

Airport Link

Phase 2 – Detailed Feasibility Study

CHAPTER 1

INTRODUCTION

■ October 06

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1. Introduction

This chapter addresses Section 1 of the Terms of Reference for the Airport Link project, as provided in Appendix A in Volume 1 of the EIS. Chapter 1 describes the background to the project, the project proponent, the purpose of the Environmental Impact Statement (EIS) and the EIS process. It also summarises the consultation process undertaken for the project. A detailed report on the consultation undertaken is provided in Appendix B in Volume 1 of the EIS.

1.1 Background

A key aspect of achieving sustainable growth in South East Queensland is the development of a safe, attractive and efficient transport system. Brisbane City Council and the Queensland Government have recognised the importance to the region of continuing the development of the transport system within the City. The *Transport Plan for Brisbane 2002-2016*, *TransApex* and the *South East Queensland Regional Plan* (SEQRP) identify a system of motorway-standard orbital (ring) roads that seek to address the predicted high levels of congestion in Brisbane while at the same time enhancing accessibility. These plans include initiatives for public transport as well as alternatives such as walking and cycling to support the desired urban environment for the predicted population increase in SEQ over the next two decades.

The Airport Link Project is identified as one of a number of strategic elements of major transport infrastructure to address deficiencies in the orbital road network of Brisbane. The primary objective of Airport Link is to provide relief to congested roads in Brisbane's northern suburbs, connect activity centres, and provide a sound basis for future traffic management by linking to strategic road connections allowing cross-city travel movements to bypass the Central Business District and inner suburbs.

This objective is set in Council's on-going commitment to build a better, more liveable city. The Project forms part of one of Council's key transport strategies, *TransApex*, a proposed tri-axis based framework of cross-river and orbital road links, predominantly in tunnel.

Airport Link is also identified in the *South East Queensland Infrastructure Plan and Program* (SEQIPP) developed to guide infrastructure planning and investment to support the preferred pattern of development in the South East Queensland Region. SEQIPP flags Airport Link as a potential road infrastructure improvement to serve the Brisbane metropolitan area.

1.1.1 Brisbane's Transport Challenge

Under the pressure of population and employment growth, the estimated growth in the travel task (in terms of person trips) and vehicle travel demand in the Brisbane transport network is significant. Even with enhanced mode share for public transport, an increase in vehicle trips is forecast. By 2026, with a forecast population of 2.58 million in the metropolitan area (compared to 1.77 million in 2004), total travel demand, including commercial vehicles, is forecast to be 45% higher than current levels, reaching 5.5 million vehicle trips on an average weekday.

Associated with this overall increase in vehicle travel will be very strong growth in demand to key trip generators within the immediate catchment of the proposed Airport Link. The Central City has a forecast increase of over 55% in vehicle demand due to the importance of the area as a Primary Activity Centre and employment node. Particularly strong growth is anticipated in the Australia TradeCoast (ATC) North region, which currently produces approximately 40% as much traffic as the Central City. By 2026, the vehicle demand

associated with this area is forecast to be over 300% higher than current levels, and almost 80% of the level of Central City vehicle traffic generation.

A general increase in congestion is predicted on the Brisbane road network over the years to 2026. Vehicle travel demand and peak period journey travel times are forecast to increase significantly compared to the current level. Average travel speeds and network performance are forecast to decline significantly. Much of the traffic congestion on Brisbane's radial road system of the inner north is caused by traffic wanting to get "somewhere else", and being forced to use the roads through the suburbs.

Within the inner north area a range of transport improvements have been implemented over many years as a result of past investigations by Brisbane City Council and the State Government in consultation with the community. Examples of key transport projects completed over the last 15 years include provision of an inbound T3 lane on parts of Lutwyche Road to improve public transport operations and the opening of Airtrain to provide high quality public transport access to Brisbane Airport. These transport infrastructure initiatives have benefited both the local community and the wider travelling public within the Brisbane area. However, the pressures of growth in population and travel generation associated with activity centres is placing increasing pressure on the transport system, and in particular the area's road network.

The SEQ Regional Plan (OUM, 2005) identifies a number of Activity Centres to serve growth in the region. The Brisbane CBD, immediately to the south of the Airport Link corridor, is the SEQ Region's Primary Activity Centre. Other important Activity Centre examples near the Project include Chermside, a Principal Activity Centre with a major regional shopping complex; the Royal Brisbane Hospital, a Specialist Activity Node; and the Toombul shopping complex, a Major Activity Centre. To the east, Brisbane Airport is a Specialist Activity Centre and the Australia TradeCoast precinct an area of major economic importance to the region.

Brisbane City Council's *Transport Plan for Brisbane 2002-2016* examined the challenges facing Council in keeping their transport network operating effectively into the future, and supporting the vision of *Living in Brisbane in 2010*. From this comprehensive strategic analysis of the transport system, the importance of addressing gaps in the strategic road network and strengthening the structure by creating an orbital road system in Brisbane (including additional cross river road capacity) emerged.

1.1.2 The Airport Link Project

The Airport Link Project is an outcome of the transport planning undertaken by the Brisbane City Council, culminating in the *Brisbane Transport Plan 2002 – 2016* and developed further through the *TransApex* transport policy initiative and the State Government's *South East Queensland Regional Plan*.

Airport Link can improve the road network and fill in gaps in the current structure by fulfilling important transport functions within the road network and various key movement roles, as follows:

- Airport Link will function as an intra-state road network connection, linking to other motorway standard connections, catering for long distance movements between major economic regions within South East Queensland, by linking the Brisbane CBD with the ATC precinct including Brisbane Airport. It will also provide a linkage between this major economic area and locations external to South East Queensland. It will provide connection alternatives to the Gateway Motorway for the ATC precinct from southern and western areas, via the Airport Link, NSBT, and the Pacific Motorway, or via the Airport Link, NSBT and the Ipswich Motorway.

- Airport Link will support the regional road network providing connections to urban arterial standard roads which link to the intra-state/motorway network. Specific examples of Airport Link's regional road network role include:
 - It will provide a connection to the Inner City Bypass and thus the western arterials of Coronation Drive and Milton Road, and via the NSBT to southern arterials such as Wynnum Road and Logan Road.
 - It will provide an improved standard of arterial orbital route in the middle ring by improving the connectivity of Stafford Road and the East-West Arterial compared to the current route along Kedron Park Road-Rose Street- Junction Road, which has sensitive adjoining land-uses.
 - It will supplement radial arterial road capacity, allowing public transport initiatives in the Lutwyche Road corridor such as staged implementation of the Northern Busway, and improving amenity and road safety for land-uses along the Sandgate Road corridor.

1.2 Detailed Feasibility Study

This feasibility phase includes:

- An engineering feasibility study culminating in a preliminary concept design on which the EIS is based; and
- This environmental impact statement (EIS), including a traffic and transport analysis.

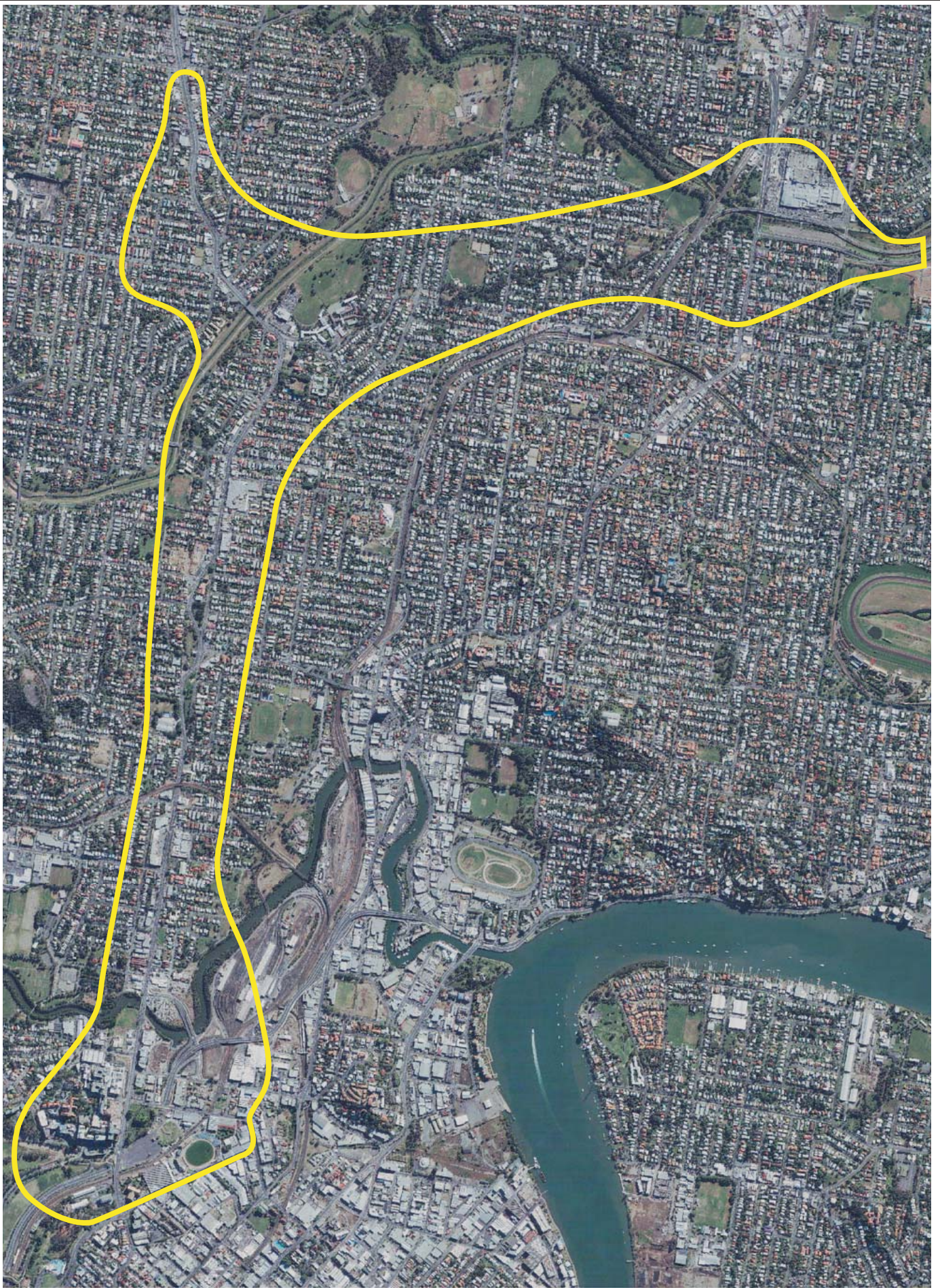
The Airport Link Project was investigated and developed in parallel with and during the course of this EIS process. The EIS studies and consultation process were integrated with the design development to address community and technical issues as they arose, with the intended outcome being a robust and sustainable project.

The Airport Link study corridor is shown in **Figure 1-1**. The Airport Link Project comprises a two tunnel road system and associated surface connections. The project has a southern connection with the Inner City Bypass, North South Bypass Tunnel and the City via O'Connell Terrace and Campbell Street between Bowen Hills and Windsor. The project has a north-western connection at Kedron, allowing access to and from Gympie and Stafford Roads in the north. The project also has a north-eastern connection at Clayfield where access would be provided to and from Sandgate Road and the East-West Arterial.

Between the southern and north-western connections each tunnel would accommodate three traffic lanes. Between the north-western and north-eastern connections each tunnel would accommodate two traffic lanes. All tunnels would have a shoulder of sufficient width to allow traffic to pass disabled vehicles.

The system will be mechanically ventilated by drawing air into the tunnels and forcing it through with the assistance of roof-mounted jet fans. The ventilation system is designed to meet international standards for in-tunnel air quality. The tunnel air will be vented to the atmosphere via three elevated ventilation outlets, one near each surface connection at Windsor, Kedron and Clayfield. The tunnel system will also be equipped with fire and life safety measures, including cross-passages, emergency services facilities, tunnel control and traffic management facilities.

The Airport Link Project is a large and complex construction task in which works may be conducted simultaneously on the north-south and east-west tunnels. Worksites will be developed with measures to contain, minimise and mitigate the construction impacts on near-neighbours. Upon completion of construction, these worksites will be rehabilitated and available for productive land use.



LEGEND

 Extent of Study Corridor

AIRPORT LINK - Figure 1-1
Study Corridor



SKM Connell Wagner
JOINT VENTURE

The Airport Link Project is likely to be constructed by a number of techniques including:

- Excavation, drilling and blasting to break the surface and establish cut and cover and other road heads;
- The use of roadheader machinery for tunnelling and to cut particular tunnel profiles at certain locations; and
- The use of Tunnel Boring Machinery (TBM). It is possible that an earth pressure balance tunnel boring machine (EPBM) would be used in the east-west driven tunnel, due to the geotechnical qualities of the rock to be bored.

The construction period is likely to be in the order of four years.

1.2.1 Northern Busway Project

TransLink is undertaking a separate detailed feasibility study for the section of the proposed Northern Busway between the Inner Northern Busway at Royal Children's Hospital (Herston) and Gympie Road at Kedron. The study corridor for the Northern Busway covers much of the study corridor for Airport Link between Bowen Hills and Kedron. The EIS process for Airport Link has been coordinated, wherever practicable, with the separate Northern Busway impact assessment process, and opportunities to integrate the two projects have been incorporated where possible.

1.3 The Proponents

The State of Queensland and Brisbane City Council are joint proponents for the Airport Link Project. The State of Queensland, with overall responsibility for transport, has built and continues to expand and maintain the State Controlled Road network. The State clearly identified its commitment to improving the road network in Brisbane City through its *South East Queensland Regional Plan 2005-2026* and works closely in cooperation with the Brisbane City Council to ensure development of the city's major road network. The Brisbane City Council is unique among Australian local governments in that it provides and operates a public transport system as well as providing and maintaining a comprehensive network of roads, consisting of arterial, sub-arterial, district, neighbourhood and local roads.

1.4 Environmental Impact Statement (EIS)

1.4.1 Purpose of the EIS

The objectives of the EIS are:

- To identify potential environmental, social and economic impacts and to ensure that adverse impacts are avoided or mitigated and managed where possible; and
- To identify potential community benefits, including environmental, social and economic benefits.

The EIS identifies and addresses the relevant legislation and other non-statutory guidelines administered at the Commonwealth and State levels of Government as well as at the local government level through the Brisbane City Council.

Potentially adverse impacts of the project are examined fully and remedial measures proposed so that the development of the project, including the definition of the project specification, is based on sound economic, social and environmental protection and management criteria. The EIS is a comprehensive stand-alone document containing sufficient information to make an informed decision on the potential impacts. It provides:

- For interested bodies and persons, a basis for understanding the project, alternatives considered in the development of the preferred concept design, the existing environment that it may affect, the impacts that may result and the measures to be taken to mitigate all adverse impacts;
- For groups or persons with rights or interests in land, an indication of the impacts of the proposed Project on that land, including access and measures to mitigate all adverse impacts; and
- An opportunity for the community to make submissions about the project and the EIS.

The process followed in the preparation of the EIS has sought to integrate fully the findings and outcomes of an extensive and comprehensive consultation process with both the engineering design development and the technical studies for the EIS. The EIS process was supported by the preparation of the traffic and transport study and on-going engagement with key stakeholders in both the Queensland Government and the Brisbane City Council on matters as diverse as air quality, contaminated land, traffic and transport and public housing.

1.4.2 The EIS Process

The Queensland Government and Brisbane City Council sought to have the environmental and planning approvals required for the project carried out under the *State Development and Public Works Organisation Act, 1971* (SDPWO Act), thereby providing independent environmental evaluation of the project.

To this end an Initial Advice Statement was prepared and submitted to the Coordinator-General in October 2005 to provide sufficient information to:

- Enable determination of the significance of the project; and
- Provide information to enable advisory agencies and the public to have input into the draft Terms of Reference for the Environmental Impact Statement (EIS).

The Queensland Coordinator-General declared in October 2005 that the project was “a significant project for which an EIS is required”, and an EIS was to be prepared to satisfy the requirements of the SDPWO Act. The Terms of Reference (ToR) for the EIS were drafted and exhibited from October to December 2005. Based on the requirements of relevant agencies and submissions from the community, the ToR were finalised in March 2006 and a copy is attached as Appendix A in Volume 1 of the EIS.

The EIS also provides the Coordinator-General with a framework to:

- Consider the economic, social and environmental aspects of the project in the context of legislative and policy provisions and decide whether the project can proceed;
- Set conditions for approval, as appropriate, to seek to achieve economically, socially and environmentally sustainable development; and
- Where necessary, recommend an environmental management and monitoring program.

The Airport Link Project needs to be assessed under relevant legislation to determine the approvals required. All approvals required under Commonwealth, State and Local laws are identified in this EIS.

The Commonwealth Department of Environment and Heritage was formally consulted through a referral of the Airport Link Project under the *Environment Protection and Biodiversity Conservation Act 1999* to determine whether the project was a ‘controlled action’ under the Act. The Department responded, in a letter dated 19 January 2006, that the Airport Link Project, as documented, was a controlled action, due to the proposal it included to place spoil from the tunnels at a site adjacent to the eastern end of Schulz Canal. This was a

peripheral matter to the main project aims and so that spoil placement site was removed and a referral was made for reconsideration. In a letter dated 20 March 2006 the Commonwealth Government advised that on the basis of the new information the original decision had been revoked and replaced by a new decision that the project is not a controlled action under the EPBC Act.

1.4.3 Structure and Presentation of Findings

The EIS is presented as a comprehensive document providing sufficient information to allow an informed decision on the potential impacts. The document provides interested bodies or persons with a basis for understanding the project, alternatives considered, proposed solutions to particular issues, the existing environment, impacts that may occur and measures taken or proposed to mitigate adverse impacts.

The Executive Summary provides a broad overview of the Airport Link Project, the existing environment and the predicted project impacts. It also provides a summary of the conclusions reached and the recommendations put forward to the Coordinator-General. To gain a comprehensive understanding of the complexities of the Airport Link Project, its likely impacts, proposed mitigation measures and outcomes of the process, the Executive Summary should be read in conjunction with the EIS and other supporting information.

The EIS is presented in three volumes:

- Volume 1 – The Environmental Impact Statement is a detailed summary document which identifies the key issues, the predicted environmental impacts and recommended mitigation measures.
- Volume 2 - Detailed engineering drawings to assist in understanding the complexity of the reference design.
- Volume 3 - Technical reports dealing with such matters as traffic and transport, and numerous specialist areas of the bio-physical and socio-economic aspects of the environment.

1.5 Consultation

1.5.1 Purpose and Scope of Consultation Process

Preparation of the EIS has involved an in-depth investigation of local conditions, potential benefits and impacts resulting from Airport Link, and issues of concern related to Airport Link during construction and operation. Community consultation contributes to the EIS by ensuring studies examine areas of interest to members of the community, and by helping to identify ways to minimise potential impacts and maximise potential benefits of Airport Link.

Community consultation was integrated with the preparation of the EIS and development of the project reference design. Community feedback gathered during community consultation was used in the development and refinement of the project design, the assessment of potential benefits and impacts and in identification of possible mitigation measures.

The purpose of the EIS consultation was to:

- Raise community awareness of Airport Link and the EIS process within local communities and the wider Brisbane population, and to seek community engagement in the EIS process;
- Provide information about the nature, scale and purpose of Airport Link to government agencies, stakeholders and the community to enable their review of the EIS and project design;
- Provide information and gather feedback on the potential benefits and impacts of Airport Link, and identify particular local issues of concern arising from the construction and operation of the project;

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- Provide information and gather feedback on the concept design, to inform the development of the project reference design and ensure a robust preliminary design in which as many impacts as possible have been mitigated or avoided; and
- Inform decision-makers of agency, stakeholder and community concerns about Airport Link.

The consultation process sought to engage Queensland Government and Brisbane City Council agencies, which will have either a regulatory or an advisory role in the design, construction or operation of the Airport Link Project. The Airport Link Project is subject to the regulatory provisions of Commonwealth, State and local laws.

The consultation process also sought to engage a body of stakeholders, as distinct from interested community groups and individuals. Stakeholder groups ranged from indigenous groups through to industry peak bodies (e.g. construction, transport) and special interest groups (e.g. environmental, professional).

The consultation approach adopted for the Airport Link EIS sought to ensure that those individuals and groups in the vicinity of construction works and surface connections were provided with the highest level of consultation and communication, while also ensuring that the wider Brisbane community were kept informed about the project and provided with opportunities to participate in consultation activities.

The consultation approach recognised that there would be strong local interest in communities near to the construction worksites, the portals and the ventilation outlets. At the same time, the process recognised there would be residents with a broader interest in the on-going development of the City, including the maintenance of its liveability and the timely provision of appropriate infrastructure to meet predicted population growth.

A full description of the consultation program and its findings is provided in Appendix B in Volume 1 of the EIS.

1.5.2 Agency and Stakeholder Consultation

Consultation with government agencies and stakeholder groups is critical to the preparation of an EIS if key issues are to be identified early in the process for input into the development of the project design and the impact assessment. A key factor for the consultation process, to assist in refining the Airport Link Project and this EIS, was gaining access to the technical expertise available in both the Queensland Government agencies and the Brisbane City Council. For this EIS, consultation with the government agencies and stakeholders commenced prior to the ToR being finalised and continued through the preparation of the EIS. It is intended to continue this consultative process through the EIS notification period and beyond to resolve any outstanding issues.

The agency and stakeholder consultation process included:

- Briefings to individual agencies and stakeholder groups in relation to the ToR, EIS processes and technical matters;
- Collective briefings to ‘whole of government’ and ‘whole of Council’ interests to provide information about the construction and operational aspects of Airport Link and to identify specific issues of concern; and
- Working groups to resolve particular issues, including traffic and transport, air quality, land use and planning, and urban regeneration, and to identify existing policy requirements, strategic directions and to resolve technical issues.

Input received from these sessions was incorporated into the development of the project reference design on which this EIS is based. These inputs also assisted the impact assessment and mitigation work necessary for the EIS. Particular thanks are extended to the following agencies and stakeholders for their contributions:

- The Jagera people and the Turrbal people;
- Office of the Coordinator-General (general EIS matters, approvals);
- Department of Main Roads and Queensland Transport (state controlled road and transport network and transport aspects of construction & operational phases of Airport Link);
- Environmental Protection Agency (air quality, approvals & licences, contaminated land);
- Queensland Health (air quality, health risk assessment, operational issues for the major hospitals);
- Department of Education and the Arts (schools);
- Brisbane City Council (Active Transport, City Design, City Planning, Community & Economic Development, Major Infrastructure Projects Office, Urban Management, Urban Renewal Task Force);
- Department of Emergency Services (as a landholder, regarding use of land); and
- Department of Natural Resources, Mines and Water (acid sulphate soil issues).

1.5.3 Community Consultation

Community consultation is critical both in terms of community participation in shaping the City, but also in terms of project delivery. Consultation allows local knowledge to be tapped, to identify issues and effects from the perspective of the community that will experience them. As design options for Airport Link were developed, they were reviewed by members of the community and impacts were discussed, enabling a process of project adaptation to minimise impacts and maximise benefits.

The purpose of the EIS consultation was to engage nominated community members in informed discussion about what Airport Link would mean to their neighbourhoods and the City. This approach required regular, detailed information about the project design and potential impacts, and multiple opportunities for the nominated community members to participate in consultation.

Consultation addressed multiple interests including property owners, residents near proposed Airport Link infrastructure and surface works, community members and stakeholder groups throughout the inner northern suburbs and Brisbane motorists and residents at large. A three-tier strategy was employed, with:

- Direct engagement with residents, property owners, businesses, community groups and community facilities in neighbourhoods closest to the proposed works, through local neighbourhood consultations, meetings with property owners, businesses, community facilities and other stakeholders, community liaison group meetings, and community information sessions and staffed library displays;
- Direct engagement with residents, business owners, community groups and community facilities in those suburbs closest to the tunnel alignment, through community liaison group meetings, community information sessions and staffed library displays;
- Provision of information to the greater Brisbane community through newsletters, public displays, 1800 project information line, email, website, and media releases.

The consultation process was supported by the broader project team, enabling a high level of information to and personal contact with residents, businesses and property owners.

1.6 Submissions to the EIS

A number of submissions were made during the preparation of the EIS, from community organisations and individuals near to proposed construction worksites, surface connections and tunnel alignment. These submissions informed the preparation of the EIS and the conclusions and recommendations made.

Formal submissions are invited on the EIS in accordance with the *State Development and Public Works Organisation Act 1971*. These submissions should be in writing and addressed to:

**Project Manager – Airport Link
The Coordinator-General
Major Projects Division
PO Box 15009
City East QLD 4002**

Fax: (07) 3225 8282