

1 Executive Summary

The Project Impact Report describes the O-Bahn City Access Project and summarises investigations and planning work to date. It presents the environmental, social and economic effects and opportunities of the Project. The Report has been prepared to help interested groups, individuals, businesses, government agencies and local government understand the rationale behind the project and the potential changes, impacts and mitigation measures.

1.1 The Current Problem

At 12 km long, the Adelaide O-Bahn is the longest and fastest guided bus service in the world. It is the most highly patronised public transport corridor in South Australia. The on-road section of the O-Bahn corridor between Gilberton and the Central Business District (CBD) currently has limited measures to protect public transport services from the effects of road congestion. Between the guided busway corridor exit and entry point at Gilberton and the CBD, O-Bahn buses operate within the roadway, either sharing the carriageway with other vehicles, or running within short sections of priority bus lanes. Between Hackney Road, and Grenfell Street, the efficiency of bus services is significantly compromised by the current heavily congested traffic conditions.

This congestion impacts on bus services by increasing travel times and increasing the variability of on-time running. During peak periods, it can take almost twice as long to travel the 1.45 km from Gilberton to Grenfell Street as the 12 km trip along the guided busway from Tea Tree Plaza to Park Terrace. Average bus speeds can be as low as 20 km/hr and 25% of travel time can be due to delays at intersections.

Vehicle movements at the Hackney Road/Botanic Road intersection are currently at or approaching capacity, with around 79,000 vehicle movements on an average weekday. Delays currently experienced on this section of the O-Bahn but route would increase over time without an infrastructure solution and would be exacerbated by the additional buses and services which are proposed to operate along the O-Bahn corridor over the next decade.

1.2 The Project Solutions

In 2014, the Premier announced that \$160 million would be provided by the State Government to extend the O-Bahn track from Hackney Road into the City.

The primary objective of the O-Bahn City Access Project is to:

Improve travel times and reliability, and reduce on-road delays for users of the O-Bahn service between the end of the busway at Gilberton and Grenfell Street over the next 30 years.

Other key objectives (refer section 2.2) of the project are to:

- Improve safety and travel time, and reduce congestion for traffic on the Inner Ring Route;
- Allow for potential long term transport initiatives;
- Minimise impacts to the travelling public, business operations and the wider community during construction;
- Minimise impacts upon the environment and heritage, including the Park Lands; and
- Complete the project within the \$160 million allocated budget by the second half of 2017.

Following a review of the 2014 scheme, a revised design was announced on 25 February 2015. The main features of the 2015 scheme included:

- **Hackney Road at-grade priority bus lanes:** Provision of two (one in each direction) centrally aligned bus-only lanes along Hackney Road, providing priority access for buses between the end section of guided O-Bahn track at Gilberton and just north of the signalised Hackney Road/Botanic Road/North Terrace intersection;
- **Bus-only Tunnel:** A tunnel commencing on Hackney Road, taking O-Bahn buses below the Botanic Road intersection, Dequetteville Terrace, Rundle Park and Rundle Road, before returning to grade within Rymill Park on an alignment which lines up with the existing priority bus lanes on Grenfell Street;
- **Realignment of Rundle Road:** Provision of a road link that effectively realigns Rundle Road so that it ties into Grenfell Street at its western end. The existing Rundle Road carriageway would be closed, enabling the net return of approximately 3,000 square metres of current road reserve back to Park Lands, effectively consolidating the north western portion of Rymill Park with Rundle Park;
- **Bridgeworks:** A new bridge structure constructed adjacent to the existing western Hackney Road Bridge to accommodate a shared use pedestrian/cycling path crossing the River Torrens.

1.3 Public Consultation

Following the February 2015 announcement, extensive public consultation was undertaken to engage with a wide range of stakeholders, including government agencies, local government, emergency services, business and industry groups, O-Bahn users and the wider community. This process included community information sessions and open days, in addition to several key stakeholder forums and briefings, to ensure South Australians had the opportunity to put forward their views on the revised proposal (refer Section 4 for further details). The key issues identified during this consultation period included:

- **Impacts on the character and amenity of the Park Lands,** in particular, the impact on Rymill Park;
- **Impacts on businesses due to the loss of on-street parking,** in particular, the loss of Rundle Road parking spaces;
- **Hackney Road traffic conditions,** including impacts on local access such as right-hand turning movements restrictions;
- **Traffic congestion on the Inner Ring Route** and through key intersections; and
- **Provision for pedestrians and cyclists.**

1.4 The Current Proposal

To address these issues raised during public consultation, following the community consultation period, the Department of Planning, Transport and Infrastructure (DPTI) worked collaboratively with Adelaide City Council (ACC) and other key stakeholders to identify further changes to the design that could be implemented, whilst still delivering on the key project objectives to improve travel time and reliability of O-Bahn bus services, enhance safety, and ease congestion on the Inner Ring Route.

The outcome of this work was the development of a scheme that retains Rundle Road with the following features:

- **Retention of the existing Rundle Road alignment;** including some modifications to the cross section to separate bicycle movements from the main carriageway;
- **An extension of the tunnel by an additional 140 metres;** (to a total length of 650 metres), with the entry/exit portal located closer to Grenfell Street, to reduce the impact on the amenity of Rymill Park;
- **Modification to the layout of East Terrace and Rundle Road** to accommodate a net increase of over 50 on-street parking spaces;
- **A new off-road shared-use pedestrian/cycle path;** The Botanic Gardens preferred option is to provide a tree lined shared pedestrian - cycle path along Botanic Park and to improving the landscape character for users of Botanic Park, and making the eastern entry of the Adelaide Botanic Gardens safer for pedestrians. This option requires relocation of car parking to the Gardens eastern entry.

Information on the O-Bahn City Access Project, including an animation showing how the project would operate once complete is also available on the project website for public viewing:

www.infrastructure.sa.gov.au/public_transport_projects/o-bahn_upgrade_projects

1.5 Benefits

This O-Bahn City Access Project will further promote the O-Bahn as a more favourable travel option than private motor vehicles for accessing the City, leading to a predicted travel mode shift for these journeys over time. Benefits delivered by this proposal include:

- **Improved travel time and reliability for bus services** will enable O-Bahn timetables to be optimised, allowing for up to a 7 minute average daily saving as well as improved service reliability. For those people living in the North East suburbs who commute to and from work in the CBD, the benefit is exponentially greater during peak times when traffic is at its heaviest ;
- **Reducing traffic congestion on the Inner Ring Route** by grade-separating the bus corridor from key signalised intersections along Hackney Road and Dequetteville Terrace, thereby improving functionality for commuters and freight traffic traversing the City fringe;
- **Improvements to traffic safety** through the proposed restrictions to various right turn movements, and replacement with alternative u-turn facilities to retain access to the local road network, whilst addressing the significant existing safety issues associated with these movements, and reinforcing Hackney Road's functional role as part of the Inner Ring Route;
- **Improvements to pedestrian and cycling access and safety** to provide safer links to the existing City pedestrian/cycling network, and improve their attractiveness as a means of accessing the City including:
 - a new shared-use path alongside the Botanic Gardens on the western side of Hackney Road (including a new bridge over the River Torrens); and

- improved pedestrian and cycling facilities along Rundle Road.
- **Improving the East End business precinct** by providing improved customer access with a quicker and more reliable public transport system, including increased parking capacity for those travelling by car; and
- **Improved amenity**, along East Terrace and Frome Road by re-routing O-Bahn buses into the realigned O-Bahn corridor.

The benefits obtained by the successful delivery of this project will contribute to achieving the goals contained within the State Government's Integrated Transport and Land Use Plan (ITLUP), which identified the need "to improve O-Bahn access to the Adelaide City Centre" as a priority. This improvement to public transport infrastructure also aligns with the State Government's South Australian Strategic Plan targets, in particular to increase the use of public transport to 10% of metropolitan weekday passenger vehicle kilometres travelled by 2018.

1.6 Challenges During Delivery

The main challenges in delivering the O-Bahn City Access Project are associated with ensuring impacts on the environment, business operations, residents and the hosting of major events during the construction phase are sensitively and effectively managed in consultation with the relevant stakeholders.

The project team has conducted an Environment Impact Assessment (EIA) in accordance with the state and federal legislative process. The impact assessment focuses on flora and fauna, hydrology, soil characterisation and contamination, non-indigenous and indigenous heritage values, noise, vibration and air quality. A number of technical specialists have been engaged to provide assessments and recommendations which will be used to manage the range of environmental issues encountered.

The successful contractor will need to develop a range of management plans and strategies to minimise the impacts of construction on businesses, residents and event coordinators in close consultation with the department and relevant stakeholders. This includes the management of traffic congestion and bus operations, minimising the impacts of noise, dust and visual impacts, and facilitating accesses where required.

The Project team has established a number of working groups with relevant Councils and other key stakeholders impacted by the proposed construction works. As project planning and concept design progresses, the Project team will continue to work with stakeholders to ensure the best overall outcomes are achieved.

1.7 Purpose and Objectives of the Project Impact Report

This Project Impact Report describes the O-Bahn City Access Project, summarises investigations and planning work to date and presents environmental, social and economic effects and opportunities of the Project. Although investigations have already been undertaken, further assessment is required during the detailed planning and design phase of the project.

The Project Impact Report has been prepared to help interested groups, individual businesses, government agencies and local government understand the project. It also addresses DPTI's response to issues raised during the formal community consultation stage. It aims to:

- Introduce and explain the need for the project;
- Describe the development of the project;
- Describe the existing environment in the project area; and
- Outline the effects and opportunities associated with the project.

1.8 Content and Structure of the Project Impact Report

The Project Impact Report identifies the key issues, impacts and changes associated with the project, as well as presenting key mitigation measures to minimise these impacts and maximise opportunities.

It contains the following key sections:

- Section A: Project Overview, Planning and Development
- Section B: Transport Demand, Traffic Access and Parking
- Section C: Urban Design, Park Lands and Social and Environmental Impacts
- Section D: Construction and Staging, Concept Design Guidelines
- Section E: Appendices, Glossary, General Abbreviations, References