Victorian Border)</p> <p>Cost: \$400 million</p> <p>Function: the Dukes Highway links the Murraylands and South East areas of the State to Adelaide, and act as our principal link to Victoria.</p>	<p>Traffic volumes – particularly between Tailem Bend and Keith – warrant the duplication of this national highway.</p> <p>The Dukes Highway carries high volumes of freight moving to market or exit/entry points (and imports). Key regional produce is funnelled onto this route, and it is therefore significant from an economic perspective. Any efficiency improvements arising from improved access will reduce production costs, and significant safety benefits will accrue from route duplication.</p>



# Medium Priority Projects

## MEDIUM PRIORITY PROJECTS – MOVING FORWARD AND GROWING

Projects listed as Medium **should** be completed by the end of the next Auslink period to maintain the state's competitiveness and achieve South Australian State Strategic Plan Goals.

PROJECT NAME & DETAIL	REASONING
<p><b>South East Rail Stage 1</b> (Standard Gauge Conversion – Wolseley to Mt Gambier, Mt Gambier to Rennie (SA/Vic Border)</p> <p>Cost: \$20 million</p> <p>Function: rail access for the South East area (to Interstate Main Line and beyond, as well as to Portland (Vic)</p>	<p>Investor interest in this project appears to have waned. The \$10m contribution offered by State Government has not been taken up.</p> <p>Nonetheless, the State's South East makes a large contribution to Gross State Product, and is faced with a rapidly growing freight task (especially woodchips).</p> <p>Depending upon woodchip harvesting processes a rail option could offer a viable alternative to road freight to Portland.</p> <p>The Victorian Government (and/or Pacific National) would need to contribute to costs associated with the Rennie to Heywood section, connecting to Portland.</p>
<p><b>Rail Intermodal terminal development</b></p> <p>Cost: \$1 million – \$20 million each depending upon development proposed</p> <p>Function: the establishment of commercially viable rail terminals will facilitate achievement of government and community goals relating to modal shift for freight.</p>	<p>The establishment of <b>commercially viable</b> rail terminals will facilitate achievement of government and community goals relating to modal shift for freight.</p> <p>A competitive rail option may also have a downward effect on freight rates as the choices available to industry expand.</p> <p>While none are "bankable" proposals as yet, terminals have been touted for:</p> <ul style="list-style-type: none"><li>• Northern Adelaide suburbs (perhaps in the Edinburgh Parks, Direk vicinity)</li><li>• Southern Adelaide suburbs (perhaps Lonsdale area)</li><li>• Bordertown</li><li>• Loxton</li><li>• Mt Barker</li><li>• Pt Augusta/Upper Spencer Gulf area</li><li>• Mt Gambier (SE area in general)</li></ul> <p>Nonetheless, SAFC urges caution when considering intermodal terminal establishment (see modal choice discussion).</p>

# Underway and Funded Projects

## UNDERWAY AND FUNDED

These projects are currently underway, or have been publicly announced with funding included. Completion without delay is considered essential.

PROJECT NAME & DETAIL	REASONING
<b>Outer Harbor Channel Deepening</b>	<p>Private – Public Partnership between Flinders Ports and the State Government, allowing access by fully laden “Panamax” class (14.2m draft) vessels to the Port’s export areas (Container Terminal, Grain Berth, Car Terminal, Livestock Berth).</p> <p>Berth extensions are expected to proceed soon after completion of channel deepening (February 2006).</p>
<b>Grain Wharf &amp; Rail Infrastructure, Port Adelaide</b>	<p>Privately funded and built by ABB Grain Ltd and Flinders Ports, this facility links the Port River Expressway to vessels using the new 14.2m Port Adelaide Channel. A vital export link, that will allow Cape-Size vessels to load grain in Adelaide.</p> <p>Upgrades to the rail corridor on LeFevre Peninsula – funded through ARTC – are necessary to ensure that there are no delays in moving freight to/from the Outer Harbor area.</p> <p>Construction of the new grain terminal is expected to be completed in 2007. CRITICAL Upgrades to rail infrastructure along LeFevre Peninsula (Govt funded) will coincide with completion of the grain terminal.</p>
<b>Port River Expressway Stages 2 &amp; 3 (Road and Rail Bridges)</b>	<p>Principally comprising the Road &amp; Rail Bridge across the Port River.</p> <p>Stage 1 of the Project (road connecting Pt Wakefield Rd to Port Adelaide area) was opened in 2005.</p> <p>While SAFC understands that the Government has made a political decision to have opening bridges for area character reasons, the extra approximately \$100 million in construction and operating costs involved should not be funded direct from the Transport budget, nor delay other, more worthy projects such as those listed above.</p> <p>Any delays in the completion of these bridges will lower the return on investment from the Port River Expressway.</p>

PROJECT NAME & DETAIL	REASONING
<b>Northern Expressway (Sturt Highway Extension)</b>	<p>The planning &amp; consultation stage for this project, which will link the Sturt Hwy to Pt Wakefield Rd, is underway, with funding committed under Auslink.</p> <p>An upgrade, including widening, of Pt Wakefield Road from the new Northern Expressway junction to the Port River Expressway also forms part of this project.</p> <p>The likely route, which will ease pressure on the existing Main North Road route, is in the vicinity of Heaslip and Angle Vale Roads.</p>
<b>Eyre Peninsula Grain Project</b>	<p>A State, Commonwealth and Private Partnership which rationalizes the rail corridor and provides for upgrades to both road and rail infrastructure on the Eyre Peninsula critical for grain export facilitation.</p>
<b>Inner Ring Route – City West Connector</b>	<p>Connects South Road to Park Terrace, providing an extension to the Inner Ring Route, and link to Torrens Road and Churchill Road routes.</p>
<b>Inner Ring Route – Bakewell Bridge</b>	<p>Funding for reconstruction of this road bridge has been recently announced, including a rail re-alignment underneath to support double stacking of containers – a precursor to the Adelaide to Melbourne Rail project outlined above.</p>

# Auslink or Eastlink – How did we fare?

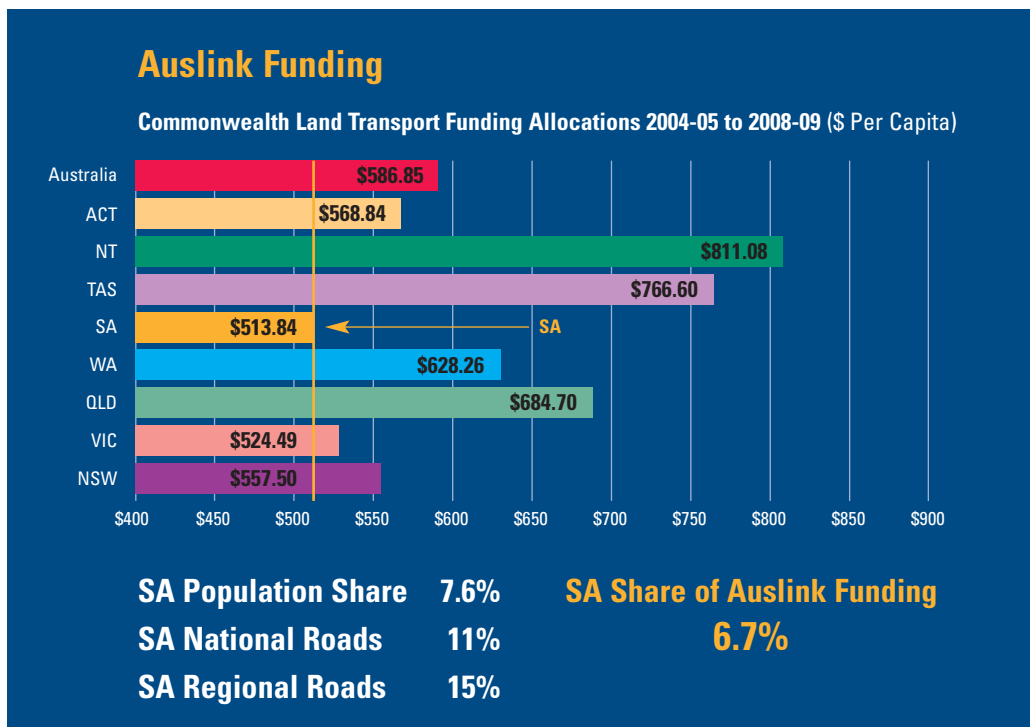
At a national level, the Australian Government has released “Auslink” as its platform for a planned approach to nationally-significant infrastructure development.

While supporting the concept as an otherwise logical and strategic approach, SAFC has been highly critical of Auslink’s gross funding inequities for South Australia.

In light of the huge allocations to the eastern seaboard, we have dubbed the programme “Eastlink”.

SAFC played a key role in the federal pre-election campaign that succeeded in increasing the State’s initial allocation by \$118 million, but this is still grossly inadequate.

A further \$112m – or \$73 for every man, woman and child in the State – is required to put South Australia on an equitable footing with the other States.



Based on information from the Auslink Website – [www.auslink.gov.au](http://www.auslink.gov.au)

*The inequitable allocation of Australian Government funding is confirmed by South Australia’s per capita allocation for road and rail infrastructure lagging behind grants to the other States; after including the \$118m extra funds committed during the 2004 Federal Election.*

*NOTE: Does not include \$550m allocation to ARTC for Interstate Rail Track (most of which will be spent in NSW), or \$273m funding associated with “national projects”.*

SAFC recognises that Auslink is project-based, and that this will mean that in some years some States will receive lesser funds, with those funds made up in future years.

Nonetheless, South Australia has been significantly disadvantaged over this five-year Auslink period.

**Therefore, SAFC expects the Commonwealth Government to give this State a “fairer share” of Auslink II funds, when that is announced in 2008/09 – as well as the \$112 million shortfall from the initial Auslink funding pool.**

In addition, SAFC strongly believes South Australia has been “short-changed” in the definition of the network. Many routes within SA, which are of national significance, have not been included.

The current Auslink network fails to recognise that there are any significant population or industrial areas south of Adelaide Airport. Hundreds of thousands of South Australian homes can attest to the blindness of this view, as can many businesses.

In addition, the critical link between the North-South Corridor (South Road) and the South Eastern Freeway (route to Melbourne) has been left off the list of eligible corridors. This link also completes the “Inner Ring Route”:

The Barrier Highway is another case in point. Whilst it is not the key link between SA and NSW (that being the Sturt Hwy) it plays a key role for national East-West freight, that is freight moving between WA and NT to NSW and the eastern seaboard. It warrants listing on the Federal Government’s nationally significant corridors list forming the basis of AusLink.



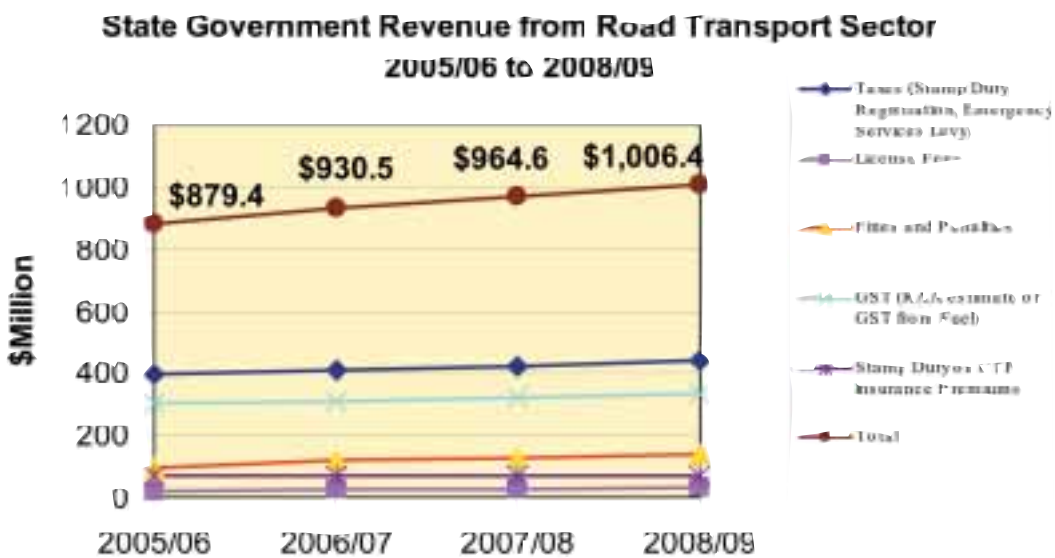
## At a Glance: How can we afford this?

The transport sector in Australia is hit heavily by a raft of taxes and charges, including registration and license fees, fines and penalties, stamp duty from compulsory third party insurance fees, GST – and the biggest ticket item excise on fuel sales.

Collectively, the State and Federal governments reap \$14.6 billion in revenue from motorists each year, including trucks and work vehicles, through these imposts.

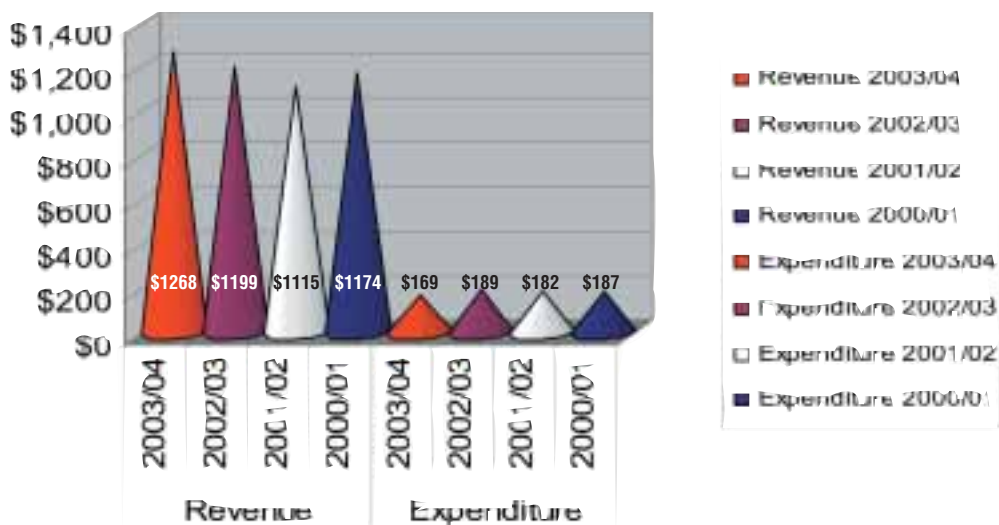
The Federal Government collected about \$13.62 billion in fuel excise levies during 2004/05 alone, almost \$1 billion more than they will return through the entire Auslink program over the next five years.

With this mammoth Federal Government revenue stream, there is no excuse for South Australia not to receive its fair share of the \$12.7 billion (over five years) Auslink pie.



Source: RAA, *Backwater to Benchmark*, November 2005 (using figures published in 2005/06 Budget papers)

### Road Based Revenue and Expenditure (State & Federal) in SA (Per Capita)



Source: RAA, *Backwater to Benchmark*, November 2005

As can be seen from the charts above, the State Government also can not justify its failure to allocate adequate expenditure on transport infrastructure in light of the large and ongoing revenue that it generates for Treasury coffers.

The transport sector will not be able to withstand the burden of funding social infrastructure (schools, hospitals and the like) while its own community resources (roads, railways etc) are under-funded and rapidly deteriorating.

The industry acknowledges that taxes must be raised from somewhere, and the transport sector is an attractive source for governments, but SAFC contends that the industry is carrying a grossly unfair burden in this regard.

In addition to the revenue already generated from the sector, there are also innovative funding solutions available to governments and industry.

State Governments can debt fund infrastructure (as is the case with the recently announced South Road tunnel and underpass), and infrastructure bonds may have some appeal in the market. Superannuation funds also are awash with contributions looking for sound investments opportunities.

Public-Private Partnerships (PPP) have been welcomed to a lesser extent in SA than interstate, yet opportunities exist for them to be embraced. The development of the North-South Freeway concept is one project that has attracted attention in this regard.

# Economic, Social and Environmental factors – The Triple Bottom Line:

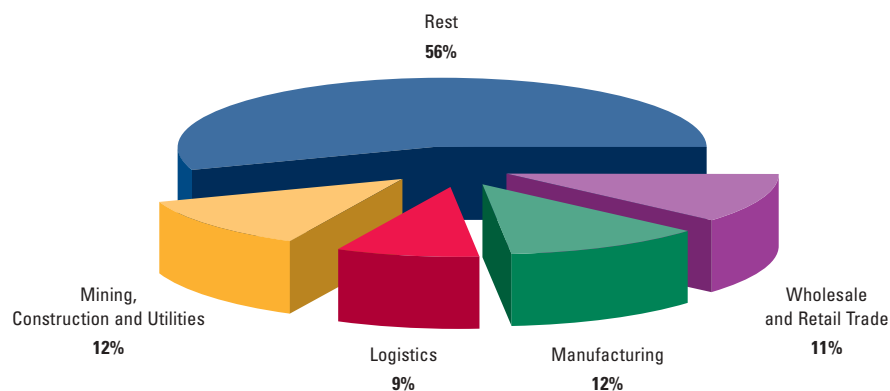
The following triple bottom line factors must be considered when assessing infrastructure proposals.

## Economic

The economic aspects associated with freight transport infrastructure projects take many forms including:

- **Investment Attraction** – quality infrastructure can be an influencing factor in business investment decisions;
- **Business/Operational Aspects** – improvements in the cost structure for operators generally manifest themselves as reduced freight rates, and
- **Transport activity is an economic activity in its own right**, contributing up to nine per cent of GDP. It therefore warrants close consideration from an economic perspective.

## Share of GDP



Source: BTRE Working Paper, *Logistics in Australia*, October 2001 (based on 1999-2000 GDP figures).

## Social

There are significant social benefits arising from freight transport, including the fundamental benefit of support for the quality of life wanted by the community. There are also some costs accruing to society that arise from transport and logistics activity, which include:

- **Transport Safety** – costs associated with individual accidents and injury and death that occur on the transport network are high; although in the case of road transport for example, evidence clearly indicates the vast majority of such injuries and deaths on roads are directly attributable to the behaviour of a small minority. Over 80% of car-truck fatal accidents are caused by a minority of motorists, according to the Federal Office of Road Safety;
- **Community Development** – the transport network contributes to a community thriving (or not) through benefits such as improved connectivity and positive economic development impacts;
- **Community dislocation** – especially for rail; and
- Costs associated with **Regulation** – controlling economic, social and environmental outcomes (eg: Adelaide Airport Curfew limits levels of service and flexibility available to get product to market);

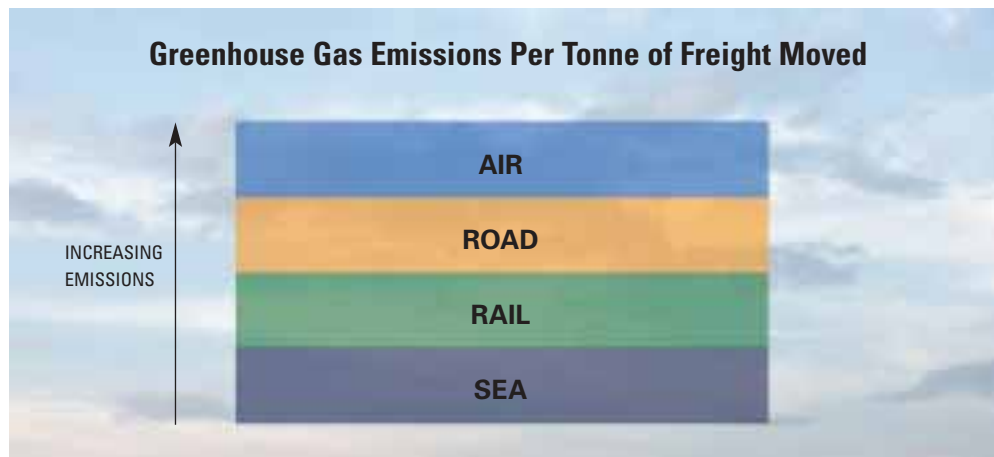


## Economic, Social and Environmental factors – The Triple Bottom Line: *Continued*

### Environmental

There is increasing concern in the community regarding the negative impacts of inefficient freight transport activities on the environment, including:

- **Greenhouse Gas Emissions** – There are many misconceptions around environmental issues, including that road transport is a major contributor to greenhouse gas emissions. In reality, transport as a whole contributes less than 17%, including **just six per cent from heavy vehicles**, with light commercial vehicles and cars contributing significantly more. Nonetheless, freight transport is increasingly a target because its activities are growing and highly visible.



- **Noise** – some transport activities are noisy. Efforts to create buffers between the transport network and the community should be encouraged along with the adoption of improved and quieter technologies within the freight transport sector;
- **Amenity** – Amenity can also be affected by freight activity, especially along key corridors and at key facilities. However, such activity is generally crucial to the efficient functioning of freight networks and systems, and governments should adopt and actively pursue a policy of ensuring that the community is aware of, and accepts, the vital support role played by Freight Transport in their daily lives. Governments could then implement sound infrastructure planning by quarantining designated freight corridors from unwarranted constraints and regulations that are imposed in response to community concerns, often arising from subsequent urban development along the freight routes.
- **Alternative Fuels** – limited supply networks, conversion and operating costs often make these technologies prohibitive; and
- **Larger Units/Vehicle Combinations** – represent an opportunity to improve environmental performance (as well as economic and social outcomes) through reductions in the number of units required to perform a given task, and reduced unit freight costs.

Providing the right infrastructure and regulatory regime will facilitate the potential improvements in the environmental performance of the freight transport sector.

# Core Infrastructure Criteria

Given these factors, the aim must be to ensure that South Australia has freight transport infrastructure that meets the following criteria:

- **Is efficient and effective;**
  - Efficient and adequate freight infrastructure advantages the entire community by reducing costs and increasing economic viability through:
    - Decreasing congestion which, in turn:
      - Decreases safety risks, and
      - Decreases the adverse environmental impacts of fuel and noise emissions.
- **Is fit for the purpose;** it is able to accommodate the desired task and reliably perform at the level of safety, efficiency and effectiveness demanded by industry.
- **Facilitates internationally competitive transport** outcomes including:
  - **Access** – meeting the accessibility requirements of industry, including connectivity;
  - **Accommodating** the vehicles, trains, vessels, and aircraft that industry requires now, and in the future, to remain competitive in their markets;
  - **Competitiveness / pricing** – freight logistics costs are a significant component of overall manufacturing and commodity costs and as such the marketability of the products is very sensitive to increased freight transport costs. Freight transport costs must be kept to an absolute minimum to avoid any negative impact upon the competitiveness of South Australian (and Australian) products in their markets;
  - **Be attractive** to business and potential investors in the State; and
  - Delivering **Competitive Advantage** to SA businesses by being efficient and effective in international markets.
- **Is genuinely multi-modal** and provides for efficient modal-interchange;
- **Is state-wide and supports connectivity** – facilitating seamless statewide linkages, as well as to interstate and international markets with appropriate inter-state and international linkages;
- Provides the **capacity to meet ongoing and projected freight demands** of the community and the economy;
- Provides the **flexibility** to facilitate a responsive freight transport system capable of meeting emerging needs and trends;
- Optimises the **balance** between freight transport logistics and appropriate and sustainable environmental and social outcomes;
- **Supports economic development** so that industry can, as a minimum, compete on a level playing field in its markets;
- **Is funded for the life of the project and the asset** – both new infrastructure, and importantly, the maintenance of existing infrastructure for its effective working life must be fully funded; and

Is **sustainable** in economic, social and environmental terms, as well as for individuals.

**For further information, contact the South Australian Freight Council  
on (08) 8447 0688 or [www.safreightcouncil.com.au](http://www.safreightcouncil.com.au)**

