

1. Overview and background

1.1 Introduction

The South East Busway between the city and Eight Mile Plains became operational in 2001 and now carries more than 150,000 passengers per day — that is, 35 million trips per year. As part of the Queensland Government's long-term public transport strategy, the South East Busway is to be extended to Springwood. The South East Busway extension from Rochedale to Springwood is part of the Queensland Government's plan to meet the future transport needs of Brisbane's growing south-side communities.

Planning for the South East Busway extension between Eight Mile Plains and Rochedale was completed in May 2007 as part of the Pacific Motorway Transit Project. Subsequently a Concept Design Study has been undertaken to protect a future busway corridor between Rochedale and Springwood.

This Concept Design Study focuses on developing a concept design that identifies local issues to ensure they are able to be managed appropriately. To ensure improvements in technology and other advancements are taken into account in the planning, detailed investigations and impact management planning will occur closer to the time of delivery.

1.2 Project vision

Once constructed the South East Busway extension from Rochedale to Springwood will be:

a two directional busway that integrates with compatible land uses in the Springwood area. The busway extension will represent industry leading urban design and transport planning knowledge. It will provide a synergistic return on public investment by facilitating transit oriented, pedestrian friendly urban environments. An increased mode share for sustainable transport in the area will result from the busway extension.

1.3 Concept design study objectives

The objectives of the Concept Design Study are to:

- identify a preferred alignment and concept design for the future South East Busway extension from Rochedale to Springwood
- develop a concept design that is economical and maximises the benefits of the busway extension for the community
- understand the impacts and local issues that will require management in the future construction and operation of the busway extension
- identify strategies to enhance the benefits and minimise impacts in the construction and operation of the busway extension
- gain state government gazettal of the final alignment to ensure the protection of the busway corridor.

1.4 Study area

The Department of Transport and Main Roads identified a study area for the South East Busway extension from Rochedale to Springwood. This area was in the general vicinity of the Pacific Motorway between Underwood Road in Rochedale and Fitzgerald Avenue in Springwood as shown in Figure 1-1. The total length of the study area is approximately 2.8 kilometres.

The study area was selected following consideration of existing land uses, plans and policies, and opportunities and constraints. Investigations and community consultation was focused within this area.

1.4.1 Description of the corridor

The Pacific Motorway corridor between Eight Mile Plains and Springwood consists of six general traffic lanes with no transit or bus priority. Forecast urban growth in the area indicates that congestion and travel delays will get worse.

Within Rochedale South, the dominant land use consists of low to medium density residential development with two large areas of parkland on the western side of the motorway. The Springwood area consists of a number of large commercial precincts, with industrial precincts on the western side.

The existing Springwood bus station is located on the eastern side of the Pacific Motorway in front of the Centro Shopping Centre. There are three bus platforms currently in use. Two of these are located in a triangular bus interchange. A lift and stairs and pedestrian overpass connects the bus interchange to the corner of Fitzgerald Avenue. The layout of the existing Springwood bus station is shown in Figure 1-2.

1.5 Policy context

1.5.1 Integrated Regional Transport Plan

The Integrated Regional Transport Plan for south-east Queensland was developed in 1997 and was the first planning document to incorporate the busway network for Brisbane. During the development of the plan, options to improve public transport services to areas not directly serviced by rail were investigated. The plan concluded that the flexibility of buses best suited the dispersed nature of Brisbane's urban development, and busways were adopted as a major part of the answer. A review of the plan is currently underway.

1.5.2 South East Queensland Regional Plan and South East Queensland Infrastructure Plan and Program

The South East Queensland Regional Plan 2009–2031 and the South East Queensland Infrastructure Plan and Program 2009–2026 have identified the extension of the South East Busway extension from Rochedale to Springwood as part of the long-term public transport strategy for Brisbane.

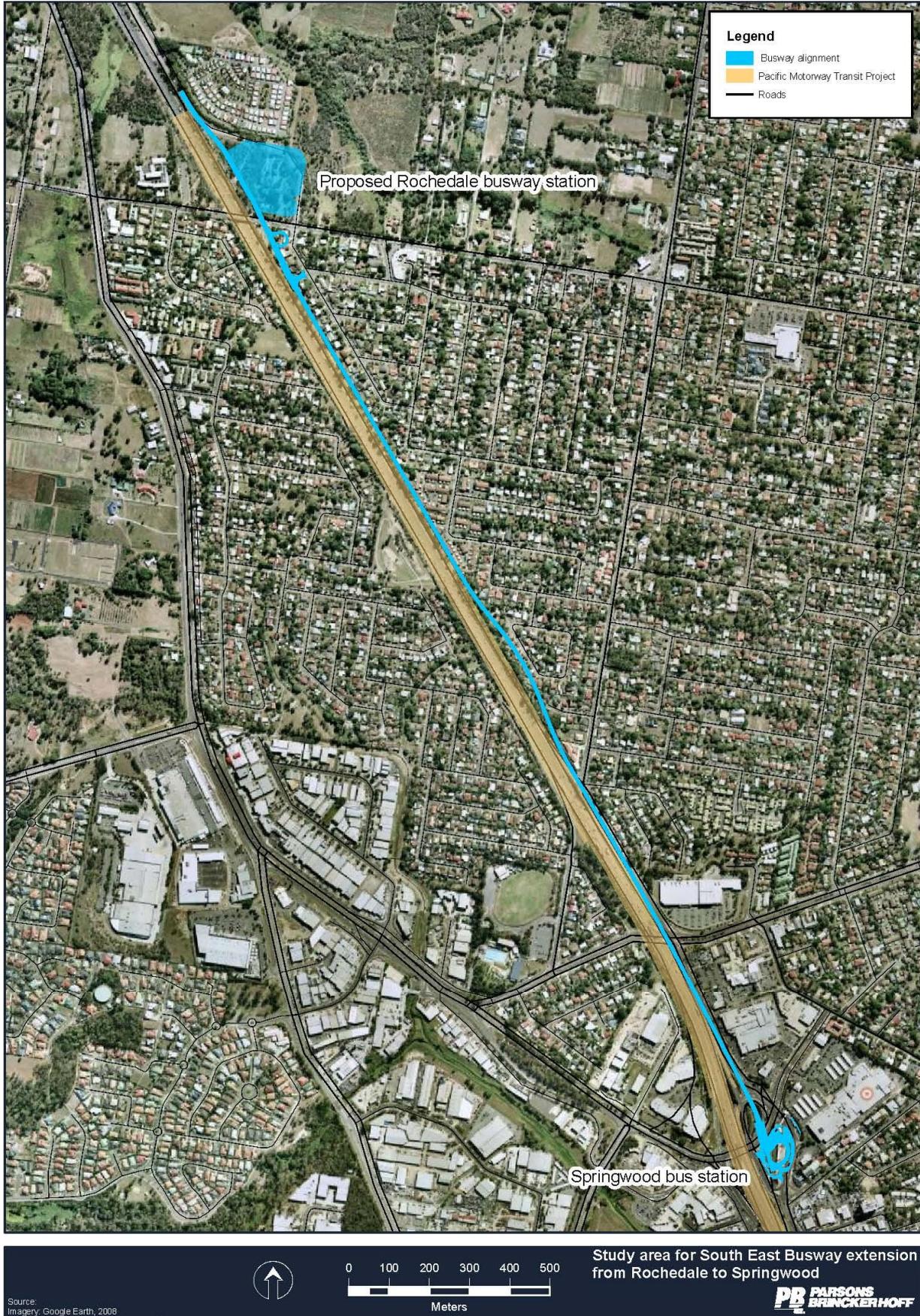


Figure 1-1: Study area for South East Busway extension from Rochedale to Springwood

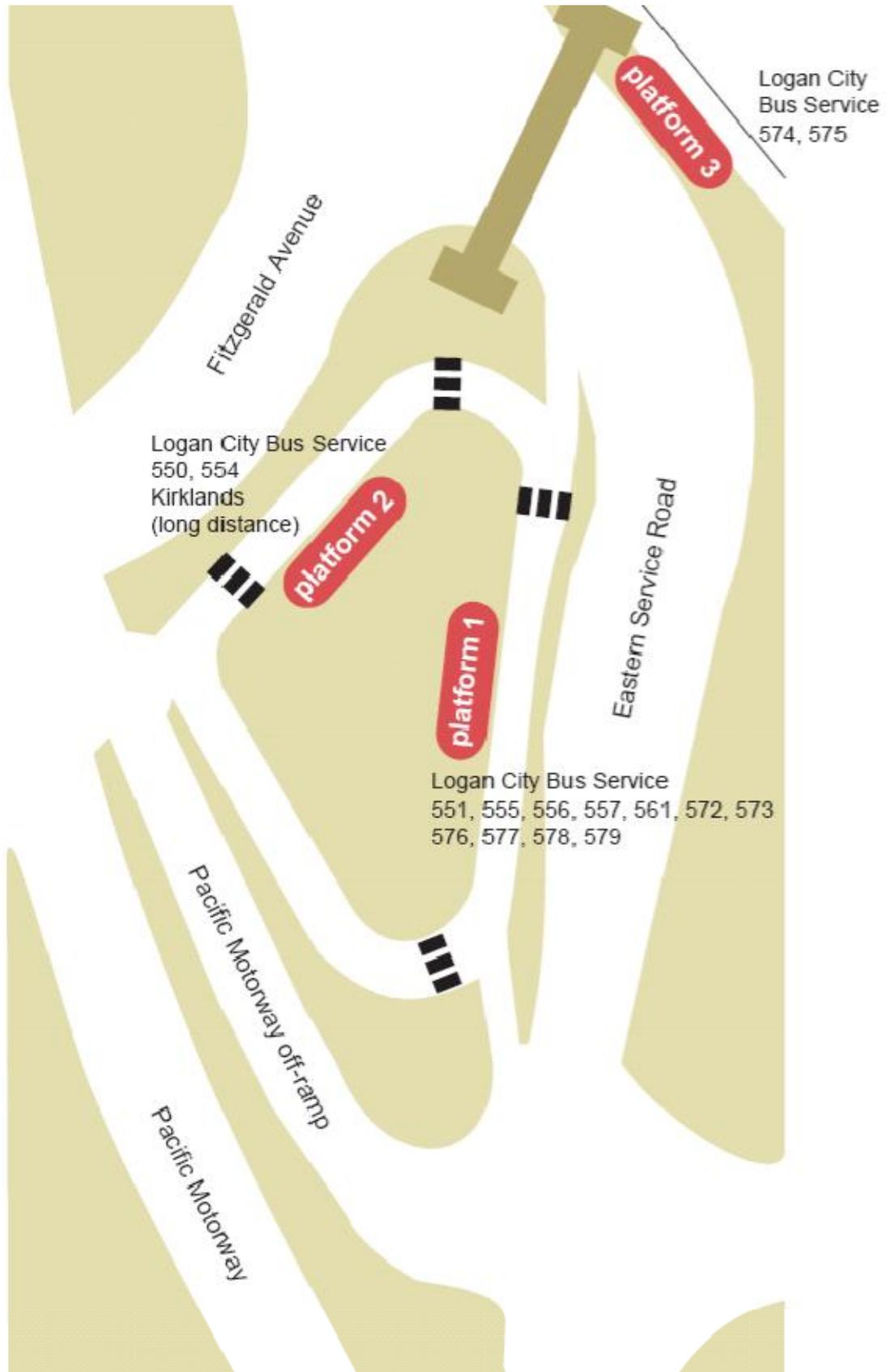


Figure 1-2: Existing Springwood bus station layout

(Source: TransLink)

The South East Queensland Regional Plan has predicted population and employment growth in the southern region of Brisbane. Population targets within this plan indicate Logan City is expected to accommodate a significant increase in residents by 2026. According to the regional plan, Springwood is to evolve into a regional hub for high-density housing, commercial activity and a larger range of government and administrative services.

Planning for the busway extension will ensure that this future growth is supported by sustainable transport. The latest revision of South East Queensland Infrastructure Plan and Program includes a notional estimate of \$230 million for delivery of the busway extension between 2011 and 2026.

1.5.3 TransLink Network Plan

The TransLink Transit Authority sets out its planned improvements to the public transport network in the TransLink Network Plan which includes a 10-year plan and 4-year program. The plan is consistent with the directions set out in the South East Queensland Regional Plan, the South East Queensland Infrastructure Plan and Program and the Integrated Regional Transport Plan, and includes a number of priority bus corridors identified as important initiatives for the future, including the South East Busway extension from Rochedale to Springwood.

1.5.4 Busway network

The busway network for Brisbane was first adopted as Queensland Government policy in 1997 in the Integrated Regional Transport Plan. The Brisbane busway network is designed to fill the gaps between Brisbane's existing rail lines to complete the city's primary public transport network and create a world-class system for the future. The network continues to be developed through regional and local transport planning undertaken by the Department of Transport and Main Roads and the TransLink Transit Authority in partnership with local authorities.

1.6 Planning need

1.6.1 Protecting the corridor

There are many benefits of undertaking early planning for the South East Busway extension from Rochedale to Springwood. Identifying and protecting the land needed for a future busway corridor will help minimise potential impacts in the future. It will also ensure the future extension is well integrated as Springwood and surrounding communities continue to grow and develop.

It is important to plan public transport networks ahead of population and employment growth to ensure future development occurs in a sustainable way. Once the corridor is protected, development that is proposed completely or partly within the protected busway corridor may be subject to assessment by the Department of Transport and Main Roads.

1.6.2 Integration with other projects

Planning has recently occurred or is currently underway on the following projects which aim to manage future traffic and urban growth predicted in the area.

The Greater Springwood Master Plan

This document aims to guide future development within the Springwood town centre, and will incorporate the South East Busway extension from Rochedale to Springwood into its plans. The Department of Transport and Main Roads is communicating with Logan City Council to discuss how the Springwood bus station will integrate with future development opportunities around the town centre.

Discussions have also focused on ensuring the future bus operations align with Council's aspirations for future traffic flows and transport networks in the Rochedale and Springwood areas.

Pacific Motorway Transit Project

The Pacific Motorway Transit Project included planning for the South East Busway extension from Eight Mile Plains to Rochedale (completed in May 2007). Further south of Rochedale, the project consists of bus lanes on the motorway and a number of other bus-related facilities. Planning for the South East Busway extension from Rochedale to Springwood has influenced the project designs and investigations are continuing to ensure positive outcomes for both the busway extension and the motorway corridor.

1.6.3 Expected future growth

Under the South East Queensland Regional Plan, Logan City is expected to accommodate a significant number of new residents as Springwood evolves into a Regional Activity Centre. Three areas south of Springwood — Logan Central, Browns Plains and Shailer Park (in particular the Logan Hyperdome) — are identified as major centres with concentrations of employment.

If public transport use continues to increase as it has in recent years, Logan City and Beenleigh are expected to experience the highest growth rate in public transport trips in south-east Queensland. Within Logan City, Springwood is to experience the highest public transport demand.

1.6.4 Prioritisation within the infrastructure program

The busway network for Brisbane is a long-term plan and will be built in stages to service the areas of highest priority first. To ensure each link in the network can be implemented successfully as the need arises, it is important to plan ahead and identify the locations of future busway corridors.

The South East Queensland Infrastructure Plan and Program identifies the Queensland Government's program of infrastructure and major projects to support the South East Queensland Regional Plan and is reviewed on an annual basis. Since the opening of the South East Busway a number of other busway projects have evolved which contribute to Brisbane's busway network and provide fast bus access to multiple destinations.

1.7 The planning process

The Concept Design Study has investigated a suitable busway alignment and the location of a busway station, and has identified strategies that can be utilised when managing or mitigating any impacts for the South East Busway extension from Rochedale to Springwood.

The findings of this study will be presented to the Queensland Government for approval. This will ensure that the corridor for the busway extension is protected for the future.

1.7.1 Methodology

The Concept Design Study is a planning process that has been developed by the Department of Transport and Main Roads to enable a public transport corridor to be protected. Technical investigations have been undertaken to determine where and how public transport infrastructure should be delivered, and to identify any potential issues.

The Concept Design Study was first produced in draft format for community and stakeholder consultation. It has now been finalised for government approval with amendments incorporating feedback from the consultation process and additional technical investigations where applicable. The Concept Design Study for the South East Busway extension from Rochedale to Springwood focused on:

- identifying a preferred busway alignment and design
- identifying any potential local issues associated with the proposal
- ensuring these issues can be managed appropriately.

1.7.2 Investigations

The area in the vicinity of the Pacific Motorway has undergone significant investigation in recent years. The Springwood Master Plan project, for example, has been investigating town centre redevelopment opportunities since 2006 and has produced a number of technical and background reports. Previous studies and investigations have been utilised in the development of the Concept Design Study where possible. New investigations were carried out in the following instances:

- where gaps in the available information were identified and new information was needed to effectively assess impacts
- where legislative changes meant that more investigation were needed
- where new data has become available — for example, the updated Australian Bureau of Statistics Census Data.

The Concept Design Study has identified a busway concept design by assessing potential options against design elements and objectives, and community and stakeholder feedback. The results of this Concept Design Study will inform the development of a detailed Impact Management Plan at a date closer to delivery of the extension.

The preliminary investigations were guided by a Terms of Reference that was developed by The Department of Transport and Main Roads and Parsons Brinckerhoff (see Appendix A). The investigations covered a broad range of social, environmental and economic issues. Areas of investigation include the following:

- sustainability
- legislative and policy requirements
- engineering
- urban design
- soils, topography and geomorphology
- hydrogeology
- hydrology and hydraulics
- water quality
- ecology
- land use planning
- social environment
- economic environment
- cultural heritage
- air quality

- noise and vibration
- traffic and transport
- pedestrian and cycle access
- network integration.

1.8 Future studies

An Impact Management Plan will be undertaken closer to the delivery of the busway. This plan will investigate the busway alignment in greater detail and update management strategies where appropriate to maximise benefits and minimise impacts of the South East Busway extension from Rochedale to Springwood.

The busway extension has not been identified for delivery in the short-term and an Impact Management Plan is not being undertaken at present. Undertaking the impact management planning closer to implementation of the busway extension will ensure that strategies can utilise any advancement in technology, contributing to better outcomes for the community.