

6. Economic Overview

6.1 Background

The following economic overview of key business, environmental and social effects, both positive and negative, in non-monetised terms, assesses potential economic outcomes of the South Road Superway Project in the context of the region and study area.

The Government of South Australia's recently released *Draft 30-year Plan for Greater Adelaide*, reflects a policy shift towards stronger population growth, demographic change, land development and employment increases over the next 30 years. The key rationale for the plan's directions and targets primarily relates to the economy and jobs creation. The plan's main objective is to create an environment that promotes stronger economic performance through more efficient and effective land use arrangements to support the growth of new industries.

The South Road Superway Project creates the necessary 'system wide' accessibility improvements to not only support major economic activity in the northern and western regions but to also create greater certainty and be a catalyst for new investment in this state. It closes the travel time gap between the north and south of benefit to the wider Adelaide community, reducing household travel costs and transport disadvantage.

6.2 Economic rationale

The importance of the north–south corridor lies in its key role of providing 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 interstate, as well as linking major regional centres, major import and export facilities and population centres within the state.

The strategic need for this project is supported at the state level by the planned infrastructure target in *South Australia's Strategic Plan* and the flow-on *Strategic Infrastructure Plan*, which identifies a need to upgrade South Road to become an improved north–south corridor for metropolitan Adelaide. Target T1.16 of *South Australia's Strategic Plan* identifies the need to invest in strategic infrastructure such as transport, to achieve other plan targets. Providing efficient movement of freight and effective access to key air and sea ports in Adelaide will be a fundamental component of achieving this target, and contributing, in particular, to targets T 1.5 (economic growth) and T1.12 (exports).

As the only continuous link between the northern and southern suburbs, South Road is a crucial connection for business and industry. It also forms the spine of connections to the major inter-modal transport hubs of Adelaide, which are highly reliant on an efficient north–south road corridor. The South Road Superway Project combined with the possible future project, Northern Connector, and Northern Expressway will help generate vital economic outcomes in several key growth regions, such as:

- reflecting where people are going to live to minimise journey to work times to new employment opportunities – through linking strategic residential growth areas identified within the 30-year Plan, including the Playford North Extension, Cheethams/Globe Derby Park, Buckland Park, Roseworthy and Concordia, to strategic employment lands such as Greater Edinburgh Parks, Wingfield and the Techport Osborne precinct, as well as other key industrial areas in the north and northwest of Adelaide
- attracting additional manufacturing hubs to this key freight and transport corridor, including the development of key clusters in cast metals, waste resource recovery, automotive, technology and other manufacturing
- taking advantage of existing transport infrastructure such as the Port River Expressway and key east–west links through the Wingfield area

- linking transport hubs/intermodal and export infrastructure (road, rail, sea and air) to commercial and industrial growth clusters to boost system efficiency and extension of the network for more efficient freight truck combinations
- creating jobs, both directly through the regional investment opportunities created by the construction of this facility, and indirectly through a general improvement in the economic competitiveness of industry that uses the north–south corridor.

The upgrade and improvement of South Road has specific objectives to provide for ‘non-stop’ travel along this strategic corridor, with an overall reduction in traffic congestion and travel time delays at major intersections or rail corridors by means of grade separation (above ground level).

6.3 Regional economic assessment

The South Road Superway Project will add further economic value to current and planned future infrastructure projects including the Northern Expressway and the possible future project, Northern Connector. Currently under construction, the Northern Expressway will complete the key freight connection between northern and western suburbs, and optimise freight efficiency from and to regional and interstate centres – a key objective of the Australian Government’s Nation Building vision.

The South Road Superway Project will further complement these planned and constructed projects, establishing a fast and efficient rail, freight and commuter link between the northern region and key freight precincts. From a regional and state-wide perspective, the north–south corridor will contribute to economic growth through these improved efficiencies, particularly for export, thereby expanding economic potential.

Regionally, the South Road Superway Project will support and further advance the outer northern metropolitan area of Adelaide. The region makes a significant contribution to the state’s economy and is expected to continue to increase its economic contribution over the next 30 years. The integration of transport and land use planning will be essential for the efficient movement of goods and services while transport policies will underpin targets not only for housing but also for the economy and jobs.

The project presents a compelling case for non-monetised benefits: it satisfies government high level policies, strategic planning, and strategic and infrastructure related objectives (see Section 4) and will deliver economic, social and environmental benefits (**Table 6.1**).

Regional economic context

Future drivers of economic development in the broader Northern Region of Adelaide and the Barossa Region are expected to come from key industries already in the area and those that contribute to the state’s export industry. The broader region’s industrial base is strong and diverse with automotive, defence, electronics, and agricultural cultivation and production. The state still maintains a robust, though significantly smaller, automotive manufacturing component clustered around the General Motors Holden assembly plant at Elizabeth. New specialisations for the state include the expansion of the Edinburgh Defence Cluster anchored by the Australian Government’s Defence, Science and Technology Organisation.

The region’s northern extremity also has significant horticultural activities as well as viticulture, which will benefit from an efficient transport network to deliver exportable goods to South Australia’s transport hubs.

Locally, within the study area, are two significant industrial areas at Wingfield and Regency Park. Both contain a significant number of metal-based manufacturers, as well as a range of manufacturers producing chemical, petroleum, coal, rubber and plastic products.

Other land uses of note include the closed landfill sites at the AMCOR recycling site and the cast metals precinct at Wingfield. The study area has formed ‘industry clusters’ with cost-effective provision of infrastructure, shared facilities, an adequate buffer and appropriate location of heavy industry.

Also within the study area are freight terminals, warehousing, storage and commercial uses that take advantage of frontage to South Road. Food, beverage and/or tobacco production is also present in the study area, a prime example being Coopers Brewery to the south.

The South Road Superway Project will generate substantial jobs and supporting activities over the course of its construction. While the economic impacts from the construction phase are substantial, its main impact will be felt once it is completed. These significant 'flow on' social and economic benefits are not solely the result of investment into the project. A number of pre-existing drivers and opportunities create the necessary pre-conditions for this investment to be fully realised in social and economic terms.

The following state-significant industry areas have a presence in the study area or the South Road Superway Project would improve their connections to surrounding areas.

Manufacturing

Manufacturing creates new products and markets. This in turn leads to higher growth, often with highly skilled, full-time jobs. Manufacturing roughly contributes nearly 70% of the state's merchandise exports, nearly 14.5% of Gross State Product and about 14% of total employment. Manufacturing is Northern Region's most important industry accounting for over 20,000 jobs, and a 28% share in the Greater Adelaide context.

Manufacturing has evolved into a skill and knowledge intensive sector. It is a major area of technical innovation in the economy and one of the largest users of high technology making it an important driver of productivity improvement across the entire economy.

Automotive

The automotive manufacturing industry in South Australia has been an integral part of the economic development of the state. Over 270 motor vehicle and component manufacturers in the state employ over 9,800 people in motor vehicle parts and manufacturing.

In addition to contributing \$1.7 billion in exports to the state's economy, it makes up 17% of the state's total goods exports with an additional \$44 million spent on automotive industry research and development in 2006–07 or 5% of the state total.

Adelaide is in the top 20 most cost-competitive cities in the world for automotive manufacturing, and is Australia's least costly place to setup and do business. Investment and expansion are thus expected to continue, particularly in the northern areas surrounding GM Holden Ltd's 90 hectare automotive precinct at Edinburgh Parks.

Defence

South Australia is Australia's defence state with more than \$10 billion worth of defence contracts; the industry supports 11,135 jobs and in 2007, 13,383 were employed indirectly. Contracts include the \$8 billion Air Warfare Destroyer Contract and the multi-billion Collins class submarine through-life support contract, all located in northern Adelaide.

The industry contains more than 200 prime contractors and small-to-medium enterprises including ASC, BAE Systems and Navantia. These defence firms are responsible for winning 30% of the Australian defence capital budget, with the industry generating \$1.08 billion gross value added in 2002–03.

Most of these defence companies are located within three defence precincts at Technology Park Mawson Lakes, Edinburgh Parks or Techport Australia.

Mining and energy production

With almost 40% of the world's known recoverable uranium reserves and significant volumes of copper, gold and silver, South Australia has huge mining potential and is ranked the 4th most prospective location in the world by Canada's Fraser Institute. Almost \$13 billion worth of projects in the minerals and energy sector helped add \$2.9 billion (4.4%) to the state's gross value added in 2007–08.

The mining and metals manufacturing industries generate over 27,600 jobs in South Australia as of August 2008 within a network of over 1,728 businesses. They created \$3.0 billion in mineral and mineral manufactures exports or 29% of the state's total goods exports in the year to September 2008 to key markets including China and Japan.

Although the actual mining operations take place in regional South Australia, mineral and energy resource developments create significant infrastructure, jobs and spill-over activities. The flow on benefits for transport, construction and manufacturing industries through demand for freight, chemical products, fabricated metal products and other machinery and equipment is likely to increase the demand for industrial land in Metropolitan Adelaide.

Transport and storage

The transport and storage sector covers road, rail, water and air transport. It is also closely linked to the success of many industries, including retail, manufacturing, automotive, wine and food. The sector requires large premises with high ceilings for vertical storage space and good access to the freight network to efficiently transport goods. The proposed intermodal freight rail facility at Penfield will give this sector a needed boost and, in turn, the South Road Superway Project and the possible future project, Northern Connector will provide further impetus for the intermodal facility.

6.4 Industrial land development and employment generation

For industrial land opportunities, the activity creation impact is about the specific benefits this project brings to land parcels that might be available. The net value of economic activity created relates to the availability of land and amenity/accessibility improved land, which encourages more development than would otherwise occur. The attraction of this land would be its immediate access to better transport linkages, and this would apply for either industrial or residential use.

The *Draft 30-year Plan for Greater Adelaide* aims to create (through land use, key infrastructure and other policies) an additional 79,000 jobs in the Northern Adelaide Region with 2,440 hectares (ha) of employment lands to become operational within the next 30 years. Further north the Barossa Region is expected to accommodate a further 38,500 jobs and 810 ha of regional employment lands. The Western Region of Metropolitan Adelaide may potentially see 46,500 jobs created and 930 ha of employment land coming on line. The key targets supported by the north–south corridor include:

- 52,000 additional manufacturing jobs in Greater Adelaide
- 9,100 additional defence jobs
- 25,000 transport/logistics and warehousing jobs.

It is clear that major infrastructure projects can reshape metropolitan regions, especially in industrial land demand. This has been witnessed most evidently in Melbourne with the opening of the Western Ring Road in conjunction with Citylink, the more recent delivery of Eastlink, and in Sydney with the opening of the Western Sydney Orbital.

Projections suggests that 2,380–3,240 ha of vacant industrial land will be demanded depending on whether medium or high population and employment projections are invoked. More than half of this demand will be in the northern and western suburbs (the stock of unconstrained land in the short-term is largely in Adelaide's north (about two-thirds), with one-third in the west. (Adelaide's south has virtually none and the east none.) These convert to approximately 80 and 108 ha per annum

respectively (95 ha per annum of industrial land consumption has been observed in Adelaide over the 2002 to 2008 period, according to Industrial Land Database statistics).

However, significant stocks of industrial land have been rezoned to other uses over the same period, reflecting the flight of manufacturing industries and land redevelopment forces among other things. Approximately 540 ha of industrial land has been rezoned since 2002, ensuring negligible change in the overall stock of industrial land. Importantly, this change has not been uniform throughout Greater Adelaide. Most industrial consumption of vacant land has occurred in northern Adelaide; most land has been removed from industrial stocks in the southern and inner areas of metropolitan Adelaide. For longer term supply, the *Industrial Land Strategy* points to the location of most stock in the northern and western sectors, in particular at the Le Fefevre Peninsula, Edinburgh Parks, Port Adelaide, Gepps Cross, Wingfield, Burton and Pooraka.

Modelling has determined the impact of the economy, accessibility improvements and industrial land availability at a more micro-level associated with the region served by the north–south corridor. The analysis was undertaken in order to update indicative forecasts of employment by destination zone across metropolitan Adelaide over the next three decades. The methodology adopted has been used over the last 20 years in this and other tasks. It provides forecasts by industry sector based on proposed changes in driving parameters – the factors that determine change in economic activity. These exogenous factors (export growth, investment government expenditure, and independent consumption) are traced through the whole of the economy using an economy wide model. It then distributes the employment by industry forecasts to destination zones, based on historical trends (using a modified shift-share analysis for most destination zones).

Figure 6.1 reflects the immediate region of industrial land development associated with the north–south corridor. Greater Edinburgh Parks is expected to grow substantially to 2031 (915 ha) and the area adjacent to the corridor is also predicted to intensify substantially (147 ha); Port Adelaide should continue to grow by 305 ha.

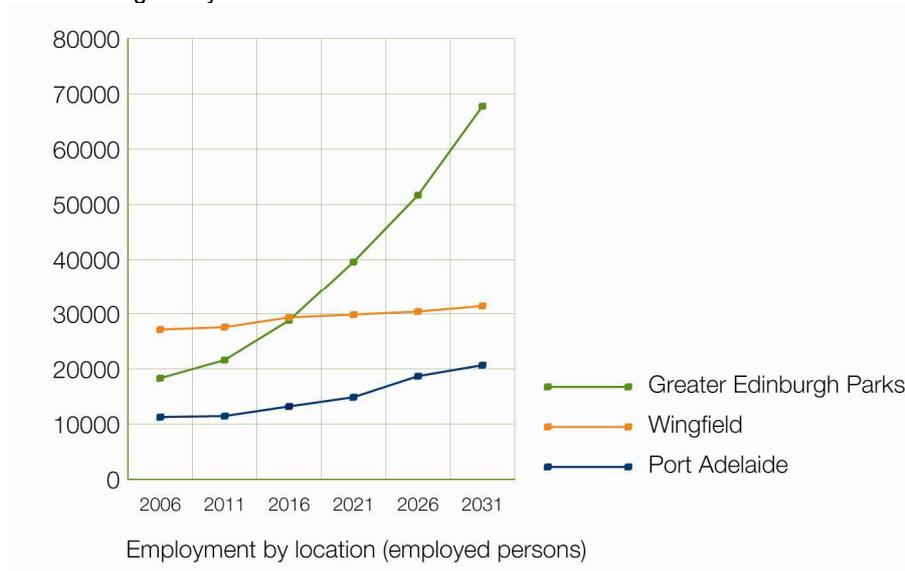


Figure 6.1. Industrial land in the project region

Source: InfraPlan

The South Road Superway and the Port River Expressway are likely to increase the viability of the short-term supply of vacant constrained industrial land as identified in the *Industrial Land Strategy*. The Western Region is identified as having the most significant land parcels of constrained land, namely the Dean Rifle Range (50 ha), Gillman Eco-Industrial Precinct (50 ha), Techport Osmond (80 ha) and Pelican Point Outer Harbor (33 ha).

Employment (**Figure 6.2**) will increase commensurately with the Wingfield and Port Adelaide regions growing by 16% and 83% respectively, albeit that the Wingfield Region already outperforms the other regions with 27,000 people currently employed in the vicinity of the South Road Superway.

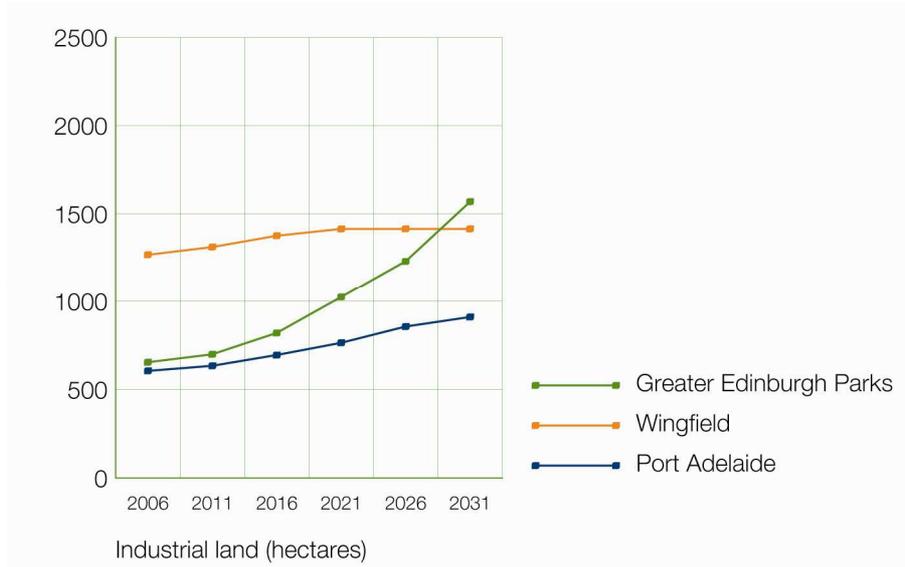


Figure 6.2. Employment in the project region

Source: InfraPlan

The Western, Northern and Barossa regions will also see an increase of 369,000 persons, supporting over one-third of Greater Adelaide’s future population. Locations such as Roseworthy, Concordia, Virginia–Buckland Park and Playford North have significant potential to supply employment and future growth, which will contribute to the higher traffic flows on the region’s main and local roads. New super-schools are also proposed in the region, which will generate student transport in the region and between regions.

It will be important for planning for this project and new land uses (or the strengthening of existing land uses) to be integrated to create new housing, social services and commercial/industrial developments that are well linked, particularly south of Grand Junction Road.

Therefore, freight transport must have access to producers, transport hubs and freight gateways to minimise delay, use transport infrastructure cost-effectively and ensure that safety is not compromised.

Not only will the north–south corridor be fundamental in bringing the state’s transport infrastructure in line with the Australian Government’s Nation Building Vision, it will also act as a link to growth areas in the north of Adelaide and improve traffic movements through the commercial and industrial precincts of Wingfield and Regency Park.

Local residential development

The southwestern portion of the study area has a high degree of residential concentration with a mixture of recreation, education and light industry. The extensive community and recreation facilities include Regency Golf Course, TAFESA Regency Campus, Westwood residential area and Angle Park Greyhound Track. Local residential development could be linked with the industry/employment demands of the study area to ensure that the region’s unemployment and social disadvantage are more directly addressed as a result of this project (see also Section 8).

6.5 Summary of economic activity effects

The economic activity impacts of the project are wide and relate to a number of issues/criteria (Table 6.1).

Table 6.1. Flow on economic effects of the South Road Superway Project

Issue–Criterion	Commentary	Effects (highly beneficial/ highly detrimental)	Period short (S), medium (M), long term (L)	Area of influence (metropolitan wide, subregional or corridor influence)
Wider economic benefits				
Industry productivity (30–40 years) – lower costs/efficiency	An important aspect of a complete assessment of the project, especially in current economic circumstances where the concept of job creation is a high priority	Highly beneficial	S–L (begins immediately after facility opens)	Metro wide, subregional and corridor
Freight accessibility improvement	Faster smoother travel, shortened delivery lead times, improved ability to meet timeslots	Highly beneficial	S – occurs immediately after facility opens	Metro wide, subregional and corridor
Direct employment from construction over 5 years	Employment, income and value added outcomes associated with the road construction spend	Highly beneficial and 2–5 jobs/\$1mill	S – at point of construction	Regional
Indirect employment effects – over 50 years (multiplier)	Will need to be modelled in terms of extent to which employment will be created for residents of the local area, region and state	Highly beneficial	S – at point of construction	Metro wide
Employment generated from additional land/development	Net value created in economic activity relates to availability of rezoned land and amenity improved land, which encourages more development than would otherwise occur; attraction of land would be its immediate access to better transport linkages	Moderately beneficial given much land development would accrue to areas outside Wingfield	M–L	Regional
Contribution to state economy	Operational expenditure impacts build on region; broader economic impacts also largely focused there	Highly beneficial	S–L	State wide
Benefits from freight greatest in the north	Improves freight connections (throughput and lead times) between north and south improving prospects for industrial development along corridor; current freight movements substantial north of Grand Junction Road	Highly beneficial	S–L (begins immediately after facility opens)	Metro wide and subregional

Issue–Criterion	Commentary	Effects (highly beneficial/ highly detrimental)	Period short (S), medium (M), long term (L)	Area of influence (metropolitan wide, subregional or corridor influence)
Social cohesion/ accessibility/ regeneration				
Improved access and pedestrian/cycle	Release of road space and improvement in east–west accessibility will improve linkages	Moderately beneficial	Gradual but L improvement	Corridor effect
Business disruption				
Avoids relocation/land consumption impacts	Existing business/properties mostly retained	Moderately beneficial	L	Corridor effect
Reduced construction impacts				
Reduction in immediate traffic/travel/business costs	Offline construction avoids direct impacts	Moderately beneficial	S, M	Corridor and subregional
Wetlands and greenscape offsets	Vision of additional green space wetlands on existing corridor possible	Moderately beneficial	L implemented	Corridor effect
'Net' greenhouse gain	Increased transport efficiency and smoother flow for existing corridor; delays will improve significantly as will GHG emission reductions (see Section 20)	Moderately beneficial	L	Corridor and metro wide
Property				
Uplift in values adjacent network	Similar to industrial land, the activity creation impact is about specific benefits this land brings relative to other land parcels that might be available; net value created in economic activity relates to availability of zoned land and amenity improved land, which encourages more development than would otherwise occur; attraction of this land would be its immediate access to better transport linkages, and this would apply for either industrial use	Moderately beneficial	M, L	Corridor effect
Rate revenue increased (land value)	Commensurate with the level of development	Moderately beneficial	M, L	Corridor effect
Government holdings (turnover) and state duty	Government land holdings could be disposed to offset some of these costs, e.g. MARWP	Moderately beneficial	M, L	Corridor effect

Issue–Criterion	Commentary	Effects (highly beneficial/ highly detrimental)	Period short (S), medium (M), long term (L)	Area of influence (metropolitan wide, subregional or corridor influence)
Infrastructure retention – benefits				
Carbon/sustainability/ services	Retention of some existing infrastructure will minimise disruption, demands on additional infrastructure/ services and avoids triggering additional energy to provide replaced infrastructure/ services	Moderately beneficial	S, M,L	Corridor effect

Table 6.2 shows the non-monetised benefits and costs that, while difficult to value, also need to be taken into account when evaluating the project options.

Table 6.2. Non monetised local benefits and costs

Benefit cost	Description	Rating
Traffic and accessibility	South Road Superway would restrict access to South Road along some parts of the corridor but would provide local road networks and some slip lanes parallel to South Road	Moderately beneficial to businesses adjacent South Road, for improved local road networks and east–west connectivity; slightly unfavourable for businesses with restricted access to South Road
Traffic and accessibility	Would improve freight movement links to transport hubs and businesses regionally and locally	Highly beneficial to businesses who move freight through the state or study area
Noise (social amenity)	Noise and overall social amenity effects by constructing an elevated roadway adjacent to residential, industrial and commercial premises; negative effects to residents near Days Road entrance would be mitigated by noise treatment walls	Slightly unfavourable to dense residential areas adjacent to the proposed corridor though some buffering from Regency Park open space and noise treatment walls
Air quality	Impact of air emissions from traffic using the proposed corridor and their effect on sensitive receivers	Moderately beneficial as this project will, in the long term (2031), have significant beneficial impacts upon atmospheric air quality through this region by allowing for the construction of a carriageway that enables free flowing traffic
Visual effects and landscaping	The effect to the general character of the study area and the proposed integration of the built form with the current landscape, proposed architectural and landscaping opportunities	Highly beneficial by providing an interesting journey experience and structures of good visual quality; moderately beneficial in design of the structure to reinvigorate North West Industrial Precinct, highlighting positive elements of the area and addressing conflicting land uses through uniform landscape upgrades

Benefit cost	Description	Rating
Stormwater management (WSUD)	Could improve stormwater management practices of study area	Highly beneficial
Habitat and biodiversity of region	Effects to flora and fauna within the study area and Barker Inlet wetland system; site has been highly degraded from pre-European state through development of industry and road networks in the region; thus, very little remnant vegetation remains in the region; also unlikely that any native fauna species, including those of conservation significance, will be significantly impacted by construction and operation of the South Road Superway Project	Neutral
Facilitate future development of employment lands and industrial hubs	Improved north–south and, to a degree, east–west accessibility for future freight and rail movements; investing in infrastructure that will assist the area to develop as a strong industrial base	Highly beneficial