

4. Need for Project

4.1 Introduction

The proposed South Road Superway is part of a larger proposal to upgrade South Road to a high standard, high speed arterial link. The state and region will both see significant benefits from the improved freight transport access through and within metropolitan Adelaide. South Road is one of two key north–south movements for freight transport routes, the other is Hampstead Road–Portrush Road (see **Figure 4.1**).

South Road connects with the major freight corridors of:

- Port River Expressway
- Salisbury Highway
- Grand Junction Road
- Sir Donald Bradman Drive
- Southern Expressway
- possible future project Northern Connector.

The northern end of South Road forms part of the northwest industrial precinct which extends across Outer Harbor, Osborne, Port Adelaide, Wingfield, Dry Creek and Regency Park, forming one of metropolitan Adelaide’s most important industrial and employment hubs.

The project will provide a high standard link with the Port River Expressway, the Salisbury Highway, the proposed Northern Expressway and the possible future project, Northern Connector, to enhance freight movement, ease congestion and improve safety for all road users.

4.2 National, regional and local transport and planning strategies

South Australia’s Strategic Plan (2007)

South Australia’s Strategic Plan (SASP) is a commitment to planning a state of growth and prosperity over a ten-year timeframe. The plan embraces six key objectives and associated targets for:

Objective 1 – Growing Prosperity

Objective 2 – Improving Wellbeing

Objective 3 – Attaining Sustainability

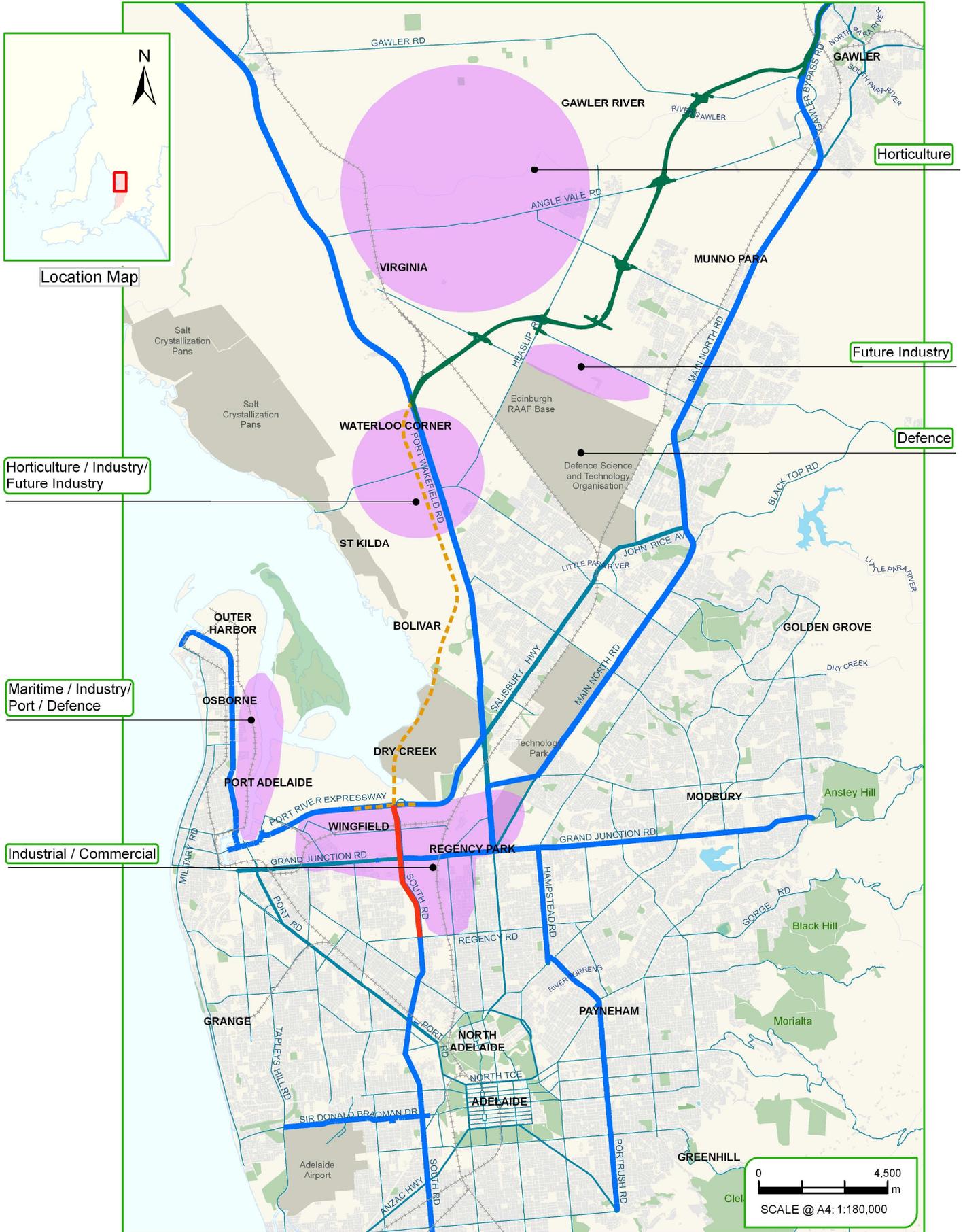
Objective 4 – Fostering Creativity and Innovation

Objective 5 – Building Communities

Objective 6 – Expanding Opportunity.

SASP was released in March 2004 and updated in January 2007. It sets out a number of important targets under Objective 1 – Growing Prosperity that, if achieved, will have a significant impact on the level of demand and supply for industry and supportive infrastructure. SASP targets that relate directly to the South Road Superway Project and the associated potential for land development, population increases and infrastructure are shown in **Table 4.1**.

The level of progress towards achieving these targets will largely determine the demand for industrial and residential land spurred by investment in the north–south corridor. In particular, economic growth, population growth and increased investment in infrastructure will underpin this demand.



Location Map

Horticulture / Industry / Future Industry

Maritime / Industry / Port / Defence

Industrial / Commercial

Horticulture

Future Industry

Defence

0 4,500 m
SCALE @ A4: 1:180,000

- South Road Superway
- Major Freight Corridors
- Northern Connector (Possible Future Project)
- Northern Expressway (Under Construction)
- Railway
- Industry and Employment Land (4.1)

Regional Industrial and Transport Generators

Figure 4.1

Table 4.1 Targets from South Australia’s Strategic Plan that relate to the South Road Superway Project

Target heading	Target	South Road Superway influence or implications
Economic growth	Exceed the national economic growth rate by 2014 (T1.1)	Refer to all other implications and influences
Competitive 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 (T1.2)	Responds to the needs of industries by implementing major projects, specifically by increasing the viability of industrial development, and improving the competitiveness of industrial land in northern and western regions
Business investment	Exceed Australia’s ratio of business investment as a percentage of the economy by 2014 (T1.5)	Will be used as an investment platform in order to fully exploit investment opportunities in the region, and the state
Labour productivity	Exceed Australia’s average labour productivity growth rate in trend terms by 2014 (T1.6)	Will have a direct influence on jobs during construction, as well as creating a competitive industrial environment in the north and northwest metropolitan region; longer term connectivity improvements to South Road and the southern region could also have implications on viability of industrial areas in that region
Jobs and employment participation	Better the Australian average employment growth rate by 2014 (T1.10) Increase the employment to population ratio, standardised for age differences, to the Australian average (T1.12)	Expected to build employment capacity at regional and industry levels, and strengthen the workforce through planning and development; aims to retain and build employment in the northern and western regions, commensurate with state population growth; connectivity improvements to South Road and the southern region could also have implications on viability of industrial areas in that region
Total exports	Treble the value of South Australia’s export income to \$25 billion by 2014 (T1.14)	In association with Northern Expressway, the possible future project, Northern Connector, and Port River Expressway, will improve interstate linkages and connections to Port Adelaide, facilitating the movement of export goods
Defence industry and defence employment	Double the defence industry’s contribution to our economy from \$1 billion to \$2 billion annually (T1.20) Increase defence industry employment from 16,000 to 28,000 by 2013 (T1.13)	Will facilitate and extend recent growth in Defence in the state focused in northern and northwestern region and potentially create further ‘industry clustering’ opportunities; much of the employment growth in this industry will occur in the northern region
Strategic infrastructure	Match the national average in terms of investment in key economic and social infrastructure (T1.21)	An investment in transport infrastructure that aims to meet the doubling of the freight task (although not expected to be implemented within target timeframes of the SASP)

Target heading	Target	South Road Superway influence or implications
Total population, interstate migration and overseas migration :	<p>Increase South Australia's population to 2 million by 2050, with an interim target of 1.64 million by 2014 (T1.22)</p> <p>Reduce annual net interstate migration to zero by 2010, with a net inflow thereafter to be sustained through to 2014 (T1.23)</p> <p>Increase net overseas migration gain to 8500 per annum by 2014 (T1.24)</p>	Improves the competitiveness of potential residential land in northern and western regions by shortening travel times and improving access; net increases of interstate and overseas migration commensurate with the investment in infrastructure and improving the competitiveness of the state economically

The Planning Strategy for Metropolitan Adelaide

The *Planning Strategy for Metropolitan Adelaide* addresses issues in planning for metropolitan Adelaide. It identifies the need to facilitate an effective freight network that is designed and located to improve road safety and land use integration. The Planning Strategy also recognises the need for industry and businesses to be located near strategic transport and freight export corridors and terminals.

The study area contains land identified in the Planning Strategy as a key freight and transport terminal, and a high concentration of businesses and industry that emphasise the importance of South Road as a major freight route.

Draft 30-year Plan for Greater Adelaide

The *Draft 30-year Plan for Greater Adelaide* is out for public consultation until 30 September 2009.

Its most significant policy directly related to the South Road Superway Project is:

Provide for non-stop travel along the strategic north-south corridor, linking the Northern Expressway, the proposed Northern Connector, the Port River expressway, South Road and the Southern Expressway.

The *Draft 30-year Plan for Greater Adelaide* also illustrates the importance of the major freight corridors and major road capital works, including ongoing investigations into the north-south corridor. The corridor is highlighted as part of the Metropolitan Adelaide Network on Map D16. The relevance of this and other projects is put in the context of:

- ensuring that industrial land is available for expanding new manufacturing industries with good access to an efficient freight network
- enabling the state to benefit from the significant expansion opportunities of the mining and resources sector
- establishing a well-planned network of high-capacity roads capable of handling freight and passenger vehicles
- improving congestion which can constrain the productivity of urban transport infrastructure in moving people and freight, and delivering services.

The Strategic Infrastructure Plan for South Australia

The Strategic Infrastructure Plan for South Australia identifies the need for a major north-south corridor to support the development of the metropolitan area. It states:

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.

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 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 identified in the Infrastructure Plan include:

- improving the state’s competitiveness through efficient freight transport networks and improved international links
- minimising the impact of freight vehicle movement on the community and environment by appropriately locating and protecting freight routes
- concentrating resources on maintaining and improving existing assets rather than extending the network.

The Infrastructure Plan will also be updated and revised when the *30-year Plan for Greater Adelaide* is formalised and adopted by the State Government. This will reflect that South Road provides the only continuous link between the northern and southern suburbs, and a crucial link for business and industry. South Road also forms the spine of connections to the major inter-modal transport hubs of Adelaide. These key freight precincts are highly reliant on an efficient north–south road corridor.

The key role of South Road demands that it be a high standard road suitable for use by large volumes of traffic. It advances the National Network objectives of improving safety, reliability and efficiency for the movement of people and goods between the states, as well as linking major regional centres, major import and export facilities and population centres within the state (DTEI 2007).

Industrial Land Strategy

The *Metropolitan Adelaide Industrial Land Strategy* (April 2007) was designed to deliver an adequate, ongoing supply of suitable industrial land in the Adelaide metropolitan region. It identifies industrial lands that are development-ready in the short term, as well as industrial land that needs to be reserved to continue well-planned orderly growth. The strategy highlights the supply-decline of inner suburban sites that has driven industrial land to the outer suburbs, predominantly to the north and northwest sectors. It notes that the consumption rate of industrial land in metropolitan Adelaide from 1996 to 2002 averaged 85 hectares per annum. At its broadest level, demand for industrial land correlates strongly with general economic activity levels. This reflects contemporary industrial land demand being dominated by transport and logistics operators, a derived demand sector.

The primary factors for desirable industrial land are flat topography at a cheap price with good access to metropolitan and inter-regional freight corridors, particularly road freight corridors. Proximity to a suitable workforce, the CBD, and major suppliers are secondary considerations in most sectors. The immediacy of site availability is also an important consideration for large industrial tenants at the time of deciding on a location. The strategic location of these sites near facilities, such as the airport and Outer Harbor, and supported by transport infrastructure, such as the Port River Expressway, Northern Expressway, the possible future project, Northern Connector, and the north–south corridor is a determining factor in the location of this growth.

The South Road Superway should enhance the locational advantage that the northern, northwestern and western suburbs have for industrial development. Once its entire length is complete, the north–south corridor should improve connectivity and opportunities for industrial development in the southern region. The Industrial Land Strategy states:

Sites that are strategically located on rail and road routes are likely to experience continued growth fuelled by demand from industries dependent on freight corridors. The extension and upgrading of arterial roads and other key transport routes have been a key determinant in the development of new industrial areas.

Nation Building Program

The Australian Government supports the need for an upgrade of the South Road corridor. As a result the Australian Government has committed to funding for the project through the Nation Building Program. The Australian Government cites that this project will improve traffic flow for both freight and commuter traffic along this strategically important route, while improving road safety and delivering environmental benefits by reducing stop–start travel, noise and air pollution.

4.3 Existing and projected need for the project

The current traffic demands on South Road vary from 30,000 to 46,000 vehicles per day, with approximately 17% being heavy vehicles. Traffic volumes have been increasing at a relatively constant rate during the last 10 years since completion of the Port River Expressway Project.

In peak periods there are considerable delays at the signalised intersections with Cormack Road and Grand Junction Road, and to a lesser extent at Kateena Street and Days Road. Access to or from side roads can be extremely difficult during peak periods due to the high volume of traffic. Future development of the areas to north of Adelaide, and the Northern Expressway and the possible future project, Northern Connector, are expected to increase traffic volumes to in excess of 80,000 vehicles per day over the next 10 years. Delays will be exacerbated at existing junctions and operating conditions along South Road will significantly decrease as will accessibility to abutting industrial areas.

Further, traffic delays can be significant at the Wingfield rail crossing particularly when trains are long (they can be longer than 1.5 kilometres) and/or slowing down to enter the rail loop located to the west of South Road. During peak periods, queues from the rail crossing have extended north on to the Port River Expressway. The Australian Rail Track Corporation has indicated that train frequencies are likely to increase in foreseeable future and that trains will most likely become longer.

The expected increase in traffic demands could exacerbate the high crash rate along this section of South Road. Assessment of the crash statistics shows a high rate at the signalised intersections (including the rail crossing) north of Grand Junction Road. The proposed upgrading should reduce the crash rate and improve overall safety along South Road.

An upgrade of the north–south corridor will improve operating conditions along South Road and adjacent roads within the study area. It will maintain accessibility to this important industrial area in Adelaide with its key links to transport terminals at Islington and the Port of Adelaide.