

## 4. Project background

### 4.1 Ipswich Public Transport Corridor Scoping Study

In 2005 Queensland Transport and Ipswich City Council jointly commissioned PB to undertake a desktop scoping study to identify feasible options for a high quality public transport corridor between the Cunningham Highway and the Ipswich City Centre. The study area for this investigation was bounded by the Ipswich City Centre to the north, the Amberley RAAF Base to the west, the Cunningham Highway to the south and the Swanbank Enterprise Park to the east. The Ipswich Public Transport Corridor Scoping Study (IPTCSS) was completed in early 2006 and, from a range of possible options, two options were selected for future assessment. Figure 4-1 shows the short-listed options.

A summary of the opportunities and constraints identified in this project included:

- Engineering:
  - the recommended design used in the IPTCSS was for heavy rail, however the corridor would be able to accommodate a bus rapid transit system or light rail if required.
- Natural environment:
  - large sections of the study area are below the Q100 flood levels and locating the corridor within these areas would need to be carefully detailed to ensure that the engineering works do not adversely impact on the local water quality, flora and fauna, air quality and flood storage
  - the noise and vibration that would be created, particularly by the formation on elevated structures, would need to be closely considered.
- Land use:
  - the large areas of New Communities and Employment Zones proposed within the study area will increase the need for efficient public transport infrastructure and will provide the opportunity to integrate transport and land use through transit oriented development strategies
  - there is also opportunity to undertake urban revitalisation and city image building as a part of the planning for the transport corridor.
- Urban design:
  - a positive contribution to the city image needs to be provided, i.e. the visual attractiveness and character of the major centres
  - the design needs to provide a safe and convenient form of public transport that has high resident appeal and provides a convenient, easy to use experience
  - the station locations need to be considered to ensure that they coordinate with the existing communities and infrastructure.

- Transit services:
  - the introduction of a public transport corridor would provide the opportunity to revise the existing bus network to reflect the changing travel demands.

Four possible alignment options for the corridor were identified during the course of the scoping study. An assessment of the short listed possible corridor options was carried out by giving a score to each criterion and comparing these. A workshop attended by PB, Ipswich City Council and Queensland Transport was also held in order to assess the options. These assessments did not identify a clearly preferred corridor, although two options, namely the Central and Western A2 corridors were rated more highly. These were the two route options considered in the REF prepared for the Ipswich to Springfield PTC study.

The scoping study found that the proposed development of the Ripley Valley Town Centre will significantly increase the number of residents in the southern Ipswich region. An efficient public transport system will be required to convey these residents to the Ipswich CBD and other major trips generators such as schools and employment zones.

The scoping study also highlighted that there will be difficulties in preserving a public transport corridor between the Ipswich CBD and the Cunningham Highway due to the extent of existing development and the physical constraints within this region. It was suggested that detailed planning be undertaken soon so the financial viability and degree of community acceptance of the project could be improved.

Furthermore, the IPTCSS identified the need for subsequent investigations including a detailed route assessment and Environmental Impact Study. This recommendation was one of the drivers for this current project.

## 4.2 Review of environmental factors (REF) report and process

The IPTCSS Study identified four possible alignment options for the corridor between the Ipswich CBD and the Cunningham Highway. An assessment of these four corridor options was undertaken as part of the REF report which narrowed the options down to a preferred corridor.

The four corridors that were assessed in the REF are outlined in the following sections and shown on Figure 4-2.

### Section 1 – Ipswich to Ripley

Two options were assessed between Ipswich and Ripley. Both options followed the same route from the Ipswich CBD, running south along the existing Boonah rail corridor, across Brisbane Street to a possible station on Keogh Street, across Moffat Street and to a possible station at the University of Queensland Ipswich Campus. South of this point, the two corridor options followed different alignments as described below.

### **Option 1A via Yamanto**

Option 1A Yamanto continued south from the University of Queensland (Ipswich Campus) across Lobb Street then into a station at the corner of Berry Street and Hall Street. The route then continued south parallel to Hall Street, crossing Warwick Road and then on into a possible Yamanto station. The route then crossed the Cunningham Highway, along the northern side of the South West Transport Corridor (SWTC) with a station at South Deebing Creek Road. The route then swung north-east crossing Deebing Creek with a possible station south of Binnies Road. It then continued south-east into a possible station just west of Ripley Road in the heart of the proposed Ripley Valley Town Centre. The total length was 14.2 km.

### **Option 1B via Flinders View**

Option 1B Flinders View continued from the University across Deebing Creek and Warwick Road into a possible station at Huxham Street. The route then continued south crossing Briggs Road and then into a possible Flinders View station in the vicinity of the Winston Glades Shopping Centre. The corridor then headed south following the Daleys Road reserve across the Cunningham Highway and swung eastward, south of Binnies Road. A station was also proposed at this location. The route then crossed over Fischer Road and south-east into a possible station in the heart of the proposed Ripley Valley Town Centre. The total length of option 1B was 11.6 km.

## **Section 2 – Ripley to Springfield**

Between Ripley and Springfield two possible corridor options were also assessed.

### **Option 2A via Redbank Plains South**

Option 2A travelled north-east from the eastern end of options 1A and 1B to a proposed station at South Ripley and then to a station at School Road in South Redbank Plains, about 1 km south of Alawoona Street. The route then continued north-east until turning eastward south of Joanie Woods Park with a station proposed near Keidges Road. The route then continued east and crossed Woogaroo Creek with the route then following along the proposed Centenary Highway Extension approaching the Springfield Town Centre station. The total length of option 2A was 10.5 km.

### **Option 2B via South West Transport Corridor**

Option 2B continued north-east from Ripley to a proposed station at South Ripley along the northern side of the proposed Centenary Highway Extension. The route then continued north-east crossing School Road and following the SWTC into the Springfield Town Centre station. The total length of option 2B was 10.1 km.

### **4.3 Preferred transport corridor and mode**

After a rigorous process of corridor comparison whereby the options were evaluated using a pair-wise comparison technique, a preferred transport corridor was determined. This technique and evaluation criteria were endorsed by representatives of the REF Project Advisory Group at a study workshop. The baseline assessment was carried out by PB and two sensitivity tests were undertaken where the criterion weightings were changed. This process ensured that the preferred corridor option is the best performing option under a number of outcome scenarios. Option 1A2A performed the best under all three scenarios whether it was a rail or busway mode. This outcome highlights the robustness of the preferred corridor choice.

The choice of mode is fundamentally a separate issue from the choice of preferred corridor option. However, it does have relevance to selected corridor issues such as alignment engineering, station/stop requirements and staging. Heavy rail and busway modes have been assessed using an evaluation framework based on three criteria including transport function; cost (CAPEX and OPEX); and social elements.

Based on the evaluation assessment of the REF, and for the purposes of corridor preservation, it was recommended that the heavy rail mode be adopted as the reference project for the Ipswich to Springfield PTC study. Heavy rail has been chosen as it typically has more constraints than busway design; criteria such as larger horizontal and vertical radii, and flatter longitudinal grades. This approach retains flexibility to accommodate a busway mode. Importantly, this approach does not assume that heavy rail is the preferred mode for the public transport corridor.

### **4.4 Background information**

Previous planning documents that provide background for this project are discussed in the following sections.

#### **4.4.1 South-East Queensland Regional Plan**

In order to provide a sustainable growth management strategy for south-east Queensland over the next two decades, the Queensland Government (in partnership with the councils of south-east Queensland) produced the South East Queensland Regional Plan (SEQRP). Objectives identified in SEQRP include the provision of timely and cost-effective infrastructure and related services as well as the protection and enhancement of south-east Queensland natural environment.

SEQRP identifies a major new urban growth corridor in the greater Ipswich area, which extends generally from Wacol through Ipswich City to Amberley and includes Ebenezer, Swanbank, the Ripley Valley and Springfield. It is referred to as the Western Corridor in SEQRP (refer to Figure 4-3) and is expected to play a major role in the future development of south-east Queensland.

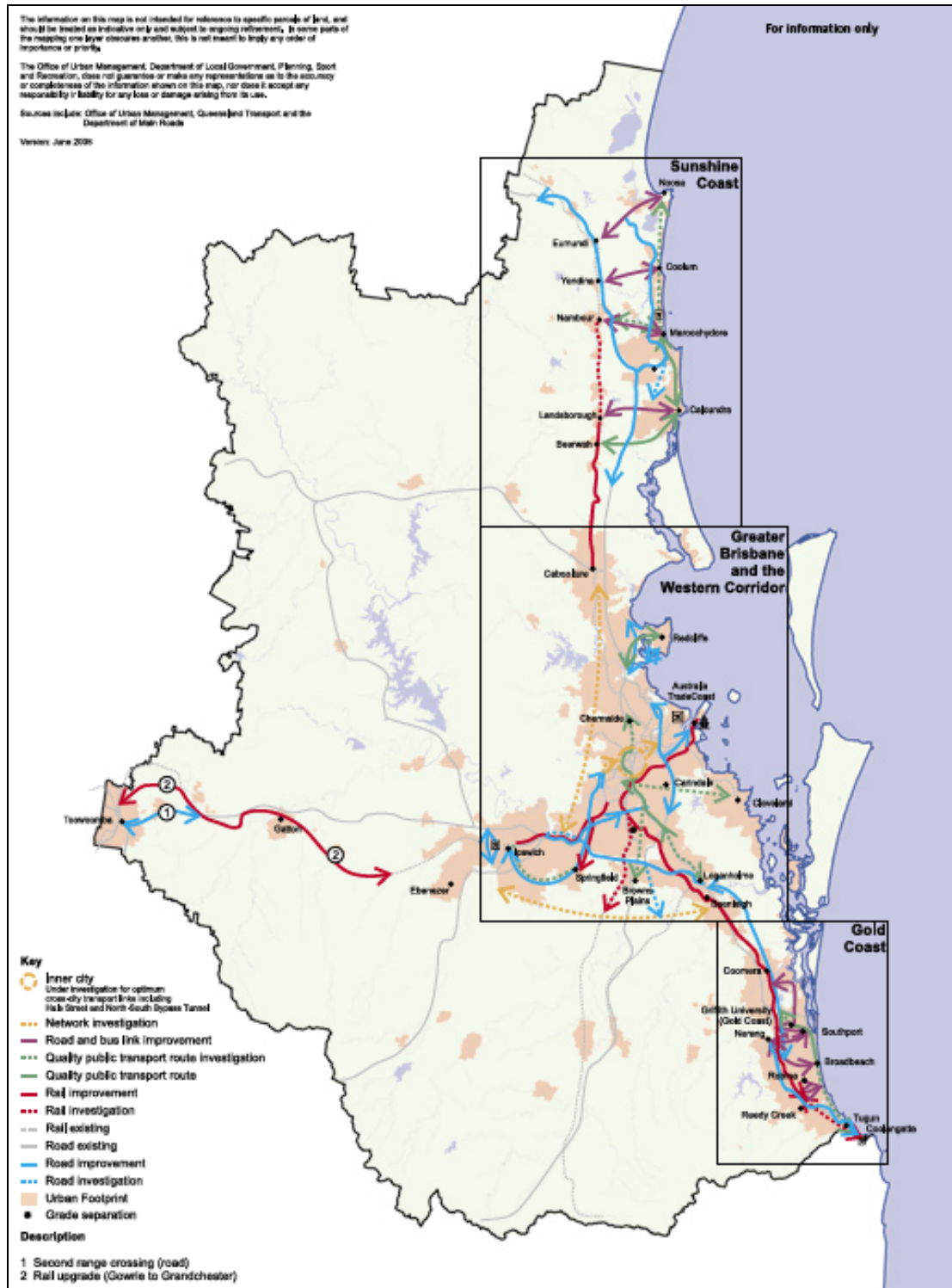


Figure 4-3: The Western Corridor as indicated in the SEQRP

In line with this vision, the delivery of public transport networks and services ahead of major population growth is required. This project is consistent with this vision and SEQRP objectives.

#### **4.4.2 South-East Queensland Infrastructure Plan and Program 2007**

The South East Queensland Infrastructure Plan and Program (SEQIPP) was first released in April 2005 in support to the SEQRP in order to guide the preferred pattern of development in south-east Queensland. SEQIPP is updated annually and this enables the Queensland Government to keep track of implementation of the plan. SEQIPP was updated in May 2007. The new SEQIPP 2007-2026 outlines investments of around \$82 billion in south-east Queensland over the next 20 years.

SEQIPP identified the Western Corridor as a key development area. SEQIPP 2007 states that “development in the Western Corridor is a key feature of the SEQRP to encourage development away from the coast and the timely provision of infrastructure to lead development in the Western Corridor will be vital.”

One of the key future transport investigation issues identified in the Western Corridor is listed as “Springfield to Ipswich public transport corridor planning”. SEQIPP states that a study is currently underway and a preferred corridor has been identified. A key goal is to improve public transport services to major centres including the University of Queensland (Ipswich campus). This could include identifying opportunities for transit oriented developments at Redbank Plains, Ripley Valley Town Centre and within the existing urban area of Ipswich.

The Ipswich to Springfield PTC study is in keeping with the requirements of SEQIPP 2007.

#### **4.4.3 TransLink Network Plan**

The TransLink Network Plan maps out a 10 year plan and define a three year short-term rolling program of improvements to public transport across south-east Queensland. The main purpose of the TransLink Network Plan is to ‘make it easy’ to travel in south-east Queensland. This will be achieved through several objectives, including:

- connecting services by integrating the public transport network
- having fast, frequent and reliable services and delivering public transport infrastructure to attract and cater for growth
- filling the gaps in the network to provide fair access to public transport, including regular services, longer operating hours and services to growing suburbs
- improving passenger information and delivering quality buses, trains, ferries, stations and stops.

The Western Region, as defined in the TransLink Network Plan, is based on the urban areas within Ipswich’s local government boundary, including Goodna, Springfield, Ripley, Ipswich and Rosewood. One of the longer-term initiatives

within the Network Plan for the Western Region is to investigate priority public transport options between Springfield, Ripley, Ipswich and Brassall. Another long-term initiative will further support this, namely the provision of a network of local services to link major growth suburbs to key destinations and the rail network, especially at Ipswich, Booval, Dinmore, Redbank, Goodna and Wacol train stations.

#### **4.4.4 Ipswich 2020 and beyond**

Ipswich 2020 and Beyond was developed by Ipswich City Council. This document defines a roadmap for the future of Ipswich. Implementation of the plan will facilitate efficiencies in transport, water, energy, communications and general service delivery. It will deliver sustainable community well being, generate jobs, facilitate community capacity building, substantially reduce per capita private vehicle commuting, improve waterways and protect 'greenspaces', leading to enhanced social, economic and environmental outcomes for the community. This vision is compliant with SEQRP.

The creation of successful communities by generating jobs to support the population growth (as highlighted in SEQRP) will be achieved through the development of Ipswich Central, the Springfield and Ripley Valley town centres and several regionally significant commercial and industrial parks, amongst others. These developments will need to be supported by a reliable public transport network and indeed Ipswich 2020 and Beyond asserts that "the city is serviced by a transport system which provides choices both within its boundaries and the balance of the region."

According to the Ipswich 2020 and Beyond website, this transportation system will need to provide a range of convenient, accessible transportation choices not only within Ipswich City, but also to and from communities outside of Ipswich City. In addition, this system should take advantage of integrated community design, land use planning, social infrastructure, community character and enhanced liveability.

The Ipswich to Springfield PTC supports the Ipswich 2020 and Beyond vision and corresponds to the above meets criteria.

#### **4.4.5 2006 Consolidated Ipswich Planning Scheme**

The 2006 Consolidated Ipswich Planning Scheme (including all amendments to the 2004 Ipswich City Planning Scheme) took effect on 23 January 2006. The Planning Scheme was prepared in accordance with the requirements of IPA and the Department of Local Government and Planning guidelines and scheme template.

Part 13 of the planning scheme focuses on infrastructure and covers topics such as desired outcomes for infrastructure.

This Ipswich to Springfield PTC project will need to consider the requirements of the planning scheme.

#### **4.4.6 Related study documentation**

A number of previous studies have recently been undertaken in the Ipswich, Redbank and Springfield areas. Relevant studies include the following:

- SWTC Springfield to Cunningham Highway Stage 4 Impact Assessment Study – Final; by SKM – June 2005
- Redbank Plains Enquiry by Design (EbD) workshop; by Ipswich City Council – September 2005
- Ripley Valley Master Planning EbD workshop; by Ipswich City Council – July 2006
- Ipswich Public Transport Scoping Study; by PB – February 2006.

These are discussed in more detail below.

##### **South West Transport Corridor**

The SWTC study was completed in 2005 by SKM on behalf of Main Roads and Queensland Transport. It investigated a possible future road and public transport link between Springfield and the Cunningham Highway via the Ripley Valley.

The Ipswich to Springfield PTC uses sections of the SWTC.

##### **Redbank Plains Enquiry by Design (EbD) workshop**

In September 2005 Ipswich City Council led an EbD workshop at Redbank Plains with key stakeholders including council, state government agencies and major landholders. The aims of this workshop were to:

- create a structure planning framework for urban growth within the Redbank Plains South Investigation Area that creates viable, sustainable communities in accordance with the provisions of IPA, SEQRP and the Ipswich Planning Scheme
- identify preferred sequencing of development to ensure efficient, timely delivery of infrastructure and the wise use of resources
- produce a draft Land Use Concept Master Plan to ultimately amend the future urban section of the Ipswich Planning Scheme
- provide sufficient certainty regarding future land use outcomes for proposals in aligning with the draft Land Use Concept Master Plan.

Corridor options considered for the Ipswich to Springfield PTC REF interfaced with the EbD master planning.

##### **Ripley Valley Master Planning Enquiry by Design (EbD) workshop**

In July 2006 Ipswich City Council along with the Ripley Valley Master Planning Taskforce held an EbD workshop with various stakeholders. The aim of this workshop was to:

- Test the assumptions, principles and standards proposed by the Ripley Valley master planning group and ensure that they are valid for the Ripley Valley area.
- Finalise the development guidelines to be incorporated in the master plan.



- Confirm population projections for the area. This process required the likely built form (density and dwelling type), employment estimations and social profile to be addressed.
- Investigate options for increasing usage of sustainable modes of transport.
- Investigate areas suitable for conservation as well as eco-sensitive development.

From the workshop itself, the following observations were made:

- there are many infrastructure projects planned for the area, one of which is the proposed buried Gardiner Expressway
- a typical neighbourhood structure was developed, as well as neighbourhood street forms, the form of the town centre amongst others.

From the Ripley Valley assumptions, principles and standards:

- the aim of the structure plan is to guide the development and growth of the Ripley Valley area
- development will be in the form of Traditional Neighbourhood Development.

#### **4.4.7 Current and future developments in the area**

At present, there are various planning activities underway which are of interest. These include:

##### **SWTC land resumption**

Main Roads has resumed land for the SWTC between Springfield and the Cunningham Highway at Yamanto for road construction. This resumption also includes land for a public transport facility (this project) between Springfield and a point west of South Deebing Creek Road.

##### **Springfield Transport Corridor Study**

Queensland Rail and Main Roads are currently undertaking the Springfield Transport Corridor Study, which will identify the preferred road and rail configuration within the existing Centenary Highway corridor between the Ipswich Motorway and Springfield and the preferred rail corridor between Darra Railway Station and the Ipswich Motorway.

##### **Local Growth Management Strategy for Ipswich City**

Ipswich City Council is undertaking development of a Local Growth Management Strategy for the city. The land use structure, population and employment distribution proposed in the Local Growth Management Strategy is an important input into the Ipswich to Springfield PTC study.

## **4.5 The Environmental Impact Study process**

Following on from the REF report which identified the preferred corridor, a second phase study was initiated to consider the preferred corridor. The aim of the Environmental Impact Study is not to exhaustively assess the receiving environment, but to consider potential significant impacts that may arise from the

choice of the preferred corridor. The Environmental Impact Study will be used for purposes of corridor preservation only, until such time that construction is planned to commence. At this stage, a full Environmental Impact Statement will be commissioned.

The Environmental Impact Study has been conducted considering the findings of the REF process, identifying gaps in the information and sourcing desktop information on these identified information gaps without embarking on extensive field investigations and monitoring surveys. The likelihood of encountering significant environmental issues was considered so as to inform the authorities of the significance of future impacts. The outcome of this report should in no way be considered as an Environmental Impact Statement, and future studies will still need to be conducted before final approval is sought for the project.

The preferred corridor has therefore been considered in respect of the potential for significant environmental impacts. These potential impacts, once identified are considered in respect of possible mitigation.