

---

## 9.0 PUBLIC TRANSPORT

Future public transport systems for the Mt Lindesay/Beaudesert area need to be efficient yet comprehensive to ensure a cost effective service that will also be utilised by the future residents/workers of the area. At the first Vision Workshop with key stakeholders, some potential future public transport networks were considered for the area. These involved the need to strongly connect the centres in the area and also provide connections to Logan, Brisbane, Gold Coast and Ipswich local government areas. Appendix H provides copies of the potential networks developed by key stakeholders at the Vision Workshop. These have been utilised as a base for 2056 public transport network development.

The other aspect which affects the development of the 2056 network is the proposed 2016 and 2026 network, which is discussed below.

### 9.1 2016 and 2026 Public Transport Network

In parallel with the planning for the 2056 public transport network, further work has also been undertaken to develop a 2016 and 2026 public transport network for the study area. This work has been undertaken in association with McCormick Rankin Cagney in the "Southern Options Public Transport Study" (Draft August 2007).

These interim year investigations are based on population growth in the Study Focus Area from the South East Queensland Strategic Transport Model and discussions with the former Beaudesert Shire Council of between 72,000 - 86,000 people by 2016 (from approximately 60,000) and to approximately between 115,000 - 148,000 by 2026. It is noted that further work on population projections has occurred since this study was undertaken (including the release of the 2009 Regional Plan and more detailed structure planning in these areas). More detailed ongoing studies which will occur in the study area will need to review and consider in more detail these population projections for the 2016 and 2026 scenarios. The main future growth areas at these time periods are Flagstone, Jimboomba, Greenbank Central, Yarrabilba and Logan Village. Further details of population at 2026 are discussed in Section 5.1.

A key finding of this project (see Section 9.3) is that by 2056 demands are likely to warrant passenger rail along the interstate rail line between Beaudesert/Bromelton and Brisbane. The 2026 scenarios are important to set the timing for that facility and therefore when more detailed investigations occur into the interstate rail line these population projections should be updated.

A number of public transport network options were investigated for 2016 and 2026. These varied by population growth numbers, timeframe and also options with and without a CityTrain passenger network between Brisbane and Kagaru/Bromelton/Beaudesert Town alongside the Sydney-Brisbane interstate rail line. Appendix I provides a copy of the network options considered in the Southern Options Public Transport Study (Draft August 2007).

---

The following discussion describes key elements of the potential 2026 public transport network. It is noted that the project has assumed that a Springfield to Ipswich rail line is constructed by 2016. The 2009 South East Queensland Infrastructure Plan and Program currently allocates funds to the Ipswich to Springfield rail line, with a delivery timeframe indicated between 2012 and 2026. As a result, the rail line may now not be constructed by 2016.

#### Passenger Rail Services on Interstate Rail Line

Consideration here of passenger rail services on the Sydney-Brisbane interstate rail corridor, south of Salisbury to Kagaru/Bromelton/Beaudesert Town is based only on considering future patronage demands. Additional study is required on potential costs, operations and impacts on the provision of such services on surrounds. It is also noted that issues associated with need for track upgrades beyond this section and into and within the Brisbane CBD have not yet been considered.

The catchment for this potential rail line is the western part of the study area, including Greenbank/Greenbank Central, Flagstone/Undullah, Bromelton, Beaudesert Town and Jimboomba. Localities such as Yarrabilba, Logan Village and Bahrs Scrub are closer to the Beenleigh/Gold Coast rail line and therefore more likely to utilise this rail line or travel north to utilise trunk services on the South East Busway.

Taking this into consideration, the population in the rail catchment area ranges from 45,000 to 58,000 people at 2016 and 70,000 to 87,000 people at 2026 (based on projections produced in 2005). Comparing these numbers to other successful rail catchment areas indicates the following:

- the Ipswich local government area (pre-amalgamation boundary) has a 2004 population of approximately 150,000 – which is slightly more than the 2026 population numbers in the total study area (i.e. not just the catchment). Distance from the Brisbane CBD is comparable to the study area. Ipswich rail line has six rail stations on the Ipswich to Brisbane section of the rail line and six on the Rosewood component of the line. Daily rail patronage data for these 12 stations is currently 7,800 people (boardings and alightings – peak period weekday);
- the Caboolture local government area (pre-amalgamation boundary) has a 2004 population of approximately 100,000 (not including Deception Bay which is not considered to be in the rail catchment). Distance from the Brisbane CBD is also comparable to the study area. The former Caboolture local government area is a little more similar to the study area as its major town, Caboolture, is comparable to Flagstone. This rail line has a total of four rail stations at the outer end of a major rail line, potentially similar to the study area. Daily rail patronage data for these four stations is currently 7,000 people (boardings and alightings – peak period weekday).

---

It is noted that at 2026, proposed population predictions (based on 2005 projections) in the potential rail catchment area are approximately 70% (low population projections) to 90% (high population projections) of the former Caboolture local government area existing population. Therefore the higher population projections are adequate to assist in converting the Sydney to Brisbane Interstate Rail Line to a passenger rail corridor. The Southern Options Public Transport Study concluded, due to the land use population projections proposed under the South East Queensland Regional Plan for this area, the following:

*“While passenger rail service in the interstate rail corridor may be plausible, particularly in the longer term horizon it would not be necessitated before 2026 under the land use scenarios examined.”*

Figure 9.1 illustrates the proposed 2026 public transport network, subject to further investigation of the impacts of the Salisbury to Beaudesert rail line. Figure 9.2 illustrates the proposed 2026 public transport network if the rail line is not constructed by 2026. It is noted that the Southern Options Public Transport Study considered the bus network could provide adequate service for the area at 2026. Figure 9.3 illustrates the interim public transport network at 2016.

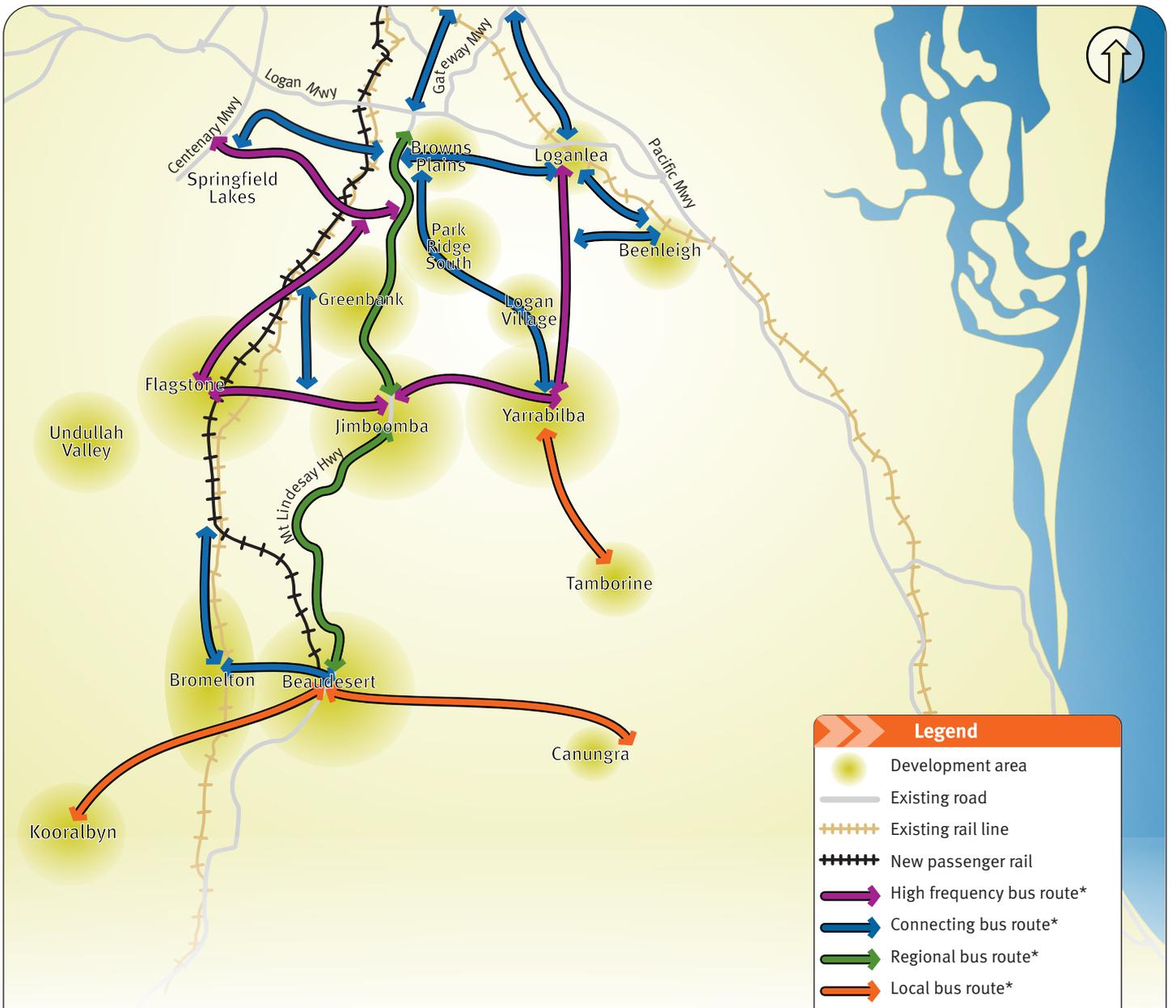
#### Mt Lindesay Highway

The Mt Lindesay Highway between Browns Plains and Beaudesert Town has been proposed as an all day service, with 15 minute peak services but less service during the day. The service is shown as ending at Browns Plain but could extend north from there or connect to the rail line at Altandi and/or the Southeast Busway. Frequencies of this service will vary depending on the population densities achieved.

#### East West Corridor

Due to the development areas at Flagstone, Yarrabilba and Jimboomba an east west desire for travel will exist. The Southern Options Public Transport Study notes that *“the key to the success of cross town lines is that they need to connect to many different origin-destination pairs, because there is no one market, comparable to the Brisbane CBD, that can support the service alone”*. As a result, a continuous service that extends west to Springfield and east to the rail connection at Beenleigh and Loganlea is proposed to assist in journeys to those destinations plus onwards to Ipswich, the Gold Coast and/or north to Brisbane. Frequencies of this service will vary depending on the population densities achieved.

Both Beenleigh and Loganlea rail stations have been considered as providing a good connection for Yarrabilba. Beenleigh provides access south to the Gold Coast, without requiring substantial “back tracking”, whilst Loganlea provides the opportunity to provide a more direct road based service between Yarrabilba and the rail line. Beenleigh rail station provides access to express services to Brisbane and the Gold Coast as well as local stop services and therefore is proposed as the main anchor of the east west corridor. Loganlea is also an emerging centre and is easily accessible for buses.



**Legend**

- Development area
- Existing road
- Existing rail line
- New passenger rail
- High frequency bus route\*
- Connecting bus route\*
- Regional bus route\*
- Local bus route\*
- \* See table below for service description

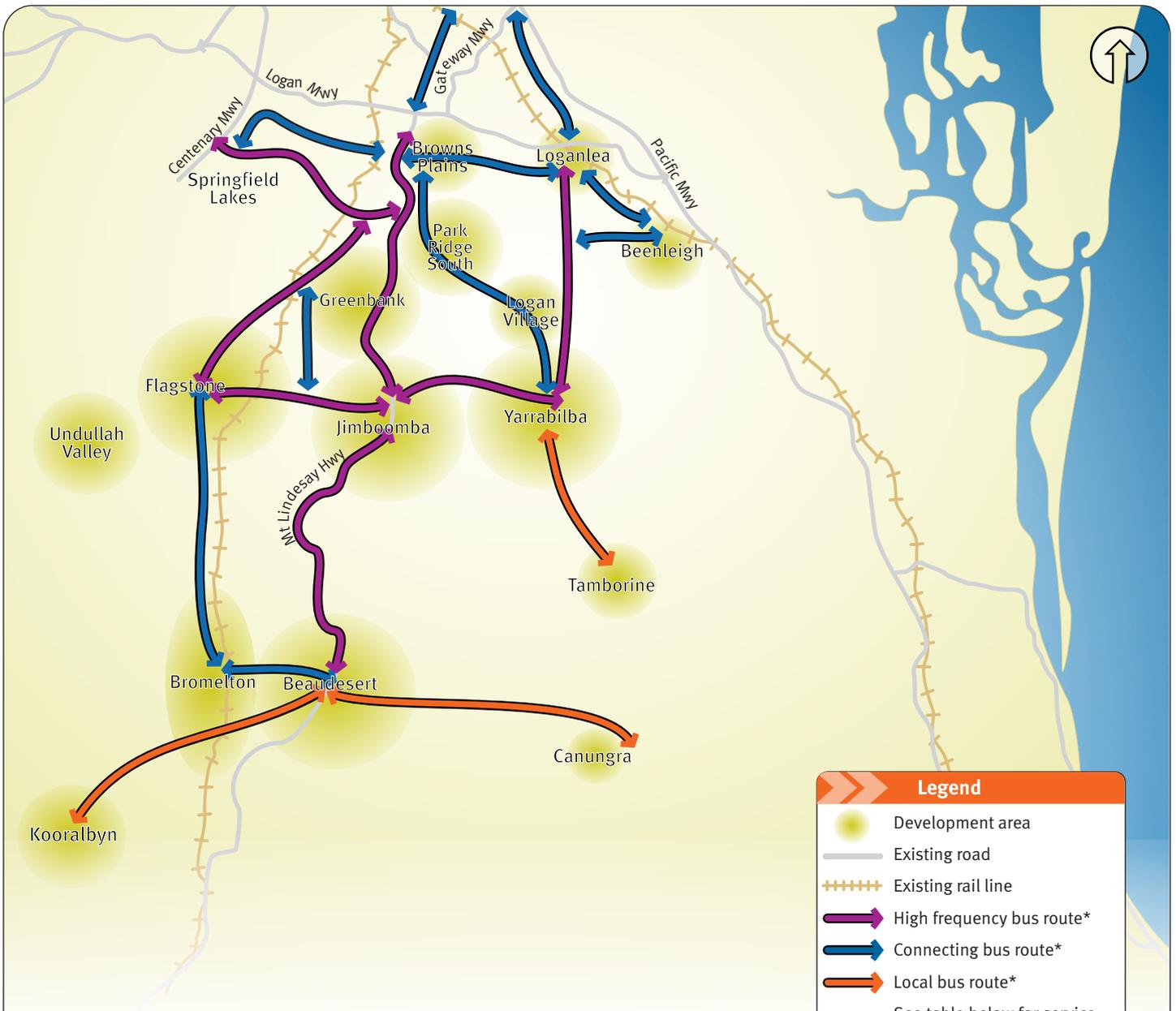
*This map is conceptual only and not to scale*

Map Colour	Service Discription	Stop Spacing	All day Frequency (mins)	Peak Frequency (mins)
Black Dashed	QR Rail	> 1k	< = 305	< = 15
Purple	High Frequency Bus Route	> 500m	< = 15	< = 15
Blue	Connecting Bus Route	250m	< = 15	< = 15
Green	Regional Bus Route	Variable	< = 30	< = 15
Orange	Local Bus Route	Variable	< = 60	< = 60



Drawing Title:  
2026 Public Transport Connections  
with rail line

Figure No: 9.1  
Date: 13.11.09  
Project No: CE005519



**Legend**

- Development area
- Existing road
- Existing rail line
- High frequency bus route\*
- Connecting bus route\*
- Local bus route\*
- \* See table below for service description

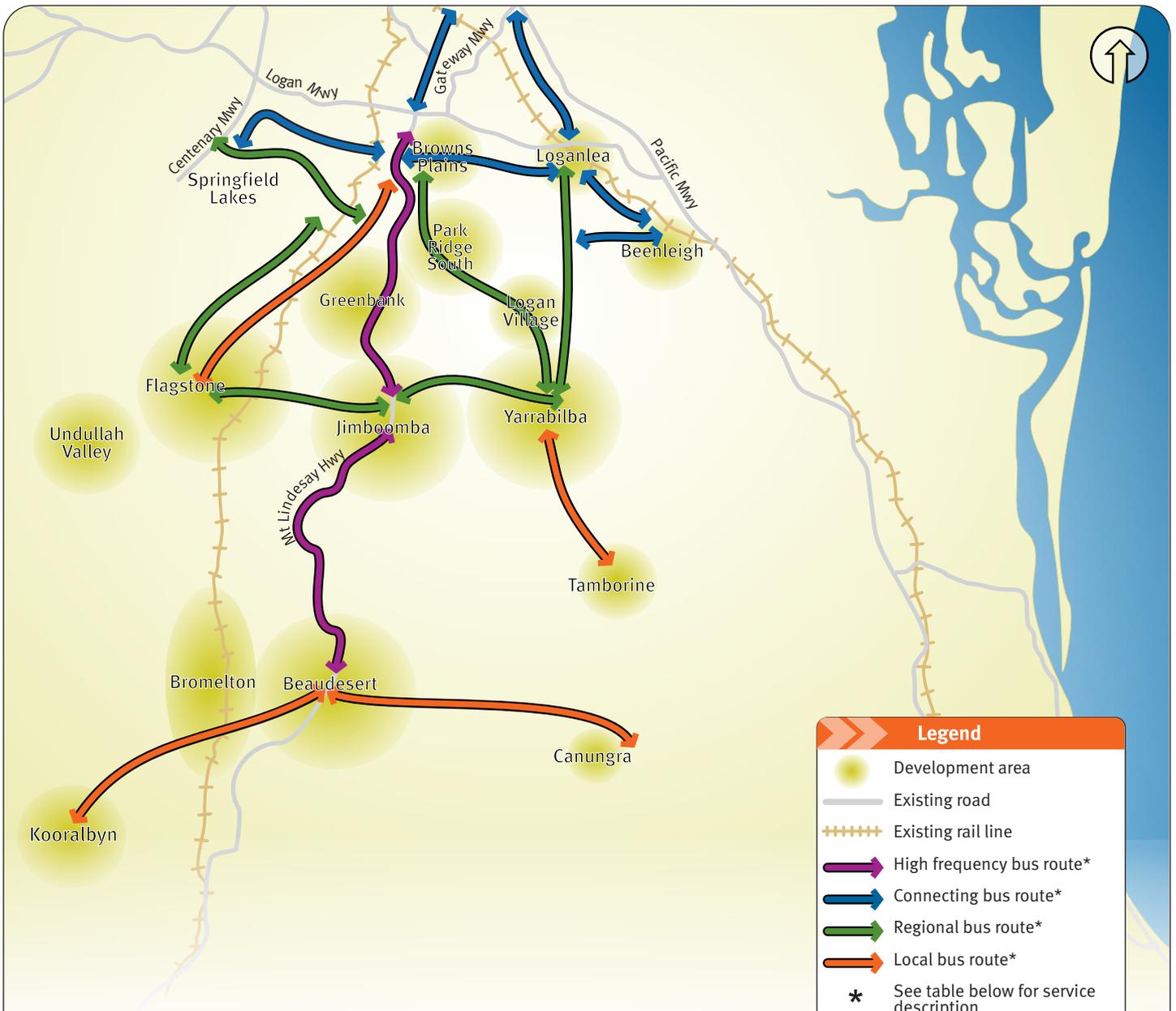
*This map is conceptual only and not to scale*

Map Colour	Service Description	Stop Spacing	All day Frequency (mins)	Peak Frequency (mins)
Purple	High Frequency Bus Route	> 500m	< = 15	< = 15
Blue	Connecting Bus Route	250m	< = 15	< = 15
Orange	Local Bus Route	Variable	< = 60	< = 60



Drawing Title:  
2026 Public Transport Connections  
without rail line

Figure No: 9.2  
Date: 13.11.09  
Project No: CE005519



This map is conceptual only and not to scale

Map Colour	Service Description	Stop Spacing	All day Frequency (mins)	Peak Frequency (mins)
Purple	High Frequency Bus Route	> 500m	< = 15	< = 15
Blue	Connecting Bus Route	250m	< = 15	< = 15
Green	Regional Bus Route	Variable	< = 30	< = 15
Orange	Local Bus Route	Variable	< = 60	< = 60



Drawing Title:  
2016 Public Transport Connections

Figure No: 9.3  
Date: 13.11.09  
Project No: CE005519

---

### Yarrabilba to Browns Plains

Depending on the extent of development at Yarrabilba, a corridor linking Yarrabilba with Browns Plains (and/or a future rail station west of Browns Plains, if implemented by 2026) via Logan Village and Park Ridge is required. This will serve growth areas of Logan Village and as a feeder route for Yarrabilba to other destinations in Logan and southern Brisbane.

### Beaudesert to Gold Coast

It is difficult to provide a direct public transport link between Beaudesert and Gold Coast, particularly from destinations within Beaudesert such as Beaudesert Town and Bromelton. This is primarily due to the topographical constraints and the minimum development between the two areas. Demand for this service has therefore been assumed to occur via the east west corridor discussed above.

### Bus Priority

Under the scenarios examined, the Southern Public Transport Options Study concludes that significant bus priority works are not likely to be required, however priority works within the centres or at critical locations on the external road network experiencing congestion may be justified.

### Interchanges and Stations

- The Southern Public Transport Options Study identifies locations for interchanges at Flagstone, Greenbank/Greenbank Central, Jimboomba, Park Ridge, Logan Village and Yarrabilba as well as at locations external to the study area at Beenleigh and Loganlea rail stations and the future Springfield rail station. These suggestions should be confirmed in a more detailed study of the proposed rail line and overall public transport system which considers operational and future land development in the area.

There may be a need for interim park and ride locations at 2016 and 2026 to facilitate increased use of public transport, as in some locations densities will not be high enough to support complete bus networks. Some of these locations could also be considered as land banking till a more viable use is feasible. Generally however it is noted that such facilities are not suitable in centres, because land is too valuable and it deters from achieving an amenable outcome.

## **9.2 2056 Public Transport Demands**

The purpose of the analysis undertaken for public transport is to establish the potential demand for future public transport use to assist in developing a regional level network for 2056.

---

The 2056 future demands have been estimated utilising the 2056 Strategic Transport Network Investigation model. This model does not have a mode choice capability in the form implemented for the study. The project brief for the study required consideration of a range of potential mode split outcomes. The modelling has applied mode split factors for low, medium and high public transport outcomes. This was undertaken by applying the mode share scenarios discussed in Section 6.4 to various trip types – within towns, between towns and external trips. High, medium and low scenarios were proposed for these trips and these have been applied to the various land use scenarios.

The demands for key components of these public transport trips, based on land use scenarios and public transport scenarios have been summarised for major desire lines. These are described herein.

#### External Trips (Study Focus Area to other local government areas)

An overall estimation of trips from the Study Focus Area to external destinations have been developed and shown on Figure 9.4. This indicates that the daily demand of public transport trips between the Study Focus Area, Brisbane and Logan (northern area) are in the order of 8,500 (low public transport scenario – 10% public transport share of trips to these destinations) to 16,000 trips (high public transport scenario – 20% public transport share of trips to these destinations) per day.

Trips between the Study Focus Area and Gold Coast have been estimated based on the current mode split assumptions in the 2026 South East Queensland Strategic Transport Model, which are based on South East Queensland Regional Plan mode share targets and policies. Public transport trip scenarios discussed above were not applied, due to the difficulty in access between these two destinations. The current mode share assumptions in the South East Queensland Strategic Transport Model for these trips are 4.3%. Demand for public transport trips between the Study Focus Area and the Gold Coast is in the order of 6,000 trips per day.

The South East Queensland Strategic Transport Model public transport mode share assumptions for the trips between the Study Focus Area and Ipswich City Council are also based on the South East Queensland Regional Plan mode share targets and policies and there are some limitations to this approach. The model shows significant demands between the local government areas for the road network, and it could be concluded that a proportional demand could occur for public transport. It is estimated that this demand is slightly less than the public transport demand between the Study Focus Area and the Gold Coast City Council.



BRISBANE/LOGAN/  
REDLANDS

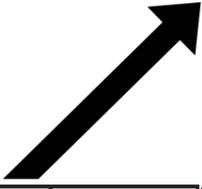


Scenario	H	M	L
1A	15,981	14,234	8,937
1B	14,592	13,622	9,163
1C	15,243	13,624	8,704
2	15,511	13,624	7,903
3A	14,881	13,293	8,484
3B	14,871	13,318	8,609

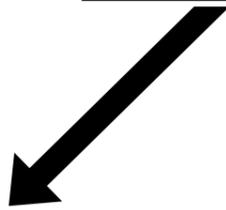


STUDY FOCUS AREA

GOLD COAST



Scenario	H	M	L
1A	6,140	5,915	5,240
1B	7,527	7,420	5,392
1C	6,158	5,953	5,339
2	5,532	5,285	4,544
3A	5,692	5,510	4,961
3B	5,694	5,517	4,986



Drawing Title:  
External Public Transport Trips

Figure No:9.4  
Date: 12.02.09  
Project No: CE005519

---

### Demands along Bromelton/Beaudesert Town to Brisbane rail corridor

Figure 9.5 illustrates potential demands at 2056 for public transport trips along this corridor. These numbers include external and internal based trips along the corridor. The catchment for these demands includes the western area of the study area, including trips originating in Jimboomba with destinations along the rail corridor. Figure 9.5 illustrates the following:

- under the high public transport scenario, demands along the route range between 6,000 to 11,000 passengers per day;
- under the medium public transport scenario, demands along the route range between 5,000 to 9,000 passengers per day;
- under the low public transport scenario, demands along the route range between 2,500 to 5,000 passengers per day;
- trips between Flagstone and North Bromelton/Kagaru range between 2,300 – 11,200 trips per day. It is noted that these include trips between both Bromelton and Flagstone and Beaudesert Town and Flagstone;
- trips between South Bromelton and Flagstone range from 1,000 – 8,800 trips per day. The number of jobs proposed at Bromelton impact on the demand for trips along this section and the rail line overall;
- trips between Beaudesert Town and Flagstone range from 1,000-3,200 trips per day.

Importantly, the land use pattern in the area has a direct impact on the public transport market share. Specifically, the viability of passenger rail along this corridor is strongly influenced by the expectation of a major population and employment nodes such as Flagstone, irrespective of the study area growth.

Land use scenarios with greater job numbers at Bromelton generate higher public transport trips on the internal sections of the rail line. It is also observed that the land use scenarios with less jobs in the study area (i.e. Scenarios 1B, 1C and 3B) result in higher numbers of passengers north of Greenbank/Greenbank Central on the rail line to Brisbane.

Section 9.1 notes that an approximate indication of minimum demands for a successful rail line is about 7,000 patrons per day. Work undertaken for the Mt Lindesay North Beaudesert study also indicate the warrant for such a rail line is between 5,000 -10,000 passengers per day. The numbers discussed above meet these demands, particularly north of North Bromelton/Kagaru. However, it is noted that, except for the section north of Greenbank/Greenbank Central, the low public transport scenario demands for trips do not meet this minimum and are unlikely to warrant a rail line in the study area at 2056.

The land use scenarios assume that high densities will be achieved around Greenbank/Greenbank Central and Flagstone to result in patronage on the rail line, although the Greenbank Military Camp is a large non-urban area along the line. The viability of the rail line would be further enhanced by adding further population along the rail line.



BRISBANE CITY COUNCIL & LOGAN

Scenario	H	M	L
1A	9,178	8,041	4,599
1B	7,717	6,989	4,646
1C	8,170	7,203	4,267
2	9,398	8,211	4,619
3A	9,228	8,157	4,924
3B	8,828	7,849	4,885

GREENBANK

Scenario	H	M	L
1A	7,548	6,411	2,969
1B	5,898	5,170	2,774
1C	6,449	5,482	2,546
2	7,906	6,719	3,128
3A	7,098	6,028	2,795
3B	6,463	5,484	2,520

FLAGSTONE

Scenario	H	M	L
1A	9,668	7,844	3,635
1B	7,184	6,043	2,797
1C	5,753	4,704	2,289
2	9,306	7,569	3,515
3A	11,242	8,989	3,903
3B	8,198	6,588	2,976

Scenario	H	M	L
1A	6,658	5,343	2,346
1B	3,980	3,288	1,455
1C	2,744	2,198	992
2	6,358	5,108	2,229
3A	8,810	6,977	2,868
3B	5,255	4,152	1,737

BROMELTON

NORTH BROMELTON

Scenario	H	M	L
1A	3,011	2,501	1,289
1B	3,204	2,755	1,342
1C	3,009	2,506	1,298
2	2,948	2,461	1,287
3A	2,432	2,012	1,035
3B	2,943	2,436	1,239

BEAUDESERT TOWN



Drawing Title:  
2056 Interstate Rail Line Demands  
(Daily)

Figure No:9.5  
Date: 12.02.09  
Project No: CE005519

---

Demands between North Bromelton/Kagaru and Beaudesert Town reduce and demands recorded are higher to/from Bromelton. The estimated demands to/from Bromelton are based on applying the centre to centre public transport mode share (see Section 6.3) between the two centres. In reality, the type of development being proposed at Bromelton (characterised as large site industrial development) may result in this proportion of trips on rail being unlikely. The style of development is more likely to be better suited to bus routes, which can permeate the future development site better.

The higher demand links along the corridor could guide a staged approach to implementation.

#### Centre to Centre Internal Trips

An assessment of internal public transport trips between centres has also been undertaken and is illustrated on Figure 9.6. It is noted that these demands are trips directly between two destinations and do not include trips from other centres e.g. Flagstone to Greenbank/Greenbank Central numbers are just these trips and not trips from Bromelton to Greenbank/Greenbank Central via Flagstone. It is noted these numbers increase significantly when continuing cross trips are included (generally between 1,000 to 6,000 trips per day, depending on the segment).

The highest demands for trips are between Bromelton and Flagstone and Bromelton and Beaudesert Town. These trips would require between 20 - 100 buses per day depending on the public transport scenario achieved. It is noted that these bus numbers do not warrant the need for a bus lane which generally require 15 - 30 buses per hour (Source: Mt Lindesay North Beaudesert Transport Analysis Study, 2005).

Further investigation of trips to/from the Yarrabilba area was also undertaken and is illustrated in Figure 9.7. This indicates that the majority of demands to/from this area are to/from Beaudesert Town, Flagstone and Brisbane/Logan.



GREENBANK

Scenario	H	M	L
1A	202	202	202
1B	204	204	204
1C	71	71	71
2	215	215	215
3A	250	250	250
3B	91	91	91

FLAGSTONE

Scenario	H	M	L
1A	3,556	2,610	719
1B	2,025	1,525	525
1C	1,675	1,244	382
2	3,278	2,406	664
3A	5,195	3,804	1,022
3B	3,375	2,482	696

BROMELTON

Scenario	H	M	L
1A	490	490	490
1B	767	767	496
1C	456	456	456
2	475	475	475
3A	382	382	382
3B	371	371	371

JIMBOOMBA

Scenario	H	M	L
1A	447	447	447
1B	701	701	453
1C	436	436	436
2	438	438	438
3A	357	357	357
3B	425	425	425

BEAUDESERT TOWN

Scenario	H	M	L
1A	148	148	148
1B	229	229	150
1C	150	150	150
2	143	143	143
3A	114	114	114
3B	122	122	122

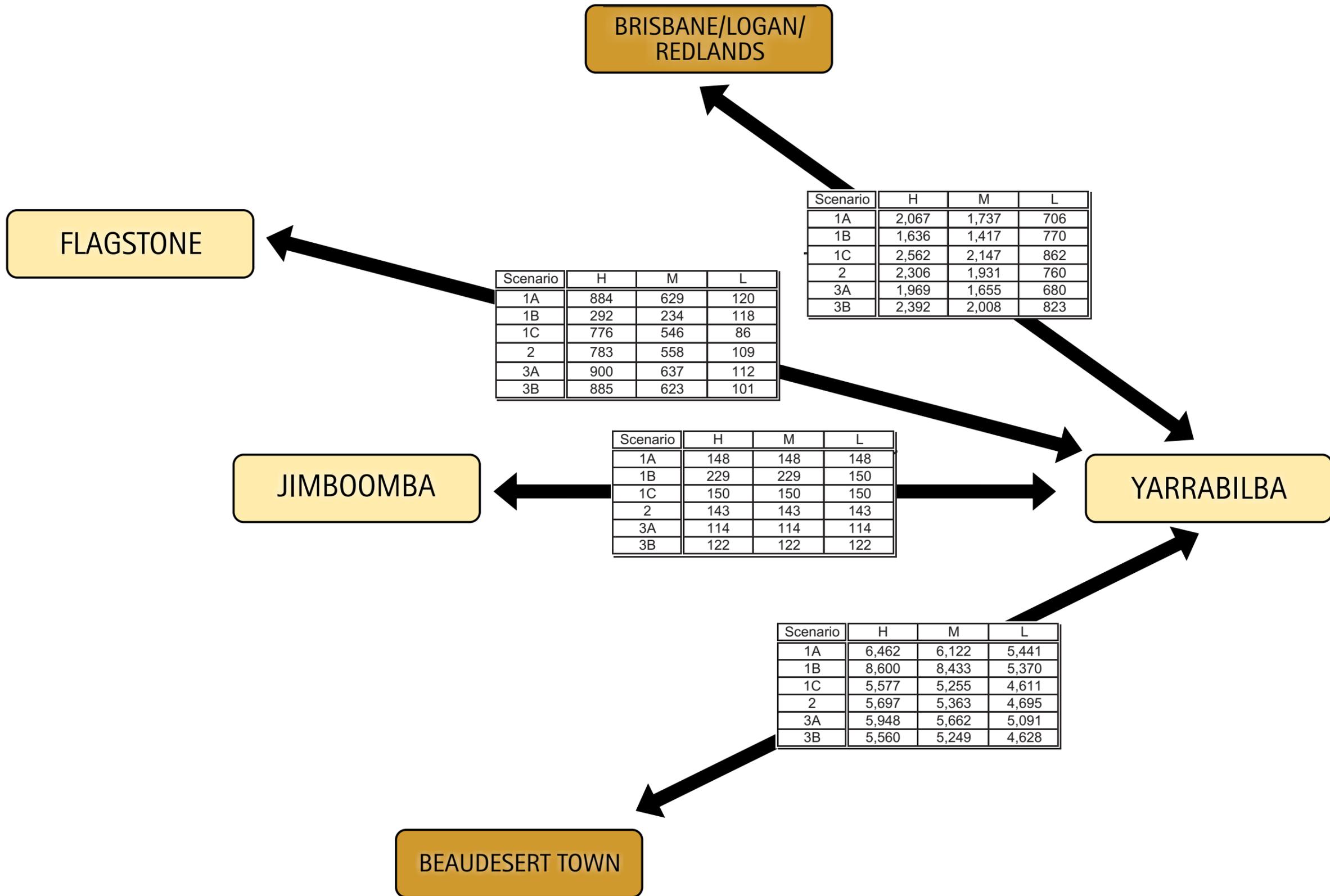
YARRABILBA

Scenario	H	M	L
1A	5,050	3,866	1,498
1B	4,086	3,148	1,172
1C	3,539	2,707	1,044
2	3,207	2,481	1,029
3A	5,712	4,358	1,650
3B	4,490	3,426	1,298



Drawing Title:  
2056 Internal Public Transport Demands  
(Daily)

Figure No:9.6  
Date: 12.02.09  
Project No: CE005519



Drawing Title:  
2056 Public Transport  
Demands to/from Yarrabilba  
(Daily)

Figure No:9.7  
Date: 12.02.09  
Project No: CE005519

---

### Internal – Within Centres Trips

In all the land use scenarios, the internal trips within a centre are quite significant, for the scenarios which have larger centres and high jobs balance, this can be as high as 40%. As a result, it is important to provide a good system of internal local public transport to cater for these shorter internal trips. The centres with a high percentage of internal trips are Yarrabilba, Flagstone and Beaudesert Town. This reflects the high combination of both population and jobs within these centres. Internal trips based on the medium series population scenario (1A) for these centres are as follows:

- Flagstone – 4,600 (low public transport scenario) – 16,200 (high public transport scenario) internal trips per day. Internal trips are approximately 30 - 40% of all trips to, from and within Flagstone;
- Yarrabilba – 4,000 (low public transport scenario) – 16,200 (high public transport scenario) internal trips per day. This is approximately 20 - 30% of all trips to, from and within Yarrabilba;
- Beaudesert Town – 6,200 (low public transport scenario) – 19,400 (high public transport scenario) internal trips per day. This is approximately 20% of all trips to, from and within Beaudesert Town.

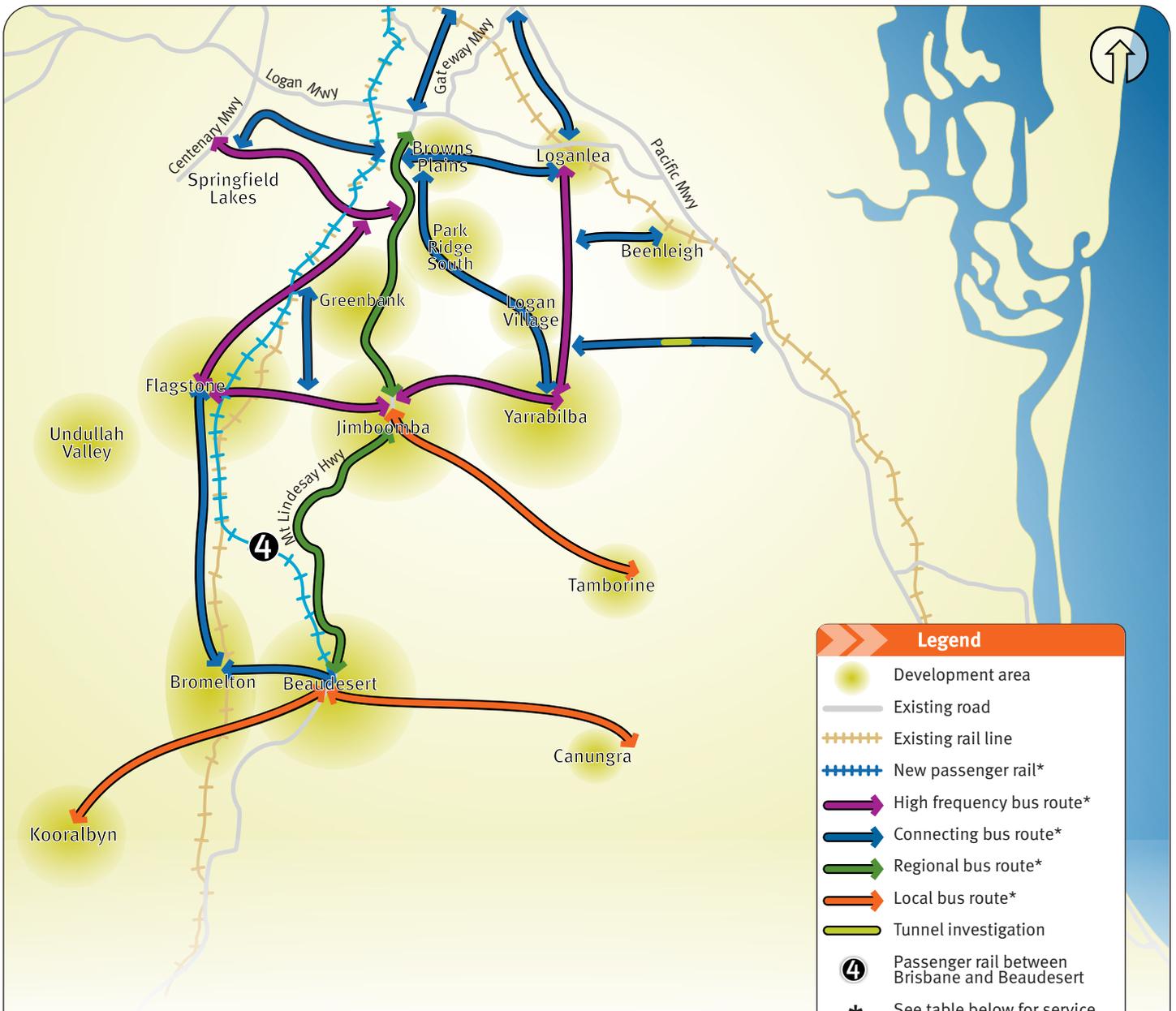
### **9.3 2056 Public Transport Network**

Figure 9.8 illustrates the proposed public transport network at 2056. The key elements of this network are described in the following.

#### Passenger rail line between Salisbury to Beaudesert Town/Bromelton

As discussed above, public transport demands warrant a passenger rail line through the study area, if public transport patronage levels are above the low public transport scenario. It is noted that the highest demands for this route are north of North Bromelton/Kagaru. Connections to Beaudesert Town or Bromelton were also considered and based on the modelling, Bromelton receives higher demands. However due to the large scale development type at Bromelton it is unlikely that a rail service is the best solution to service this area. A bus route will be able to permeate and better serve a development of this nature. It is likely therefore that the rail line is better targeted to Beaudesert Town, the rural principal activity centre. It is noted that estimated demands to Beaudesert Town are lower than achieved on other components of the rail line and as a result may not warrant a rail service. It is considered however that due to the proposed nature of Beaudesert Town as a principal rural activity centre, a rail line to this destination should be investigated as an option.

The other advantage of providing a train service to/from this area is the distance to be travelled to the Brisbane CBD. Generally, it is undesirable to travel via bus for longer than one hour and estimates of bus travel from Beaudesert to Brisbane CBD is approximately 110 minutes. Travel time savings, utilising the rail line, can be up to 20 minutes, depending on the speed achievable along the rail line when constructed. The relative travel time should be investigated in further detail in future studies.



This map is conceptual only and not to scale

Map Colour	Service Description	Stop Spacing	All day Frequency (mins)	Peak Frequency (mins)
Blue Dashed	QR Rail	> 1km	< = 30	< = 15
Purple	High Frequency Bus Route	> 500m	< = 15	< = 15
Blue	Connecting Bus Route	250m	< = 15	< = 15
Green	Regional Bus Route	Variable	< = 30	< = 15
Orange	Local Bus Route	Variable	< = 60	< = 60



Drawing Title:  
2056 Public Transport Connections

Figure No: 9.8  
Date: 13.11.09  
Project No: CE005519

---

It is also recommended that the passenger rail tracks should be in addition to the freight tracks currently provided along this line. This is consistent with previous work undertaken by the former Queensland Transport (see discussion below).

The interstate rail corridor contains a single standard gauge rail line. It predominantly carries freight and is managed for the government by Queensland Rail Network Access Group. There is one regular interstate passenger service in each direction each day between Sydney and Brisbane, run by NSW RailCorp. The corridor runs through the Acacia Ridge Freight Terminal with the section between Acacia Ridge and Roma Street containing both standard and narrow gauge tracks.

The former Queensland Transport investigated the ability of the interstate rail corridor (between Salisbury and Bromelton/Kagaru) to accommodate additional rail infrastructure suitable for passenger services. The work consisted of the following assessment:

- a review of the existing corridor infrastructure;
- a review of the existing freight and passenger services;
- the assessment of potential future operations and infrastructure requirements;
- an assessment of the corridor's ability to cater for additional infrastructure.

Three future corridor scenarios were developed and tested. Service levels for public transport along the corridor were considered as part of the assessment. The scenarios investigated were:

- three track configuration (two passenger rail tracks and one freight rail track with passing loops);
- three track configuration with shared passenger and freight operations;
- a four track configuration.

The work by the former Queensland Transport found that the horizontal alignment of the corridor is comparable with existing Citytrain corridors. It was found that curve easing is not justifiable as the travel time savings are minimal when compared with the economic investment that would be required.

The study found that the 30 minute frequency passenger services would require a second track along the length of the corridor to prevent an impact on freight services. If freight and passenger services use separate infrastructure, two passenger tracks would support services of 15 minute frequencies.

---

It is therefore recommended that a detailed corridor planning study is required to assess the requirements for achieving passenger rail services along the Sydney to Brisbane interstate rail corridor with a view to identifying future corridor preservation options. The former Queensland Transport investigated the ability of the interstate rail corridor (between Salisbury and Bromelton/Kagaru) to accommodate additional rail infrastructure suitable for passenger services. The Salisbury to Bromelton section of the interstate rail corridor, without alignment upgrades, is considered technically suitable for upgrading for passenger services. It was found that the western side of the corridor, due to lack of development, is more suitable for upgrade than the eastern section between Greenbank station and Acacia Ridge. A preliminary engineering study is required to investigate the land requirements, land impacts and retaining wall requirements of upgrades. This should be incorporated into the proposed corridor study. Further details in regards to alignment, operational characteristics, local impacts, station locations staging and timing should also be investigated in this corridor study.

The route between Salisbury and North Bromelton/Kagaru can traverse the Sydney to Brisbane interstate rail line. The corridor study needs to also identify a route between North Bromelton/Kagaru and Beaudesert Town to ensure it is preserved into the future. This route may utilise parts of the historical Bethania to Beaudesert rail line and this should form part of the corridor investigations. The study should also address in more detail whether a rail line is also warranted to Bromelton. The corridor study should also coordinate with Council's structure planning, particularly in the Flagstone and Greenbank/Greenbank Central area.

#### East West Bus Network

There are a number of future development areas on an east west axis in the study area and direct public transport routes are required between them. As noted in the Southern Options Public Transport Study, cross town links are more difficult to support and require a number of origins and destinations along them to make them a viable service. As a result, an east west route is proposed between Beenleigh and Loganlea rail stations in the east and the future Springfield rail station in the west. The route will traverse Yarrabilba, Jimboomba, Flagstone and Greenbank/Greenbank Central. This route has the highest demands between Yarrabilba and Jimboomba (approximately between 3,000 - 6,000 trips per day) and between Yarrabilba and Beenleigh/Loganlea rail stations (approximately 2,000 - 3,000 trips per day). These numbers warrant between 60 - 120 buses per day, which does not require a bus lane. However, there may be a need for bus priority measures at key congestion points along this route.

Consideration has been given to whether part of this route could utilise the historical Bethania to Beaudesert rail line. Southern sections may well form part of a connection to Beaudesert Town. Estimated demand on northern sections discussed above does not warrant a heavy rail line or busway along this route. It is not considered necessary to utilise this corridor for public transport. Consideration of this corridor as a trail for pedestrians, cyclists and horses should be investigated.

---

There are strong travel demands from the study area into Ipswich and the east west bus route is proposed to meet these needs. The route could travel along the Springfield Greenbank Arterial and connect into the Springfield activity centre and future Springfield rail station.

#### Mt Lindesay Highway

A bus route with frequent peak services (see Figure 9.8 for explanation) is proposed along the Mt Lindesay Highway between Beaudesert Town and Browns Plains. This route will be less frequent as the rail line will cater for the majority of these demands. The bus route may continue to Brisbane via the South East Busway. Demands for this route do not warrant bus lanes along the Mt Lindesay Highway, although if High Occupancy Vehicle lanes are considered along this route, buses would also benefit.

#### Connections to Browns Plains

In addition to the route discussed above, connections between Yarrabilba and Browns Plains are required to serve access to the Browns Plains Shopping Centre and destinations in Logan and southern Brisbane for Yarrabilba residents. This route should also serve growth areas of Logan Village and Park Ridge South.

#### Connections to Bromelton

There are strong demands between Bromelton and the remainder of the Study Focus Area, particularly to/from Flagstone and Beaudesert Town. It is therefore important to provide high frequency service between the proposed North Bromelton/Kagaru rail station and Bromelton and Beaudesert Town and Bromelton. A bus route is better suited to the future development type at Bromelton as it can service the large scale development types more directly.

#### Local Links

Within the larger development areas of Beaudesert Town, Yarrabilba and Flagstone internal public transport systems are required. Modelling indicates that there is a high percentage of internal trips in these areas and a robust public transport system needs to cater for these. The type and location of these internal public transport networks are beyond the scope of the Strategic Transport Network Investigation and should be addressed as part of Council's structure planning, in conjunction with TransLink's network planning.

In addition, public transport connections are also required between rural townships and these major centres. Due to the low density nature of these rural townships, frequent services are not envisaged and community based transport solutions may also need to be considered. Examples of connections required include Kooralbyn and Canungra to Beaudesert Town and Tamborine Mountain to Yarrabilba or Beaudesert Town.

---

### Stations and Interchanges

The corridor study for the passenger rail line between Salisbury and Beaudesert Town needs to consider in detail locations for rail stations. This could also be supplemented with information from structure planning of the development areas at Park Ridge, Beaudesert Town, Bromelton, Flagstone and Greenbank/Greenbank Central. The structure planning process at these centres should ensure passenger transport networks are integrated with the urban centre development. This corridor study should consider the issue based on appropriate rail station spacing and land use development and also consider bus/rail interchange locations as well as park and ride needs.

Other bus interchange locations will be required at Jimboomba, Yarrabilba, Beenleigh and Loganlea rail stations and the future Springfield rail station. Due to its central location, Jimboomba has the ability to act as an operational hub for the bus network in the area, however this is a matter which should be considered when undertaking detailed planning of the bus network.

---

## 10.0 ROAD NETWORK

The current road network within the study focus area is comprised of the Mount Lindesay Highway providing the main north/south connection to Logan and Brisbane City. Road network connections to the Gold Coast and Springfield/Ipswich City provide connectivity to the other major centres in southern South East Queensland, however they are limited in their capacity to cope with the expected growth in the study focus area to 2056.

The aims of the transport modelling component of the Mt Lindesay/Beaudesert Strategic Transport Network Investigation included identifying strategic transport needs for the road network that could be required by 2056. The linkages that were investigated came out of the key strategic questions that needed to be answered as identified in Section 6.2. These strategic questions were considered at a Vision Workshop with key stakeholders and the road network suggestions utilised as a base for the transport modelling are illustrated in Appendix H. Development of potential network options to test as a result of these strategic questions and Vision Workshop outcomes were developed, combined with consideration of future network deficiencies as discussed below.

The broad process to answer these key questions involved the testing of a number of road network alternatives, utilising demands derived from a number of 2056 land use scenarios outlined in Section 7.1. Key corridors need to be supportable under all scenarios though the scale of feasibility may vary with development levels.

The study area for the Strategic Transport Network Investigation has been wide, stretching from the Pacific Motorway west to the Ipswich area. However, the focus of the analysis has been the Study Focus Area and the connections through and from the Study Focus Area to other areas. Areas outside the Study Focus Area form a frame to ensure interactions are properly understood. However, the study has not sought to define networks in these frame areas, including considering interstate connectivity. These road networks in turn may need to be assessed in their own wider frame. The analysis has revealed issues around the periphery of the study area but has not considered options to deal with those. The Pacific Motorway is a case in point. While the Pacific Motorway capacity will be challenged in the study period, separate studies are needed to develop options.

As outlined in Section 8.1, the South East Queensland Strategic Transport Model (SEQSTM) was adopted and refined for the purposes of testing road network options and ultimately answering the key strategic questions related to the future road network. It should be noted that the 2026 land use data received with the South East Queensland Strategic Transport Model did not reflect changes in the 2009 Regional Plan. Consequently, the 2026 demands reported are likely to be low in the Study Focus area. As this timeframe was not the focus of the investigation, revisions to the 2026 land use data was not undertaken.

---

2036 demand was also developed as an interim and assigned to the road network to provide an understanding of staging. Detailed assessment is provided in Chapter 13, however the main outcomes show that significant north-south and east-west capacity is required at this interim stage.

The 2056 demands for the scenarios were assigned to an assumed 2026 base network (see Figure J10.43). This network represented the 2006 South East Queensland Infrastructure Plan and Program projects plus additional detail of the Study Focus Area network derived from discussions with the former Beaudesert Shire Council. The 2026 base network did not include the Southern Infrastructure Corridor (road) or the new north-south link (road), however it did include a district arterial extending from Flagstone to Greenbank/Greenbank Central.

Figures J10.41 in Appendix J show the assignments for these tests. Key links in the network which were overloaded were:

- Waterford-Tamborine Road;
- Chambers Flat Road;
- sections of Mt Lindesay Highway;
- Beaudesert-Beenleigh Road;
- Stanmore Road;
- Teviot Road;
- Cusacks Lane (west end);
- Tamborine Road;
- Beaudesert-Nerang Road;
- Greenbank–Springfield Road;
- Undullah Road.

The 2056 demands on the 2026 network show constrained operations due to a lack of capacity in the network. In particular, the limited network connecting Yarrabilba to the wider network and volume/capacity ratios of greater than 1.0 on Waterford Tambourine Road and Mt Lindesay Highway constrain trip making.

As a result of these tests, a base 2056 network was developed which included upgraded network components based on discussions with the former Beaudesert Shire Council and results of the above. This base and the assignment of 2056 demands on its base are shown in Appendix J, Figures J10.42 and J10.1 to J10.5

Based on these system issues and discussion of key issues and options, the Stakeholder Liaison Group workshop produced a series of road concepts to test. These were distilled to two key strategies shown in Figures J10.6 and J10.7. The traffic volumes for 2056 demands on 2026 networks were to some extent suppressed by the levels of congestion in the network. Later analysis shows higher volumes on the major links.

---

In order to address the strategic questions, two broad network alternatives were tested:

- 2056 Network I includes a new highway route to the west of the Mt Lindesay Highway connecting to the Springfield-Greenbank Arterial and a Southern Infrastructure Corridor (road) alignment to Beenleigh-Beaudesert Road;
- 2056 Network II includes a new north south road link east of the Mt Lindesay Highway from the Logan Motorway to the proposed Southern Infrastructure Corridor (road), between Yarrabilba and Jimboomba.

Daily 2056 volumes, select link analysis and volume/capacity ratios for a range of scenarios and levels of public transport usage are given in Appendix J, Figures J10.10 to J10.38.

Table 10.1 outlines link volumes on key north-south links and the required form of key facilities given the modelled volumes as a result of these network tests.

**Table 10.1**

**Summary of Network Model Tests Results**

Link	2026 ConnectWest		2056 demand on 2026 base		2056 Network I		2056 Network II		Recommended Network	
	Daily Two-way Volume	Form Needed	Daily Two-way Volume	Form Needed	Daily Two-way Volume	Form Needed	Daily Two-way Volume	Form Needed	Daily Two-way Volume	Form Needed
Undullah Road	6,700	two lane arterial	16,000	two lane arterial	21,000	four lane arterial	20,000	four lane arterial	23,500	four lane arterial
West Freeway	N/A		N/A		24,000	four lane arterial	N/A		N/A	
Flagstone Greenbank Arterial	N/A		17,000	two lane arterial	N/A		14,000	two lane arterial	10,300	two lane arterial
Teviot Road	9,800	two lane arterial		two lane arterial	24,500	four lane arterial	18,900	two lane arterial	22,900	four lane arterial
Mt Lindesay Highway	32,000	four lane freeway	51,000	4-6 lane freeway	40,400	four lane freeway	42,000	four lane freeway	45,400	four lane freeway
New North South Road east of Mt Lindesay Highway	N/A		N/A		N/A		35,000	four lane freeway	33,200	four lane freeway
Waterford Tamborine Road	12,000	two lane arterial	50,000	4-6 lane freeway	34,500	four lane arterial	28,000	four lane arterial	33,300	four lane arterial
Beenleigh Beaudesert Road	8,000	two lane arterial	29,000	four lane arterial	53,000	four lane freeway	20,500	four lane arterial	20,300	four lane arterial
Southern Infrastructure Corridor	N/A		N/A		53,000	four lane freeway	72,000	six lane freeway	75,000	six lane freeway

---

The assignment of 2056 demands to the 2026 base network shows the need for a north-south freeway facility, in addition to the Mt Lindesay Highway, which is likely to require 6 lanes. In particular, the volume on Waterford-Tamborine Road show the need for a freeway style of facility. The 2056 demand on the 2026 network also showed that in order to get reasonable results, the loading arrangements of Yarrabilba needed to be improved (i.e. more than one connection to/from the development was required). The tests also shows that Camp Cable Road would carry approximately 27,000 vehicles per day (volumes of a four lane arterial facility) and other study focus area east-west links (Stockleigh Road and Chambers Flat Road) also show increased use. This increase on the local links warrants the inclusion of the Southern Infrastructure Corridor (road) to relieve local roads and provide a facility for the loading of a fully developed Yarrabilba township.

The testing of Network I, which supplements the Mount Lindesay Highway with a freeway facility to the west, still shows the need for north-south freeway to the east, as evident by the 53,000vpd on Beenleigh Beaudesert Road.

### **10.1 North-South Road Link (Gateway Motorway Extension South of Logan Motorway)**

The first of the key strategic questions related to the road network is the need for the new north south road link east of the Mt Lindesay Highway south from the Logan Motorway. In order to address this question, two broad network alternatives were tested:

- 2056 Network I includes a new highway route to the west of the Mount Lindesay Highway connecting to the Springfield-Greenbank Arterial;
- 2056 Network II includes a new north south road link east of the Mt Lindesay Highway from the existing interchange on the Logan Motorway to a possible Southern Infrastructure Corridor (road), between Yarrabilba and Jimboomba.

In the initial assignments, capacity issues were evident on Waterford-Tamborine Road, sections of Mt Lindesay Highway and Teviot Road. The tests above address the issue of whether additional capacity east or west of Mt Lindesay Highway should be provided.

The outcomes of this testing under all land use scenarios is provided at Appendix J, Figures J10.10 to J10.38.

The results of testing of Network I under land use Scenario 1A are as follows:

- totals between 36,000vpd (Scenario 2) and 54,000vpd (Scenario 3) are transferred to the major links west of Mt Lindesay Highway (Undullah Road, the proposed Flagstone to Springfield link and the Flagstone to Greenbank link);
- the demand on the Mt Lindesay Highway would be approximately 33,000-45,000vpd at the Southern Infrastructure Corridor (road) and between 38,000 and 45,000 at Park Ridge;

- 
- the demand on the Waterford-Tamborine Road would be 30,000-35,000vpd;
  - the demand on the Beenleigh-Beaudesert Road would be approximately 48,000-62,000vpd, requiring a motorway style of facility.

The results of testing Network I under land use Scenario 3A (with the highest development yields in Beaudesert) are:

- the projected demands on the Mount Lindesay Highway could be between 45,000vpd and 57,000vpd;
- Waterford-Tamborine Road would experience four lane arterial demands of over 35,000vpd;
- flows of 61,000vpd on Beaudesert-Beenleigh Road would require a freeway style facility.

Further tests, one with the new north south road east of the Mt Lindesay Highway extended to join Mt Lindesay Highway at Park Ridge (see J10.36) and the other extended only to Granger Road (see J10.35) were conducted. In both these cases motorway levels of demands result on Waterford-Tamborine Road between the Southern Infrastructure Corridor (road) and Anzac Avenue. It is noted that Waterford-Tamborine Road currently experiences flooding and therefore would need significant upgrading.

The key conclusion for all scenarios from testing Network I is that a freeway capacity link to the west of the Mount Lindesay Highway does not alleviate capacity issues on the Mt Lindesay Highway and north south arterials to the east. The data suggest that even with a motorway style facility to the west, upgrading of Mt Lindesay Highway plus another north-south motorway standard link to the east would be needed.

Network II, which includes the new north south road east of the Mt Lindesay Highway to the Southern Infrastructure Corridor (road), tested under land use Scenario 3A, results in daily flows on the new north south road east of the Mt Lindesay Highway of between 35,000 and 37,000vpd. Importantly, this moderates demand on Waterford-Tamborine Road and Beenleigh-Beaudesert Road to 30,000vpd and 22,000vpd respectively.

Under the development levels in Scenario 1, the new north south road east of the Mt Lindesay Highway would carry around 30,000-35,000vpd. This leaves demands on Waterford-Tamborine Road and Beenleigh-Beaudesert Road at around 26,000vpd and 22,000vpd respectively.

In all scenarios, the introduction of the new north south road east of the Mt Lindesay Highway to the Southern Infrastructure Corridor (road):

- maintains Mt Lindesay Highway at four lane motorway capacity;
- allows four lane arterial forms to be adopted for Waterford-Tamborine Road and Beenleigh-Beaudesert Road;
- leaves volumes consistent with a two lane arterial road on Teviot Road and the Flagstone-Greenbank/Greenbank Central link to the west of Teviot Road.

---

It is noted that in Scenario 2 with lower growth in Beaudesert, Waterford-Tamborine Road and Beenleigh-Beaudesert Road may be maintained as two lane roads.

The new north south road east of the Mt Lindesay Highway plays a key role in connecting the development areas of Yarrabilba, Flagstone, Beaudesert and Bromelton to the existing Gateway and Logan Motorways. Select link analysis (Figure J10.45) on the new north south road east of the Mt Lindesay Highway shows that the key destinations of traffic utilising this link to the south are:

- Yarrabilba – 33%;
- Southern Infrastructure Corridor (road) to Pacific Motorway - 15%;
- Flagstone – 16%;
- Beaudesert-Beenleigh Road – 14%.

To the north, the key destinations include:

- Gateway Motorway north of Logan Motorway – 40%;
- Logan Motorway west – 15%;
- Chambers Flat – 10%.

A test of a network with the new north south road east of the Mt Lindesay Highway located more to the east (connecting to Southern Infrastructure Corridor (road) east of Waterford-Tamborine Road) was also run for 2056 Scenario 1A. This does not reduce needs on Waterford-Tamborine Road such that four laning would be avoided and has marginal effects on Beenleigh-Beaudesert Road. However, it means additional traffic on links to the west and introduces the need to four lane Waterford-Tamborine Road from Yarrabilba to Mundoolun. The link would also feed traffic through Yarrabilba whereas the more westerly alignment avoids the major planned cities. Figure J10.32 shows the model results. Such a concept also involves two T-connections at Logan Motorway and adds about 25% extra traffic to the section of Logan Motorway between the connections and is therefore not preferred.

Further extension of the new north south road east of the Mt Lindesay Highway south towards Beaudesert Town was also tested. Figure J10.33 and J10.34 show the assignments for Scenarios 1A and 3. For Scenario 1A, such an extension simply moves volumes but involves greater cost than use of existing roads. However, in Scenario 3, added development at Mundoolun is included. The southern extension then provides relief to the existing roads connecting Yarrabilba to Mundoolun and Beaudesert. If Mundoolun is to be considered as a future expansion area, then the southbound extension should be considered.

---

The conclusions that can be drawn from this testing are:

- a new north-south motorway standard road extending south from the Logan Motorway would be required if land use continues to develop as forecast;
- whilst it is not the aim of this study to identify specific alignments for future works, a route from the study area to the existing Gateway Motorway on the eastern side of the Mt Lindesay Highway would attract the greatest traffic volume and provide the greatest capacity relief to the Mt Lindesay Highway. It would support the safe and efficient operation of other roads in the vicinity: the Mt Lindesay Highway, Beaudesert-Beenleigh Road and Waterford-Tamborine Road;
- an alignment east of the Mt Lindesay Highway and joining the existing Gateway Motorway could ultimately attract between approximately 30,000 and 45,000 vehicles per day on the new north-south road link;
- a north-south link road, connecting to the Gateway Motorway would also serve as a freight route from the study area to the Port of Brisbane and Brisbane Airport, thereby reducing freight traffic on the Mt Lindesay Highway, and other major roads in the study area;
- the identification and preservation of the route is urgently required to avoid conflicting development decisions and as an input to land use planning in the area. The identification should include the location, impacts, staging and alignment of the corridor, especially for sections of the road to be established in the Park Ridge and Berrinba areas;
- new interchanges would be required to ensure connectivity with the local road network and to access new commercial and industrial development in the area;
- the development of other high capacity north south arterial routes in the area are also required to assist with public transport and service the traffic generated by new development in Park Ridge.

## **10.2 Southern Infrastructure Corridor (road)**

The Southern Infrastructure Corridor (road) is a potential link from Beaudesert-Beenleigh Road at Cedar Creek west to the Mt Lindesay Highway near Jimboomba. Extensions east and west are also considered in this study. The South East Queensland Regional Plan identified an investigation of a freight route between Ebenezer/Purga to Yatala/Ormeau in this vicinity. The aim of the Strategic Transport Network Investigation is to identify the role and demand for this corridor.

A number of alternatives of the Southern Infrastructure Corridor were tested including:

- connections to the Pacific Motorway, either directly or via Beaudesert-Beenleigh Road and Stanmore Road;
- an alignment either to the north or to the south of Yarrabilba;
- connections to Ipswich City.

---

In order to test the need for the Southern Infrastructure Corridor (road), the aforementioned alternatives were coded into the 2056 road network and assigned using demands from all land use and mode share scenarios. The daily traffic volume outputs from these tests are given in Appendix J (Figures J10.10 to J10.31).

Comparisons between Networks I and II illustrate the effects of connecting the Southern Infrastructure Corridor (road) either directly to the Pacific Motorway or by utilising Beenleigh-Beaudesert Road and Stanmore Road.

Not connecting the Southern Infrastructure Corridor (road) directly to the Pacific Motorway, would force traffic on to Beenleigh-Beaudesert Road with volumes between 48,000vpd and 62,000vpd (Scenario 3) between the Southern Infrastructure Corridor (road) and Stanmore Road. The demand on Stanmore Road could be around 53,000vpd. Both links would require significant upgrading to motorway style facilities.

Connecting the Southern Infrastructure Corridor (road) directly to the Pacific Motorway through the Darlington Range, would deliver significant capacity relief to Beenleigh-Beaudesert Road and Stanmore Road and also improve the efficiency of freight movement. This section of the Southern Infrastructure Corridor (road) would carry approximately 60,000vpd, reducing flows on the Beenleigh-Beaudesert Road to 23,000vpd, requiring a quality four lane Beenleigh-Beaudesert Road but avoiding the need for a freeway/motorway form, and 11,500vpd on Stanmore Road.

Testing of the alignment of the Southern Infrastructure Corridor (road) either to the north or south of Yarrabilba was undertaken by modifying Network II (test network Figure J10.37). The results of this testing indicate that an alignment to the north of Yarrabilba would attract approximately 73,000vpd west of Beenleigh-Beaudesert Road, compared with the southern alternative carrying between 47,000vpd and 63,000vpd. The greater volume on the northern alignment is most likely attributable to the more direct connections available to the new north south road east of the Mt Lindesay Highway, the development area of Flagstone and ultimately the Greenbank-Springfield Arterial.

The more southerly route was only tested for Scenario 3 which has allowance for considerable development at Mundoolun. The more southerly link adds to the amount of road upgrading by virtue of additional length and still leaving upgrading to Camp Cable Road and connections from Yarrabilba to Mundoolun to Beaudesert.

This alignment is less direct for the major interregional and sub regional connections (Gold Coast to Yarrabilba/Flagstone and beyond to Ipswich). The northern alignment is to be preferred even with considerable development at Mundoolun. The Mundoolun area may be better served by extending the new north south road east of the Mt Lindesay Highway southward from Southern Infrastructure Corridor (road), although this needs to be considered further if Mundoolun area develops in the future.

---

A key element of assessing the Southern Infrastructure Corridor (road) is the alignment of further connections to the west to better connect to Ipswich including Ebenezer/Purga. The Greenbank-Springfield Arterial link (and then connecting to the South West Transport Corridor) would most logically serve as a western connection to Ipswich, given a northern alignment of the Southern Infrastructure Corridor (road). Under Network II, the Greenbank-Springfield Arterial could carry approximately 65,000vpd, necessitating upgrading to a freeway style facility.

In the Network I tests, the provision of an alternative motorway more directly from Flagstone to Springfield does not reduce the demands on Greenbank-Springfield Road below levels necessitating a motorway form. Provision of a motorway standard link between Greenbank and Springfield meets the capacity needs and avoids the need for a second such facility. The select link tests for Southern Infrastructure Corridor (road) and Greenbank-Springfield Road are shown at Figures J10.37 and J10.38. This link would also address freight movements that would not be able to utilise the proposed Southern Freight Rail Line between Bromelton and Ebenezer/Purga.

Another consideration of utilising the Greenbank-Springfield Arterial as a western linkage is the practicality of providing connections to the Southern Infrastructure Corridor (road) that does not result in the overloading of the local road network. The select link information shows that around 7,500vpd would travel from the Pacific Motorway to Springfield via the Southern Infrastructure Corridor (road) and Greenbank-Springfield link. This makes up about 12.5% of traffic on the latter link.

The data also indicates that over 20% of the usage of the Greenbank-Springfield Link is drawn from Flagstone/Bromelton/Beaudesert. This is mainly on the potential new arterial from Flagstone to Greenbank/Greenbank Central which is envisaged to have a more district level function. The relative use of Teviot Road and the new link needs further consideration.

The data also shows that strong management of the local road alternatives will be needed to encourage longer distance trips to use the defined major routes i.e. Southern Infrastructure Corridor (road) to Mt Lindesay to Stoney Camp Road to Greenbank/Greenbank Central. Upgrading of Stoney Camp Road or development of a new alternative link has to be considered in the Southern Infrastructure Corridor (road) corridor planning studies. By providing good quality connections to the Mount Lindesay Highway and the new north south road east of the Mt Lindesay Highway, this issue should be manageable. With the introduction of the new north south road east of the Mt Lindesay Highway, Mt Lindesay Highway as a four lane freeway type road, can handle the projected volumes in this network test.

---

Testing the Southern Infrastructure Corridor (road) concludes that for all scenarios:

- a southern linkage from the Pacific Motorway/Intra-regional Transport Corridor broad corridor to Ipswich would be required to provide an alternative to the Logan Motorway for long distance trips and to provide linkages from the study area to centres in Ipswich City (Ripley, Ebenezer/Purga and Springfield) and Gold Coast City (Yatala and southern Gold Coast);
- the preferred route for the Southern Infrastructure Corridor (road) would be north of Yarrabilba and Jimboomba.

The Study also shows that the eastern section Southern Infrastructure Corridor (road) primarily serves to link development in the southern part of what is now Logan City to the Gold Coast. This linkage would provide significant benefit to the network but is not needed before 2031. As a result the continuous east-west concept suggested in the South East Queensland Regional Plan has been varied and the Southern Infrastructure Corridor (road) is recommended in three sections.

The preferred form of the Southern Infrastructure Corridor (road) described above would necessitate additional works including:

- upgrading of Beenleigh-Beaudesert Road and Stanmore Road, given that a connection to the Pacific Motorway from Beenleigh-Beaudesert Road would likely be the last component of the Southern Infrastructure Corridor in terms of staging;
- the Springfield-Greenbank Arterial would be used to link the Mt Lindesay Highway to Springfield, connecting the south-west corridor development areas of Greater Flagstone and Park Ridge with the emerging centre of Springfield. Given this increased role, further investigation will be required to determine the feasibility of using the Springfield Greenbank Arterial for this purpose or if an alternative road should be used.

### **10.3 Additional East-West Linkages**

Assessment of volume/capacity ratios during the road network testing shows that potential capacity issues will form in the northern part of the network, particularly on Kingston-Beenleigh Road and its crossing of the Logan River at Waterford. Whilst it is not proposed that an additional strategic level east-west link would be provided in the northern part of the study area, investigations should be carried out to address long term capacity issues and ascertain how local development will be served in the area. This could involve road upgrading and possibly new river crossings but is best considered in a more local context than this strategic study.

---

## 10.4 Additional North-South Linkages

A further strategic question that emerged whilst testing road network alternatives was related to an additional north-south linkage to the west of the Mount Lindesay Highway. Outputs from the modelling data indicate that a connection in the form of a local arterial/distributor from Greenbank-Springfield Arterial to Flagstone would attract between 10,000 and 15,000vpd, providing relief to the Mount Lindesay Highway between the Southern Infrastructure Corridor (road) and Stoney Camp Road.

Select link assessment (Figure J10.37) shows that whilst there is some demand from Flagstone to Undullah Road (approximately 2,000vpd), 70% of demand to Ipswich and the west would utilise the Springfield-Greenbank Arterial.

Given the topographical challenges that exist for a north-south connection from Flagstone, further detailed investigation would need to be carried out in order to identify the most suitable alignment. Again, this is not a strategic issue but needs review in a more detailed local/district context.

## 10.5 Connections to Bromelton

The proposed industry development at Bromelton has the potential to generate up to 100,000 vehicle trips per day by 2056 and create significant challenges for the localised road network in terms of both freight movements and commuter trips.

In order to understand the pattern of trips generated by Bromelton, a select link analysis was undertaken on the zone centroids connectors that connect the traffic zone representing Bromelton to the road network. Details of these select link assignments are given at Appendix J, Figure J10.45. The following key movements can be seen:

- Beaudesert Town – 30%;
- Flagstone – 20%;
- Beaudesert-Boonah Road – 10%;
- Mount Lindesay Highway north of the Southern Infrastructure Corridor (road) – 7%;
- Ipswich (via Undullah Road or Greenbank-Springfield Road) – 6%;
- Yarrabilba and the Southern Infrastructure Corridor (road) both account for approximately 3% of traffic to Bromelton.

---

Broadly, the outcomes of this analysis shows that several high quality connections would be required to provide connectivity for both commuter (i.e. workers) and freight, including:

- linkages from Bromelton to Flagstone and Beaudesert Town. This is likely best achieved by a link west of the Logan River;
- a connection to the Mount Lindesay Highway for longer distance trips, in particular freight movements to the Port of Brisbane via the Southern Infrastructure Corridor (road) and the new north south road east of the Mt Lindesay Highway. Following the network principle for routes skirting the proposed centres, an alignment is proposed skirting south-east of Flagstone and connecting to the link above;
- a freight connection to the Cunningham Highway, which could utilise the existing Beaudesert-Boonah Road. A significant section of this road link will be inundated by the proposed Wyaralong Dam. Although this road would not be a high volume connection any replacement road should be planned in a form that supports use by heavy freight vehicles.

## **10.6 Recommended Road Network**

The recommended network for further detailed corridor investigation is illustrated in Figure J10.40 and includes:

- new north south road east of the Mt Lindesay Highway and south of the Logan Motorway;
- the Southern Infrastructure Corridor (road) connecting the Pacific Motorway to Ipswich via the Mt Lindesay Highway and Greenbank Springfield Arterial;
- road network connections to Bromelton, via a new road west of the Logan River and skirting the south eastern area of Flagstone. This will be supplemented by a link between Bromelton and Gleneagle.

In addition to the key strategic links above, additional local capacity improvements would likely be required (see Appendix J10.44) including:

- Beenleigh-Beaudesert Road and Stanmore Road, due to likely staging of the Southern Infrastructure Corridor (road);
- Waterford-Tamborine Road upgrading;
- Kingston-Beenleigh Road, in particular the crossing of the Logan River;
- Springfield-Greenbank Arterial;
- local network improvements around the major development centres of Bromelton, Flagstone and Yarrabilba;
- development of a stronger local network in the Bahrs Scrub, Buccan, Waterford areas if further development is to occur.