

Traffic and transport

Transport systems should support the efficient movement of goods and people from one place to another in a safe and efficient manner. This can support trade and commerce, connect communities and provide safe and easy access to education, healthcare, employment opportunities, and other essential services.

As a key link in Adelaide's major north-south road spine, South Road between the River Torrens and Darlington, attracts high passenger and freight vehicle volumes, putting this non-motorway sections of the corridor under increasing pressure, hindering its ability to effectively support the economic productivity and efficiency of the State.

Traffic and transport assessments have been undertaken across several years to understand the potential impacts and benefits of the T2D Project to deliver the best outcomes for South Australia.

These assessments include understanding the existing features of the current traffic and transport network, the potential impacts and benefits of the planned

upgrades and necessary mitigation measures, as well as considering opportunities to enhance social and environmental outcomes where possible.

The assessments show that the project is expected to have significant traffic and transport benefits for road users and the community both along the corridor and across the broader network.

Existing traffic and transport environment

The North-South Corridor (NSC) is a critical part of Adelaide's transport network and is its primary economic corridor. It's role as a strategic commuter and freight route is recognised with the NSC forming part of the National Land Transport Network— a designated network of nationally important road and rail infrastructure links.

The section between the River Torrens / Karrawirra Parri and Darlington carries up to 61,000 vehicles per day and is the most complex section of NSC due to proximity to the Central Business District (CBD), connectivity requirements to the arterial network and key destinations, and dense inner suburbs. There are 21 sets of traffic lights to pass through with road users facing daily congestion, excess delays, safety risks and high crash rates.

In addition to north-south movements, accessibility is impacted on east-west movements (180,000 vehicles on an average day) with excess delays, which reduces the

attraction of sustainable transport choices such as public transport or cycling or walking.

The performance of Adelaide's east-west arterial roads is important for the efficiency of bus movements servicing communities in western suburbs. There are around 15 communities and business districts serviced by a high-frequency '15-minute Go-Zone' bus service on the western and south-western side of the CBD. In addition, South Road is a major bus corridor primarily serving the southern suburbs, including express and limited-stops services. It is also a key link for city-bound bus routes from the west. There are approximately 30 bus stop pairs on South Road within the project area.

The Glenelg tram line crosses over South Road, grade separated on an overpass with Tram Stop 6 located on the overpass. Currently, pedestrians access Stop 6 via stairs, or lifts on either side of the tram line.

The Seaford Rail line also intersects South Road at Cross Road intersection. However, South Road is grade separated with an overpass over Cross Road intersection, therefore no impacts are anticipated to the existing rail operation, pedestrian and public transport interface during construction or operation of the project.

Pedestrians and cyclists currently have four designated options to cross South Road's four lanes of traffic such as signalised crossings at intersections, pedestrian activated crossings and median refuges.

Potential impacts to existing environment

Traffic and transport modelling has been undertaken to assess the expected future traffic performance during the construction and operation phases of the project.

The key construction traffic and transport impacts identified are:

- road closures and network congestion
- increased heavy vehicle movements
- potential bus service disruption
- improve cycling and walking connections.

The key operational traffic and transport impacts are beneficial and include:

- improved north-south travel times by reducing congestion
- improved public transport travel times
- changes to some local road access
- enhanced liveability and opportunities for urban development
- opportunities to enhance active travel
- enhanced visual amenity around the project corridor
- enhancing overall road safety.

Alternatives, mitigation and opportunities

Construction works are expected to increase travel times and delays along the South Road corridor in the short term however, there are plans and processes to mitigate and minimise issues as much as possible. These include:

- contractor to develop a detailed Traffic Management Plan that minimises traffic impacts and retains accessibility
- programming works, and timing of the works to minimise impacts on the community, residents and businesses
- use of effective diversions and alternate routes and bus stop relocations
- clear and latest communication of closures or changes to accessibility
- ongoing stakeholder and community engagement.

The T2D Project has identified several opportunities for further design efficiency to increase functionality and connectivity along the corridor including:

- broader network upgrades required to ensure the network functions effectively during construction, and on completion of the T2D Project these upgrades continue to be reviewed and prioritised for positive transport outcomes on the arterial road network, cycling and pedestrian networks

- modified and improved South Road Tram Overpass to enhance the T2D Project design
- multiple new east-west active transport crossing locations:
 - along the corridor at Thebarton (near River Torrens / Karrawirra Parri)
 - at James Congdon Drive near Tennyson Street north of Anzac Highway
 - near Pleasant Avenue south of Glenelg tram line
 - near Byron Avenue/ Walsh Avenue north of Tonsley Boulevard
- other T2D Project initiatives include supporting active travel, planning for local area traffic management and enhancing South Road through improved urban realm.

The T2D Project will be further refined through the procurement phase informed by consultation with community and stakeholders.

Approvals, permits and authorisations

The traffic and transport design components of the T2D Project shall be undertaken in accordance with the Department's Master Specification.

Scan the QR code to view the suite of assessments included in the PAR or visit T2D.sa.gov.au/PAR.

