14.0 SUMMARY AND CONCLUSIONS

The South East Queensland Regional Plan identified a number of investigation areas that provide potential land banks for medium to long term development within South East Queensland (SEQ). The Regional Plan included the Mt Lindesay North Beaudesert (MLNB) area as a special investigation area. The Office of Urban Management (OUM), now the Department of Infrastructure and Planning commenced a study of the Mt Lindesay North Beaudesert area which detailed a preferred long term development option. The study concluded that the proposed future land use would increase future transport demand within the Mt Lindesay North Beaudesert study area. The predicted increase in transport demand has necessitated a strategic network investigation to detail the long term transport needs of the study area.

The Mt Lindesay/Beaudesert Strategic Transport Network Investigation aims to identify the important passenger and freight transport links needed to support growth consistent with the Mt Lindesay North Beaudesert Study preferred development option. The Strategic Transport Network Investigation will assist local governments and agencies with long term planning for the Mt Lindesay North Beaudesert area and the wider study area.

The project has undertaken strategic modelling and analysis to assess a range of land use, mode share and transport network scenarios for 2056. The results of this analysis are described in detail in the preceding sections.

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 former Beaudesert Shire and the connections through and from Beaudesert to other areas. Areas outside Beaudesert form a frame to ensure interactions are properly understood. However, the study has not sought to define networks in these frame areas. 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 for that corridor.

The study aims to identify the need for the transport infrastructure, and not its detailed alignment. The Regional Plan identified a number of investigations into potential long term transport corridors so corridor preservation can begin to occur. This study seeks to identify the need for these corridors specifically focussed around the Study Focus area. Detailed corridor studies will form the next stage of work for the Department of Transport and Main Roads which will assist in corridor preservation for the future.
14.1 Conclusions

A number of key strategic questions were formed to assist with the overall direction of the Strategic Transport Network Investigation outcomes. The strategic questions and the overall conclusions are contained below.

Figures 14.1, 14.2 and 14.3 illustrate the proposed public transport, road and cycle networks required at 2056 in the area. Key aspects of these networks are discussed below.

*Figure 14.1* 2056 Future Road Network
New North South Road east of the Mt Lindesay Highway
An extension of the new north south road east of the Mt Lindesay Highway, south of Logan Motorway will be required by 2056 if the land use develops in the Study Focus Area along the lines of any of the three scenarios discussed in this report. The key generators for this route are the future population and jobs proposed around the Yarrabilba, Logan Village and Jimboomba area.
The conclusions that can be drawn from the Strategic Transport Network Investigation are:

- a new north south road east of the Mt Lindesay Highway south from the Logan Motorway would be required in order to provide capacity relief on the Mount Lindesay Highway, Beaudesert-Beenleigh Road and Waterford-Tamborine Road;
- 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 Mount Lindesay Highway would attract the greatest traffic volume and provide the greatest capacity relief to the Mount Lindesay Highway;
- an eastern alignment of the new north south road east of the Mt Lindesay Highway is also in keeping with the strategic road network principles whereby key strategic links should not pass through major development areas;
- an alignment east of the Mount Lindesay Highway could attract between approximately 30,000 and 45,000 vehicles per day;
- a new north south road east of the Mt Lindesay Highway as discussed above would also serve as a priority road freight route from the study area to the Port of Brisbane and Brisbane Airport, thereby reducing long distance transit freight traffic from the Mount Lindesay Highway, and other major roads in the study area.

The corridor is required east of the Mt Lindesay Highway, running north south between the Logan Motorway and proposed Southern Infrastructure Corridor (road) (see below). A more detailed study is required to identify the location, impacts, staging and alignment of this corridor and consideration of staging of local road upgrading. The study should also consider the likelihood of development at Mundoolun and whether a corridor is also required in this area.

Southern Infrastructure Corridor (road)
The Southern Infrastructure Corridor (road) is schematically shown in the 2005 Regional Plan as an east-west route. A concept for a route from Gold Coast to Ipswich and beyond has been implied. The Strategic Transport Network Investigation analysis shows that the longer regional connections from Gold Coast to Ipswich make up only 10% of Southern Infrastructure Corridor (road) use. The Southern Infrastructure Corridor (road) primarily serves as the Study Focus Area to Gold Coast and Beaudesert to Ipswich linkages. As a result the continuous east-west alignment suggested in the Regional Plan has been varied. The Southern Infrastructure Corridor (road) is recommended in three sections:

- Mt Lindesay Highway to Springfield via Springfield Greenbank Arterial;
- Mt Lindesay Highway to Beaudesert-Beenleigh Road. This segment will be required as a Highway/Motorway standard distributor by 2026, justifying further investigation;
- Beaudesert-Beenleigh Road to M1 Pacific Motorway/Intra-regional Transport Corridor broad corridor.
The outcome of testing the Southern Infrastructure Corridor (road) concludes:

- that a southern east west linkage from the Pacific Motorway 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.

In terms of connections at the eastern and western ends, the preferred outcome would be:

- an eastern connection directly to the Pacific Motorway (and potentially beyond), which would involve investigation of a route through the Darlington Range;
- a western connection to Ipswich City from Mount Lindesay Highway via Springfield-Greenbank Arterial and then connecting to the South West Arterial. The ability for upgrading of the Springfield-Greenbank Arterial would also need to be investigated.

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 tunnel connection to the Pacific Motorway from Beenleigh-Beaudesert Road would likely be the last component of the Southern Infrastructure Corridor (road) in terms of staging;
- the Springfield-Greenbank Arterial would take on a significant role in the strategic network and would require upgrading.

A detailed study identifying location, impacts, staging and alignment of the Southern Infrastructure Corridor (road) is therefore required as well as the ability to achieve the above local road work networks upgrading.

Connections to Bromelton

A new north-south spine running within the Bromelton area is recommended. Major movements are anticipated between Flagstone and Bromelton. At the northern end the route could skirt the south-east of the Flagstone area and join together with a main feeder from Flagstone to join the Mt Lindesay Highway/Southern Infrastructure Corridor (road) interchange. In addition, a link to the Mt Lindesay Highway in vicinity of Gleneagle will also be required. Linkages north-south would join into Flagstone and to Undullah Road which itself would eventually become a major road link.
The scenarios tested a wide variation in employment levels at Bromelton from 13,000 to 30,000 jobs. In all cases there is need to configure roads in the Bromelton area to link north to Flagstone and hence to Mt Lindesay Highway. If development were constrained to the southern part of Bromelton then the latter connection to Mt Lindesay Highway could be made closer to Beaudesert.

Freight connections from Cunningham Highway to Bromelton will be provided by Beaudesert-Boonah Road and Boonah-Flagstone Road. Maintenance of suitable alignment, grades and passing opportunity for freight will be necessary. Rebuilding of the section of road affected by the Wyaralong Dam should also consider this role.

**Internal Sub Regional Road Connections**
The 2056 land use scenarios all include significant development at Flagstone, Greenbank, Beaudesert Town and Yarrabilba. There will need to be a network of major roads within these areas and also between these centres. The internal road network should be resolved as part of Council’s detailed structure planning for these areas. Specifically, the Strategic Transport Network Investigation indicates the need for major road connections are required to service Yarrabilba, Flagstone and Bromelton. A more detailed local arterial road network should be developed for the study area.

In addition to the key strategic links above, additional local capacity improvements would be required including:

- Beenleigh-Beaudesert Road and Stanmore Road, due to likely staging of the Southern Infrastructure Corridor (road);
- Kingston-Beenleigh Road, in particular the crossing of the Logan River;
- Springfield-Greenbank Arterial;
- local network improvements around the major development centres of Flagstone and Yarrabilba;
- Waterford-Tamborine Road in the vicinity of Flagstone and extending north;
- linkages from Flagstone to Greenbank west of Teviot Road are desirable to supplement Teviot Road.

**Passenger rail between Beaudesert and Brisbane**
The Strategic Transport Network Investigation found that future public transport demands are likely to warrant the passenger rail along the interstate rail line between Beaudesert/Bromelton and Brisbane at 2056, if public transport patronage levels are above the low public transport scenarios. It is noted that the highest demands for this route are north of North Bromelton.
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 principal rural activity centre. It is noted that estimated 2056 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.

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

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 has investigated the ability of the interstate rail corridor (between Salisbury and Bromelton) 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. 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 area impacts, staging and timing should also be investigated in this corridor study.

The route between Salisbury and North Bromelton can traverse the Sydney to Brisbane interstate rail line. The corridor study needs to also identify a route between North Bromelton 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 area.

Additional stations have been indicated, although a more detailed corridor study will be required to confirm appropriate locations and the corridor. The population levels proposed under the South East Queensland Regional Plan Amendment 1 are not sufficient to justify provision of this rail line at 2026. Our 2036 estimates suggest provision in the 2026-2036 timeframe, depending on level and location of future development.
Other Public Transport Networks
To serve the remainder of the Study Focus Area, a detailed network of bus connections between and to/from centres will be required to meet the public transport demands as illustrated on Figure 14.2. Bus networks should also be developed in the study area as an interim network before the passenger rail line is provided and will suitably provide for the needs of the area.

The development of public transport systems within major development areas of Flagstone, Beaudesert Town, Yarrabilba, and Bromelton will be crucial to meeting public transport targets and should be resolved as part of Council's detailed structure planning for these areas, in conjunction with TransLink’s network planning. Within these areas, there may be a need to provide bus priority measures.

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 Public Transport Options Study (Draft August 2007). Key elements of this proposed network include an east west bus route between Beenleigh and Loganlea rail station, via Yarrabilba, Jimboomba, Flagstone, Greenbank and potentially connecting the future rail station at Springfield. A high frequency service along the Mt Lindesay Highway; and bus services between Browns Plains and Yarrabilba and Flagstone are also required.

Future new road links may provide opportunities for alternative public transport network configurations. For example, a more direct link to the Gold Coast rail line may be via parts of the proposed Southern Infrastructure Corridor. These opportunities require investigation as transport network planning proceeds.

Freight Networks
The primary regional freight movements are anticipated from Bromelton to Australia Trade Coast/Port of Brisbane. These will use rail links, and by road using the new north-south link from Bromelton connecting to the future Southern Infrastructure Corridor (road) and the future new north south road east of the Mt Lindesay Highway. This route will be supplemented by existing major freight routes of the Pacific Motorway, Logan Motorway, Cunningham Highway and Warrego Highway. The Mt Lindesay Highway will also continue to serve a secondary freight route.

Rail will also serve a role in the movement of goods via the Interstate rail line to Acacia Ridge and also via the proposed Southern Freight Rail Corridor between Bromelton and Ebenezer. This route is currently under investigation as part of another study.
Non-Motorised Transport Modes

Cycle networks will form an important part of the future transport system for the study area. All new transport corridors proposed for the Strategic Transport Network Investigation should be investigated for the provision of facilities for cycling. In addition, the study recommends safe centre to centre cycle connections as well as connected internal cycle networks within these centres. The internal networks should be identified in Council’s detailed structure planning for these areas. The key elements of this network are as follows:

- comprehensive external connections to Logan (and Brisbane), Gold Coast and Ipswich;
- sub-regional connections between residential areas, key centres and enterprise areas;
- comprehensive internal pedestrian and cycle network within all existing and proposed development areas. As noted above, this should be planned as part of Council’s structure planning processes;
- recreational routes should be developed within cities, towns and villages and to/from key recreational destinations. In addition, where topography or distance is a constraint for commuter travel, training and recreational links could be provided. This is particularly the case through the Scenic Rim hinterland areas and connections to the Gold Coast and Tweed areas. These can also be guided by Council’s recreation planning;
- investigations should also occur into the use of the Bethania to Beaudesert rail line for walking and cycling, potentially as a rail trail development and provision of cycle route alongside the Beaudesert to Salisbury rail line. These rail corridors form an ideal location for such facilities due to their grades, topography and that they also serve a direct route between major development areas.

Figure 14.3 illustrates the proposed cycle networks required at 2056 in the area.
Figure 14.3 2056 Future Cycle Network

14.2 Recommendations

As a result of the key study findings, the Strategic Transport Network Investigation has defined a need for a number of future transport infrastructure projects. It is therefore recommended that the Department of Transport and Main Roads undertake further corridor investigations for:

- new north south road east of the Mt Lindesay Highway south of the Logan Motorway into the Study Focus Area;
- the Southern Infrastructure Corridor (road) (Mt Lindesay Highway towards Beaudesert-Beenleigh Road and on to the Pacific Motorway/Intra-regional Transport Corridor broad corridor);
- western Southern Infrastructure Corridor (road) links to Ipswich from Mt Lindesay Highway via Greenbank-Springfield Arterial;
- Mt Lindesay Highway;
in considering the Southern Infrastructure Corridor (road) connectivity to the Pacific Motorway/Intra-regional Transport Corridor broad corridor, investigation of the Pacific Motorway corridor between Springwood and the northern Gold Coast is required in relation to supporting road opportunities to the east and west of the Pacific Motorway;

more detailed network studies of the new north south road east of the Mt Lindesay Highway and the Southern Infrastructure Corridor (road) to gain better understanding of the staging of these roads;

the Brisbane to Beaudesert rail line.

The corridor studies need to investigate potential alignment, location and staging of these corridors as well as consider in detail impacts on the local area and local road upgrading.

It is also recommended that Scenic Rim Regional and Logan City Councils undertake structure planning including internal road, public transport and cycle networks of the following key growth areas:

- Flagstone;
- Yarrabilba;
- Beaudesert Town;
- Bromelton;
- Greenbank;
- Buccan/Bahrs Scrub;
- Park Ridge.

Analysis of the priority of the above recommendations has been undertaken based on considering growth to 2036. This indicates the new north south road east of the Mt Lindesay Highway, the Southern Infrastructure Corridor (road) and the Salisbury to Beaudesert rail line corridor alignment studies are the highest priority, depending on the level of growth achieved at this time. Depending on the location and timing of this growth, may also bring forward the need for some of these projects.

The 2016 and 2026 recommendations for public transport systems of the report should also be incorporated into TransLink’s planning and implementation program (i.e., TransLink Network Plan). These are to include an enhanced bus system with improved frequency and route coverage in the Study Focus Area.
## GLOSSARY

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CBD</td>
<td>Central Business District</td>
</tr>
<tr>
<td>ICC</td>
<td>Ipswich City Council</td>
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<tr>
<td>ICS</td>
<td>Infrastructure Charges Schedule</td>
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<tr>
<td>IRTP</td>
<td>Integrated Regional Transport Plan</td>
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<tr>
<td>LGA</td>
<td>Local Government Area</td>
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<tr>
<td>LGMS</td>
<td>Local Growth Management Strategy</td>
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<td>LPM</td>
<td>Logan Population Model</td>
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<td>MLNB</td>
<td>Mt Lindesay North Beaudesert</td>
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<td>MTAA</td>
<td>Motor Traders Association Australia</td>
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<tr>
<td>NORSROC</td>
<td>Northern Sub-regional Organisation of Councils</td>
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<td>OUM</td>
<td>Office of Urban Management</td>
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<tr>
<td>PIFU</td>
<td>Planning Information and Forecasting Unit</td>
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<tr>
<td>PIP</td>
<td>Priority Infrastructure Plan</td>
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<tr>
<td>ROC</td>
<td>Regional Organisation of Councils</td>
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<td>SEQ</td>
<td>South East Queensland</td>
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<td>SEQIPP</td>
<td>South East Queensland Infrastructure Plan and Program</td>
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<tr>
<td>SEQRFNS</td>
<td>South East Queensland Regional Freight Network Strategy</td>
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<td>SEQRP</td>
<td>South East Queensland Regional Plan</td>
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<td>SEQSTM</td>
<td>South East Queensland Strategic Transport Model</td>
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<tr>
<td>SouthROC</td>
<td>Southern Regional Organisation of Councils</td>
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<td>SRWP</td>
<td>Southern Regional Water Pipeline</td>
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<td>TWG</td>
<td>Technical Working Group</td>
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<td>V/C</td>
<td>Volume to Capacity</td>
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<td>WBTNI</td>
<td>Western Brisbane Network Investigation</td>
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<tr>
<td>WESROC</td>
<td>Western Sub Regional Organisation of Councils</td>
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<tr>
<td>WOSPP</td>
<td>Whole of Shire Planning Process</td>
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