

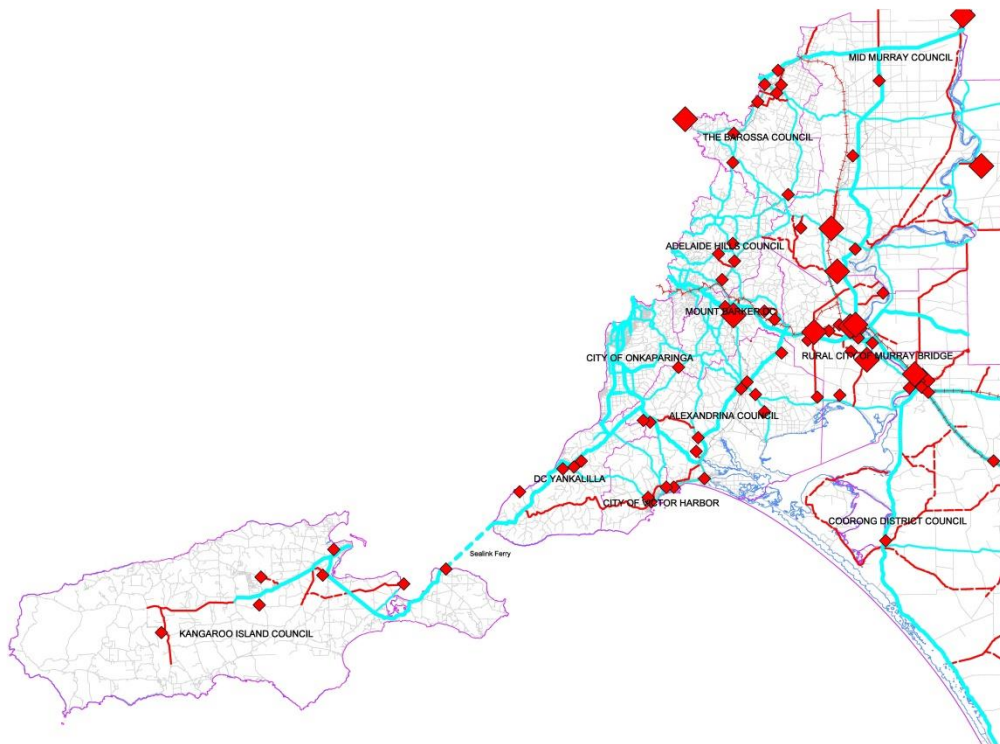
# Southern & Hills Local Government Association

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## 2020 TRANSPORT PLAN – 2015 UPDATE

### Final Report

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### HDS Australia Pty Ltd

277 Magill Road  
Trinity Gardens SA 5068

telephone +61 8 8333 3760  
facsimile +61 8 8333 3079  
email [sa@hdsaustralia.com.au](mailto:sa@hdsaustralia.com.au)

[www.hdsaustralia.com.au](http://www.hdsaustralia.com.au)

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## Key Regional Transport Infrastructure Initiatives

### Freight

- Development of the **South Coast Freight Corridor** as a primary cross regional gazetted 26m B-Double GML route (ultimately upgraded to a PBS Level 2A route) running from Cape Jervis, via Victor Harbor and Strathalbyn, to the South East Freeway Interchange at Callington, with a branch to Mount Barker.
- Development of the **Southern Vales Wine Freight Corridor** as a secondary cross regional gazetted 26m B-Double GML route running from McLaren Vale to the South East Freeway Interchange at Mount Barker.
- Development of the **Kangaroo Island Freight Corridor** as a secondary cross regional gazetted 23m B-Double GML route (upgraded to 26m B-Double when the Sealink Ferry capability permits) running from Gosse to Penneshaw, then via the Ferry to Cape Jervis.

### Tourism

- Development of the **Fleurieu Way** as a primary cross regional tourism route, suitably signposted and promoted, from Wellington, via Strathalbyn, Goolwa, Victor Harbor, Delamere / Cape Jervis, Normanville / Yankalilla, Aldinga, Willunga and McLaren Vale, to Adelaide.
- Development of the **Kangaroo Island South Coast Loop and North Coast Loop** as primary regional tourism routes, suitably signposted and promoted, and connected via the Sealink Ferry and the Fleurieu Way to Adelaide and Melbourne.
- Development of **tourism link roads** from the Fleurieu Way, KI South Coast Loop and KI North Coast Loop to secondary tourism destinations, primarily associated with the Fleurieu Peninsula and Kangaroo Island food and wine trails, plus coastal destinations.

### Public Transport

- Significant enhancement of regional public transport to/from Adelaide by providing a more frequent and coordinated bus schedule from Victor Harbor, Goolwa and Yankalilla to the Seaford Bus/Rail Interchange, with the ultimate aim of **extending Metrocard ticketing** to these towns.
- Upgrade the existing Metrocard ticketed bus service to Strathalbyn, with a more frequent and coordinated bus schedule to the Mount Barker Bus Interchange.

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**ENCLOSURES**

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2. 2020 Transport Plan – Demand Modelling Working Paper
3. 2020 Transport Plan – Final Report
4. 2020 Transport Plan – 2015 Update – Regional Transport Routes (as at 10 Nov 16) in A3 Size

**REFERENCES** (downloadable from S&HLGA web site or relevant SA Government web site)

1. 2010 Transport Plan – Final Report and Plan, S&HLGA, August 2001
2. 2010 Transport Plan Addendum – Final Report, S&HLGA, December 2004
3. 2010 Transport Plan 2007 Addendum – Final Report, S&HLGA, February 2008
4. Development of a Roads Infrastructure Database – Project Report, Office of Local Government / Local Government Association of SA, December 2001
5. South Australia's Strategic Plan 2011, State Government of SA, 2011
6. Strategic Infrastructure Plan for South Australia, Office for Infrastructure Development, State Government of SA, April 2005
7. Strategic Infrastructure Plan for South Australia – Regional Overview, Office for Infrastructure Development, State Government of SA, May 2005
8. Planning Strategy for the Outer Metropolitan Adelaide Region, Planning SA, December 2007 – *superseded by Reference 10*
9. Kangaroo Island Plan – A Volume of the South Australian Planning Strategy, Department of Planning, Transport and Infrastructure, January 2011
10. The 30-Year Plan for Greater Adelaide, Department of Planning and Local Government, 2010
11. Population Projections for South Australia (2001-31) and the State's Statistical Divisions (2001-21), Planning SA, June 2007
12. Development Plan, Adelaide Hills Council, April 2016
13. Development Plan, Mount Barker District Council, December 2016
14. Development Plan, Alexandrina Council, November 2016
15. Development Plan, City of Victor Harbor, May 2016
16. Development Plan, District Council of Yankalilla, May 2016
17. Development Plan, Kangaroo Island Council, September 2015
18. Development Plan, Rural City of Murray Bridge, March 2014 – *no longer relevant, Council no longer part of S&HLGA*
19. Development Plan, The Barossa Council, February 2013 – *no longer relevant, Council no longer part of S&HLGA*
20. South Coast Master Plan (Draft), Planning SA, October 2007
21. Victor Harbor Urban Growth Management Strategy – 2013 Update, City of Victor Harbor, September 2013
22. Draft Strathalbyn Town Plan 2014 - 2024, Alexandrina Council, August 2014
23. Murray Bridge Urban Growth Plan, The Rural City of Murray Bridge, July 2007 – *no longer relevant, Council no longer part of S&HLGA*
24. Monarto Precinct Strategic Directions Report, Murraylands Regional Development Board, September 2007
25. DC Yankalilla Strategic Directions 2007-2012, District Council of Yankalilla, September 2007 – *superseded by Reference 47*
26. AusLink White Paper – Building our National Transport Future, Department of Transport and Regional Services, June 2004
27. Melbourne – Adelaide Corridor Study, Department of Transport and Regional Services, July 2006
28. Regional North South Transport Corridor Final Report, Murray Lands RDB, February 2006
29. Kangaroo Island Regional Transport Strategy, KI Regional Transport Strategy Steering Group, March 2007
30. Transport Master Plan, District Council of Mount Barker, December 2009
31. Rural Road Hierarchy, District Council of Yankalilla, March 2007
32. Road Classification Guidelines in South Australia, Local Roads Advisory Committee, July 2008
33. Heavy Vehicle Access Framework, Department for Transport Energy and Infrastructure, October 2011
34. South Australia Experiences (Adventure/Diving), South Australian Tourism Commission, 2008

35. South Australia Fleurieu Peninsula Regional Brochure, South Australian Tourism Commission, 2007
36. Regional Tourism Profiles for S&HLGA Region, South Australian Tourism Commission, December 2015
37. South Australian Tourism Plan 2020, South Australian Tourism Commission, 2014
38. Local Government's Engagement in Tourism – Final Report, South Australian Tourism Commission / Local Government Association of SA, July 2006
39. The Fleurieu Peninsula Destination Action Plan 2012-2015, Various Fleurieu Councils and South Australian Tourism Commission, July 2013
40. Kangaroo Island Destination Action Plan, Kangaroo Island Council and South Australian Tourism Commission, July 2013
41. Towards 2020 – RAA's Vision for South Australia's Roads, The Royal Automobile Association of SA Inc, April 2009 (*web link via paper submitted May 2009*)
42. Adelaide Rail Freight Movements Study – Final Report, Department of Infrastructure, Transport, Regional Development & Local Government, June 2010
43. A Functional Hierarchy for SAs Land Transport Network, Department of Planning, Transport and Infrastructure, June 2013
44. The Integrated Transport and Land Use Plan, Department of Planning, Transport and Infrastructure, October 2013
45. The Integrated Transport and Land Use Plan – Technical Document, Department of Planning, Transport and Infrastructure, October 2013
46. National Remote and Regional Transport Strategy – Consultation Draft, Transport and Infrastructure Council, May 2015
47. Our Towns Our Future: Structure Plan for Yankalilla, Normanville and Carrickalinga, URS Australia, January 2015
48. Mount Barker, Littlehampton and Nairne Trails Plan, Oxigen, July 2011
49. Strategic Infrastructure Plan for South Australia – 2010 Discussion Paper, Department for Transport, Energy and Infrastructure, September 2010
50. The 30-Year Plan for Greater Adelaide 2016 Update – Draft for Consultation, Department of Planning, Transport and Infrastructure, 2016
51. Adelaide Hills Strategic Bicycle Plan – Draft, Adelaide Hills Council, October 2015
52. Victor Harbor Bicycle Strategy – Draft for Consultation, City of Victor Harbor, 2016

## PART A

### 1.0 EXECUTIVE SUMMARY

#### 1.1 Overview of Original Project

In June 2008, HDS Australia Pty Ltd was engaged by the Southern & Hills Local Government Association (S&HLGA) to prepare a 2020 Transport Plan. The 2020 Transport Plan is a strategic level assessment of transport needs and priorities within the S&HLGA region for the period from 2010 to 2020. While it officially replaces the 2010 Transport Plan, which has reached the end of its period of operation, the 2020 Transport Plan builds upon earlier research and road proposal prioritisation methodologies developed as part of the 2010 Transport Plan and subsequent Addendums.

Development of the 2020 Transport Plan was undertaken by John Olson, Managing Director and Principal Engineer at HDS Australia, using an agreed methodology developed jointly by HDS Australia and the S&HLGA. The S&HLGA Roads Working Party (RWP) acted as a reference group for the project, while Fred Pedler, former Executive Officer for the S&HLGA, was the client representative.

Overall, the original project entailed four distinct phases, namely:

1. Identification of significant sources and destinations for transport within the S&HLGA region.
2. Development of updated regional transport routes for the S&HLGA region.
3. Creation of a 2009 Roads Database.
4. Preparation of a final report, encompassing all aspects of the 2020 Transport Plan.

Included in the first phase was a substantial study of all currently available literature reflecting state level strategic planning, regional planning and development issues, regional transport planning and local transport plans. Forty documents were initially examined, with input from a further three key documents subsequently included in the final report (refer to the list of references included with that report).

In addition, methodologies for development and periodic review of the 2020 Transport Plan, as defined and agreed upon in the 2007 Addendum to the 2010 Transport Plan, were incorporated into the final report for the 2020 Transport Plan.

Three interim publications were prepared during development of the 2020 Transport Plan. The first, titled "2020 Transport Plan – Demand Modelling Research Notes" was released in September 2008 (refer Enclosure 1). The second, titled "2020 Transport Plan – Demand Modelling Working Paper" was released in November 2008 (refer Enclosure 2). The third, titled "2020 Transport Plan – 2009 Roads Database Assessment Worksheet" was released in April 2009 (refer Appendix B to Enclosure 3).

The final report for the 2020 Transport Plan was the culmination of the original project. It is included as Enclosure 3 to this 2020 Transport Plan – 2015 Update. However, it should be recognised that the 2020 Transport Plan is a "living" document which has needed and will continue to need on-going review and updating as new regional planning and development initiatives influence future transport priorities.

Further details of specific tasks undertaken and outcomes achieved as part of the original 2020 Transport Plan development project are contained in Section 2 of this report.

## 1.2 2015 Update

In July 2013, HDS Australia was engaged by the S&HLGA to review and update selected elements of the 2020 Transport Plan, in line with the overall methodology described in Section 6 of the report. The S&HLGA RWP again acted as a reference group for the 2020 Transport Plan Update, while Graeme Martin, current Executive Officer for the S&HLGA, was the client representative.

This supplementary project entailed three distinct stages, undertaken over a two year period, namely:

1. Development of Regional Road Deficiency Action Plans during which, with assistance from HDS Australia, individual councils within the S&HLGA broadly assessed all of their regional freight, tourism and community access routes against the appropriate “fit for purpose” standard, and then prioritised any deficient road segments into one of three Action Plans (defining them as short term, medium term or long term upgrade priorities). This task was completed in February 2014.
2. Assessment and prioritisation of council road upgrade nominations in accordance with the methodology contained in Section 6.3 of the report. Similar to previous assessments in 2009 and 2011, this task entailed a two step process, namely:
  - a. Assessment of the nominations for completeness of details and provision of appropriate supporting evidence, involving creation of an initial spreadsheet containing “raw” assessments for each nomination based upon the quality of each council’s submitted supporting information; and
  - b. Creation of a second spreadsheet containing “weighted” assessments for each nomination using the weighted scoring methodology defined in Section 6.3.

A 2014 “Summary of Road Proposals” listing all nominations in order of priority within the three primary purpose categories of “Freight”, “Tourism” and “Community Access” was then prepared, as well as an overall list of “2014 Regional Priorities” for consideration and subsequent adoption by the S&HLGA RWP. This task was completed in April 2014.

3. Although officially released in December 2011, the 2020 Transport Plan is based primarily on 2009 data and strategic priorities. While the overall methodology contained within the 2020 Transport Plan final report remains acceptable, some definitions were considered to be inconsistent with similar regional transport plans adopted by other regions and with updated guidelines proposed by the Local Government Association of South Australia (LGASA). In turn, this required a review by individual councils of their regional freight, tourism and community access routes. HDS Australia assisted in this process, along with providing updates to Sections 5 and 10 of the original report, in order to take into account the recent release of major state government reports, particularly “The 30-Year Plan for Greater Adelaide” (Reference 10) and “The Integrated Transport and Land Use Plan” (References 44 and 45).

In summary, sections of this report as listed below have been materially updated when compared with the original (December 2011) release, while other sections have had nominal changes resulting from removal of the Rural City of Murray Bridge and The Barossa Council from membership of the S&HLGA, various government department name changes, updating of appendices and references, plus other non-essential terminology changes.

- Section 1.2 added, previous Sections 1.2 to 1.6 renumbered Sections 1.3 to 1.7.
- Section 1.7 (and Section 11.4) Recommendations 7 and 8 updated.
- Section 2.11 added.
- Section 5 updated.



- Section 7 definitions amended and regional freight routes updated.
- Section 8 definitions amended and regional tourism routes updated.
- Section 9 definitions amended and regional community access routes updated.
- Section 10 reviewed in light of recent publications.
- Section 10.6 added, describing the concept of a Regional Cycling Network, with the inclusion on a sample basis of “Regional Cycling Routes” for Yankalilla / Normanville as a supplementary category of regional tourism and community access routes.
- Appendix A and Enclosure 4 updated with new regional transport route drawings, current as at 10 November 2016.
- Appendix B added with Regional Road Deficiency Action Plans, current as at 17 February 2014.
- Appendix C (formerly Appendix B) updated with the 2014 Roads Database.
- Former Appendix C, namely Special Local Roads Program – Review of 2009-10 Funding Applications, superseded and therefore removed.
- References updated where needed to reflect more recent versions of individual publications, and additional references included where relevant.

### 1.3 Regional Development and Transport Planning Issues

Section 3 of this report reviews the strategic direction set by the state government for both South Australia as a whole and for the S&HLGA region. It also examines the state’s current planning strategy, plus individual development plans in existence for the six councils which form the S&HLGA, along with master plans and urban growth strategies for Victor Harbor / Goolwa, Strathalbyn, Mount Barker and Yankalilla.

South Australia’s Strategic Plan was originally launched by the state government in March 2004, then updated in 2007 and again in 2011. The 2007 plan had six objectives, namely:

Growing Prosperity  
 Improving Wellbeing  
 Attaining Sustainability  
 Fostering Creativity and Innovation  
 Building Communities  
 Expanding Opportunity

Implications of the 2007 state strategic plan on transport planning within the S&HLGA region are considered in Section 3.2 of this report, but broader implications arising from the 2011 release have not been addressed as part of the 2015 Update.

The Strategic Infrastructure Plan for South Australia (SIPSA) was released in April 2005, as a follow on to the original 2004 release of South Australia’s Strategic Plan. The principal purpose of SIPSA was to guide new infrastructure investment by government and the private sector over the next five to ten years as well as to improve management and use of the state’s existing infrastructure assets. SIPSA incorporated four broad strategies, namely:

1. To **coordinate** infrastructure planning and construction across the state.
2. To pursue more **efficient** and competitive infrastructure systems.
3. To pursue and promote **sustainable** development through sound planning and use of infrastructure.
4. To meet future demands in a timely and **innovative** manner.

SIPSA stated that the strategic priorities for road infrastructure were to:

- Improve the state's competitiveness through efficient freight transport networks and improved international links.
- Minimise the impact of freight vehicle movement on the community and environment by appropriately locating and protecting freight routes.
- Concentrate resources on maintaining and improving existing assets rather than extending the network.

A strategic priority for the rail network was to:

- Encourage the shift to rail transport for passenger and freight movements where justified by environmental, economic or social imperatives.

Strategic priorities for aviation were to:

- Maintain an efficient transport network to Adelaide Airport to support anticipated passenger and freight movements.
- Ensure any change in land use on or adjacent to export airports does not preclude future transport development.
- Provide for the orderly expansion of facilities at regional airports to meet growing visitor and freight activities.

An update of SIPSA is currently being developed, but at the date of this report has not been officially released.

The "30-Year Plan for Greater Adelaide" is designed to:

- Provide the framework for development based on principles of ecologically sustainable development and management of the outer metropolitan area; and
- Create some degree of certainty for investors, state agencies, local government and the community by providing a clear indication of the state government's policy directions for the physical development of Greater Adelaide.

The S&HLGA region is a major asset to the state and to metropolitan Adelaide because it:

- Is a major tourist destination, particularly with regard to the viticulture industry;
- Contains the major water catchment areas which supply metropolitan Adelaide's reticulated water as well as storage for water pumped from the River Murray;
- Contributes to the economic health of the state through the value of its agricultural production;
- Is a major focal point for non-metropolitan population growth in Mount Barker and Victor Harbor, which have two of the fastest growing populations in South Australia; and
- Contains beautiful and diverse landscapes.

The state government's broad directions for Greater Adelaide's growth and development are outlined in the 30-Year Plan for Greater Adelaide. These include major development around transit corridors, including Transit Oriented Developments (TODs), and the identification of future growth areas. The government is committed to a plan that incorporates the following:

- Within the next 30 years, Greater Adelaide will house 560,000 more people, 258,000 new dwellings and 282,000 additional jobs; and
- New housing will move over time from a 50:50 split between existing areas and new land divisions, to a 70:30 split.

Section 4 of this report looks at various transport planning studies covering the S&HLGA region which have been undertaken by federal, state and local government bodies. Three of the documents examined are the 2010 Transport Plan and related appendices, while a further eight transport studies have been examined.

Sections 3 and 4 of this report collectively identify and in many instances quantify the expected future demand for transport infrastructure in the S&HLGA region out to various years from 2015 to 2050. A further independent assessment of expected transport demand has not been undertaken. Rather, all available literature has been consolidated into a single regional transport focus, the outcome of which is the 2020 Transport Plan.

Section 5 of this report examines issues related to the Department of Planning, Transport and Infrastructure (DPTI) controlled arterial road network. A fundamental assumption in preparing the 2020 Transport Plan is that arterial roads are of a multi-purpose nature (freight, tourism and community access) with sufficient capacity to handle current and projected traffic loads. However, this is not always the case. In particular, DPTI's Heavy Vehicle Access Framework defines a network of key and general freight routes around the state, recognising that not all arterial roads are capable of safely handling B-Double and other Restricted Access Vehicle movements. Other deficiencies in the arterial road network relate to bridge and culvert capacity (dimensions and strength), along with traffic accident "black spots".

#### **1.4 Methodology for Review and Update of Transport Plan**

Section 6 of this report outlines the methodology for review and update of the 2020 Transport Plan, including periodic assessment of road proposals presented by individual councils for consideration as part of the Roads Database, along with the annual grant funds application process. This methodology, including a discussion on how it evolved, was previously presented in the 2007 Addendum to the 2010 Transport Plan and adopted by the S&HLGA RWP as part of the 2007 Addendum.

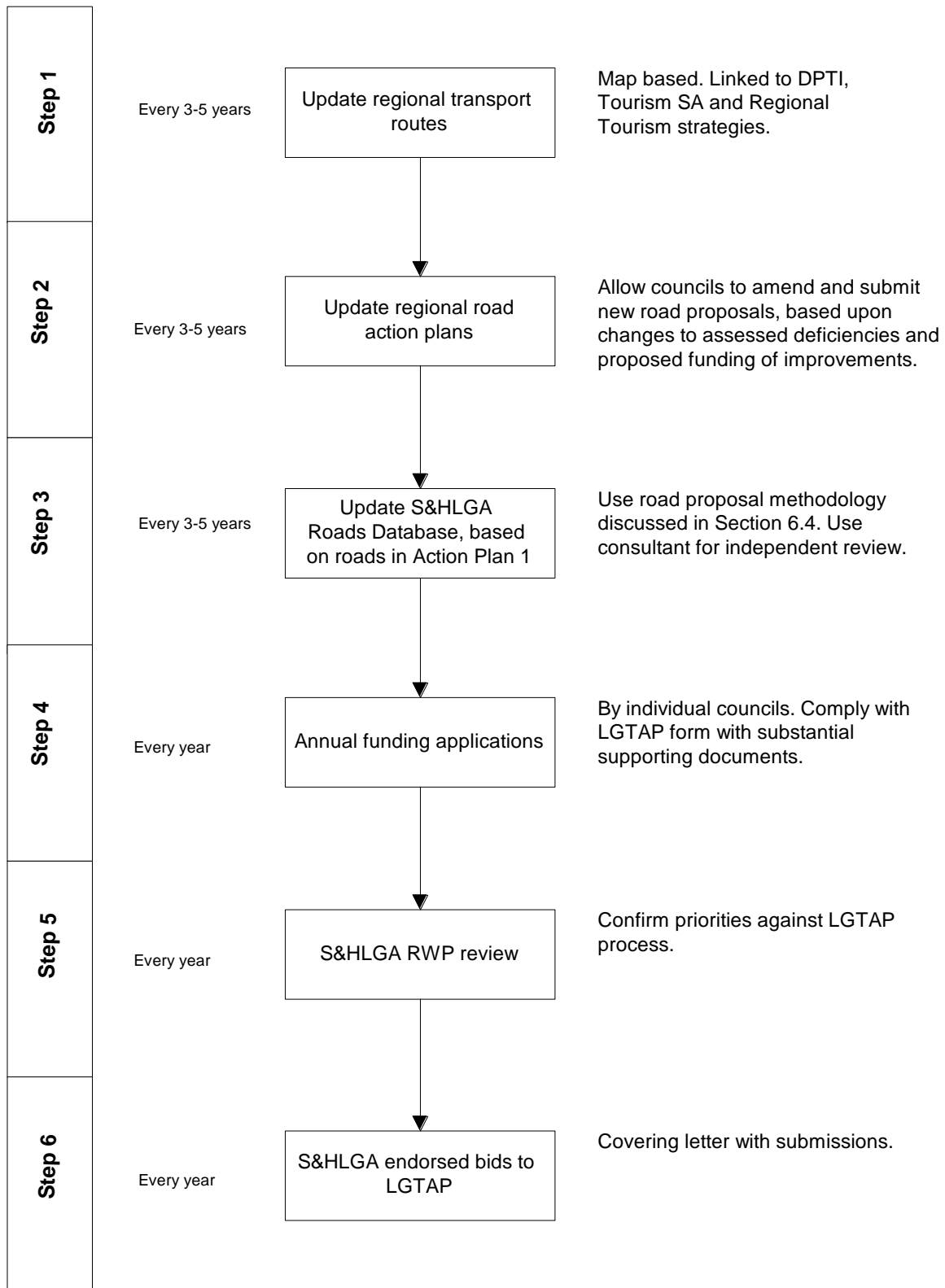
The road proposal assessment component of the 2020 Transport Plan review and update methodology is more closely aligned with recommendations contained within the Roads Infrastructure Database (RID) Project Report released in 2001 when compared with the original 2010 Transport Plan road proposal assessment process. The RID Project guidelines are used by the Local Government Transport Advisory Panel (LGTAP) as part of its annual assessment process for grant funding under the Special Local Roads Program (SLRP). Closer alignment between the S&HLGA and LGTAP assessment processes improves the potential for S&HLGA applications to receive SLRP funding support.

In addition to changes to the road proposal assessment process, the revised transport plan methodology also introduces a process for periodic review and update of the 2020 Transport Plan to take into account changes in planning and development needs, along with revised priorities for the road proposals submitted by individual councils.

A flow chart depicting the methodology originally adopted under the 2007 Addendum to the 2010 Transport Plan, then subsequently incorporated into the 2020 Transport Plan, is shown on the next page and also in Section 6.2 of this report.

As part of the 2015 Update, an extra step (Step 2) has been introduced to the methodology, involving the updating of regional road action plans every 3 to 5 years. This additional step is further explained in Section 6.3 of this report, while the road proposal assessment methodology covered by Steps 4 to 6 (previously Steps 3 to 5) is now explained in Section 6.4 of this report.

**2020 TRANSPORT PLAN  
METHODOLOGY FOR REVIEW AND UPDATE**



## 1.5 Regional Transport Routes

Section 7 summarises freight demands, including the main source of freight movements in the S&HLGA region. It also examines capacity and safety issues, plus states a definition for a “Freight” purpose. A recommendation is made regarding quantifying the term “large volume of heavy freight vehicles”, so that measured or predicted heavy vehicle traffic volumes and/or freight tonnages can be used to support applications for local roads to be considered as a freight route of regional significance.

Regional freight routes have been presented as a regional overview, together with council wide maps for greater clarity and, where needed, detailed maps for key towns. All maps are included at A4 size in Appendix A of this report, while a separate volume of A3 sized maps is also available as Enclosure 4. A proposed “South Coast Freight Corridor” from Cape Jervis to Callington, connecting the S&HLGA region to major industry and logistics centres at Monarto and Murray Bridge, as well as to the broader National Highway Network, is proposed (refer Appendix D). This freight corridor will also have a branch to Mount Barker.

Section 8 addresses tourism demands in the S&HLGA region by examining in some detail various publications available from the South Australian Tourism Commission. Section 8 defines such demands in terms of economic benefit to the state, region and local community. A summary of total visitor numbers and accommodation nights indicates that, while well-known tourism regions like Kangaroo Island attract proportionally more international visitors when compared with other tourism destinations in the S&HLGA region, the importance of the Fleurieu Peninsula as a destination for interstate and intrastate visitors should not be underestimated.

A methodology for defining regional tourism routes is proposed in Section 8. Based upon this methodology, regional tourism routes have again been presented as a regional overview, together with council wide maps for greater clarity and, where needed, detailed maps for key towns. All maps are included at A4 size in Appendix A of this report, while a separate volume of A3 sized maps is also available as Enclosure 4. A map showing the full extent of the Fleurieu Way Regional Tourism Route is also included as Appendix E.

Section 9 identifies community access demands based upon current population, expected future growth in population under the current state strategic plan, consideration of demographic shifts (mainly the ageing population in South Australia) and availability of essential regional services covering education, health, finance (banking), recreation and emergency services.

The second part of Section 9 proposes a methodology for defining regional community access routes, using a combination of community size and availability of essential services. Based upon this methodology, regional community access routes have again been presented as a regional overview, together with council wide maps for greater clarity and, where needed, detailed maps for key towns. All maps are included at A4 size in Appendix A of this report, while a separate volume of A3 sized maps is also available as Enclosure 4.

Section 10 examines rail, sea and air transport infrastructure and its importance to freight, tourism and community access considerations with the S&HLGA region.

Section 10 also looks at state government public transport policy and its likely effect on S&HLGA regional transport planning. In particular, the new electric passenger rail service to Seaford is directly relevant to the S&HLGA region through availability of a bus/rail interchange at Seaford. A re-routing of existing Link SA (formerly Stateliner) contracted bus routes to operate on a more regular basis between the key towns of Victor Harbor, Goolwa and Yankalilla and the Seaford interchange is proposed. At a later date, this may include operation under a single Metrocard ticket system. A possible future passenger rail service to Mount Barker would also benefit the region, should the “Northlink” rail bypass, as proposed in the Murraylands and Riverland Local Government Association’s 2030 Regional Transport Plan, eventually become a reality. However, passenger rail services to Strathalbyn, Goolwa and Victor Harbor are not considered to be economically viable compared with express bus services, because travel time

would be much greater. Apart from Kangaroo Island, large scale passenger movements by air and sea are not likely within the region, once again because road links provide the quickest connection with Adelaide.

Recreational and commuter cycling throughout the S&HLGA region is becoming an increasingly important activity, with associated road user safety issues. Section 10.6 examines the impact of cycling on regional transport routes, while a sample map showing Regional Cycling Routes in the Yankalilla / Normanville township precinct is included as Appendix F.

## 1.6 Conclusions

Section 11 confirms that regional transport goals for the 2020 Transport Plan should remain substantially unchanged from the earlier 2010 Transport Plan. Some issues related to demand modelling inconsistencies, particularly regional population growth over the period to 2020, are also addressed in Section 11. The following key conclusions arising from development of the freight, tourism and community access routes are presented in Section 11:

### Regional Freight Routes

Regionally significant freight routes generally connect industrial and logistics zones in Key Towns and Important Centres, along with significant extractive industry sites, with designated freight routes that form part of the DPTI managed arterial road network. In addition, cross regional freight movements (such as the proposed South Coast Freight Corridor running from Cape Jervis to Callington, with a branch to Mount Barker, along with a potential wine freight route from McLaren Vale to Mount Barker) are very important for efficient freight movement across the region. Localised township freight bypasses, such as the eastern bypass of Mount Barker via Bald Hills Road and a possible Middleton bypass, separate freight from commuter and tourism traffic – providing significant road safety improvements. Impacts from failure of the hard wood plantation industry on Kangaroo Island, and various attempts to revive it, also need to be considered.

Locally important freight routes also exist. These routes still involve the connection of industrial zones and extractive industry sites with arterial roads, but carry a volume of freight traffic which is less than the agreed levels to be classified as regionally significant (i.e. an average of at least 200 tonnes of freight per day or 50,000 tonne per year). Locally important freight routes also include any gazetted B-Double routes (excluding commodity routes) which do not qualify as regionally significant. These routes should be shown on council level transport plans, and have in most instances been included on regional freight route drawings.

### Regional Tourism Routes

Regionally significant tourism routes are concentrated around the primary tourism destinations associated with Kangaroo Island and the Fleurieu Peninsula. Once again, such routes connect tourism destinations with the DPTI managed arterial road network. To be considered a regionally significant tourism route, regular use by commercial tourist buses and/or significant car visits is required, with the destination advertised at an intrastate, interstate or international level that brings tourists into the region.

Locally important tourism routes also exist. They have been shown on the regional tourism route drawings as a local tourism route, but ultimately should form part of council level transport planning. Such routes include designated scenic drives in the Adelaide Hills, Alexandrina, Victor Harbor and Yankalilla council areas, which are not actively promoted as a tourist attraction but serve to add to a tourist's positive experience while in the area.

### Regional Community Access Routes

Regionally significant community access routes are required to ensure that the social fabric of regional South Australia is maintained, particularly because so many essential services are no

longer available in country townships. Reliable, safe, all-weather roads connecting communities to the nearest arterial road or directly to a major service centre are essential. In addition, concentration points define sections of road which service a large rural population that also needs access to regional service facilities.

Sustainable use of the S&HLGA regional road network will require increasing use of public transport to reduce future congestion on the network. Introduction of Park & Ride facilities, combined with express bus services linking regional destinations to the bus/rail interchange at Seaford on the end of the new electrified metropolitan rail network, will significantly enhance the use of public transport.

## 1.7 Recommendations

The following updated recommendations are presented in Section 11 for consideration by the S&HLGA RWP and for formal adoption by the S&HLGA Executive:

1. The strategic transport goals developed as part of the 2010 Transport Plan and reaffirmed as the Regional Transport Goals for the 2020 Transport Plan, as listed in Section 2.1 and restated in Section 11.1 of this report, be further reaffirmed as the Regional Transport Goals for the 2020 Transport Plan – 2015 Update.
2. The updated methodology for review and update of the 2020 Transport Plan, as summarised by the flowchart in Section 6.2 of this report, be adopted as part of the 2020 Transport Plan – 2015 Update.
3. Updated regional freight routes, as shown on the regional overview, council wide maps and selected township detail maps in Appendix A and Enclosure 4, along with the underpinning definitions and methodology used to create the plans (as described in Section 7 of this report) be adopted as part of the 2020 Transport Plan – 2015 Update.
4. Updated regional tourism routes, as shown on the regional overview, council wide maps and selected township detail maps in Appendix A and Enclosure 4, along with the underpinning definitions and methodology used to create the plans (as described in Section 8 of this report) be adopted as part of the 2020 Transport Plan – 2015 Update.
5. Updated regional community access routes, as shown on the regional overview, council wide maps and selected township detail maps in Appendix A and Enclosure 4, along with the underpinning definitions and methodology used to create the plans (as described in Section 9 of this report) be adopted as part of the 2020 Transport Plan – 2015 Update.
6. The future introduction of car/bus Park & Ride facilities at various regional townships, as shown on the updated community access routes, combined with lobbying of state government to expand express bus services to all regional townships in the defined “Greater Adelaide” area, including better linkage to the Seaford bus/rail interchange, be reaffirmed as a key strategy for improving public transport in the S&HLGA region.
7. The 2014 Roads Database, comprising 12 road proposals submitted and assessed in early 2014 (refer Appendix C), forms an interim database, which will subsequently be replaced with a 2017 Roads Database that is underpinned by a final version of the Regional Road Deficiency Action Plans (refer Appendix B).
8. The next scheduled strategic review of all regional transport routes associated with the 2020 Transport Plan be set down for 2018 (i.e. eight years into the ten year planning period) at which time the overall transport plan should be reviewed to become the 2030 Regional Transport Plan.

## PART B

### 2.0 INTRODUCTION

#### 2.1 Background

The Southern & Hills Local Government Association (S&HLGA) is a Regional Association of Councils under Part 4 of the Constitution of the Local Government Association of South Australia. S&HLGA was first formed in July 1969. It is now constituted as a Regional Subsidiary under Section 43 and Schedule 2 of the Local Government Act 1999, formed by Adelaide Hills Council, Alexandrina Council, Kangaroo Island Council, Mount Barker District Council, the City of Victor Harbor and the District Council of Yankalilla.

Collectively, the above six councils have a population of 119,016 people (reference – S&HLGA web site). They have a total of 5,494 km of local roads under their care, comprising 2,136 km of sealed roads, 3,195 km of formed unsealed roads and 164 km of unformed roads. *Source – South Australian Local Government Grants Commission Annual Report for the 2012-13 Financial Year, Chapter 6 and Appendix IV.*

In 2000, the S&HLGA formed a Roads Working Party (RWP), with membership comprising Managers or Directors from the Works / Technical Services areas within each constituent council, together with Regional Managers and Transport Strategy Planners from the Department of Planning, Transport and Infrastructure (DPTI). The initial task of the RWP was to prepare a regional transport plan within the context of state transport planning initiatives being developed around the same time.

The S&HLGA 2010 Transport Plan was prepared by QED Pty Ltd in association with Hudson Howells Asia Pacific on behalf of the S&HLGA. It was released in August 2001 (Reference 1). The plan examined the regional road network and its overall condition, including an examination of traffic volumes, major road safety concerns and public transport issues, plus rail, sea and air links. It undertook demand modelling covering key population centres, plus existing and expected future major freight movements for the wine, horticulture, livestock, grain and timber industries.

Four strategic transport goals were developed as part of the 2010 Transport Plan, namely:

Goal 1 “Economic Development” – A transport system that supports the economic, industry and trade development of the S&HLGA.

Goal 2 “Access” – An equitable and accessible transport network that allows for consistent and reliable travel.

Goal 3 “Road Safety” – A safe transport network where the severity and risk of accidents are minimised.

Goal 4 “Environment” – A transport network that minimises impacts on the environment and communities.

Note that these goals remain as relevant to the 2020 Transport Plan as they were for its predecessor.

From the above goals, a regional road proposal assessment process evolved, incorporating a series of evaluation criteria. A network of regionally important freight routes, tourism routes and community access routes were then identified, including specific road proposals that constituent councils felt warranted regional road funding support. Road proposal priorities were set using the methodology outlined in the 2010 Transport Plan. That same methodology formed the basis for all S&HLGA applications for regional road funding between 2002 and 2007.



In December 2004, an Addendum to the 2010 Transport Plan was prepared by QED Pty Ltd on behalf of the S&HLGA (Reference 2). It recommended incorporation of north south freight corridors across the region to meet projected growth in freight demands of the wine and timber industries. Although the 2004 Addendum was formally adopted by the S&HLGA, no specific changes were made to regional principal route plans in existence at that time to incorporate recommendations contained in the 2004 Addendum.

In late 2007, a further Addendum to the 2010 Transport Plan was prepared by HDS Australia Pty Ltd on behalf of the S&HLGA (Reference 3). This document refined the methodology covering periodic review of the regional transport route drawings, aligning the process more closely to principles contained within the Roads Infrastructure Database Project (Reference 4). The 2007 Addendum also revised the methodology for periodic assessment and prioritisation of individual road proposals against the regional transport strategy, together with annual endorsement of road proposal funding applications. In addition, four revised regional transport route drawings (collectively covering the arterial road / national highway network, freight routes, tourism routes and community access routes) were produced, along with a revised methodology for prioritising road proposals submitted as part of the 2007 Roads Database.

## 2.2 Overview of Original Project

In June 2008, HDS Australia Pty Ltd was engaged by the Southern & Hills Local Government Association (S&HLGA) to prepare a 2020 Transport Plan. The 2020 Transport Plan is a strategic level assessment of transport needs and priorities within the S&HLGA region for the period from 2010 to 2020. While it officially replaces the 2010 Transport Plan, which has reached the end of its period of operation, the 2020 Transport Plan builds upon earlier research and road proposal prioritisation methodologies developed as part of the 2010 Transport Plan and subsequent Addendums.

Development of the 2020 Transport Plan was undertaken by John Olson, Managing Director and Principal Engineer at HDS Australia, using an agreed methodology developed jointly by HDS Australia and the S&HLGA. The S&HLGA Roads Working Party (RWP) acted as a reference group for the project, while Fred Pedler, former Executive Officer for the S&HLGA, was the client representative.

Overall, the original project entailed four distinct phases, namely:

1. Identification of significant sources and destinations for transport within the S&HLGA region.
2. Development of updated regional transport routes for the S&HLGA region.
3. Creation of a 2009 Roads Database.
4. Preparation of a final report, encompassing all aspects of the 2020 Transport Plan.

Included in the first phase was a substantial study of all currently available literature reflecting state level strategic planning, regional planning and development issues, regional transport planning and local transport plans. Forty documents were initially examined, with input from a further three key documents subsequently included in the final report (refer to the list of references included with that report).

In addition, methodologies for development and periodic review of the 2020 Transport Plan, as defined and agreed upon in the 2007 Addendum to the 2010 Transport Plan, were incorporated into the final report for the 2020 Transport Plan.

Three interim publications were prepared during development of the 2020 Transport Plan. The first, titled "2020 Transport Plan – Demand Modelling Research Notes" was released in

September 2008 (refer Enclosure 1). The second, titled “2020 Transport Plan – Demand Modelling Working Paper” was released in November 2008 (refer Enclosure 2). The third, titled “2020 Transport Plan – 2009 Roads Database Assessment Worksheet” was released in April 2009 (refer Appendix B to Enclosure 3).

The final report for the 2020 Transport Plan was the culmination of the original project. It is included as Enclosure 3 to this 2020 Transport Plan – 2015 Update. However, it should be recognised that the 2020 Transport Plan is a “living” document which has needed and will continue to need on-going review and updating as new regional planning and development initiatives influence future transport priorities.

### 2.3 Phase 1 Tasks

Early work by QED Pty Ltd in association with Hudson Howells Asia Pacific, as contained in the 2010 Transport Plan published in 2001, along with QED’s subsequent 2004 Addendum to the 2010 Transport Plan, provided a comprehensive assessment of likely freight transport demands within the region in existence at that time.

While much of the information remains relevant today, significant regional development has occurred since those earlier reports were produced. The release of a state strategic infrastructure plan in April 2005, along with various council development plans and transport strategies, has also necessitated a full review of all available information. As recently as October 2013, release of “The Integrated Transport and Land Use Plan” has had a significant impact on regional transport planning.

The tasks undertaken as part of Phase 1 are shown in the consultancy framework (refer Appendix A of Enclosure 2). In summary they were:

1. Conduct a desktop study of published data as it relates to the three road purpose categories of freight, tourism and community access within the S&HLGA region.
2. Conduct additional research to better understand tourism demands, including meetings with Tourism SA and, if needed, Regional Tourism Boards.
3. Conduct additional research on the current and future location of education, health, finance, recreation and emergency services relative to residential centres with populations of at least 50.
4. Examine non-roads transport needs within the region, including –
  - Sea freight to/from KI,
  - Passenger rail,
  - Public transport issues, and
  - Regional airports.
5. Report on known deficiencies in the arterial road network managed by DPTI that will have an impact on the 2020 Transport Plan.
6. Prepare a working paper on the findings from Phase 1, to be reviewed by the S&HLGA RWP.

Research assistance in Phase 1 was provided by Leigh Dawson, an experienced traffic engineer with HDS Australia. Lloyd Roberts, principal of Lloyd Roberts & Associates and a specialist consultant in public transport policy, reviewed the current status of public transport policy applicable to the S&HLGA region and provided an assessment of likely future requirements.

## 2.4 Phase 1 Outcomes

Three separate deliverables were prepared as outcomes from the first phase of developing the 2020 Transport Plan, namely:

1. A “Draft 2020 Transport Plan – Public Transport Policy” discussion paper was prepared as part of the non-roads transport needs assessment under Item 4 of the Phase 1 tasks. This document was separately circulated to S&HLGA CEO’s for consideration of broader public transport issues.
2. A “2020 Transport Plan – Demand Modelling Research Notes” bound summary of all Phase 1 research was prepared (refer Enclosure 1). This document comprised a collection of research notes and preliminary findings in relation to the six elements which collectively covered the initial demand modelling phase of the project. The elements were:
  - State and regional development plans
  - Freight demands
  - Tourism demands
  - Social inclusion requirements
  - Non-roads transport issues
  - Deficiencies in the arterial network

Literature summary sheets and (in the case of public transport) a copy of the policy discussion paper were included in the research notes, along with selected items of raw data. Also included in the research notes were samples of updated principal route plans being developed as a consequence of the initial research.

3. A “2020 Transport Plan – Demand Modelling Working Paper”, which summarised all of the findings from the first phase of the project, was prepared as the third and final deliverable for Phase 1 (refer Enclosure 2).

The working paper comprised an introduction, plus eight subsequent chapters which collectively defined the basis for development of the 2020 Transport Plan. In summary, the chapters were:

- Review of State and Regional Development Plans
- Review of Current Transport Plans
- DPTI Controlled Arterial Road Network
- Freight Routes of Regional Significance
- Tourist Routes of Regional Significance
- Community Access Routes of Regional Significance
- Non-Roads Transport Considerations
- Conclusions and Recommendations

Included within the working paper were key definitions applicable to regionally significant freight, tourism and community access routes, together with a proposed methodology for creation of updated regional transport route drawings. Following review and adoption by the S&HLGA RWP and constituent councils, the working paper became a key input to the second phase of the project.

## 2.5 Phase 2 Tasks

Phase 2 of the original project involved development of revised regional transport route drawings for the region, covering regionally significant freight, tourism and community access routes. The tasks undertaken as part of Phase 2 are shown in the consultancy framework (refer Appendix A of Enclosure 2). In summary they were:

### Phase 2a – Regional Considerations

1. Conduct a S&HLGA RWP workshop to review the most recent set of regional transport route drawings, as prepared under the 2010 Transport Plan – 2007 Addendum.
2. Draft revised regional transport route drawings.
3. Develop a new format involving minimum data inputs to assist councils with submission of roads for inclusion in the S&HLGA Roads Database.

### Phase 2b – Assist Individual Councils

This optional component of the project involved provision of assistance in various forms, including staff meetings, site visits and council workshops, to individual councils who requested support with the identification of regionally significant roads within their respective council areas. Over an eight month period from January to August 2009, six of the eight (at that time) S&HLGA member councils sought assistance, namely Kangaroo Island Council, the District Council of Yankalilla, Adelaide Hills Council, the City of Victor Harbor, Alexandrina Council and the Rural City of Murray Bridge. Issues addressed involved some or all of the following:

1. Assist council staff to initially identify deficiencies in their freight, tourism and community access networks.
2. Conduct a meeting with council staff, including key stakeholders from engineering, planning and regional development, to review nominated roads and confirm which of them would be classified as regionally significant.
3. Conduct a site visit of nominated roads (or in several cases use aerial photos or Google Earth to inspect from the office).
4. Assist council staff to formulate a nomination list for regionally significant roads in their area requiring upgrade.
5. Assist council staff to prepare submissions for inclusion of nominated roads in the S&HLGA Roads Database.
6. Prepare a working paper of council submissions.

## **2.6 Phase 2 Outcomes**

The key deliverable prepared under Phase 2 was a set of regional transport route drawings (effective as at 3 November 2009) which formed the basis (at that time) of the 2020 Transport Plan. These drawings were included in A4 format as Appendix A of Enclosure 3, with plans in A3 format also available. In addition, MapInfo data sets were made available if individual councils wished to incorporate the regional transport route drawings into local transport planning documents.

## **2.7 Phase 3 Tasks**

Phase 3 of the original project involved development of a 2009 version of the S&HLGA Roads Database, identifying regionally significant freight, tourism and community access routes which failed to meet “fit for purpose” standards and would require upgrading within the ten year timeframe of the 2020 Transport Plan.

The tasks undertaken as part of Phase 3 are shown in the consultancy framework (refer Appendix A of Enclosure 2). In summary they were:

1. Conduct a S&HLGA RWP workshop to review projects nominated by individual councils.
2. Evaluate nominated proposals against the assessment methodology previously agreed to as part of the 2010 Transport Plan – 2007 Addendum (and discussed later in this report).
3. Prepare raw data and weighted scoring spreadsheets, together with a ranked summary of road proposals, for the 2009 version of the S&HLGA Roads Database.

## 2.8 Phase 3 Outcomes

A publication titled “2020 Transport Plan – 2009 Roads Database Assessment Worksheet” was released in April 2009 (refer Appendix B of Enclosure 3). This spreadsheet assessed the merits of 19 road proposals (comprising seven freight routes, five tourism routes and seven community access routes) submitted by four different S&HLGA member councils for inclusion in the database. Page 4 of the spreadsheet ranked the proposals in descending order of priority for endorsement as regional projects, both by primary purpose and on an overall basis.

The assessment worksheet (with recommended priorities) was presented to a meeting of the S&HLGA RWP in April 2009. The RWP endorsed the recommended priorities but determined that, based upon financial year 2009-10 funding commitments from relevant councils, only four projects would be submitted under the Special Local Roads Program (SLRP) as regionally endorsed projects for 2009, namely:

- Bald Hills Road (Freight)
- Stokes Bay Road (Community Access)
- Parawa Road (Tourism)
- Torrensvale Road (Tourism)

Subsequent to the RWP meeting, as a variation to Phase 3 of the project, HDS Australia was requested to assist individual councils to finalise their 2009-10 SLRP funding applications. While a formal report was not prepared, individual applications were assessed and councils provided with feedback, in order to identify opportunities for improvement prior to submission of the applications to the Local Government Transport Advisory Panel (LGTAP).

## 2.9 Phase 4 Tasks

Phase 4 of the original project involved preparation of the “2020 Transport Plan – Final Report” (refer Enclosure 3), including detailed discussion of all aspects of the project and recommendations regarding regional transport priorities.

The tasks undertaken as part of Phase 4 are shown in the consultancy framework (refer Appendix A of Enclosure 2). In summary they were:

1. Consolidate all working papers into a final report.
2. Prepare a draft of the “2020 Transport Plan – Final Report” for consultation.
3. Review any comments received on the draft report.
4. Release a final version of the “2020 Transport Plan – Final Report”.

Release of three key publications between April and October 2009 necessitated an additional review of their likely influence over the 2020 Transport Plan. These publications were:

- Towards 2020 – RAA’s Vision for South Australia’s Roads (Reference 41 of Enclosure 3).
- Planning the Adelaide We All Want – Progressing the 30-Year Plan for Greater Adelaide (Reference 42 of Enclosure 3)

- Adelaide Rail Freight Movements Study – Discussion Paper (Reference 43 of Enclosure 3).

## 2.10 Phase 4 Outcomes

Enclosure 3 is the culmination of the original 2020 Transport Plan development project. While released in December 2011 as a (then) current summary of regional transport priorities for the next ten years, it was recognised at the time that the 2020 Transport Plan is a “living” document which will need regular review and updating as subsequent regional planning and development initiatives influence transport priorities. Section 2.11 below describes the first such update to the 2020 Transport Plan.

## 2.11 2015 Update

In July 2013, HDS Australia was engaged by the S&HLGA to review and update selected elements of the 2020 Transport Plan, in line with the overall methodology described in Section 6 of this report. The S&HLGA RWP again acted as a reference group for the 2020 Transport Plan Update, while Graeme Martin, current Executive Officer for the S&HLGA, was the client representative.

This supplementary project entailed three distinct stages, undertaken over a two year period, namely:

1. Development of Regional Road Deficiency Action Plans during which, with assistance from HDS Australia, individual councils within the S&HLGA broadly assessed all of their regional freight, tourism and community access routes against the appropriate “fit for purpose” standard, and then prioritised any deficient road segments into one of three Action Plans (defining them as short term, medium term or long term upgrade priorities). This task was completed in February 2014.
2. Assessment and prioritisation of council road upgrade nominations in accordance with the methodology contained in Section 6.3 of this report. Similar to previous assessments in 2009 and 2011, this task entailed a two step process, namely:
  - a. Assessment of the nominations for completeness of details and provision of appropriate supporting evidence, involving creation of an initial spreadsheet containing “raw” assessments for each nomination based upon the quality of each council’s submitted supporting information; and
  - b. Creation of a second spreadsheet containing “weighted” assessments for each nomination using the weighted scoring methodology defined in Section 6.3.

A 2014 “Summary of Road Proposals” listing all nominations in order of priority within the three primary purpose categories of “Freight”, “Tourism” and “Community Access” was then prepared, as well as an overall list of “2014 Regional Priorities” for consideration and subsequent adoption by the S&HLGA RWP. This task was completed in April 2014.

3. Although officially released in December 2011, the 2020 Transport Plan is based primarily on 2009 data and strategic priorities. While the overall methodology contained within the 2020 Transport Plan final report remains acceptable, some definitions were considered to be inconsistent with similar regional transport plans adopted by other regions and with updated guidelines proposed by the Local Government Association of South Australia (LGASA). In turn, this required a review by individual councils of their regional freight, tourism and community access routes. HDS Australia assisted in this process, along with providing updates to Sections 5 and 10 of the original report, in order to take into account the recent release of major state government reports, particularly “The 30-Year Plan for Greater Adelaide” (Reference 10) and “The Integrated Transport and Land Use Plan” (References 44 and 45).

In summary, sections of this report as listed below have been materially updated when compared with the original (December 2011) release, while other sections have had nominal changes resulting from removal of the Rural City of Murray Bridge and The Barossa Council from membership of the S&HLGA, various government department name changes, updating of appendices and references, plus other non-essential terminology changes.

- Section 1.2 added, previous Sections 1.2 to 1.6 renumbered Sections 1.3 to 1.7.
- Section 1.7 (and Section 11.4) Recommendations 7 and 8 updated.
- Section 2.11 added.
- Section 5 updated.
- Section 7 definitions amended and regional freight routes updated.
- Section 8 definitions amended and regional tourism routes updated.
- Section 9 definitions amended and regional community access routes updated.
- Section 10 reviewed in light of recent publications.
- Section 10.6 added, describing the concept of a Regional Cycling Network, with the inclusion on a sample basis of “Regional Cycling Routes” for Yankalilla / Normanville as a supplementary category of regional tourism and community access routes.
- Appendix A and Enclosure 4 updated with new regional transport route drawings, current as at 10 November 2016.
- Appendix B added with Regional Road Deficiency Action Plans, current as at 17 February 2014.
- Appendix C (formerly Appendix B) updated with the 2014 Roads Database.
- Former Appendix C, namely Special Local Roads Program – Review of 2009-10 Funding Applications, superseded and therefore removed.
- References updated where needed to reflect more recent versions of individual publications, and additional references included where relevant.

### 3.0 REVIEW OF STATE AND REGIONAL DEVELOPMENT PLANS

#### 3.1 General

This section of the report reviews the strategic direction set by the state government for both South Australia as a whole and for the S&HLGA region. It also examines the state's current planning strategy, plus individual development plans in existence for the six councils which form the S&HLGA, along with master plans and urban growth strategies for Victor Harbor / Goolwa, Strathalbyn, Mount Barker and Yankalilla.

For each of the original 21 documents reviewed, a summary of pertinent findings is provided in the 2020 Transport Plan – Demand Modelling Working Paper (refer Enclosure 2). In this report, only issues which impact directly upon S&HLGA regional transport planning requirements are highlighted.

#### 3.2 South Australia's Strategic Plan

South Australia's Strategic Plan (SASP) was originally launched by the State Government of South Australia in March 2004. The plan had six objectives, namely:

Growing Prosperity  
Improving Wellbeing  
Attaining Sustainability  
Fostering Creativity and Innovation  
Building Communities  
Expanding Opportunity

The 2007 update of SASP was released in January 2007 (Reference 5 of Enclosure 3). While many of the 98 individual targets included in SASP 2007 differ from the 2004 version, the above six objectives remain fundamental to the plan.

Specific implications of SASP 2007 on transport planning within the S&HLGA region are considered in the remainder of this section. However, broader implications arising from a subsequent 2011 release of SASP (Reference 5) have not been addressed as part of the 2020 Transport Plan – 2015 Update.

The whole of SASP 2007 has relevance to regional development and transport planning in the S&HLGA region and elsewhere throughout the state. There are some objectives and underlying targets, though, which are of particular significance to S&HLGA regional transport planning priorities. These are:

##### Objective 1: Growing Prosperity

- Exceed the national economic growth rate by 2014.
- Exceed Australia's ratio of business investment as a percentage of the economy by 2014.
- Better the Australian average employment growth rate by 2014.
- Treble the value of South Australia's export income to \$25 billion by 2014.
- Increase visitor expenditure in South Australia's tourism industry from \$3.7 billion in 2002 to \$6.3 billion by 2014.
- Match the national average in terms of investment in key economic and social infrastructure.
- Increase South Australia's population to 2 million by 2050, with an interim target of 1.64 million by 2014.

##### Objective 2: Improving Wellbeing

- Exceed the Australian average for participation in sport and physical activity by 2014.



- By 2010, reduce serious injuries to less than 1000 per year.

#### Objective 3: Attaining Sustainability

- Increase the use of public transport to 10% of metropolitan weekday passenger vehicle kilometres travelled by 2018.

#### Objective 5: Building Communities

- Maintain regional South Australia's share of the state's population (18%).

The majority of SASP 2007 targets were at a whole-of-state level. Some, like the interim state population target of 1.64 million by 2014, have been met. Others have not been achieved.

State level targets in SASP 2007 (and its updated release as SASP 2011) have been complemented by the subsequent development of regional strategic plans aligned with SASP. Major documents relevant to the S&HLGA region are the "30-Year Plan for Greater Adelaide", which was released in 2010 (Reference 10), and "The Integrated Transport and Land Use Plan", which was released in October 2013 (References 44 and 45).

### 3.3 Strategic Infrastructure Plan for South Australia

The Strategic Infrastructure Plan for South Australia (SIPSA) comprises a state level plan (Reference 6) and a regional overview (Reference 7). SIPSA was released in April 2005, as a follow on to the original 2004 release of South Australia's Strategic Plan. An update of SIPSA was commenced in 2010, with the release of a Discussion Paper (Reference 49) which remains available on the DPTI website. However, as at the date of this report, no updated SIPSA has been officially released.

Page 6 of SIPSA 2005 states that the principal purpose of the plan is to guide new infrastructure investment by government and the private sector over the next five to ten years as well as to improve management and use of the state's existing infrastructure assets. SIPSA incorporates four broad strategies, namely:

1. To **coordinate** infrastructure planning and construction across the state. This requires strong participation in national programs to ensure that South Australia receives a fair share of Australian Government funding. Aggregation of demand at regional levels, and partnerships between infrastructure providers, will help to bring forward infrastructure investment on a commercial scale.
2. To pursue more **efficient** and competitive infrastructure systems. This requires South Australians to develop, promote and use measures to manage peak demands and congestion in water, energy and transport systems.
3. To pursue and promote **sustainable** development through sound planning and use of infrastructure. This requires a full life cycle approach to asset development, management and maintenance.
4. To meet future demands in a timely and **innovative** manner. This requires management of facilities across the state to accommodate geographical shifts in population and industry. It also involves exploring options for redevelopment and alternative uses for existing assets and design of adaptable multi-purpose facilities for shared use.

Based upon the above strategies, SIPSA 2005 identified six infrastructure priorities. At that time, these were:

1. Invest in transport infrastructure.
2. Invest in advanced technologies.

3. Invest in skills and innovation.
4. Manage our built assets well.
5. Match our health and social services to community needs.
6. Ensure our energy, water and land supplies are sustainable.

Within the above six listed priorities in SIPSA 2005 are a total of 18 supporting elements. Those of most relevance to S&HLGA regional transport planning priorities are:

- 1.3 Develop and maintain regional freight networks.
- 1.4 Increase use of public transport.
- 4.1 Ensure efficient use of all public built assets.
- 4.2 Invest in maintenance of our assets.
- 5.3 Address social disadvantage.

SIPSA 2005 presented strategies for 14 infrastructure sectors, the first one of which was transport. Strategic needs in the transport infrastructure sector are summarised on Page 10 of SIPSA 2005. The key stated requirement was that by 2015, South Australia will have a sustainable transport system; one that is integrated, coordinated, affordable, efficient and safe, meeting the accessibility needs of all South Australians. Pages 44 to 53 of SIPSA 2005 provide further detail on the transport sector, with a specific focus on state challenges and opportunities.

The Bureau of Transport and Regional Economics has estimated that the cost of congestion on Adelaide roads in 1995 was \$0.8 billion and will grow to \$1.5 billion by 2015. While this is significantly lower than the congestion cost in any other mainland state capital city, decreases in these costs will have a positive impact on the economy.

Strategic priorities for roads are therefore:

- Improve the state's competitiveness through efficient freight transport networks and improved international links.
- Minimise the impact of freight vehicle movement on the community and environment by appropriately locating and protecting freight routes.
- Concentrate resources on maintaining and improving existing assets rather than extending the network.

In regional South Australia, the rail network is a significant carrier of grain, both intrastate and interstate. With grain freight expected to grow by 30% to 2030, it is in the interests of the farming and grain handling organisations to ensure decisions on logistic maintenance and upgrades of the rail system are based on comparisons of the full costs of alternatives.

A strategic priority for the rail network is therefore:

- Encourage the shift to rail transport for passenger and freight movements where justified by environmental, economic or social imperatives.

Air freight is crucial for the transport of time-critical high value products. Adelaide airport is South Australia's only international export airport. Eight regional airports (including Kingscote) have scheduled passenger and freight services. However, sustaining infrastructure at most local airports is a challenge because low traffic levels do not produce sufficient income to meet maintenance needs.

Strategic priorities for aviation are therefore:

- Maintain an efficient transport network to Adelaide Airport to support anticipated passenger and freight movements.
- Ensure any change in land use on or adjacent to export airports does not preclude future transport development.

- Provide for the orderly expansion of facilities at regional airports to meet growing visitor and freight activities.

Cars are the primary mode of transport for people movement throughout South Australia, with 80% of CBD trips made by car, higher percentages in suburban areas and close to 100% in regional areas. Roads are not the sole province of motorised vehicles. South Australia's potential as a leading cycling destination generates increased tourism, improved levels of health and contributes to the state's environmental standing.

The government also aims to support public transport as a significant mode of metropolitan/CBD travel, because of the substantial community and environmental benefits that can be gained from replacing private motor vehicle trips with public transport trips. Electrification and extension of the metropolitan heavy rail network to the south of the city is now a reality, while electrification north of the city remains an additional option for improving the efficiency of public transport rail services. This strategy is based on maximising the use of the north-south heavy rail spine with new and upgraded interchanges providing bus links and car parking facilities.

Among strategic transport projects identified in SIPSA 2005, those most affecting S&HLGA regional transport planning are:

1. Address priorities for safety related maintenance and upgrades on roads with high crash rates.
2. Enhance existing priority strategic freight routes throughout the state in order to minimise community impacts of road freight.
3. Implement the strategic town bypass policy.
4. On Kangaroo Island, designate Penneshaw as the primary freight and passenger ferry harbour.
5. Develop intermodal facilities in northern Adelaide and the Barossa Valley and consider intermodal developments at Port Augusta, Riverland and Port Stanvac.
6. Standardise and upgrade the state rail network where it has connectivity to the interstate main line.
7. Extend runways and upgrade terminals at Port Lincoln and upgrade Whyalla and Kingscote airfields when justified by growth in demand for services.

The Strategic Infrastructure Plan for South Australia Regional Overview (Reference 7) is a companion document to SIPSA which provides a framework for infrastructure investment throughout the entire state, with due emphasis placed on each region of South Australia.

Pages 48 to 59 of the Regional Overview focus on a particular region of the state titled "Barossa, Adelaide Hills, Northern Adelaide Plains, Fleurieu Peninsula and Kangaroo Island". This nominated region covers all of the S&HLGA region. The detailed discussion contained on these pages is considered highly relevant to S&HLGA regional transport planning.

### 3.4 Planning Strategy for South Australia

The South Australian government has prepared a planning strategy for South Australia which is summarised on the state government website ([click here](#)). The planning strategy comprises the "30-Year Plan for Greater Adelaide" (refer to Section 3.5), as well as various plans for regional South Australia, the most relevant for the S&HLGA region being the Kangaroo Island Plan (Reference 9).

Documents which collectively make up the planning strategy contain various maps, policies and specific strategies, covering a full range of social, economic and environmental issues. The documents are integrated with, and should be read in conjunction with, other specialist plans, including the Strategic Infrastructure Plan for South Australia, the Housing Plan for South Australia and South Australia's Greenhouse Strategy. The planning strategy provides a physical and policy framework to assist in reaching various targets outlined in South Australia's Strategic Plan.

#### 3.4.1 Planning Strategy for the Outer Metropolitan Adelaide Region

This former volume of the planning strategy (Reference 8) has been replaced by the 30-Year Plan for Greater Adelaide (Reference 10). However the following comments, derived from the earlier document, remain relevant:

The S&HLGA region is a major asset to the state and to metropolitan Adelaide because it:

- Is a major tourist destination, particularly with regard to the viticulture industry;
- Contains major water catchment areas – despite the introduction of a desalination plant, it still supplies (in normal seasons) 60% of metropolitan Adelaide's reticulated water as well as storage for water pumped from the River Murray;
- Contributes to the economic health of the state through the value of its agricultural production;
- Is a major focal point for non-metropolitan growth in Mount Barker and Victor Harbor, which have two of the fastest growing populations in South Australia; and
- Contains beautiful and diverse landscapes.

Areas within 100 kilometres of the Adelaide metropolitan area generate 20 to 25 percent of the state's total gross agricultural production value from three percent of its agricultural land. There is wide diversity in these enterprises including orchards and horticulture in the hills; vineyards in and around the Barossa Valley and the Adelaide Hills; dry land farming on the Northern Adelaide Plains; and dairy production throughout the Fleurieu Peninsula.

There is also a need for industrial land in the region. The provision of well-located and suitable serviced land is vital in ensuring that land is available for industrial and commercial development when needed.

Key areas for future industrial development in the S&HLGA region are located at:

- Goolwa,
- Strathalbyn, and
- Mount Barker.

Industrial development at Monarto and Murray Bridge, although located outside the S&HLGA region, will facilitate economic growth within the region through their close proximity to transport infrastructure, the local workforce and local produce.

Major extractive mineral operations contribute significantly to the economy of the state and region. Mining can also offer value adding opportunities in the region through mineral processing. Existing and potential mining sites require protection from the encroachment of incompatible or conflicting uses that can potentially affect mining operations and their viability.

Tourism is a significant economic contributor to the state, and the outer metropolitan Adelaide region contains many of South Australia's premier tourist attractions. The planning strategy

aims to protect these areas and provide transport links to them. The region's key tourism assets include:

- Kangaroo Island,
- Victor Harbor,
- Hahndorf, and
- The Fleurieu Peninsula.

Other tourism features are:

- Coastal and marine environments such as the Ramsar Wetlands, the Murray Mouth, the Coorong, Goolwa and the Lower Lakes,
- A variety of parks, including the Scott Creek Conservation Park and the Deep Creek Conservation Park, and
- The Heysen and Mawson trails.

### 3.4.2 Plans for Regional South Australia

These volumes of the planning strategy cover all areas of the state not addressed in the 30-Year Plan for Greater Adelaide and can be found on the state government website ([click here](#)).

The state government is committed to understanding the needs and priorities of people in regional South Australia. Future prosperity is dependent largely on the economic, environment, cultural and social wellbeing of regional communities.

Regional communities exert an influence far beyond their size and population. Much of the primary produce, minerals and petroleum from these regions is exported, contributing about two thirds of the state's exports and a significant proportion of its manufacturing and services wealth.

One of the Plans for Regional South Australia is relevant to S&HLGA regional transport planning, namely the "Kangaroo Island Plan" (Reference 9).

The Kangaroo Island Plan contains an overview of economic activity, environment and resources issues, people, towns and housing considerations, and infrastructure matters, along with 10 principles of regional planning and 73 associated policies. Of these principles and policies, those which are most relevant to S&HLGA regional transport planning include:

- Develop a range of tourism facilities and products, including sustainable nature retreats of international standard and high quality eco-tourism resorts.
- Retain Penneshaw as a major tourist gateway.
- Upgrade and maintain key roads as part of the arterial road network, particularly tourist roads.
- Improve access between Kangaroo Island, Port Adelaide and Adelaide International Airport.
- Ensure intermodal connections are efficient, effective and reliable, particularly Penneshaw Ferry Terminal and Kingscote Airport.
- Support cost effective freight and passenger access to the mainland.

- Investigate opportunities to provide a regular passenger transport service on the Island, particularly to service community needs, including school children and the aging community.

### 3.4.3 Population Growth Projections

Population estimates for the state and S&HLGA region vary depending on the data source. Australian Bureau of Statistics (ABS) Series B population projections (2002) suggest that the state's population will grow from 1.511 million in 2001 to 1.577 million in 2015. Alternative projections from Planning SA (2005), based upon recent demographic trends, project the state's population to reach 1.606 million by 2015. Preliminary projections under the state government's "2 million by 2050" strategy indicate a target 2016 population of around 1.654 million. According to the latest ABS population statistics ([click here](#)), the state's actual population as at 30 June 2016 was 1.708 million, which exceeds all of the above projections.

An alternative source for population growth projections in South Australia, namely the Planning SA publication "Population Projections for South Australia (2001-31) and the State's Statistical Divisions (2001-21)", was released in June 2007 (Reference 11). It indicates a population growth for the Outer Adelaide Statistical Division, ranging between 30,000 and 36,000 in absolute terms over the 15 year period from 2001 to 2016. In annual growth terms, this is 1.4% to 1.8% per annum.

Population growth projections have been further revised under the 30-Year Plan for Greater Adelaide (Reference 10), which states that projected population growth for Greater Adelaide will be 560,000 over 30 years. This includes growth projections of 22,000 for the Fleurieu Region and 29,000 for the Adelaide Hills Region (including Murray Bridge).

Urban growth in the Adelaide Hills is a significant factor in S&HLGA regional transport planning. Mount Barker, Littlehampton and Nairne have experienced high residential growth rates. These towns have generally attracted couples and young families, with housing prices comparable to the fringe suburbs of Adelaide, although this affordability is declining. Accessibility to the metropolitan area is an important factor for people choosing to live in these towns, with approximately 40% of Mount Barker's workforce commuting to metropolitan Adelaide. This has been assisted by the upgrading of the South Eastern Freeway.

Recent duplication of the Southern Expressway is expected to offer a similar improvement for workforce commuters living in Victor Harbor, Goolwa and Yankalilla. The landscape amenity of the region is also a strong factor in home purchases.

## 3.5 **30-Year Plan for Greater Adelaide**

The original 30-Year Plan for Greater Adelaide (Reference 10) was released in 2010. A "Draft for Consultation" of the 30-Year Plan for Greater Adelaide 2016 Update (Reference 50) has recently been released. The plan details where and how Adelaide will develop, providing certainty whilst also recognising regional differences, strengths, opportunities and constraints. It has been developed through a series of seven regional partnerships with local councils, industry and state agencies.

Greater Adelaide includes metropolitan Adelaide and the surrounding near-country arc – down to Victor Harbor and Goolwa in the south, up to the Barossa and Mallala in the north, and east across to Mount Barker through the Adelaide Hills. Murray Bridge was included in the plan's initial draft, but excluded from the final release. Kangaroo Island was also excluded, as it has its own Planning Strategy. Greater Adelaide therefore covers 26 councils and seven state government planning regions, namely:

- Western Adelaide (West Torrens, Charles Sturt, Port Adelaide-Enfield (part)),
- Northern Adelaide (Playford, Salisbury, Tea Tree Gully, Port Adelaide-Enfield (part)),
- Southern Adelaide (Holdfast Bay, Marion, Onkaparinga, Mitcham),

- Eastern Adelaide (Burnside, Norwood-Payneham-St Peters, Campbelltown, Prospect, Walkerville, Unley, Adelaide),
- Fleurieu (Yankalilla, Victor Harbor, Alexandrina),
- Adelaide Hills (Adelaide Hills, Mount Barker), and
- Barossa (Gawler, Barossa, Mallala, Light).

The state government's broad directions for Greater Adelaide's growth and development are outlined in the plan. These include major development around transit corridors, including Transit Oriented Developments (TODs), and the identification of future growth areas. The government is committed to a plan that incorporates the following:

- Within the next 30 years, Greater Adelaide will house 560,000 more people, 258,000 new dwellings and 282,000 additional jobs; and
- New housing will move over time from a 50:50 split between existing areas and new land divisions, to a 70:30 split.

The government's vision for the future growth of Greater Adelaide focuses on creating:

- A city which will undergo urban regeneration and revitalisation in many existing areas (while sensibly protecting valued heritage and character), with vibrant new higher-density neighbourhoods created in and near the CBD and along designated transit corridors to the west, north and south.
- A city that embraces well-planned fringe growth with new population centres closely connected to transport infrastructure and employment opportunities.
- A city that encourages the sustainable growth of near country towns and townships, while protecting our most valuable environmental, agricultural and tourism assets.
- A city that will see the provision of high speed mass transport linked to the growth in residential housing and jobs.
- A city based around rapid-transit, with people living in energy and water-efficient developments in both the inner city and the suburbs.
- A city that is climate-change resilient, with a strong, affordable supply of housing to accommodate a growing population, and a broad range of housing choices.

The 30-Year Plan for Greater Adelaide includes the following functions:

- It provides regional targets for housing and population growth.
- It provides related targets for the number of jobs needed to support population growth and it identifies where those jobs may be located and where specific employment land should be set aside.
- It provides strategies to position Greater Adelaide to respond to climate change.
- It identifies major transit corridors and growth precincts within Greater Adelaide, with land use priorities integrated with long term transport and infrastructure planning for Greater Adelaide, building on the Strategic Infrastructure Plan for South Australia.
- It identifies areas for conservation and protection, including high value environmental and agricultural lands.

The 30-Year Plan for Greater Adelaide forms a volume of the State Government's Planning Strategy (pursuant to Section 22 of the Development Act), giving it statutory effect in guiding future development.

### 3.6 Development Plans

Development Plans are key documents in the South Australian planning and development system. They differ from Master Plans (refer to Section 3.7) in that they are part of the statutory planning process required under the Development Act 1993. Development Plans contain the zones, maps and written rules (i.e. "policies") which guide property owners and others as to what can and cannot be done in the future on any piece of land in the area covered by the Development Plan. These zones, maps and policies provide the detailed criteria against which development applications will be assessed.

The Development Act requires there be a Development Plan for each part of the state in order to guide development and inform assessment of development applications. There is an individual Development Plan for each of the 68 local council areas in South Australia (i.e. 68 Development Plans) plus a handful of Development Plans for parts of the state which do not fall within a council area.

Among other requirements, Development Plans identify the location of designated residential, commercial and industrial zones within township boundaries. This information is important in determining roads of local importance which connect these areas to the nearest arterial road. Depending on the size of the industrial zone or residential zone, and its regional importance, the connector roads may become roads of regional significance.

### 3.7 Master Plans and Urban Growth Plans

Master Plans and Urban Growth Plans have been developed for a number of individual or collective council areas in the S&HLGA region, as a follow on to the original Planning Strategy for the Outer Metropolitan Adelaide Region (Reference 8), which has now been superseded by the 30-Year Plan for Greater Adelaide (Reference 10). These plans provide a key link between individual council strategic plans and the state government's planning strategy.

#### 3.7.1 South Coast Master Plan

The South Coast Draft Master Plan (Reference 20) was released for public consultation in October 2007. The Master Plan is intended to guide the future growth and development of the South Coast region over the next 25 years.

The draft Master Plan ignores council boundaries to treat the whole of the South Coast as a single entity for strategic planning. The South Coast region comprises the coastal and adjacent hinterland area from Victor Harbor to Goolwa, including the towns of Middleton and Port Elliot, as well as Hindmarsh Island. The region is one of the fastest growing areas in South Australia, with an average annual population growth rate of around 4% per annum over the past 30 years. This growth is projected to continue.

The draft South Coast Master Plan has three key objectives:

- Protecting and enhancing the distinctive character of the region;
- Growing and promoting the region's economic competitiveness; and
- Preserving and developing the quality of life for individuals and communities on the South Coast.



### 3.7.2 Victor Harbor Urban Growth Management Strategy

This document (Reference 21) presents an urban growth management strategy (UGMS) for Victor Harbor covering the period 2008 to 2030. Some of the key issues identified in the strategy, as they affect S&HLGA regional transport planning, are noted in the following paragraphs.

Over the past two decades, Victor Harbor has maintained a strong annual population growth rate of between 3% and 4%. This is well above the state average of 0.5% over the same period. Growth has been driven principally by the “baby boomer” generation, combined with the sea change phenomenon. This trend is set to continue, bringing with it an unsustainable population structure with proportionally more aged households with higher dependencies on health and community services and more frugal spending habits, combined with fewer people of working age to provide those health and other services.

The principal supporting transport infrastructure for Victor Harbor comprises:

- A road network of 370 km, including the Ring Road (completed in 2004) connecting the Adelaide to Victor Harbor Road in the east with the Inman Valley Road to the west of the town.
- Tourist rail, used by Steam Ranger Heritage Railway and connecting Victor Harbor via Goolwa to Mount Barker.
- Regional airport, primarily used by light aircraft for recreational flights, near Goolwa.
- Coach bus service, operating between Victor Harbor, Goolwa and Adelaide.
- Two taxi services.

The principal transport related issues for Victor Harbor are:

- Transport connections to Adelaide are sub-standard (when compared with similar coastal towns). The poor road quality and perception of road safety, coupled with a severely limited daily public transport (bus service), affects the perception of accessibility to Victor Harbor, access to tertiary education in metropolitan Adelaide (contributing to out-migration of school leavers), access to specialist health services in metropolitan Adelaide and tourism business growth.
- Victor Harbor is relatively isolated from interstate transport connections. Victor Harbor’s quiet, historic seaside character, stable social environment and mild weather provide opportunities to build on tourism through development of high-end tourist resorts and conference facilities suitable for interstate and overseas delegations. However, these opportunities are limited by poor transport (and telecommunications) networks which are a deterrent for short-stay, time-poor holiday makers or business delegates.

### 3.7.3 Strathalbyn Town Plan

In 2005, QED Pty Ltd on behalf of Alexandrina Council prepared a Town Plan for Strathalbyn (Reference 22) to guide the sustainable growth of the town through to 2020. The Plan sets out key principles for development, as well as potential opportunities for improving the balance of housing, retail, enterprise, recreation and tourism activities within the town whilst conserving Strathalbyn’s unique heritage character.

Strathalbyn is a town of much historic and heritage importance from a European settlement perspective. It is located inland within the Fleurieu Peninsula, approximately 45 kilometres south-east of Adelaide and forms part of the Fleurieu Way tourist route. The town has a wide

variety of important heritage items of local and state significance. The regional economy is based on agriculture, viticulture, manufacturing and tourism.

Strathalbyn has developed as an orderly and compact regional town, with a user-friendly town centre surrounded by land used for a mix of residential, industrial, commercial, rural living, agistment, landscape and grazing activity. Pressure for additional residential and rural living development in and around the township has grown in recent years. An appropriate response to this pressure requires strategic guidance and management, to ensure a continued orderly and economic approach to any expansion of the township, to maintain and enhance the vibrant town centre, and to take advantage of any opportunities for improvement to surrounding landscape qualities.

Significant expansion of Strathalbyn, principally via residential development in Strathalbyn North and industrial development in Strathalbyn South, will expand the town and require appropriate upgrades to transport and other infrastructure.

#### 3.7.4 Monarto Precinct Strategic Directions Report

This report (Reference 24) provides a strategic summary of the scope for development of the Monarto area. In 2003, the Murraylands Regional Development Board investigated the development of two intermodal hubs (Monarto and Tailm Bend). However the project lapsed due to the lack of funding.

In recent years, the South Australian Freight Council has endorsed the Regional North South Transport Corridor. There has also been a general expansion of industrial and intensive agriculture within the Monarto South area. This has resulted in difficulties in the management of land use and maintaining the buffer between the zoo and the chicken industry. Increased demand for land has occurred along the north south corridor and north of the south eastern freeway. There is also an issue with the lack of water and power. In addition, pressure within Mount Barker for industrial land could lead to further development of the Monarto Precinct.

Major industrial participants already located in the Monarto Precinct include Big W, Sneaths Transport, Inghams, Australian Portable Camps, Recut Industries, Monarto Zoo, Adelaide Mushrooms, Aays Herb's, Hillgrove Kanmantoo Mine, Neutrog Pty Ltd and Peat Soils. Other companies are planning to move into the precinct.

## 4.0 REVIEW OF CURRENT TRANSPORT PLANS

### 4.1 General

This section of the report looks at recent transport planning studies covering the S&HLGA region which have been undertaken by various federal, state and local government bodies. Three of these documents are the 2010 Transport Plan and related appendices, while a further eight transport studies have been examined. Once again, a summary of each is provided.

### 4.2 S&HLGA 2010 Transport Plan and Addendums

The 2010 Transport Plan (Reference 1), 2004 Addendum to the 2010 Transport Plan (Reference 2) and 2007 Addendum to the 2010 Transport Plan (Reference 3) have each been previously discussed in Section 2.1. These documents collectively developed and refined a regional transport plan, focussing on the road network, which has assisted S&HLGA in its regional transport planning for the past eight years. However, additional transport planning has been undertaken by the federal government Department of Transport and Regional Services (DOTARS), as well as by DPTI, individual councils and private industry associations over the same period. It is appropriate to review those documents prior to considering regional transport planning requirements out to 2020.

### 4.3 AusLink White Paper

The AusLink White Paper titled “Building our National Transport Future” (Reference 26) was released by DOTARS in 2004. This original document addressed issues associated with federal government funding of the national road and rail transport network.

AusLink moved federally funded transport planning beyond separately planned and funded rail and road networks and ad-hoc rail/road intermodal developments. It introduced a single integrated network of land transport linkages of strategic national importance. The original National Network was based on:

- national and interregional transport corridors, including connections through urban areas;
- links to ports and airports; and
- other rail/road intermodal connections.

The National Land Transport Plan became the blueprint for improving the National Network into the future. It operated on a rolling five year basis. The first plan:

- contained strategic directions developed by the federal government to guide its investment priorities;
- set out projects that the federal government intended to fund in the period 2004-05 to 2008-09, in cooperation with states, territories and potentially the private sector; and
- identified the level of funding the federal government would apply to each project.

The federal government backed its AusLink initiative with a substantial increase in land transport investment. It allocated a total of \$11.8 billion for road and rail transport over the five years to 2008–09. Components of this funding included:

- \$7.7 billion for the AusLink National Network,
- \$1.5 billion for Roads to Recovery,
- \$2.6 billion for Financial Assistance Grants identified for roads, and
- \$90 million for the National Black Spot programme.

As well as interstate land transport corridor investments (including Melbourne-Adelaide), the Auslink White Paper identified interregional corridor investments, capital city urban corridor investments (including Adelaide), rail system investments and network-wide investments (including provision for higher mass limits and intermodal developments). Importantly, the White Paper also confirmed that the federal government's priority in the first five-year plan was to work with local government to:

- improve local and regional land transport infrastructure,
- facilitate greater cooperation between local councils, and
- enhance regional infrastructure planning.

Concepts contained in the original AusLink White Paper remain in place today, but are now managed as part of the National Land Transport Network, which is a defined national network of important road and rail infrastructure links and their intermodal connections. The Network is determined by the Federal Transport Minister under the National Land Transport Act 2014. Further information can be found on the federal Department of Infrastructure and Regional Development website ([click here](#)).

#### 4.4 Melbourne – Adelaide Corridor Study

The Melbourne – Adelaide Corridor Study (Reference 27) was prepared jointly by DOTARS, DPTI, the Department of Infrastructure Victoria and VicRoads.

The Melbourne – Adelaide corridor comprises the principal road route and the standard gauge railway link between the two cities. The corridor plays a significant role in the national economy and the economies of Victoria and South Australia. It supports a diverse, complex and sometimes competing range of freight and passenger tasks, performing seven distinct roles:

1. It carries freight between capital cities: Melbourne and Adelaide, Melbourne and Perth, and to a much lesser extent between Melbourne and Darwin and Sydney and Perth.
2. It carries timber and other regional products to markets in metropolitan and regional centres of consumption in other states, and a miscellany of consumables to regional locations from distribution centres in the state capitals and in other states.
3. It is a key linkage for intra-state freight movements between regional centres within Victoria and South Australia.
4. It supports the movement of the international trade of rural zones of production.
5. It serves a land bridging role in moving exports from South Australia and imports destined for South Australia overland between Adelaide and the port of Melbourne.
6. It provides a primary commuter linkage between the urban areas and regional centres to the east of Adelaide and to the west of Melbourne.
7. It provides international, interstate and local tourists with a number of access points to key tourism destinations in Victoria and South Australia.

The study contains a detailed analysis of road and rail freight movement along the corridor. It also identifies key restrictions in road and rail capacity, along with intermodal transfer locations, which currently prevent optimum use of the corridor.

There are two issues with the corridor which most affect S&HLGA regional transport planning.

Firstly, in 2001 a study undertaken on behalf of Transport South Australia assessed vehicle access to Mount Barker from the Princes Highway. In particular, the study assessed freeway

access at Bald Hills Road (the access route to new land subdivisions off Springs Road and the adjacent town of Nairne). Key observations drawn from the study were:

- Commuter based needs would dominate the growth in traffic on Adelaide Road (which runs over the Princes Highway at Mount Barker) and the access ramps for ten to fifteen years on from 2001.
- Estimated future growth suggested these facilities should operate at a satisfactory level of service until at least 2011.
- The majority of traffic using the existing interchange would not be attracted to a new facility to the east.
- Traffic generated from the eastern area of Mount Barker and the Nairne area and beyond, would benefit from a new access at Bald Hills Road, and the benefits derived would almost certainly be in the area of private commuter travel time savings.

As a consequence of these findings:

- It was advised to consider development of access plans to improve the efficiency of feeder road connections to Adelaide Road at Mount Barker.
- It was also suggested that to preserve the option of an additional freeway access for the future, land requirements for possible future freeway ramps adjacent to the Bald Hills Road underpass, should be identified (Transport South Australia 2001).

Secondly, inherent problems associated with the Adelaide Hills section of the rail line need to be addressed, in particular:

- This part of the corridor is barely coping with its current workload, and the addition of more trains to handle the growing volumes of freight that is expected over the next 20 years will only exacerbate the current problems.
- Although there is a “grand plan” for a 180 km “Adelaide by-pass” rail line, costing around \$600 million, to avoid the problems in the Adelaide Hills, the potential benefits (particularly for Melbourne–Perth/Darwin trains) are offset by a number of disadvantages. To maximise the benefits of such a big investment, other improvements would be needed elsewhere in the corridor, particularly at the Melbourne end where capacity improvements are required.

#### **4.5 Regional North South Transport Corridor**

The final report on the Regional North South Transport Corridor (Reference 28) was released by the Murraylands Regional Development Board (MRDB) in February 2006. This corridor is a cross regional strategic transport route of national, state and regional significance comprising the following existing roads – Kangaroo Road, Ferries McDonald Road, Schenscher Road, Pallamana – Wagenknecht Road, Murray Bridge – Sedan Road and Bower Boundary Road.

According to the report, upgrading of the nominated roads will enable the establishment of a Regional North South Transport Corridor that will:

- Create a transport route of regional and state strategic significance for not only South Australia, but also of national significance to support interstate freight access;
- Support a diverse cross section of industry needs and service a broad catchment area; and

- Link three major state and national freight corridors, namely the South East Freeway, the Sturt Highway and the Morgan to Burra Road.

#### 4.6 Kangaroo Island Regional Transport Strategy

The KI Regional Transport Strategy (Reference 29) was prepared by Strategic design + Development Pty Ltd on behalf of the KI Regional Transport Strategy Steering Group and released in May 2007.

The underlying issues that require a response in terms of additional transport infrastructure expenditure on Kangaroo Island relate to:

- A substantial increase in freight volumes as a result of the harvesting of plantation timber and potential new mining developments;
- Reducing mixed traffic conflicts between local, tourist and freight traffic; and
- Reducing on-going maintenance costs of sections of unsealed road by up-grading these sections to sealed roads.

Tourism must be considered within the context of the study. It is estimated that tourism generates approximately 15 percent of direct employment on the island, high compared to other South Australian regions. Total annual visitor spending has been estimated at between \$50 and \$60 million.

While tourism will remain an important economic activity for the island, over the next 15 to 20 years production of bulk commodities, namely timber products, mining outputs and grains, will increase to around 600,000 tonnes per annum. Improvements to the island's road infrastructure are paramount to ensure the safe movement of residents and tourists, concurrent with the efficient movement of production outputs to their markets. Both activities, namely tourism and production, are vital for the socio-economic strength of Kangaroo Island.

The KI Regional Transport Strategy outlines the required investment on roads and ports to year 2021.

Proposed road improvements include the establishment of a freight corridor along Playford Highway, Hog Bay Road and Redbanks Road, supplemented by re-establishing port activities at Ballast Head, upgrades for the tourist ring road, construction of sealed roads which provide local access to the freight corridor, and upgrade of key tourist and residential roads along the north coast.

Considerable attention has also been given to the operation and pricing of the SeaLink service from Penneshaw to Cape Jervis. The sea crossing and the marshalling of freight vehicles adds to the cost of freight movement of goods to/from Kangaroo Island. Whilst this is largely unavoidable, improved scheduling of road vehicle movements and ferry movements should be explored between SeaLink and the road operators, with the objective of a more contiguous flow, rather than the dwell times which are experienced by staging and marshalling at each wharf.

#### 4.7 Transport Master Plan for Mount Barker District Council

A working draft of the Transport Master Plan for DC Mount Barker was prepared in September 2008 (Reference 30). This document provides a comprehensive plan for the current and future transport needs of the district, with a strong emphasis on the high growth precinct of Mount Barker / Littlehampton / Nairne.

The overall objective of the Transport Master Plan is to develop a safe, integrated and efficient transport network that meets current and future needs. Five goal areas are contained within the Transport Master Plan, each with a number of strategies. The goal areas are listed below:

1. Future Growth
2. Public Transport
3. Walking and Cycling
4. Safety
5. Travel Demand Management

Those strategies considered to be most relevant to S&HLGA regional transport planning are:

- 1.1 Develop a freight network for north to south corridor movements through the district to reduce the impact of increasing commuter and freight traffic.
- 1.2 Plan and develop a ring route to the east and south east of Mount Barker connecting Wellington Road and Flaxley Road traffic to the Bald Hills Road / South East Freeway Interchange.
- 1.5 Develop a "Network Operating Strategy" that better defines road hierarchy based on the passenger, commuter, tourist and freight task.
- 2.2 Ensure integration of other transport modes with public transport infrastructure.
- 4.6 Identify and promote freight networks, gazette roads and a road hierarchy.

#### **4.8 Rural Road Hierarchy for District Council of Yankalilla**

The Rural Road Hierarchy for DC Yankalilla (Reference 31) was developed by Tonkin Consulting on behalf of DC Yankalilla and released in March 2007. The report provides a road hierarchy based on road function. However, an integral part of the process was to examine road condition, to highlight disparities between condition and function, and to identify how the disparities might be addressed.

The report identifies that production from Forestry SA pine plantations within DC Yankalilla is not forecast for substantial growth. However there are many young blue gum plantations in the area, and on Kangaroo Island, which will mature in the next eight to ten years. This will impact upon some council roads and designated freight routes, and overall north-south freight movements in the Fleurieu Peninsula. The main movements are currently catered for by Main South Road.

Tourism development activities are also forecast to grow steadily, which will heighten the need to manage the conflict between freight and tourism traffic.

Range Road is identified for consideration as a B-Double route because of the timber and dairy industry in the district.

#### **4.9 Road Classification Guidelines in South Australia**

Released in July 2008, the Road Classification Guidelines in SA (Reference 32) was prepared by the Local Roads Advisory Committee on behalf of the Local Government Association of South Australia and DPTI. It provides the most recent and most comprehensive set of definitions for the classification of roads throughout South Australia as "Arterial" or "Local". It also provides a fundamental definition of "Key Towns" and "Important Centres" based upon "ABS 2006 Census of Population and Housing" data.

Relevant definitions contained within the Road Classification Guidelines which are most likely to influence S&HLGA regional transport planning are:

### Key Town and Important Centre

Key Towns are designated as those with a population greater than or equal to 3000, while Important Centres are those with a population greater than or equal to 1000 persons, but less than 3000. Note that the terms Key Town and Important Centre have been used in the Road Classification Guidelines solely to determine the road hierarchy and network. The terms are based on population only and do not necessarily reflect the general importance of towns in the state.

Using the above definitions, Key Towns in the S&HLGA region (from largest to smallest) are Crafers/Bridgewater, Mount Barker, Victor Harbor, Goolwa, Strathalbyn and Nairne. Important Centres are Lobethal, Woodside, Hahndorf, Littlehampton, Port Elliot and Kingscote. The actual population (ABS 2006) of these Key Towns and Important Centres is shown in Appendix F of Enclosure 2 (being a reprint of Page 7 of the Road Classification Guidelines).

### Rural Arterial Road

Rural Arterial Roads provide a highly connective strategic network of roads carrying significant traffic volumes, including heavy vehicles, over long distances on a continuous basis (as distinct from seasonal traffic). Such roads include:

- Roads between states and their capital cities (e.g. the South Eastern Freeway and Sturt Highway);
- Roads between broad geographic regions of the state and between Key Towns in these regions (e.g. Victor Harbor / Adelaide);
- Roads connecting Important Centres to Adelaide either directly (where the Important Centre is situated on the arterial road e.g. Lobethal) or indirectly (where the Important Centre is situated a short distance off the arterial road e.g. Hahndorf);
- Roads connecting Important Centres to each other where such links in association with other arterial roads are of state-wide or major regional significance (e.g. Woodside to Lobethal).

### Rural Local Road

Rural Local Roads are of three kinds:

- Roads that are obviously local access roads leading to groups of farms or small settlements;
- Roads that provide for local area movements including travel between two Important Centres (note that local area is not necessarily synonymous with council area); and
- Roads leading to Important Centres or other communities situated a short distance off the main bypassing arterial road.

### Urban Road

Urban Roads are defined as those inside the Adelaide metropolitan area. However, an exception to this is those roads located in some regional cities, or large country towns, which are considered to be of an urban nature. It is therefore proposed in the Road Classification Guidelines that roads within those towns outside of Adelaide with 10,000 people or more be treated as urban. For the S&HLGA region, this would apply to Crafers/Bridgewater, Mount Barker and Victor Harbor.



#### 4.10 Adelaide Rail Freight Movements Study

The Adelaide Rail Freight Movements Study was undertaken by GHD on behalf of the federal Department of Infrastructure, Transport, Regional Development & Local Government, with the final report published in June 2010 (Reference 42). The report covers the findings of the Study, including five options that were analysed. A base case of “do nothing” was also examined. The upgrade options were:

1. Upgrade existing Adelaide Hills route
2. New Northern Bypass north of Truro to Two Wells
3. New Northern Bypass south of Truro to Two Wells
4. New Southern Bypass
5. Upgrade existing Adelaide Hills route and build Northern Bypass south of Truro

Estimated capital costs for the five upgrade options varied from a low of \$0.7 billion for Option 1 (existing route upgrade) to a high of \$3.2 billion for Option 5 (upgrade existing route then build Northern Bypass at a later date).

The key conclusion from the Study was that, while all alignment options were technically feasible to build, none were found to be economically justifiable at the time of undertaking the Study.

The initial outcome of the Adelaide Rail Freight Movements Study (i.e. to upgrade the existing route), and any subsequent decision by the federal or state government in relation to upgrading or bypassing of the Adelaide Hills rail freight corridor, will have a significant flow on effect in relation to transport planning in the S&HLGA region, particularly in relation to public transport by rail.

Options 2, 3 and 4 of the Adelaide Rail Freight Movements Study all release the Adelaide to Mount Barker (or Murray Bridge) rail corridor from future freight tasks, allowing consideration of its use for rail based public transport to the high population growth centre of Mount Barker. The future economic value of this potential significant public transport corridor was not factored into the Study parameters, and should be re-visited at a later date.

## 5.0 ARTERIAL ROAD NETWORK CONSIDERATIONS

### 5.1 General

Following on from principles defined in the 2010 Transport Plan 2007 Addendum (Reference 3), it can be reasonably assumed that DPTI controlled arterial roads within the S&HLGA region are able to provide sufficient capacity and adequate road safety standards to allow for general freight movements up to semi-trailer classification, along with all expected tourism and community access road transport requirements.

In the main, this assumption is correct and is fundamental to the inherent concept within S&HLGA regional transport planning that linking a regionally significant local road to a DPTI controlled arterial road will enable all subsequent network links (whether freight, tourism or community access based) to be safely achieved. Unfortunately, the DPTI controlled arterial road network does not achieve this ideal solution for several major reasons.

Firstly some roads, despite being designated arterial roads, cannot safely handle standard semi-trailer movements. This is particularly the case on many of the tightly constrained roads through the Adelaide Hills. In addition, numerous arterial roads have not been designed for and are therefore unable to safely handle the various classes of Restricted Access Vehicles (RAVs) which, as the name suggests, require special safety assessment and gazette/permit approvals before being allowed to use specific arterial roads. DPTI's Heavy Vehicle Access Framework (HVAF) discussed in Section 5.2 proposes a network of RAV routes throughout South Australia which are pre-approved and therefore can be used with confidence by freight operators.

Secondly traffic growth, along with higher expectations by the community regarding road safety, has resulted in identified (often isolated) deficiencies in the arterial road network, which are being addressed by DPTI under various improvement programs. A range of these deficiencies have been identified through DPTI's bridge capacity assessment program and the federally funded "Black Spot" program. Section 5.4 discusses in more detail these identified deficiencies in the DPTI network.

### 5.2 Heavy Vehicle Access Framework

South Australia's Strategic Plan 2004 (later updated to 2007) identified the need to embrace a strategic approach to infrastructure development. The Heavy Vehicle Access Framework (Reference 33) adopts this principle with the aim of improving the efficiency and effectiveness of road freight transport to make South Australia more competitive, support export and employment growth, and improve community access to affordable freight services.

The above aim is achieved by the development of road freight networks and corridors for heavy vehicles which take into account environmental and social issues that are now given greater prominence by the community in general. Road freight networks must also be developed in the context of providing a complete, sustainable and efficient land transport system in South Australia by complementing and interacting with other transport modes, particularly rail.

The HVAF provides policy and direction for meeting the main objectives of South Australia's Strategic Plan for heavy vehicle operation. It seeks to achieve a sustainable balance between the interests of all stakeholders, and also to guide heavy vehicle access to the road network for the long term.

Heavy vehicle operations are divided into three categories. These are:

- General Access
- Restricted Access by Gazette Notice
- Restricted Access by Permit

General Access vehicles are defined as including all vehicles up to and including the common six-axle articulated vehicle (semi-trailer). Maximum limits for vehicles are a gross mass of 42.5 tonne, width of 2.5 metres, height of 4.3 metres and length of 19.0 metres.

RAVs can only operate on approved routes due to their large size and mass. Consistent with national transport policy, South Australia has adopted the RAV concept within state legislation to make the most efficient use of existing road network infrastructure. As some RAV types, such as Road Trains and B-Doubles, are built to a common design and configuration, their construction specifications and general rules of operation are specified in the Road Traffic Act and related Regulations. Controlled Access Buses for carrying passengers are also included in this category. Individual roads can be gazetted as suitable for various RAV classes, once a route assessment has been undertaken. This allows unrestricted use of the route by RAVs which have been assessed as compliant with that RAV class.

Permit operations generally cover the transport of large indivisible items (as distinct from general freight loads). These are loads that cannot be readily transported within general access mass and dimensional limits. It is important that the use of permits be confined to such individual assessment applications and not be used on an ongoing basis for operations that may be regular or repetitious.

Under the HVAF, the road freight network in South Australia is divided into three categories. These are:

#### Key Freight Routes

*Key Freight Routes* are defined as routes that provide a high capacity for the movement of freight. They can include a combination of roads on the national network, state arterial and local roads that include:

- major links between important economic regions and freight centres, industrial, agricultural and manufacturing areas;
- connections to state borders; and
- intermodal connections at rail terminals, seaports and airports.

#### General Freight Routes

*General Freight Routes* are defined as routes that:

- provide ongoing access to transport depots, manufacturing and processing plants; and
- link into the Key Freight Route network.

General Freight Routes also include roads of regional significance and, along with Key Freight Routes, provide for the movement of general freight transport activities all year round.

#### Commodity Freight Routes

*Commodity Freight Routes* are routes that can safely accommodate the operation of RAVs on a limited or seasonal basis where traffic volumes are very low and in most cases limited to particular users transporting specific primary products (i.e. the transport of grain from paddock to silo).

This category provides a "fit for purpose" road network that matches the prevailing freight task where conditions of operation, not appropriate for key or general freight routes, can be applied through a risk assessment process.

### Higher Mass Limits

In addition to the above three general mass limit (GML) categories, further specific approvals are required where vehicles operate under higher mass limits (HML).

Axle mass limits are imposed on heavy vehicles to protect roads and bridges from unacceptable wear, tear and damage. Road damage is caused by the dynamic impact of heavy vehicles travelling along the road. The higher the speed the greater the dynamic impact on the road surface. Dynamic impact can be reduced with a corresponding reduction in road damage with the use of special soft riding suspensions. These suspensions are known as “Road Friendly Suspensions” and are certified under a national identification scheme.

## **5.3 Link to SA Strategic Plan**

The general direction of South Australia’s Strategic Plan focuses on the provision of freight corridors for heavy vehicle access and discourages inappropriate use of roads primarily designed for light vehicle and passenger cars. There is a responsibility by industry to encompass these principles and ensure that the most appropriate configuration of vehicle is used for the freight task in local and residential streets. The assessment of routes is therefore based on matching HVAF criteria to appropriate road design and safety standards.

## **5.4 Deficiencies in the Arterial Road Network**

### **5.4.1 Bridge Capacity Assessments**

DPTI maintains a list of bridges with kerb to kerb widths of less than 8.4 metres. This constitutes a deficiency in the ability of those bridges to accommodate unrestricted two way freight movements, although restricted (sometimes one way) freight movements are still possible at most of these sites. A list of deficient bridge sites within the S&HLGA region has been supplied by DPTI and is included as Appendix H to Enclosure 2.

### **5.4.2 Black Spot Discrete Sites**

DPTI maintains a series of maps depicting “Black Spot” sites around the state. For discrete sites, a Black Spot is defined as a site which has a history of at least three casualty crashes over a five year period. Maps showing Black Spots, for each constituent S&HLGA council, are included as Appendix I to Enclosure 2. The maps indicate that there are only isolated Black Spot sites on arterial roads in Alexandrina Council, the City of Victor Harbor, the District Council of Yankalilla and Kangaroo Island Council, but a moderate number occur on arterial roads in Adelaide Hills Council (mostly related to the South Eastern Freeway) and in Mount Barker District Council (mostly related to Adelaide Road).

## PART C

### 6.0 METHODOLOGY FOR REVIEW AND UPDATE OF THE PLAN

#### 6.1 Background

A review of the original S&HLGA 2010 Transport Plan Methodology was undertaken in 2007, initially by a subcommittee of the S&HLGA RWP and subsequently by HDS Australia as part of the 2007 Addendum to the 2010 Transport Plan. A revised methodology was presented in the 2007 Addendum which:

1. Proposed a strategic level process for reviewing agreed regional transport route plans and updating the S&HLGA Roads Database every three to five years; and
2. Proposed an annual process for submission, review and endorsement of Special Local Roads Program (SLRP) funding applications.

The proposed methodology was adopted by the S&HLGA RWP in early 2008 and successfully employed on a trial basis as part of the 2008-09 SLRP funding application process. The methodology was then incorporated into the 2020 Transport Plan development project, including creation of an interim 2009 S&HLGA Roads Database comprising 19 road proposals of which four were submitted as part of the 2009-10 SLRP funding application process.

Because the 2007 Addendum to the 2010 Transport Plan is no longer current, the recommended methodology as explained in Section 3 of that report, along with some subsequent refinement, is repeated in the following paragraphs, in order that a full explanation of the methodology for periodic review and update of the 2020 Transport Plan and associated Roads Database, together with the annual funding application process, is retained in a single report.

#### 6.2 Overview of Process

The original flowchart shown on the next page described the review and update methodology for the 2020 Transport Plan as a five step process. However, as part of the 2015 Update, an extra step (Step 2) has been introduced to the methodology, involving the updating of regional road action plans every 3 to 5 years. This additional step is further explained in Section 6.3 of this report, while the road proposal assessment methodology covered by Steps 4 to 6 (previously Steps 3 to 5) is now explained in Section 6.4 of this report.

Step 1 addresses the need to periodically review all regional transport routes developed as part of the original 2020 Transport Plan (refer to Sections 7, 8 and 9, plus Appendix A, for the current routes). This step was first implemented in 2015/16 as part of the 2015 Update.

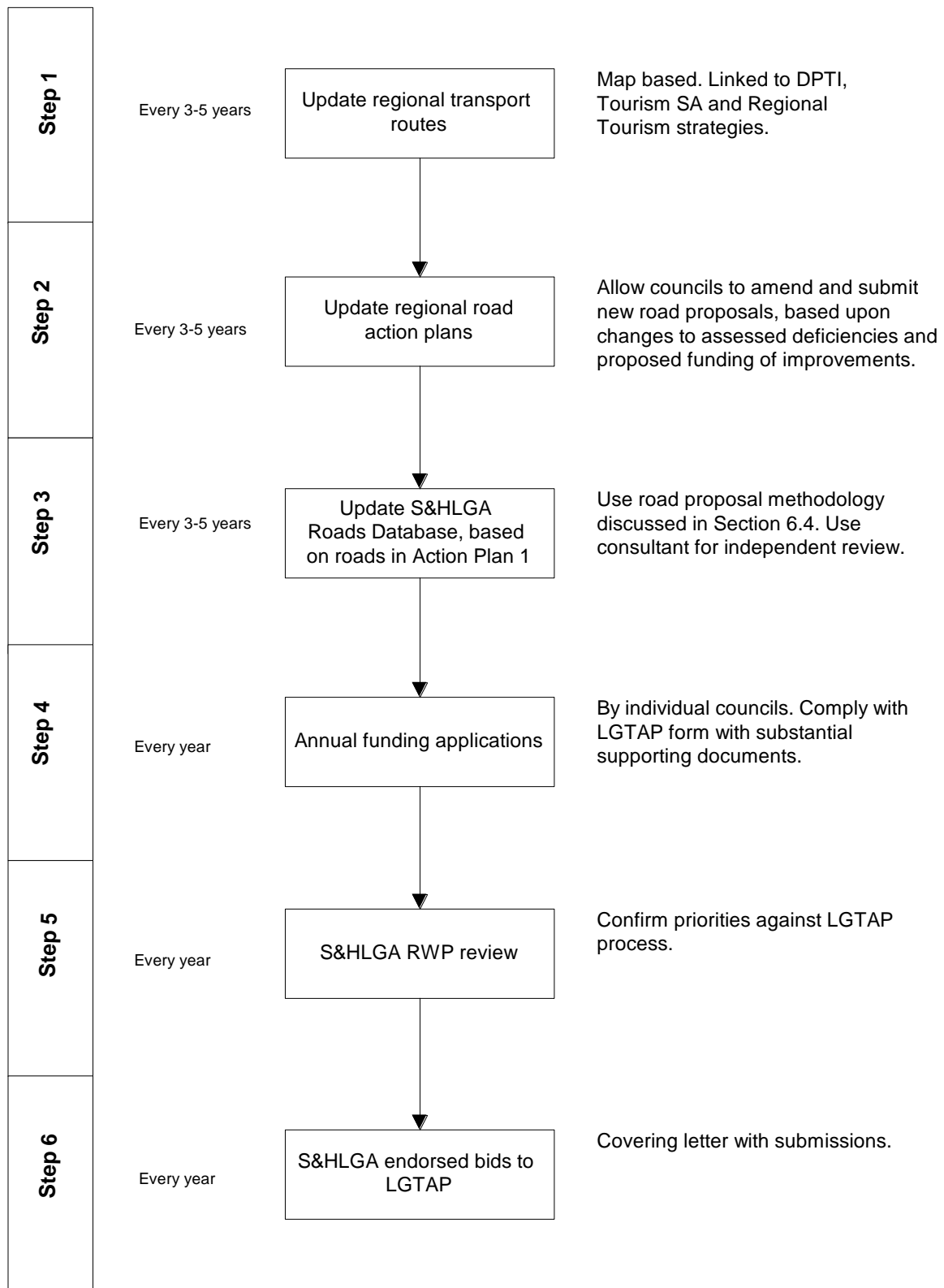
The new Step 2 allows councils to amend and submit updated regional road action plans, based upon changes to assessed deficiencies and available funding for capital works improvements.

Step 3 allows councils to review and update their individual road proposals, so that a revised Roads Database can be created which reflects changes in council and regional priorities. This step was last implemented in 2014 and is next due in 2017.

Steps 1 to 3 should be conducted every three to five years.

Steps 4 to 6 describe the annual grant funds application process, which if applied as described, should maximise the potential for S&HLGA road projects to receive funding under the SLRP and from other sources. These three annual steps were trialled as part of the 2008 and 2009 rounds of SLRP funding applications, and have been successfully implemented each year since then.

### 2020 TRANSPORT PLAN METHODOLOGY FOR REVIEW AND UPDATE



### 6.3 Regional Road Action Plans

#### 6.3.1 Background

While not part of the original S&HLGA 2020 Transport Plan, development of a methodology for creation of short, medium and long term regional road action plans was introduced as part of the 2020 Transport Plan – 2015 Update. Road deficiency assessments were undertaken by councils during 2013, with an initial version of Regional Road Action Plans released as at 17 February 2014. Minor updates to the Regional Road Action Plans were prepared in April 2014 and November 2014.

#### 6.3.2 Methodology

The methodology for developing Regional Road Action Plans is based upon the four fit-for-purpose categories listed in Section 4 of the SLRP Standard Funding Application Form, namely:

- Speed Environment
- Dimensions
- Geometry
- Strength/Durability

Each regional route (or section of route where a significant change in road purpose or road standard occurs) is broadly assessed for compliance with its fit-for-purpose standard, based upon the road's purpose(s). Against the above four categories (i.e. not broken down any further) an assessment of "Compliant", "Minor Deficiency" or "Major Deficiency" is noted. A "Minor Deficiency" is defined as failing to meet the fit-for-purpose standard, but not in such a way as to affect the functional performance of the road or its inherent safety for the road user or its economic value to council and the community. A "Major Deficiency" is defined as failing to meet the fit-for-purpose standard to such a degree that the road is unable to safely and/or economically perform its purpose(s), requiring constant intervention by the responsible council using a suitable risk mitigation strategy.

Once the above assessment is complete, each regional route (or section of route) is listed on one of the following three action plans, or remains on a fourth list of roads with two parts, namely either "assessed as fit-for-purpose" or "not yet assessed".

#### 6.3.3 Action Plan 1 – Immediate Priority (0 to 5 Years)

Roads on this list are regional routes exhibiting one or more major deficiencies in fit-for-purpose standard, the upgrade of which councils have included in their five year capital works programs. Initial budget allocations for these proposed upgrades are included in the action plan.

Starting point for the first version of Action Plan 1 was any outstanding road upgrade proposals which were assessed and prioritised under the 2009 Roads Database (Appendix B of Enclosure 3), provided that the road remained classified as a regionally significant route under the 2020 Transport Plan. Additional road proposals arising from the 2013 road deficiency assessments by individual councils were then added.

#### 6.3.4 Action Plan 2 – Medium Term Priority (6 to 10 Years)

Roads on this list are regional routes exhibiting at least one major deficiency in fit-for-purpose standard, the upgrade of which councils have not been able to include in their five year capital works programs, but for which an on-going risk mitigation strategy is in place for addressing any major deficiency.

### 6.3.5 Action Plan 3 – Long Term Priority (11 Years and Beyond)

Roads on this list are regional routes exhibiting no major deficiency, but one or more minor deficiencies in fit-for-purpose standard, the upgrade of which councils acknowledge is unlikely to occur in the next 10 years unless circumstances change significantly (e.g. road purpose, traffic volumes, further deterioration in standard, available funding).

## 6.4 Road Proposal Assessment

The road proposal assessment component of the 2020 Transport Plan review and update methodology, which is shown as Step 3 of the flowchart in Section 6.2, is more closely aligned with recommendations contained within the Roads Infrastructure Database (RID) Project Report released in 2001 when compared with the original 2010 Transport Plan road proposal assessment process. The RID Project guidelines are used by the Local Government Transport Advisory Panel (LGTAP) as part of its annual assessment process for grant funding under the Special Local Roads Program (SLRP). Alignment between the S&HLGA and LGTAP assessment processes improves the potential for S&HLGA applications to receive SLRP funding support.

The RID Project methodology is fully described in the Roads Infrastructure Database (RID) Project Report (Reference 4). It is a single stage methodology which evaluates road proposals against six categories, namely Secondary Purpose, Regional Significance, Economic, Access, Safety and Environmental. Since publishing of the project report in 2001, all annual Special Local Roads Program and Regional Roads to Recovery funding applications from throughout the state submitted to the Local Roads Advisory Committee (LRAC), now LGTAP, are required to be in a format that facilitates assessment using the RID Project methodology.

The key to successful application of this methodology is threefold:

- a. Selecting road proposals which have been clearly identified as forming part of the regional road network under the freight, tourism and/or community access categories, to ensure that the road proposal is properly recognised as having regional and/or state significance and (preferably) having more than one purpose.
- b. Substantiating claimed benefits under the economic, access, safety and environmental categories with objective evidence. This might include supporting freight movement studies for the economic benefits section, tourist or public transport operator letters of support for the access benefits section, and road safety audit reports for the safety benefits section.
- c. Once weighted benefit assessments are complete, splitting priorities for roads which have a primary purpose of freight, tourism or community access, so that the priority of tourism or community access roads for funding is independently compared with other tourism or community access roads respectively, not with freight roads.

Some LGA Regions, in particular the Limestone Coast Local Government Association (LCLGA), use the RID Project methodology exclusively, both for regional assessment of funding application priorities and in lodging recommended road proposals with LGTAP. Others, like S&HLGA, use a modified method for regional assessment, but are obliged to submit their funding applications to LGTAP in the RID Project methodology format. Either approach is acceptable, provided that in the latter case, the regional assessment method is sufficiently aligned with the RID Project methodology that a similar set of relative priorities emerges. In the case of the original S&HLGA 2010 Transport Plan methodology, this was not the case, which led to the revised S&HLGA methodology that has been adopted for the 2020 Transport Plan.

An example of how the road proposal assessment process operates as an integral part of the 2020 Transport Plan review and update methodology is shown in Appendix C.



Fundamental to the road proposal assessment process is the “weighted scoring methodology”, which is shown on Page 2 of Appendix C and repeated below:

**Weighted Scoring Methodology**

Define categories, criteria and set weights on this page	Category		Criteria			Criteria Total	
	Set Category Score	Set Criteria Weighting within Category	Criteria Weighting as a Percentage of Category	Individual Maximum Category Score			
<b>Secondary Purpose(s)</b>	Maximum Score	Minimum Score					
Does the proposal have at least one regionally significant secondary purpose ?	2	0	10	50.0%	5.0	Criteria Total	20
Does the proposal have two regionally significant secondary purposes ?	2	0	10	50.0%	5.0		
<b>Total - Secondary Purpose(s)</b>	<b>4</b>	<b>0</b>	<b>10%</b>			Check Total	10.00
<b>Regional Significance</b>	Maximum Score	Minimum Score					
Is the proposal identified as a route with community significance ?	2	0	10	33.3%	8.3	Criteria Total	30
Is the proposal identified as a route with regional significance ?	2	0	10	33.3%	8.3		
Is the proposal identified as a route with state significance ?	2	0	10	33.3%	8.3		
<b>Total - Regional Significance</b>	<b>6</b>	<b>0</b>	<b>25%</b>			Check Total	25.00
<b>Economic Development</b>	Maximum Score	Minimum Score					
To what extent will the proposal assist in the attraction of economic investment to the region ?	3	0	20	19.0%	3.8	Criteria Total	105
To what extent will the proposal provide for B-Doubles and higher mass vehicles ?	3	0	60	57.1%	11.4		
To what extent will the proposal ensure goods arrive at their market in a fit for purpose condition ?	3	0	10	9.5%	1.9		
To what extent will the proposal reduce delays and operating costs for heavy vehicles ?	3	0	15	14.3%	2.9		
<b>Total - Economic Development</b>	<b>12</b>	<b>0</b>	<b>20%</b>			Check Total	20.00
<b>Access</b>	Maximum Score	Minimum Score					
To what extent will the proposal improve access to a regionally significant tourism site ?	3	0	30	23.1%	3.5	Criteria Total	130
To what extent will the proposal improve accessibility to and between areas/towns in this region ?	3	0	10	7.7%	1.2		
To what extent will the proposal improve access to and availability of public transport services both within the region and to Adelaide ?	3	0	10	7.7%	1.2		
What is the current peak daily traffic volume on the road (note - may be higher than the measured daily two way count shown above)?	3	0	60	46.2%	6.9		<100=0, 101-500=1, 501-1000=2, >1000=3
What is the expected annual growth in peak daily traffic volume over the next five years ?	3	0	20	15.4%	2.3		
<b>Total - Access</b>	<b>15</b>	<b>0</b>	<b>15%</b>			Check Total	15.00
<b>Safety</b>	Maximum Score	Minimum Score					
To what extent will the proposal reduce conflicts between tourist, commuter and freight traffic ?	3	0	15	37.5%	7.5	Criteria Total	40
To what extent will the proposal improve safety in particular reducing accidents associated with run off road, hit object and overtaking related accidents ?	3	0	25	62.5%	12.5		
<b>Total - Safety</b>	<b>6</b>	<b>0</b>	<b>20%</b>			Check Total	20.00
<b>Environmental</b>	Maximum Score	Minimum Score					
To what extent will the proposal reduce heavy vehicle movements in town centres ?	3	0	30	54.5%	5.5	Criteria Total	55
To what extent will the proposal reduce environmental impacts of the transport system ?	3	0	15	27.3%	2.7		
To what extent will the proposal improve facilities for other modes of transport (sea, air and rail) ?	3	0	10	18.2%	1.8		
<b>Total - Environmental</b>	<b>9</b>	<b>0</b>	<b>10%</b>			Check Total	10.00
<b>Total All Categories</b>	<b>52</b>	<b>0</b>	<b>100%</b>		<b>100.0</b>	Check Total	100.00

## PART D

### 7.0 DEVELOPMENT OF REGIONAL FREIGHT ROUTES

#### 7.1 Freight Demands

Most of the sources, destinations and tonnages of freight identified in the 2010 Transport Plan (Reference 1) remain relevant to preparation of the 2020 Transport Plan. Major regional commodities identified in the 2010 Transport Plan included wine, horticulture, livestock, grain and timber. Of these, future demands for freight transport associated with the first four remain consistent with projections in Section 3.3 of Reference 1. On the other hand, the number of hardwood timber plantations has increased dramatically, particularly on Kangaroo Island and in smaller pockets on the Fleurieu Peninsula. However, on-going problems with management of the plantations means that timber harvesting requirements remain unclear, despite scheduled harvesting which should have commenced around 2011.

Sources of freight movements in the S&HLGA region comprise three fundamental types:

1. Individual properties throughout the region. In this instance, freight movements are generally of low volume and spread across various roads in the network, dictated by the needs of individual businesses. In some cases, use of B-Doubles may be required. These would generally be approved via issue of individual permits or, if required on a regular basis, through gazettal of a Commodity Freight Route under DPTI's Heavy Vehicle Access Framework (refer Section 5.2).

The presence of B-Doubles may dictate that these "farm/industry gate to arterial road" freight routes qualify as important freight routes within an individual council's area of responsibility. However, the routes do not necessarily qualify as regionally significant unless the daily quantity of B-Double movements is high enough that the quantity of freight being moved brings substantial economic benefit to the region. This would be the case where freight movements from a large number of individual properties start to concentrate onto a common route. An example of this is the marshalling yards and wharf facilities at Cape Jervis and Penneshaw supporting the Kangaroo Island Ferry freight service.

2. Industrial and logistics development zones in Key Towns and Important Centres. These zones generate significant economic activity which is of benefit to an individual council's area of responsibility and to the S&HLGA region. In some cases, the centres are of importance to the state as a whole.

Four major industrial/logistics development zones within or adjacent to the S&HLGA region were identified in the Strategic Infrastructure Plan for South Australia (References 6 and 7) and the 30-Year Plan for Greater Adelaide (Reference 10). These were at Goolwa, Strathalbyn, Mount Barker and Monarto. However, as part of the 2015 Update, it has been recognised that the industry centres at Goolwa and Strathalbyn are unlikely in the near future to expand to the level forecast in SIPSAs, so have been re-classified as minor industry centres. The remaining major industrial/logistics zones at Mount Barker and Monarto are located in close proximity to the South Eastern Freeway, which is a DPTI controlled road. Local roads connecting these zones to the freeway automatically qualify as being of regional significance.

Various minor industrial zones exist in Important Centres throughout the S&HLGA region. These are identified in the Development Plan applicable to each S&HLGA council (References 12 to 17). Local roads connecting minor industrial zones to a nearby arterial road will qualify as being of local importance, but to be considered of regional significance will require a sufficient number of freight movements to demonstrate economic benefit to the region as a whole.

3. Major extractive industries. Examples include the sand mines near Mount Compass and the Tooperang Quarry near Goolwa. These mines generate significant activity, particularly as most of the products from the mines are exported by road. The significance of any local road as a freight route connecting the mine to the nearest arterial road depends again on the number of vehicle movements and tonnages being shipped from the mine.

## 7.2 Capacity and Safety Issues

If considered in isolation to other road users, freight routes could be established as the shortest link between freight demand generators (such as the major industrial/logistic zones, minor industrial zones, extractive industries or individual properties) and arterial roads. However, use of the road network by commuters and tourists generates several different sets of road user requirements which must be catered for. The safety of all road users is affected by the capacity of individual roads to handle these differing requirements.

Where possible, separation of freight movements from commuter/tourist traffic achieves pronounced improvements in road safety for all users. The continued introduction of freight bypasses for Key Towns and Important Centres has therefore been given a very high priority by the state government, with implementation of its strategic town bypass policy being recognised as a strategic transport project within the Strategic Infrastructure Plan for South Australia (Reference 6).

## 7.3 Definition of Regionally Significant Freight Routes

The most appropriate definition of a regionally significant freight route remains that which is contained within the December 2001 Roads Infrastructure Database (RID) Project Report (Reference 4), namely that a "Freight" purpose "*Facilitates industry development by linking key industries to major transport routes and contributes to efficient movement of large volumes of heavy freight vehicles*".

Unfortunately, the term "large volumes of heavy freight vehicles" was never fully defined in the RID Project Report, nor in any of the subsequent strategic planning documents which have been released. To therefore assist in development of the new set of regionally significant freight routes which form part the 2020 Transport Plan, the S&HLGA RWP adopted a recommendation contained within the 2020 Transport Plan – Demand Modelling Working Paper (Enclosure 2) that the following quantifiable definition of a "large volume of heavy freight vehicles" be applied:

- At least 10 B-Double movements per day (50 per week) on a two way basis (i.e. half may be empty or part full); or
- At least 20 semi-trailer movements per day (100 per week) on a two way basis (i.e. half may be empty or part full); or
- Any combination of the above where a B-Double counts as two semi-trailers.

As an alternative to heavy freight vehicle movements, the significance of a freight route can also be defined in terms of average tonnages moved on a daily, weekly or annual basis. Based upon creating an equivalent definition to the five fully laden B-Double movements per day (and five empty returns) mentioned above, at an average 40 tonne load, movement of 200 tonne of freight per day along the route then becomes an alternative measure of whether the road can be considered regionally significant. In turn, based upon a five day working week, 1,000 tonne of freight per week or 50,000 tonne of freight per annum also become definitions by which a road can be classified as regionally significant.

## 7.4 Summary of Findings – Regional Freight Routes

The process for developing regional freight routes was undertaken in four steps, namely:

1. The major regional industrial zone at Mount Barker, along with the Monarto logistics centre, were linked to the nearest suitable DPTI arterial road and/or national highway. An example of this step included designating Alexandrina Avenue and Bald Hills Road (Mount Barker District Council), which connect freight to the new Bald Hills Road Freeway Interchange, as regionally significant routes.
2. Minor industry centres were examined, with connection to a DPTI arterial road determined to be regionally significant if the volume of heavy vehicles and/or tonnage of freight moved on that route met the definitions in Section 7.3 above. Examples arising from this step included Maude Street (City of Victor Harbor) and Tiers Road (Adelaide Hills Council). Note that, where any route associated with a minor industry centre failed to meet the definition for regional significance, this route was designated a locally important freight route. Examples in this category were Hay Flat Road and Fitzgerald Road (DC Yankalilla) and Sandmine Road (Alexandrina Council).
3. Other sources of freight movement, particularly extractive industry sites as well as large individual industrial sites, were also examined, with connection to a DPTI arterial road or existing regionally significant freight route again determined to be regionally significant if the volume of heavy vehicles and/or tonnage of freight moved on that route met the definitions in Section 7.3 above. There were many examples of these types of routes, including roads accessing Unimin Sand Mine, Tooperang Quarry and Peats Soil (all Alexandrina Council).
4. There are some local roads which form part of major regional freight links that have regional and/or state significance. These have been included as part of the 2020 Transport Plan as local roads, but ultimately it may be more appropriate for some of these roads to be reclassified as DPTI controlled arterial roads (either under arterial/local road swap arrangements or as an agreed extension to the arterial road network). One such major example is the proposed South Coast Freight Corridor, which incorporates Range Road, Victor Harbor Ring Road, Waterport Road, a new Middleton Bypass and Airport Road, along with several existing DPTI roads. This freight corridor will also have a branch to Mount Barker. Another example is the north-south freight route either side of Monarto, encompassing Kangaroo Road and Ferries-McDonald Road to the south, with Schenscher Road, Pallamana Road and Wagenknecht Road to the north. The eastern freight bypass of Mount Barker and the extension of Playford Highway on Kangaroo Island (west of Parndana) are further examples.

As a result of the above four step process, and using the definitions shown in Section 7.3, a variety of maps showing regional freight routes in the S&HLGA region have been prepared. These regional freight routes have then been presented as a regional overview, together with council wide maps for greater clarity and, where needed, detailed maps for key towns. All maps are included at A4 size in Appendix A of this report, along with a separate volume of A3 sized maps (as Enclosure 4). The proposed “South Coast Freight Corridor” from Cape Jervis to Callington, with a branch to Mount Barker, is shown in Appendix D.

The following road index tables list all regional freight routes identified within the five councils that are funded under the S&HLGA allocation within the Special Local Roads Program (Adelaide Hills Council being separately funded under the Metropolitan Councils SLRP allocation). The tables are consistent with the approved maps shown in Appendix A and Enclosure 4:

Alexandrina Council

AC	F	1	Waterport Road
AC	F	2	Proposed Middleton Bypass
AC	F	3	Flagstaff Hill Road
AC	F	4	Airport Road
AC	F	5	Lanacoona Road
AC	F	8	Kangaroo Road
AC	F	10	Milne Road
AC	F	11	Gardiner Street
AC	F	12	Nangkita Road
AC	F	13	Quarry Road

Kangaroo Island Council

KIC	F	1	Playford Highway
KIC	F	2	Mount Taylor Road
KIC	F	4	Birchmore Road
KIC	F	5	Arranmore Road
KIC	F	6	Redbanks Road / Ballast Head Road
KIC	F	7	The Lane

Mount Barker District Council

DCMB	F	1	Alexandrina Road
DCMB	F	2	Bald Hills Road
DCMB	F	3	Heysen Boulevard / Springs Road
DCMB	F	4	Mine Road
DCMB	F	6	Oborn Road
DCMB	F	7	Proctor Road

City of Victor Harbor

CVH	F	1	Range Road
CVH	F	2	Waitpinga Road
CVH	F	3	Mill Road
CVH	F	4	Armstrong Road
CVH	F	5	Welch Road
CVH	F	6	Waterport Road
CVH	F	7	Maude Street

District Council of Yankalilla

DCY	F	1	Range Road
DCY	F	2	Cole Road

## 8.0 DEVELOPMENT OF REGIONAL TOURISM ROUTES

### 8.1 Tourism Demands

The South Australian Tourism Commission (SATC) periodically creates campaigns to advertise key tourism locations, which are consequently considered of state significance. They are part of the state tourism promotion booklet, available in hard copy from SATC offices and also promoted on their web site. Key tourism locations are also promoted in the “South Australia Experiences” leaflets and other publications which detail particular types of tourism like diving, ecotourism, adventure, etc.

For the S&HLGA region, key tourism destinations include the Adelaide Hills, Kangaroo Island and the Fleurieu Peninsula. Of these, the strategically important area (identified as worthy of promotion at a national and/or international level) is Kangaroo Island, although one other location (namely Victor Harbor) is also actively promoted in selected Asian tourist market sectors.

The three regional tourism destinations identified above are further described in specific regional tourism brochures published by SATC. These depict specific towns, sites, routes, experiences and events likely to be of interest to a tourist visiting the region. As well as hard copy versions for all regions, some of the brochures can be downloaded from the SATC web site (including Fleurieu Peninsula – Reference 35).

Any site listed in the regional tourism brochures could be considered to have regional significance. However, practical considerations in terms of the likely number of visitors, particularly those coming via organised coach or mini bus tour, should be taken into account when determining which sites need to be serviced by a regionally significant tourism route.

Finally, a market summary for each of the above three regional tourism destinations, along with various other facts covering the profile of domestic visitors, attractions and events, tourism accommodation, and the profile of international visitors, are provided in regional tourism profiles last published by the SATC in December 2015 (Reference 36). This important information further assists in defining the regional significance of various tourism destinations. In particular, Page 1 from each of the three regional tourism profiles provides a valuable summary of the tourism market in each region.

One basis of comparing tourism demand across the S&HLGA region (and its growth over the last eight years) is the estimated number of overnight visitors and their source (intrastate vs interstate vs international). For 2007 (as published in the original 2020 Transport Plan), the regional tourism profiles provided the following information:

	<u>Intrastate</u>	<u>Interstate</u>	<u>International</u>
Adelaide Hills			
Visits	63,000	40,000	5,000
Nights	150,000	124,000	46,000
Fleurieu Peninsula			
Visits	549,000	87,000	16,000
Nights	1,500,000	415,000	105,000
Kangaroo Island			
Visits	82,000	21,000	36,000
Nights	300,000	111,000	157,000

For 2015 (as now included in this report), the latest regional tourism profiles (Reference 36) provide the following information:

	<u>Intrastate</u>	<u>Interstate</u>	<u>International</u>
Adelaide Hills			
Visits	89,000	63,000	8,000
Nights	229,000	245,000	95,000
Fleurieu Peninsula			
Visits	565,000	114,000	21,000
Nights	1,516,000	484,000	176,000
Kangaroo Island			
Visits	57,000	31,000	38,000
Nights	241,000	135,000	134,000

The above table highlights the continuing significance of Kangaroo Island as a major tourism location for international visitors. However, the increase between 2007 and 2015 of international visits and nights is much greater for the next most popular location (the Fleurieu Peninsula) with a 31% increase in visitor numbers and a 68% increase in visitor nights, while the remaining location (Adelaide Hills) has had a 60% increase in visitor numbers and a 107% increase in visitor nights over the corresponding period (albeit from a much lower base).

Using the latest (2015) figures, if interstate and international visitor numbers are combined, the Fleurieu Peninsula surpasses Kangaroo Island as having the greatest economic significance as a tourism destination, with the estimated number of visits totalling 135,000 while the number of accommodation nights is estimated as 660,000.

In terms of total number of visits, the Fleurieu Peninsula easily surpasses the other two locations within the S&HLGA region, with the bulk coming from within South Australia and interstate, rather than overseas. This makes it a very important tourism destination for the region, because of the economic impact of such a large number of visits and accommodation nights.

Using visitor night spending estimates supplied by Tourism Research Australia in 2007, the dollar value of the above accommodation nights (i.e. excluding day trip expenditure) translated into an annual tourism income at that time, for the three locations within the S&HLGA region, in the order of:

Adelaide Hills	\$ 35 million
Fleurieu Peninsula	\$ 200 million
Kangaroo Island	\$ 55 million

Including day trip expenditure of up to a further \$ 200 million, the total economic value of tourism within the S&HLGA region was therefore almost \$ 500 million per annum in 2007. Updated data on the SATC website ([click here](#)) shows that, as at December 2015, the total annual visitor expenditure has increased by 30% over the intervening eight year period to now be in the order of \$ 650 million. This is a significant source of wealth generation for the region.

## 8.2 Strategic Tourism Considerations

In the 2007 Addendum to the 2010 Transport Plan (Reference 3), it was identified that there are very few available publications which specifically address the need for tourism transport infrastructure on a regional basis. However, an understanding of the following publications provides, at least in a broad sense, guidance for the determination of regional priorities in relation to tourism transport infrastructure:

- South Australia's Tourism Plan 2020 released by the SATC in 2014 (Reference 37).
- Local Government's Engagement in Tourism dated July 2006 (Reference 38).
- The Fleurieu Peninsula Destination Action Plan 2012-2015, dated July 2013 (Reference 39).
- Kangaroo Island Destination Action Plan, dated July 2013 (Reference 40).

### 8.3 Definition of Regionally Significant Tourism Routes

The most appropriate definition of a regionally significant tourism route is again drawn from that which is contained within the December 2001 Roads Infrastructure Database (RID) Project Report (Reference 4), namely that a "Tourism" purpose *"Provides access to tourism sites and locations, and enables people to view scenic attractions in a safe and enjoyable manner"*.

Once again, the above definition fails to provide any quantifiable measure that differentiates between regionally significant tourism routes and locally important tourism routes (including scenic drives). Therefore to assist with development of regional tourism routes as part of the 2020 Transport Plan, the S&HLGA RWP endorsed recommendations, made in the 2020 Transport Plan – Demand Modelling Working Paper (Enclosure 2), that regionally significant tourism routes should be identified using the principles outlined in the following paragraphs.

As discussed in Section 8.1, an initial study of SATC state wide promotional material was undertaken in order to identify tourism destinations of state significance, along with a study of SATC regional tourism promotional material, as well as local council and private sector publications, in order to identify tourism destinations of regional significance. Tourism information was also based on a number of scenic drives indicated in regional promotional material, as well as on maps maintained at a state level by DPTI.

The difference between designation of a tourism destination as "primary" or "secondary" was therefore based on two key indicators, namely:

1. The target audience and level of advertising of the destination was the major factor. Primary destinations were considered to be those which the state government and private operators advertise interstate and overseas, thereby attracting tourists into the state. Such destinations have state significance. Obvious examples included various sites on Kangaroo Island and (although just outside the S&HLGA region) increasingly Monarto Zoo. However, promotion of Victor Harbor to interstate and selected overseas markets was also shown to achieve significant results (refer to Section 8.1).
2. The size of vehicles that commercial tourism operators use on the route was used as a secondary indicator of route importance. For instance, routes which cater for 40 seat tourist buses were considered as primary tourism routes while routes catering for 20 seat tourist buses (e.g. coasters, etc) were considered to be secondary tourism routes.

In addition, a route which was promoted as having state significance, like the Fleurieu Way or the Torrens Valley Scenic Drive, were considered primary routes. On the other hand, well advertised major attractions, but usually only accessed by private vehicles, were considered secondary routes. Examples of this type of route included access roads to Waitpinga Beach, Deep Creek Conservation Park and Rapid Bay.

As well as the tourist destinations themselves, any township offering a visitor information centre highlighting attractions in the surrounding region, such as Strathalbyn, was also identified. This acknowledged the fact that visitor information centres serve to enhance a tourist's experience in the area by providing information on additional attractions which might not otherwise have been known to the tourist, thereby encouraging them to stay longer.



## 8.4 Summary of Findings – Regional Tourism Routes

The process for developing regional tourism routes was undertaken in three steps, namely:

1. All primary tourism destinations were linked to the nearest suitable DPTI arterial road and/or national highway, if they were not already located on a DPTI route. Examples arising from this step included Birchmore Road / South Coast Road / West End Highway and Playford Highway (KI Council) and Fleurieu Way (DC Yankalilla, City of Victor Harbor and Alexandrina Council).
2. All secondary tourism destinations were checked against the criteria in Section 8.3 regarding the type of vehicles used by commercial tourism operators to access the destination. Regular visits (e.g. at least daily in tourist season) by 40 seat buses dictated that the route warranted primary tourism route status. Examples arising from this step included Stokes Bay Road and North Coast Road (KI Council). On the other hand, secondary tourism destinations visited regularly by smaller buses and cars were designated as secondary tourism routes. Examples in this category included Rapid Bay Road and Deep Creek Conservation Park Access (DC Yankalilla), Waitpinga Beach (City of Victor Harbor), Basham Beach Road and the Murray Mouth Access (Alexandrina Council).
3. Secondary tourism destinations which were not visited by a commercial bus operator on a regular (daily) basis, or where individual cars failed to bring in at least 50 visitors per day, were considered to only be of local importance, rather than being regionally significant. Similarly, local scenic routes that were not promoted in tourism publications outside of the region, were considered to have local importance, rather than regional significance.

As a result of the above three step process, and using the definitions shown in Section 8.3, a variety of maps showing regionally significant tourism routes in the S&HLGA region have been prepared. These regional tourism routes have once again been presented as a regional overview, together with council wide maps for greater clarity and, where needed, detailed maps for key towns. All maps are included at A4 size in Appendix A of this report, along with a separate volume of A3 sized maps (as Enclosure 3). Additionally, a map showing the full extent of the Fleurieu Way Regional Tourism Route is included as Appendix E.

The following road index tables list all regional tourism routes identified within the five councils that are funded under the S&HLGA allocation within the Special Local Roads Program. The tables are consistent with the approved maps shown in Appendix A and Enclosure 4:

### Alexandrina Council

AC	T	3	The Strand
AC	T	6	Basham Beach Road
AC	T	10	Beach Road
AC	T	11	Oliver Street / Barrage Road
AC	T	13	Randall Road
AC	T	14	Semaschko Road
AC	T	15	Bongalong Road
AC	T	16	Murray Mouth Road
AC	T	17	Sugars Avenue
AC	T	18	Winery Road
AC	T	19	Finniss - Clayton Bay Road
AC	T	20	Milang - Clayton Bay Road
AC	T	21	Lake Road
AC	T	22	Lake Plains Road
AC	T	23	Goolwa Terrace

AC	T	24	Brooking Street
AC	T	25	Cutting Road
AC	T	26	Dunbar Road
AC	T	28	High Street / North Parade

Kangaroo Island Council

KIC	T	1	Playford Highway
KIC	T	2	West End Highway
KIC	T	3	South Coast Road
KIC	T	4	Seal Bay Road
KIC	T	5	Birchmore Road
KIC	T	6	Starrs Road
KIC	T	7	Willsons Road
KIC	T	8	Arranmore Road
KIC	T	9	North Coast Road
KIC	T	10	Emu Bay Road
KIC	T	11	Stokes Bay Road
KIC	T	12	North Coast Road (West of Stokes Bay)
KIC	T	13	Cape Borda Road
KIC	T	14	Cape Willoughby Road
KIC	T	15	Hanson Bay Road
KIC	T	16	Jetty Road
KIC	T	17	Elsegood Road
KIC	T	18	Pennington Bay Road

Mount Barker District Council

DCMB	T	5	Ambleside Road / Heyson Road
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City of Victor Harbor

CVH	T	1	Waitpinga Road
CVH	T	2	Mill Road
CVH	T	3	Armstrong Road
CVH	T	4	Welch Road
CVH	T	5	Franklin Parade
CVH	T	6	Parsons Beach Road
CVH	T	7	Dennis Road
CVH	T	11	Hindmarsh Falls Road
CVH	T	16	Crozier Road
CVH	T	17	Victoria Street
CVH	T	18	Ocean Street
CVH	T	19	Flinders Parade
CVH	T	20	Granite Island Access
CVH	T	22	Bartel Boulevard
CVH	T	23	Bay Road
CVH	T	24	Battye Road
CVH	T	25	Range Road

District Council of Yankalilla

DCY	T	1	Fork Tree Road
DCY	T	2	Reservoir Road
DCY	T	3	Carrickalinga Road
DCY	T	4	Jetty Road

DCY	T	5	Parawa Road
DCY	T	6	Torrens Vale Road
DCY	T	7	Paradise Drive
DCY	T	8	Rapid Bay Road
DCY	T	9	Range Road
DCY	T	10	Cole Road
DCY	T	11	Tapanappa Road
DCY	T	13	Dog Trap Road
DCY	T	15	Finniss Vale Drive

## 9.0 DEVELOPMENT OF REGIONAL COMMUNITY ACCESS ROUTES

### 9.1 Community Access Demands

In reviewing the underlying definition for regionally significant community access routes, as contained in the 2010 Transport Plan (Reference 1) and confirmed in the 2007 Addendum to the 2010 Transport Plan (Reference 3), a number of steps have been taken to enhance earlier information used to determine regionally significant community access routes in the S&HLGA region.

Firstly, the location of town and community centres were determined using the CFS Emergency Services Map Books. This information was then collated with the 2006 census data to establish which town and community centres had permanent populations exceeding 50. An exception to this rule was made for Rapid Bay which, despite its very low permanent population, is included on the community access network because there is a school located within the town. Isolated communities with a permanent population less than 50, where there is only one road access in to and out of the community, have also been included.

Population data for all towns and communities was gathered from individual councils via ratepayer data and census data. Some of the councils completed a more detailed analysis of the census data and were able to provide accurate information for their large and small townships/communities. Other councils (i.e. Alexandrina Council, Mount Barker District Council, DC Yankalilla and Kangaroo Island Council) had census data for the larger towns, but relied upon rates data for smaller centres. Note that the community access network is based on town centres, which are clusters of households, rather than households scattered over a length of road.

Population data for Key Towns and for Important Centres, as per the definitions contained within the Road Classification Guidelines in SA (Reference 32), were then cross checked against data supplied by councils. Where a discrepancy existed, data from the Road Classification Guidelines has been used.

Once locations for all town centres were established, and population data received, the provision of essential services was assessed. Essential services are considered to cover the five areas of education, health, finance (banking), recreation and emergency services. The presence of an essential service was defined using various criteria. Education requires a school of at least R-7 level. Health requires a doctor's surgery or hospital with full time doctor in attendance (not a visiting GP). Finance requires an operational bank or other lending institution (i.e. not an agency arrangement). Recreation requires an established sporting club with clubrooms used for social functions (not just an oval or netball/tennis courts). Emergency services requires at least one of ambulance, police or SES to be based in the township/community, along with a regional control or training facility for CFS (not just a volunteer station).

### 9.2 Definition of Regionally Significant Community Access Routes

The most appropriate definition of a regionally significant community access route is again drawn from that which is contained within the December 2001 Roads Infrastructure Database (RID) Project Report (Reference 4), namely that a "Social" (now referred to as "Community Access") purpose "*Provides for community development and equitable access to community facilities, whilst minimising the impact of heavy vehicles on the community*".

By combining the presence of essential services with population data, town centre locations and the DPTI arterial road network, maps showing regionally significant community access routes have been created (included in Appendix A of this report). These maps show various colours for individual towns or community centres, based on the number of essential services available in that location, namely:

- Red – 0 services
- Orange – 1 Service
- Magneta – 2 services
- Yellow – 3 services
- Blue – 4 services
- Green – 5 services

Population is represented on the draft maps by the size of circles, with the ranges being:

- Small Community      50-100,
- Large Community      100-1000,
- Important Centre      1000-3000, and
- Key Town                >3000.

Most townships and communities are on the arterial road network, thereby being provided with a connection to other town centres with more or different services. A number of communities, though, are not on the arterial road network. These include Ironbank, Scott Creek, Bradbury, Longwood, Cherryville, Paracombe, Upper Hermitage and Forreston (Adelaide Hills Council), Kuitpo, Hindmarsh Island and Clayton Bay (Alexandrina Council), Hanson Bay, Vivonne Bay, Emu Bay and Island Beach (Kangaroo Island Council), Brukunga and Harrogate (Mount Barker District Council), plus Silverton, Rapid Bay, Second Valley, Wirrina Cove, Carrickalinga and Myponga Beach (DC Yankalilla).

Each Large Community (i.e. with a population of 100+) that is isolated from the arterial road network has automatically been provided with a regionally significant community access route to the nearest town centre or DPTI road. A Small Community that is isolated from the arterial road network, and has a high risk to life in the event of a major emergency (such as a bushfire), was also considered to require a regionally significant community access route. However, any Small Community which is not at significant risk in an emergency was considered to require an access route of local importance (i.e. council level), rather than at a regional level.

An extra warrant for development of a regionally significant community access route, not directly related to specific communities, was also introduced. This warrant involved determining the point at which local roads become a common use facility for at least 100 people, all coming from either individual farms or isolated communities each of less than 50 permanent population, and requiring access to their nearest town providing some or all of the five essential services. Application of this situation resulted in some local roads which feed directly in to towns being of regional significance for part of their length, but of only local significance for the remainder. An example of this was Stokes Bay Road on Kangaroo Island, which serves a large community north of Parndana, but which does not satisfy the criteria for being considered a regionally significant community access route over its entire length.

As a result of the devastating fires in Victoria in February 2009, a further warrant was introduced that examined the requirement for safe alternative resident escape routes and emergency services access routes in the event of catastrophic bushfire conditions. In this circumstance, all communities living in high risk bushfire areas (such as most of Adelaide Hills Council, around Mount Barker and other parts of the Fleurieu Peninsula) require at least two safe exit roads which fundamentally run in opposite directions. Otherwise, if the main route in to and out of the community is blocked by fire, residents have no safe means of escape.

### **9.3 Summary of Findings –Regional Community Access Routes**

The process for developing regional community access routes was undertaken in four steps, namely:

1. All communities in the S&HLGA region with at least 50 permanent residents, along with essential services available in each of those communities, were identified using the methodology described in Section 9.2.
2. Small and Large Communities, plus occasionally Important Centres, were linked via a single regionally significant community access route to either a DPTI arterial road or directly to a larger community providing the required essential service(s). Examples of such routes include access to Emu Bay (KI Council), Rapid Bay, Second Valley and Carrickalinga (DC Yankalilla), plus Brukunga and Harrogate (Mount Barker District Council).
3. Small and Large Communities in high risk bushfire prone areas were provided, where possible, with a second regionally significant community access route in the opposite direction to the primary route. Examples of such routes include the dual accesses to Ironbank, Cherryville and Forreston (Adelaide Hills Council).
4. Using ratepayer property information provided by individual councils, concentration points were determined for certain local roads servicing at least 100 permanent residents across diverse rural properties and very small communities. The section of local road from these concentration points to the nearest community with the relevant essential services (either directly or via a DPTI arterial road) was then defined as a regionally significant community access route. A large number of such road examples were found in the councils with a lower population density, such as KI Council, DC Yankalilla and Alexandrina Council, but (somewhat surprisingly) also included several examples in the City of Victor Harbor.

As a result of the above four step process, a variety of maps showing regionally significant community access routes in the S&HLGA region were prepared. These regional community access routes have once again been presented as a regional overview, together with council wide maps for greater clarity and, where needed, detailed maps for key towns. All maps are included at A4 size in Appendix A of this report, along with a separate volume of A3 sized maps (as Enclosure 4).

The following road index tables list all regional community access routes identified within the five councils that are funded under the S&HLGA allocation within the Special Local Roads Program. The tables are consistent with the approved maps shown in Appendix A and Enclosure 4:

#### Alexandrina Council

AC	C	4	Nangkita Road
AC	C	5	McHargs Creek Road
AC	C	6	Ashbourne Road
AC	C	8	Wellington Road
AC	C	9	Meechi Road
AC	C	11	Lake Plains Road
AC	C	12	Nine Mile Road
AC	C	13	Finniss - Milang Road
AC	C	14	Milang - Clayton Bay Road
AC	C	15	Winery Road
AC	C	16	Gardiner Street
AC	C	17	Brooking Street
AC	C	18	Randall Road
AC	C	19	O'Connell Avenue
AC	C	20	Captain Sturt Road
AC	C	21	Monument Road
AC	C	25	Airport Road / Flagstaff Hill Road
AC	C	27	Waterport Road

Kangaroo Island Council

KIC	C	1	Stokes Bay Road
KIC	C	2	Playford Highway
KIC	C	3	Wedgewood Road
KIC	C	4	South Coast Road
KIC	C	5	Birchmore Road
KIC	C	6	Elsegood Road
KIC	C	7	Arranmore Road
KIC	C	8	North Coast Road
KIC	C	9	Emu Bay Road
KIC	C	10	Cape Willoughby Road
KIC	C	11	Island Beach Road
KIC	C	12	Knofel Drive

Mount Barker District Council

DCMB	C	2	Bald Hills Road
DCMB	C	3	Heysen Boulevard / Springs Road
DCMB	C	6	Springs Road
DCMB	C	7	Bridge Street
DCMB	C	8	Sydney Road
DCMB	C	9	Pyrites Road
DCMB	C	12	Harrogate Road
DCMB	C	15	Wellington Road

City of Victor Harbor

CVH	C	1	Range Road
CVH	C	2	Waitpinga Road
CVH	C	3	Battye Road
CVH	C	4	Tugwell Road
CVH	C	5	Tabernacle Road
CVH	C	6	Bay Road
CVH	C	7	Mill Road
CVH	C	8	Armstrong Road
CVH	C	9	Cartwright Road
CVH	C	10	Greenhills Road
CVH	C	11	Seaview Road
CVH	C	12	Welch Road
CVH	C	13	Lipizzaner Drive
CVH	C	14	Waterport Road
CVH	C	15	Ocean Road
CVH	C	17	McCracken Drive
CVH	C	18	The Parkway
CVH	C	19	Field Avenue
CVH	C	20	Pine Avenue
CVH	C	21	Crozier Road
CVH	C	22	Oval Park Road

District Council of Yankalilla

DCY	C	1	James Track
DCY	C	2	Reservoir Road
DCY	C	3	Fork Tree Road

DCY	C	4	Myponga Beach Road
DCY	C	5	Carrickalinga Road
DCY	C	6	Hay Flat Road
DCY	C	7	Parawa Road
DCY	C	8	Paradise Drive
DCY	C	9	Finnis Vale Drive
DCY	C	10	Rapid Bay Road
DCY	C	11	Range Road West / Rarking Road
DCY	C	12	Torrens Vale Road



## 10.0 NON-ROADS TRANSPORT CONSIDERATIONS

### 10.1 General

The movement of freight, tourists and the general population throughout the S&HLGA region, indeed throughout the state, is primarily via the national highway, arterial road and local road networks. However, other modes of transport are very relevant to transport planning, particularly where sea gaps are involved (such as Kangaroo Island) or where distances increase sufficiently such that intermodal transfer times and costs associated with using air and rail transport are small compared with travel time and mass freight haulage benefits.

Sustainable use of the existing and any upgraded road network also requires optimisation of its capacity by achieving higher numbers of people per vehicle (through use of buses and car pooling) and by diverting passenger movements to rail and tram networks where feasible (mainly in the metropolitan area). Consideration of public transport options, and future upgrades in this area, is therefore critical to achievement of a total sustainable transport planning solution for the S&HLGA region.

Tourism orientated and commuter based dedicated cycling networks (both on-road and off-road) are increasing in importance as a mode of transport throughout the S&HLGA region, both within built up areas and on roads and separate trails between townships. The connectivity of these cycling networks, and the safe interaction of vehicles and cyclists along individual elements of the cycling networks, are a key consideration for both individual councils and the region as a whole.

### 10.2 Rail Transport Infrastructure

Existing rail infrastructure within the S&HLGA region and expected upgrades over the next ten years have already been discussed in various other sections of this report and also in the 2020 Transport Plan – Demand Modelling Working Paper (Enclosure 2). In summary:

#### 10.2.1 Freight Considerations

Major rail freight movements are centred on the Adelaide to Melbourne line, which runs through Mount Barker, Monarto and Murray Bridge. This is a long haul freight line with a currently very limited ability for loading/unloading of freight at the above centres. Industrial developments at Mount Barker and Murray Bridge are of regional significance, but they are highly unlikely to warrant any consideration of road/rail intermodal transfer facilities within the timeframe of the 2020 Transport Plan. On the other hand, Monarto is developing as a national logistics centre, which may warrant future consideration of an upgrade in road/rail intermodal freight transfer facilities. The implication for the road network is that important local roads leading into the Monarto industrial/logistics precinct will need to be capable of handling up to B-Double freight movements.

The federal government funded Adelaide Rail Freight Movements Study (Reference 42) did not have a significant impact on rail freight movement along the Adelaide to Murray bridge section of the Adelaide to Melbourne route. As discussed in Section 4.10, it recommended upgrading of the existing route, rather than implementation of a freight rail bypass of the Adelaide Hills line. The economic justification of a freight rail bypass needs to be re-visited, taking into account national rail freight savings and the potential future use of the existing Mount Barker to Adelaide rail corridor as a public transport facility serving the high residential growth zones in the Adelaide Hills and particularly at Mount Barker. Any Adelaide Hills freight rail bypass should include road/rail intermodal transfer facilities at Murray Bridge and/or Monarto, to take advantage of the realigned freight route.

### 10.2.2 Tourism Considerations

Existing tourist rail facilities run from Mount Barker, via Strathalbyn and Goolwa, to Victor Harbor. The existing rail infrastructure used by this tourism operation is suitable for the task, but would require significant capital investment for limited return should the same rail infrastructure be considered for high speed commuter use.

There are no plans for expansion of tourist rail facilities in the region.

### 10.2.3 Commuter Considerations

There are no passenger rail facilities operating within the S&HLGA region at the moment. Adelaide Metro passenger rail services terminate at Belair in the Adelaide Hills and Seaford in the south. Of these services, the Noarlunga line is now electrified, introducing a high speed rail connection into the Adelaide CBD from the south (Reference 10). This has allowed for the development of a Park and Ride (Rail) facility at Seaford Rise and a Bus/Rail Interchange (as well as Park and Ride) at Seaford. The implication for the S&HLGA region is the potential provision of regular bus services on arterial roads throughout the region, and on local roads with a community access purpose, which connect to this rail hub at Seaford.

On the other hand, there is little incentive for commuters to use rail as a means of travelling from Victor Harbor, Goolwa, Strathalbyn or even Mount Barker to Adelaide, since travel times for rail through the Adelaide Hills are much slower than the equivalent time by bus (or car) using the South Eastern Freeway, Adelaide / Victor Harbor or Adelaide / Goolwa roads.

## 10.3 **Sea Transport Infrastructure**

The main sea transport opportunity existing in the S&HLGA region is the KI Sealink ferry service operating between Cape Jervis at the tip of the Fleurieu Peninsula and Penneshaw on Kangaroo Island. This facility provides dedicated freight movements, as well as a combined freight, tourist and general passenger service, between Kangaroo Island and the mainland on a commercial basis. Travel subsidies are offered to Kangaroo Island residents and businesses.

The state government owns wharf infrastructure at both ends of the KI Sealink ferry service and has included an upgrade of those facilities as part of the Strategic Infrastructure Plan for South Australia (Reference 6). In particular, Penneshaw has been designated as the primary freight and passenger ferry harbour. Both ends of the ferry service are connected to DPTI controlled arterial roads, so there is no obvious requirement for upgrading of local roads leading in to these sites. However, particularly at the Penneshaw end, the need for improved marshalling of freight vehicles and possible expansion of parking facilities may warrant investment in Council owned infrastructure in addition to state controlled facilities. As well, the justification of Range Road as a regionally significant freight route is likely to gain more significance as the demand for freight movements between Kangaroo Island and the Monarto logistics precinct or direct to Melbourne increase.

Note that, while the various responsible entities for managing the hardwood plantations on Kangaroo Island have experienced repeated financial problems, it is expected that the hardwood industry will continue in some form or other and that a requirement for woodchip export remains. The exact location of the proposed export facility, previously identified as Ballast Head, remains uncertain and freight routes will need to be adjusted when a final decision is reached.

Other sea transport facilities in the S&HLGA region have a relatively minor role to play in regional transport planning. The marina at Wirrina Cove (also known as Sunset Cove or Marina St Vincent) provides private moorings for mainly recreational purposes. The marina was built to be of sufficient size to accommodate a car and passenger ferry to Kangaroo Island (previously operated by Kangaroo Island Ferries – South Australia Pty Ltd). However, that operation has

ceased and the commercial viability of this site as an alternative to KI Sealink is questionable, so the ferry terminal at Wirrina Cove is not considered to be of regional significance.

Other wharf or marina facilities exist at Rapid Bay, Victor Harbor, Goolwa, Hindmarsh Island, Kingscote, American River and Vivonne Bay. All of these primarily support recreational purposes. The latter three (all on Kangaroo Island) also support a small fishing fleet. There is no coastal sea trade of significance operating between these ports that would require significant road infrastructure leading to the port.

#### 10.4 Air Transport Infrastructure

As stated in the Strategic Infrastructure Plan for South Australia (Reference 6), air freight is crucial for the transport of time-critical high value products, while air transport is usually the quickest and most economical means of moving passengers over a sea gap (such as to Kangaroo Island). Adelaide Airport is South Australia's only international export airport. Eight regional airports (including Kingscote on Kangaroo Island) have scheduled passenger and freight services. However, sustaining infrastructure at most local airports is a challenge because low traffic levels do not produce sufficient income to meet maintenance needs.

Upgrading of Kingscote regional airport has been identified in the Strategic Infrastructure Plan for South Australia (Reference 6) and is now underway as a result of recent state government initiatives. Growth in demand has been generated by high value freight export requirements (such as marron or lobster) and by increases in tourist and general commuter numbers.

The other airport in the S&HLGA region is located at Goolwa. This privately owned regional airport is used as a base for skydiving, and for jet and classic joy flights. There are no scheduled passenger services operating from Goolwa, nor is there any available information to indicate that regular air freight services operate from Goolwa. As it only takes about one hour to drive to Adelaide from Goolwa, it is unlikely that Goolwa airport will fill a regionally significant role as either an air freight terminal or passenger terminal within the next ten years.

Although slightly outside the S&HLGA region, the Monarto Precinct Strategic Directions Report (Reference 24) examined the possibility of establishing a regional airport at Monarto, as part of a planned intermodal hub. An earlier investigation in 1975 (as part of the original Monarto development plan) looked at four sites, including the existing Murray Bridge site at Pallamana. The study focussed on servicing the air transport and freight demands of the expected 200,000 Monarto population. Needless to say, it did not proceed at that time.

The more recent investigation regarding a regional airport at Monarto focused mainly on potential air freight transport needs in conjunction with the proposed development of Monarto as an industrial/logistics precinct. The second stage of the study involved developing a business case for an intermodal facility at Monarto (that may or may not include a regional airport at Monarto South or some other nearby location). Until the business case is fully developed, and relevant air freight demand identified, the concept of a regional (freight) airport at Monarto is, at best, likely to occur at the end of the 2020 Transport Plan timeframe.

An alternative driver for development of a regional airport at Monarto would be that Adelaide and Parafield airports either reach their capacity or require relocation due to land constraints. This would result in the creation of an alternate or replacement large scale airport facility for Adelaide. Given the significant level of infrastructure investment at the existing Adelaide Airport, any relocation of this facility is considered to be at least 20 years away, and therefore well outside the 2020 Transport Plan timeframe.

## 10.5 Review of Public Transport Policy

### 10.5.1 Methodology

The current status of regional public transport policy applicable to the S&HLGA region was reviewed as part of the 2020 Transport Plan development process. This included an assessment of likely future requirements. The methodology involved a review of previously supplied documents, scanning of publicly available transport policy, consultation with senior DPTI staff and development of a discussion paper for incorporation into the 2020 Transport Plan – Demand Modelling Working Paper (Enclosure 2). The discussion paper was, in effect, an environmental scan of public transport policy affecting the S&HLGA region. It was not intended to be a detailed analysis of all of the public transport services in the region, nor did the paper include consultation with other significant stakeholders or communities.

A summary of the discussion paper's findings are contained in the following paragraph's, along with implications for the S&HLGA region.

### 10.5.2 Current Transport Policy – Federal Government

While the federal government funded Adelaide Rail Freight Movements Study (Reference 42) focused on freight rail movements, it did have potential implications for rail public transport through the Adelaide Hills. The final report considered five options for addressing the sub-standard Adelaide Hills section of the Melbourne – Adelaide Rail Corridor. Two of the options involved a northern bypass leaving the existing line at Murray Bridge, while a southern bypass leaving the existing line at Callington was also proposed (though it had a very high capital cost). However, none of these three options were recommended by the Study. As such, the existing rail corridor through the Adelaide Hills remains primarily a resource for freight rail, with extension of the current passenger service from Belair to Mount Barker not feasible at this point in time.

### 10.5.3 Current Transport Policy – State Government

The state government's 30-Year Plan for Greater Adelaide (Reference 10) includes provision for the Adelaide Metro rail network to be upgraded, electrified and high-speed trains purchased for both the Gawler and Noarlunga/Seaford lines. Improvements to the rail network have relevance to the S&HLGA region as follows:

Noarlunga/Seaford Line:

- Works on electrification and standardisation of the line, including its extension to Seaford, are complete.

Belair Line:

- A recent upgrade program has been completed. No decision on electrification will be made while the line continues to be primarily a rail freight corridor.

The Public Transport Division of DPTI manages the Adelaide Metro network (rail and bus), along with overseeing operation of the following regional passenger transport services:

Regular Route Services – commercial arrangements by transport operators, such as TransitPlus and Link SA (formerly Premier Stateliner), for which transport concessions are provided, but no subsidy.

Provincial City Bus Services – funded by the state government in six provincial cities in SA and managed by local operators. This service is not available within the S&HLGA region.

Community Passenger Networks – transport information/brokerage services for transport disadvantaged people for accessibility to services within communities, including the Adelaide Hills, South Coast and Kangaroo Island, jointly funded by DPTI and the federal government Department of Families and Communities' Home and Community Care Program.

Integrated Transport Services – timetabled and flexible intra-region bus services, such as Strathalbyn and surrounds, small towns around Mount Barker, and Mount Pleasant to Tea Tree Plaza, providing services which are contracted and subsidised by the state government and with transport concessions provided.

Regional Taxi Services – 24 hour metered fares which can access the SA Transport Subsidy Scheme for people with disabilities.

#### 10.5.4 Some Specific Regional Public Transport Implications

Adelaide Hills Council:

The public transport implications in this council area are similar to those listed below for Mount Barker. An integrated transport facility (i.e. car/bus Park & Ride) is proposed in the near future at Verdun. In addition, the existing Community Passenger Network and Integrated Transport Service model for the smaller scattered towns in Adelaide Hills Council will come under increasing focus particularly as the population ages and services become more centralised.

Mount Barker District Council:

Mount Barker has the benefit of being included within the Adelaide Metro network. The town acts as a hub for travel to/from Adelaide and surrounding areas. People travel in from surroundings areas by various means including car, bus and walking. The two Mount Barker car/bus Park & Ride facilities have proven to be very popular.

As the region grows, any increase in demand for commuter services will tend to be managed on an as-needed basis within the framework of the Adelaide Metro network.

Any future potential to provide rail services to Mount Barker as a transport policy will be subject to a further investigation of the economic benefits of the Adelaide rail freight bypass and any future state government decision on upgrading of the Belair line with respect to electrification and standardisation of the rail gauge.

An Integrated Transport Service (namely Magor's Bus Service) operates around the more rural areas of DC Mount Barker, while local Community Passenger Network services within Mount Barker will come under increasing demand pressures in the future as the town grows.

Alexandrina Council:

The Community Passenger Network model and Integrated Transport Services, currently operated by TransitPlus and Murray Bridge Passenger Services in Strathalbyn and surrounding smaller towns, will continue to come under increasing pressure. Growth in demand for long distance services may involve future links to rail hubs at Seaford and potentially Mount Barker. Provision of future car/bus Park & Ride facilities at Goolwa, Strathalbyn and Mount Compass has been included in the 2020 Transport Plan to facilitate this opportunity.

City of Victor Harbor:

The South Coast Community Passenger Network, along with Integrated Transport Services operating in the region, will become of increasing focus for local travel. As the region grows, there will be some increasing demand for the Regular Route Service to Adelaide from Victor Harbor and surrounds. These are presently operated by Link SA (formerly by Stateliner). The increasing demand for services to Adelaide will more than likely need to be met by providing

additional route services to the CBD or bus services to hubs such as Seaford, particularly now that the rail line has been electrified. Provision of future car/bus Park & Ride facilities on the northern edge of Victor Harbor and at Encounter Bay has been included in the 2020 Transport Plan to facilitate this opportunity.

SteamRanger Heritage Railway operates the popular Cockle Train tourist rail service between Goolwa and Victor Harbor on the South Coast, as well as the Highlander and Southern Encounter tourist rail trips from Mount Barker to Strathalbyn and Victor Harbor respectively. While highly suitable for slow speed tourist rail activities, upgrading of the Mount Barker to Victor Harbor line for high speed public transport services would involve a significant cost and be very unlikely to compete with road-based services on a time of travel basis.

District Council of Yankalilla:

This area has bus services that currently link into Sealink coaches travelling to Kangaroo Island, as well as Link SA (formerly Stateliner) services. However, as population grows, so too will demand for long distance services to Adelaide, again potentially involving future links to the bus/rail interchange at Seaford. Provision of a future car/bus Park & Ride facility on the southern edge of Yankalilla has been included in the 2020 Transport Plan to facilitate this opportunity. DC Yankalilla also has an ageing population base, so demand for local services such as Community Passenger Networks will increase.

Kangaroo Island Council:

Kangaroo Island has ferry transport services operated by Kangaroo Island Sealink on regular schedules between the Fleurieu Peninsula and the Island. These services can be considered as providing a form of public transport. The Island also has various commercial bus services for tourists (again mainly operated by KI Sealink), while local schools have numerous buses provided by the state government. A Community Passenger Network also operates on the Island and there may be increased demand in the future. An opportunity worth further exploration would be to provide a pilot integration project of all these services for the benefit of tourists, local people and the economy.

Access to the Island can also be by air. There are several flights each day operating in the morning and afternoon between Adelaide and Kingscote airport (the latter managed by KI Council).

#### 10.5.5 Public Transport Policy Conclusions

1. The current policy for public transport in the State of South Australia is mainly focused on revitalisation for the higher demand centres in the Adelaide Metropolitan area.
2. Electrification of the Seaford rail line, including the introduction of high-speed train services, now provides significant increased potential for Regional Route Services to hub out of Seaford, providing Victor Harbor, Goolwa, Yankalilla and Mount Compass with much more frequent bus services. Eventually, this might include incorporation into an expanded Adelaide Metrocard public transport network, though such an option is not essential.
3. The provision of local infrastructure such as Park and Ride stations should be encouraged to enhance the use of Regional Route Services from Victor Harbor, Goolwa, Yankalilla, Mount Compass and Strathalbyn.
4. Local public transport will tend to be provided within communities by Integrated Transport Services and Community Passenger Networks, supplemented where viable by Regional Taxi Services.

5. Potential opportunities may exist for rail upgrades and services to be provided to the east of Belair (e.g. to Mount Barker) should the Adelaide rail freight bypass from Murray Bridge and Monarto, via Truro, to northern Adelaide eventually replace the existing Adelaide Hills rail freight corridor.

## 10.6 Regional Cycling Network

As mentioned in Section 10.1, tourism orientated and commuter based dedicated cycling networks (both on-road and off-road) are increasing in importance as a mode of transport throughout the S&HLGA region, both within built up areas and on roads and separate trails between townships. The connectivity of these cycling networks, and the safe interaction of vehicles and cyclists along individual elements of the cycling networks, are a key consideration for both individual councils and the region as a whole.

Several councils with the S&HLGA region have addressed cycling requirements for their respective councils in documents such as the Mount Barker, Littlehampton and Nairne Trails Plan by Mount Barker District Council (Reference 48), the Adelaide Hills Strategic Bicycle Plan – Draft by Adelaide Hills Council (Reference 51) and the Victor Harbor Bicycle Strategy – Draft for Consultation (Reference 52). These plans take a detailed look at tourist and/or commuter cycling requirements within individual townships. In the case of the Mount Barker, Littlehampton and Nairne Trails Plan, linkages between these three towns (which are all in relatively close proximity) have also been considered.

Commuter based cycling requirements, applicable primarily to school children but also to potential localised ride-to-work or ride-to-shops trips, are generally addressed very well in the above township level bicycle strategies. Typically, dedicated on-road full time or school hours bicycle lanes are introduced, with parking controls and linemarking used to provide a relatively safe riding environment. However, safety issues arise with the available width of bike lanes and close proximity of cars and trucks, the continuity of such on-road networks, and at points where the on-road lanes cross existing streets, particularly higher volume roads. Some good examples of these challenges, and potential solutions, are contained in the Victor Harbor Bicycle Strategy – Draft for Consultation (Reference 52).

Longer distance riding opportunities, usually associated with healthy recreation and tourism, are currently provided via dedicated off-road bicycle and shared paths, such as the existing Encounter Bikeway from Goolwa to the southern end of Encounter Bay, the Carrickalinga to Normanville shared path and several trails in and around Mount Barker. Once again, these cycling opportunities are generally well documented in township level bicycle strategies and route maps. Safety issues that may arise include interaction with pedestrians using the same facility, plus once again at points where the shared paths cross existing roads and streets, particularly cyclist visibility approaching the crossings because they are generally riding at higher speeds.

Unique to the nature of the S&HLGA region, with its close proximity to metropolitan Adelaide and its picturesque constantly changing scenery, is the opportunity to introduce cross regional cycling routes throughout the Adelaide Hills and Fleurieu components of the S&HLGA region, and potentially for selected routes on Kangaroo Island as well. Such cross regional cycling routes would draw upon existing or proposed on-road bicycle lanes and off-road shared paths where available (particularly in built up or more heavily trafficked areas), but would connect these dedicated facilities together via “cycle safe” roads. Cyclists would have the opportunity to ride short sections of interest, or undertake longer challenges using the cycle safe roads.

To achieve a cycle safe standard, existing roads would need to provide sealed shoulders of 1.2m in width beyond the existing road edge line. Such roads would allow motorists to remain within their lane, while achieving legislated safe passing requirements for cyclists using little or no deviation. Cycle safe roads would be designated using the existing blue bicycle route signage, or possibility via a new or supplementary “cycle safe” sign. At road intersections, cycle safe roads could include a green painted crossing lane to indicate potential cycle/vehicle

conflict, with stop and give way hold lines adjusted to be behind any such cycle crossing lane (subject to sight distance requirements).

The first step in developing an integrated regional cycling network, which combines localised on-road bike lanes and off-road shared paths with cycle safe regional roads, is to identify all current cycling facilities and the potential connecting roads most likely to be used by cyclists. A sample drawing containing regional cycling routes in the Yankalilla / Normanville / Carrickalinga is included as Appendix F. Future development of this concept, with input from all S&HLGA member councils, is highly recommended.



## PART E

### 11.0 CONCLUSIONS AND RECOMMENDATIONS

#### 11.1 Regional Transport Goals

Regional (formerly referred to as strategic) transport goals developed as part of the 2010 Transport Plan continue to underpin regional transport planning and should remain substantially unchanged, as they align very closely with state strategic planning initiatives. The goals are:

Goal 1 “Economic Development” – A transport system that supports the economic, industry and trade development of the S&HLGA region.

Goal 2 “Access” – An equitable and accessible transport network that allows for consistent and reliable travel.

Goal 3 “Road Safety” – A safe transport network where the severity and risk of accidents are minimised.

Goal 4 “Environment” – A transport network that minimises adverse impacts on the environment and communities.

#### 11.2 Demand Modelling Issues and Inconsistencies

During the course of the 2020 Transport Plan development, particularly during the initial study of relevant literature, a number of examples of conflicting base line data and associated recommendations emerged. In particular, regional population over the period to 2020 is predicted to grow by between 1% per annum (Strategic Infrastructure Plan for South Australia) and over 3% per annum (various Master Plans and Urban Growth Strategies). This large variation is considered a significant risk to establishing a valid estimate of future transport needs, particularly those transport requirements based upon the high end population growth targets.

#### 11.3 Key Conclusions

##### 11.3.1 Freight Routes

Regionally significant freight routes generally connect industrial and logistics zones in Key Towns and Important Centres, along with significant extractive industry sites, with designated freight routes that form part of the DPTI managed arterial road network. In addition, cross regional freight movements (such as the South Coast Freight Corridor and the north-south freight link from Ferries-McDonald Road to Wagenknecht Road) are also important, along with more localised township bypasses such as the eastern freight bypass of Mount Barker and the proposed Middleton Bypass. Impacts from the hard wood plantation industry on Kangaroo Island also need to be considered.

Locally important freight routes also exist. These routes involve the connection of industrial zones and extractive industry sites with arterial roads, but carry a volume of freight traffic which is less than the agreed levels to be classified as regionally significant (i.e. an average of at least 200 tonnes of freight per day or 50,000 tonne per year). Locally important freight routes also include any gazetted B-Double GML routes which do not qualify as regionally significant.

##### 11.3.2 Tourism Routes

Regionally significant tourism routes are concentrated around the primary tourism destinations associated with Kangaroo Island and the Fleurieu Peninsula. Once again, such routes connect tourism destinations with the DPTI managed arterial road network. To be considered a

regionally significant tourism route, regular use by commercial tourist buses and/or significant car visits is required, with the destination advertised at an intrastate, interstate or international level that brings tourists into the region.

Locally important tourism routes also exist. They have been shown as part of the Regional Tourism Routes (Refer Appendix A and Enclosure 4) as a local tourism route, but ultimately should form part of council level transport planning. Such routes include tourism destinations that are promoted locally and generally attract a lower volume of visitors. Other locally important tourism routes, such as designated scenic drives in the Adelaide Hills, Alexandrina, Victor Harbor and Yankalilla council areas, are not actively promoted as a tourism attraction but serve to add to a tourist's positive experience while in the area.

### 11.3.3 Community Access Routes

Regionally significant community access routes are required to ensure that the social fabric of regional South Australia is maintained, particularly because so many essential services are no longer available in country townships. Reliable, safe, all-weather roads connecting communities to the nearest arterial road or directly to a major service centre are essential. In addition, concentration points define sections of road which service a large rural population that also needs access to regional service facilities.

Sustainable use of the S&HLGA regional road network will require increasing use of public transport to reduce future congestion on the network. Introduction of Park & Ride facilities, combined with more frequent express bus services linking regional destinations to the bus/rail interchange at Seaford, will significantly enhance the use of public transport.

## 11.4 **Key Recommendations**

The following updated recommendations are presented for consideration by the S&HLGA RWP and for formal adoption by the S&HLGA Executive:

1. The strategic transport goals developed as part of the 2010 Transport Plan and reaffirmed as the Regional Transport Goals for the 2020 Transport Plan, as listed in Section 2.1 and restated in Section 11.1 of this report, be further reaffirmed as the Regional Transport Goals for the 2020 Transport Plan – 2015 Update.
2. The updated methodology for review and update of the 2020 Transport Plan, as summarised by the flowchart in Section 6.2 of this report, be adopted as part of the 2020 Transport Plan – 2015 Update.
3. Updated regional freight routes, as shown on the regional overview, council wide maps and selected township detail maps in Appendix A and Enclosure 4, along with the underpinning definitions and methodology used to create the plans (as described in Section 7 of this report) be adopted as part of the 2020 Transport Plan – 2015 Update.
4. Updated regional tourism routes, as shown on the regional overview, council wide maps and selected township detail maps in Appendix A and Enclosure 4, along with the underpinning definitions and methodology used to create the plans (as described in Section 8 of this report) be adopted as part of the 2020 Transport Plan – 2015 Update.
5. Updated regional community access routes, as shown on the regional overview, council wide maps and selected township detail maps in Appendix A and Enclosure 4, along with the underpinning definitions and methodology used to create the plans (as described in Section 9 of this report) be adopted as part of the 2020 Transport Plan – 2015 Update.
6. The future introduction of car/bus Park & Ride facilities at various regional townships, as shown on the updated community access routes, combined with lobbying of state government to expand express bus services to all regional townships in the defined

“Greater Adelaide” area, including better linkage to the Seaford bus/rail interchange, be reaffirmed as a key strategy for improving public transport in the S&HLGA region.

7. The 2014 Roads Database, comprising 12 road proposals submitted and assessed in early 2014 (refer Appendix C), forms an interim database, which will subsequently be replaced with a 2017 Roads Database that is underpinned by a final version of the Regional Road Deficiency Action Plans (refer Appendix B).
8. The next scheduled strategic review of all regional transport routes associated with the 2020 Transport Plan be set down for 2018 (i.e. eight years into the ten year planning period) at which time the overall transport plan should be reviewed to become the 2030 Regional Transport Plan.

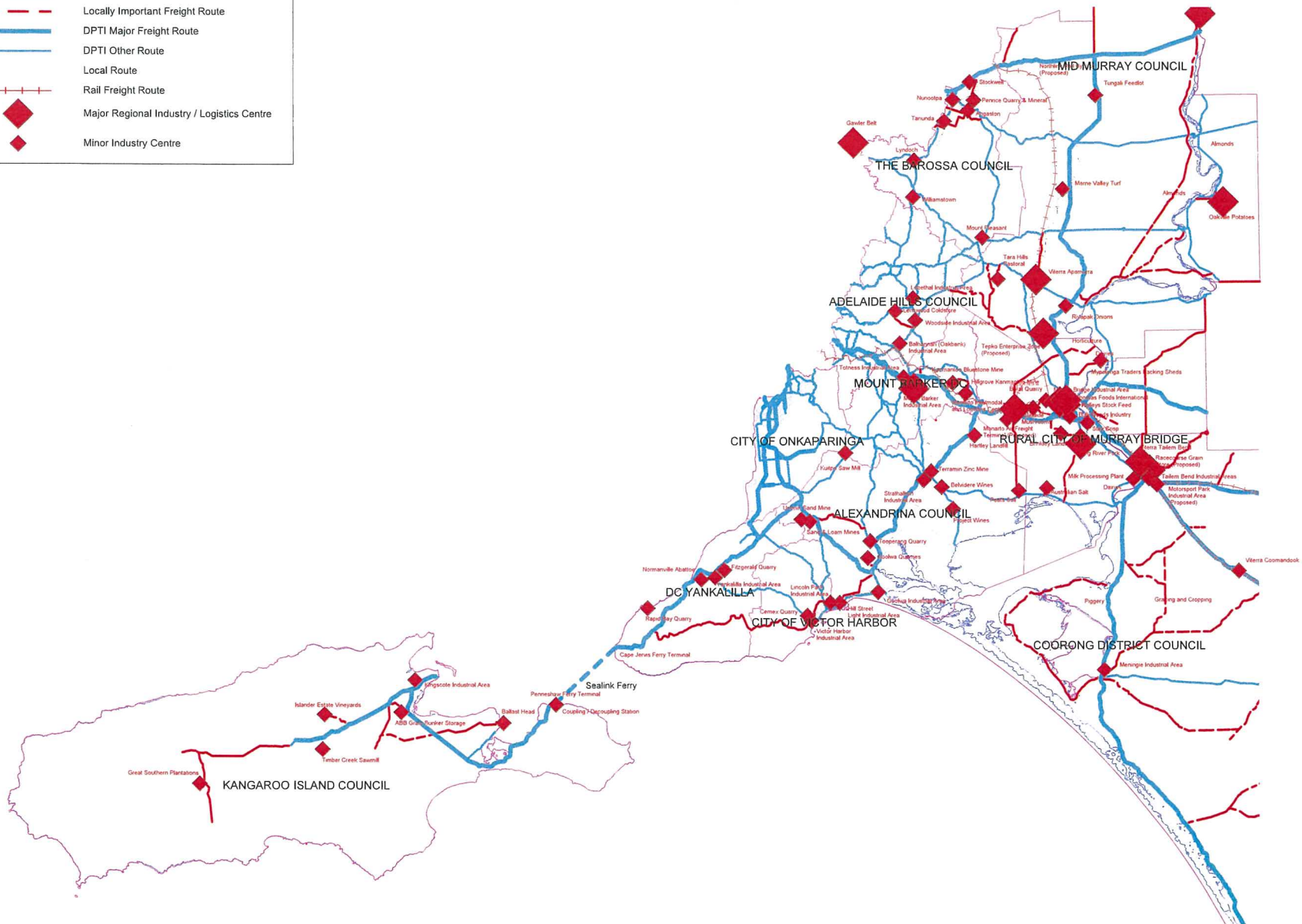
## **Appendix A**

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2020 Transport Plan – 2015 Update  
Regional Transport Routes, A4 Size  
(as at 10 Nov 16)

Legend

- Regionally Significant Freight Route
- - - Locally Important Freight Route
- DPTI Major Freight Route
- - - DPTI Other Route
- Local Route
- + + + Rail Freight Route
- ◆ Major Regional Industry / Logistics Centre
- ◆ Minor Industry Centre



Prepared by  
**hds**  
 AUSTRALIA  
 277 Magill Road  
 Trinity Gardens SA 5068  
 Telephone: 08 8333 3760  
 Facsimile: 08 8333 3079  
 Email: sa@hdsaustralia.com.au



John C Olson  
 FIEAust  
 Chartered Professional Engineer  
 Member No. 506394

Approved  
  
 Date 10 Nov 16

**Southern & Hills Local Government Association**  
**2020 Transport Plan**

**Regional Freight Routes**

Drawing No.  
**2020TP-F-R-01**  
 REVISION B

**Legend**

-  Regionally Significant Freight Route
-  Locally Important Freight Route
-  DPTI Major Freight Route
-  DPTI Other Route
-  Local Route
-  Rail Freight Route
-  Major Regional Industry / Logistics Centre
-  Minor Industry Centre

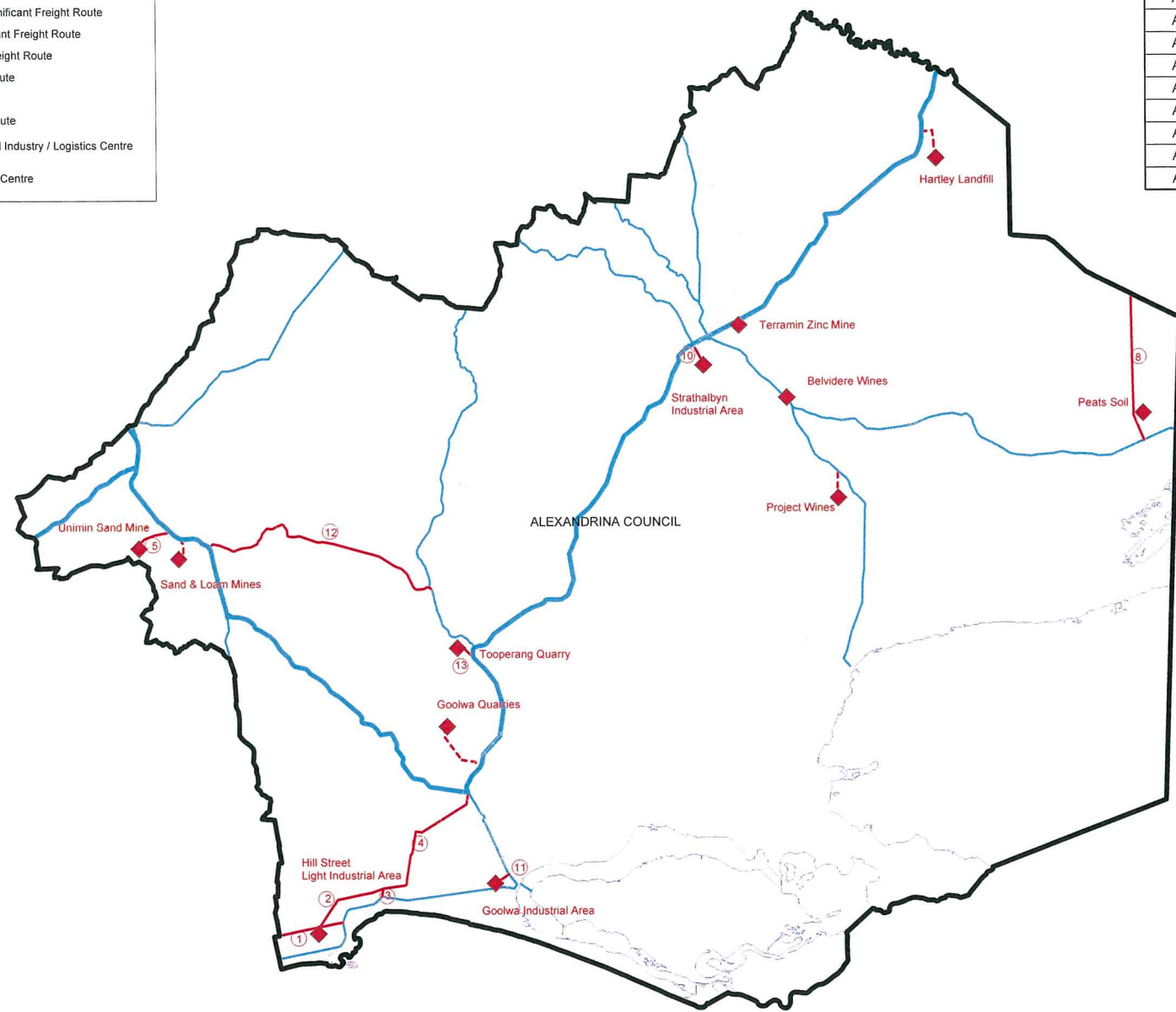


### Road Index

AC	F	1	Waterport Road
AC	F	2	Proposed Middleton Bypass
AC	F	3	Flagstaff Hill Road
AC	F	4	Airport Road
AC	F	5	Lanacoona Road
AC	F	8	Kangaroo Road
AC	F	10	Milne Road
AC	F	11	Gardiner Street
AC	F	12	Nangkita Road
AC	F	13	Quarry Road

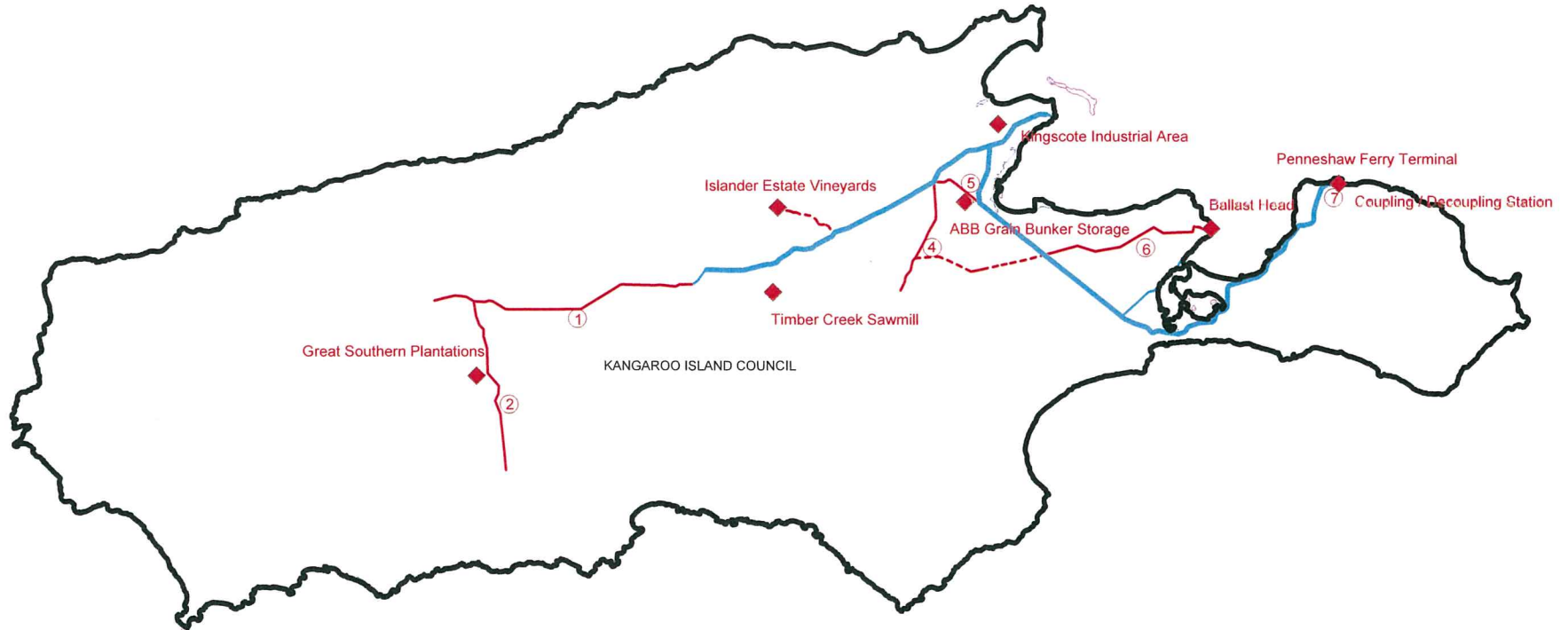
### Legend

- Regionally Significant Freight Route
- - - Locally Important Freight Route
- DPTI Major Freight Route
- - - DPTI Other Route
- Local Route
- + + + Rail Freight Route
- ◆ Major Regional Industry / Logistics Centre
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Legend

- Regionally Significant Freight Route
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- + + + Rail Freight Route
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- ◆ Minor Industry Centre



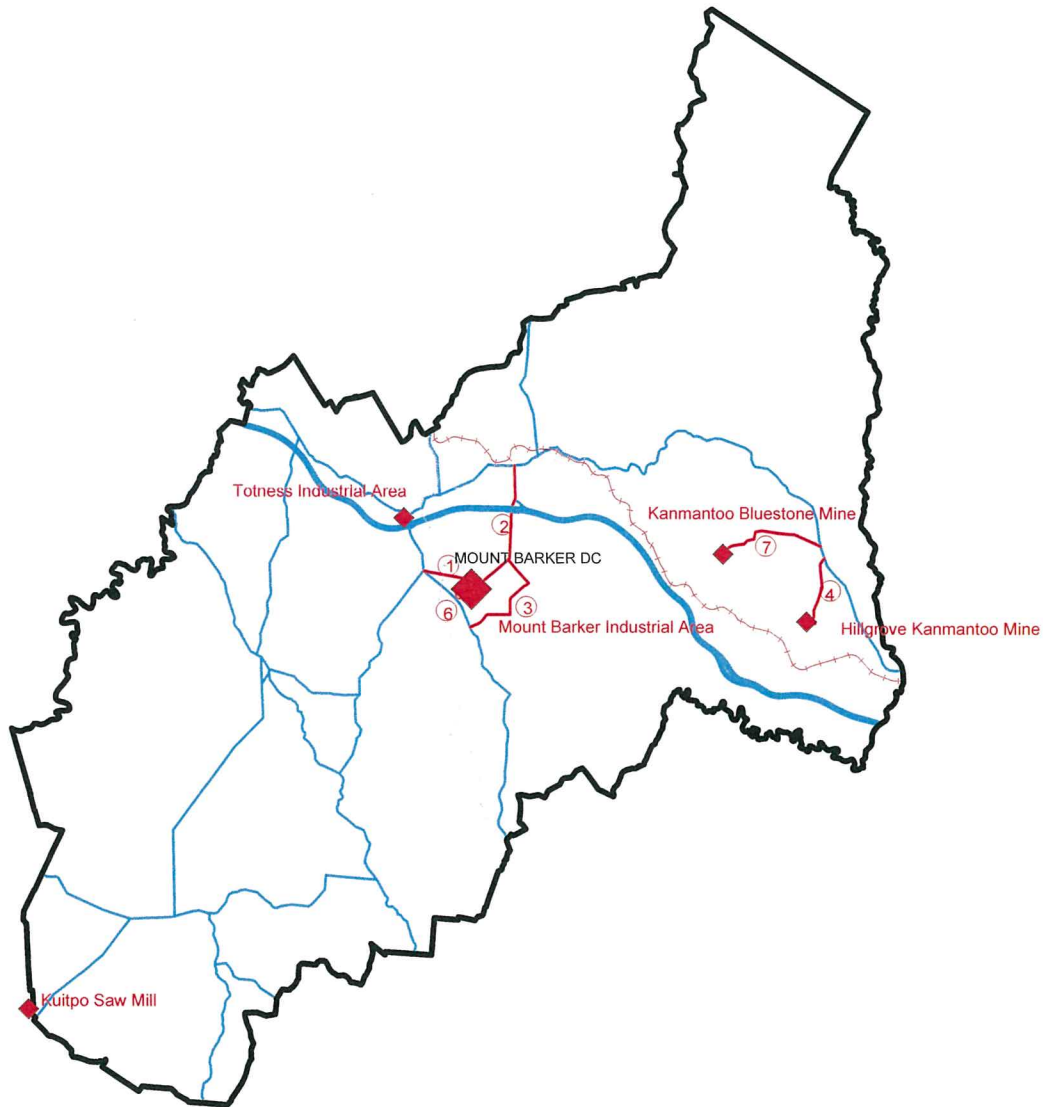
Road Index

KIC	F	1	Playford Highway
KIC	F	2	Mount Taylor Road
KIC	F	4	Birchmore Road
KIC	F	5	Arranmore Road
KIC	F	6	Redbanks Road / Ballast Head Road
KIC	F	7	The Lane



Legend

-  Regionally Significant Freight Route
-  Locally Important Freight Route
-  DPTI Major Freight Route
-  DPTI Other Route
-  Local Route
-  Rail Freight Route
-  Major Regional Industry / Logistics Centre
-  Minor Industry Centre



Road Index

MBDC	F	1	Alexandrina Road
MBDC	F	2	Bald Hills Road
MBDC	F	3	Heyson Boulevard / Springs Road
MBDC	F	4	Mine Road
MBDC	F	6	Oborn Road
MBDC	F	7	Proctor Road

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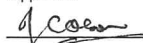


277 Magill Road  
Trinity Gardens SA 5068  
Telephone: 08 8333 3760  
Facsimile: 08 8333 3079  
Email: sa@hdsaustralia.com.au



John C Olson  
FIEAust  
Chartered Professional Engineer  
Member No. 506394

Approved

  
Date 31 Aug. 16

Southern & Hills Local Government Association  
2020 Transport Plan

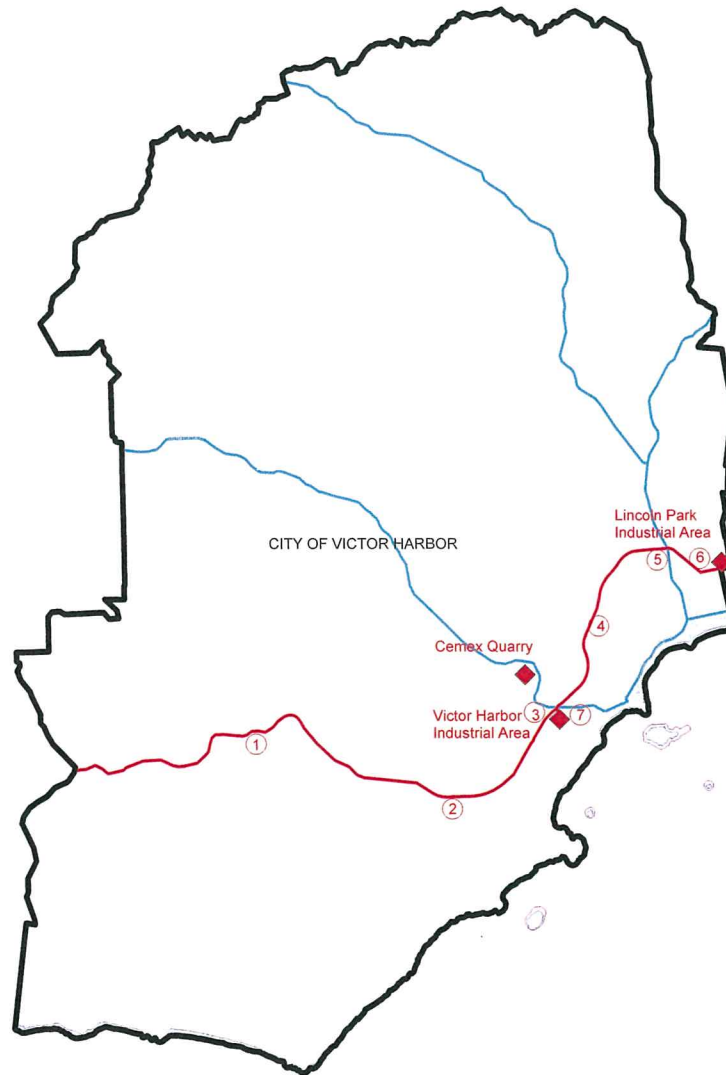
Regional Freight Routes  
Mount Barker District Council

Drawing No.

2020TP-F-C-05  
REVISION B

Legend

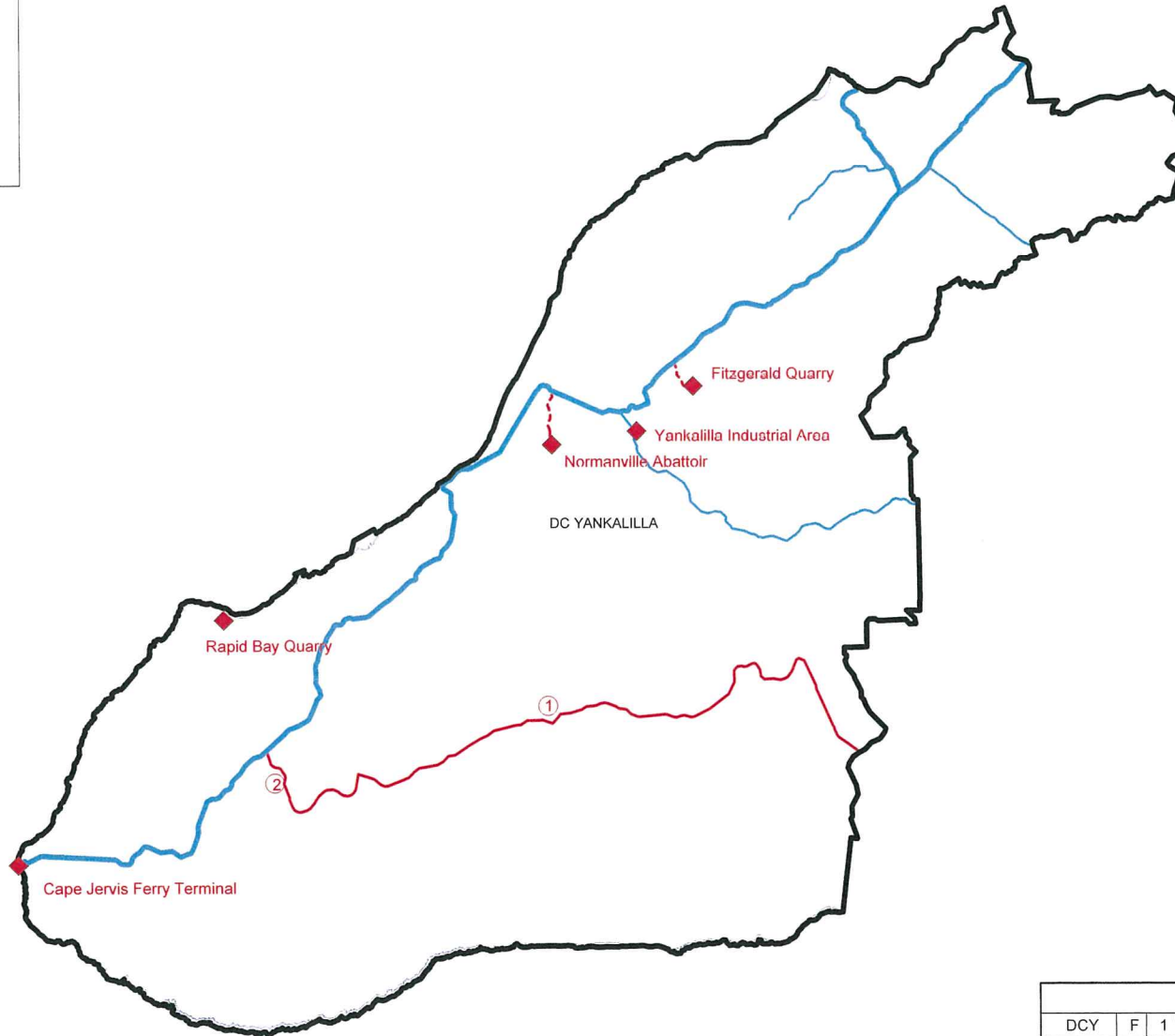
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-  Locally Important Freight Route
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-  Local Route
-  Rail Freight Route
-  Major Regional Industry / Logistics Centre
-  Minor Industry Centre



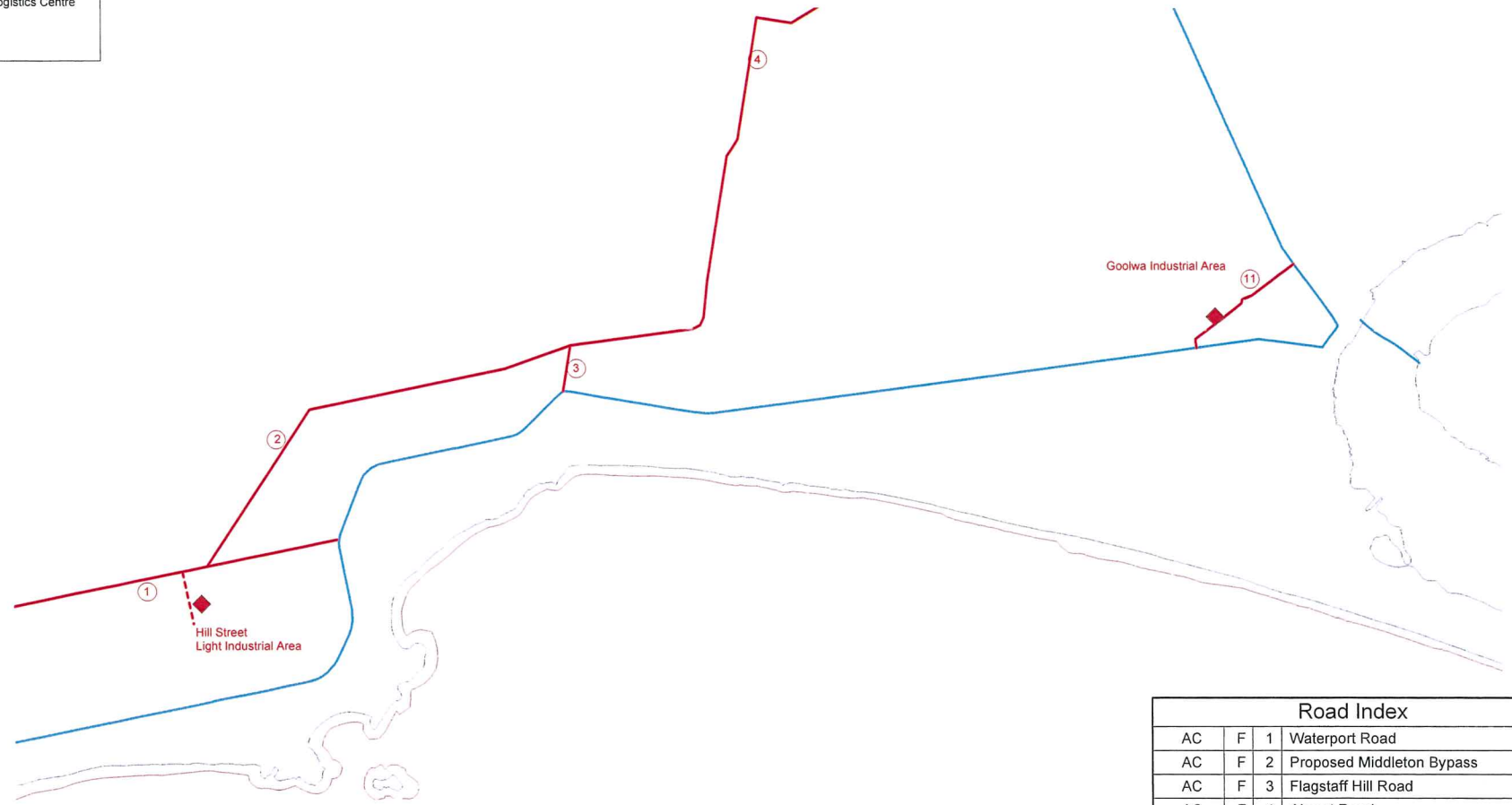
Road Index			
CVH	F	1	Range Road
CVH	F	2	Waitpinga Road
CVH	F	3	Mill Road
CVH	F	4	Armstrong Road
CVH	F	5	Welch Road
CVH	F	6	Waterport Road
CVH	F	7	Maude Street

Legend

-  Regionally Significant Freight Route
-  Locally Important Freight Route
-  DPTI Major Freight Route
-  DPTI Other Route
-  Local Route
-  Rail Freight Route
-  Major Regional Industry / Logistics Centre
-  Minor Industry Centre



Legend	
	Regionally Significant Freight Route
	Locally Important Freight Route
	DPTI Major Freight Route
	DPTI Other Route
	Local Route
	Rail Freight Route
	Major Regional Industry / Logistics Centre
	Minor Industry Centre



Road Index			
AC	F	1	Waterport Road
AC	F	2	Proposed Middleton Bypass
AC	F	3	Flagstaff Hill Road
AC	F	4	Airport Road
AC	F	5	Lanacoona Road
AC	F	8	Kangaroo Road
AC	F	10	Milne Road
AC	F	11	Gardiner Street
AC	F	12	Nangkita Road
AC	F	13	Quarry Road

Prepared by  
 277 Magill Road  
 Trinity Gardens SA 5068  
 Telephone: 08 8333 3760  
 Facsimile: 08 8333 3079  
 Email: sa@hdsaustralia.com.au



John C Olson  
 FIEAust  
 Chartered Professional Engineer  
 Member No. 506394









Approved  
  
 Date 31 Aug 16

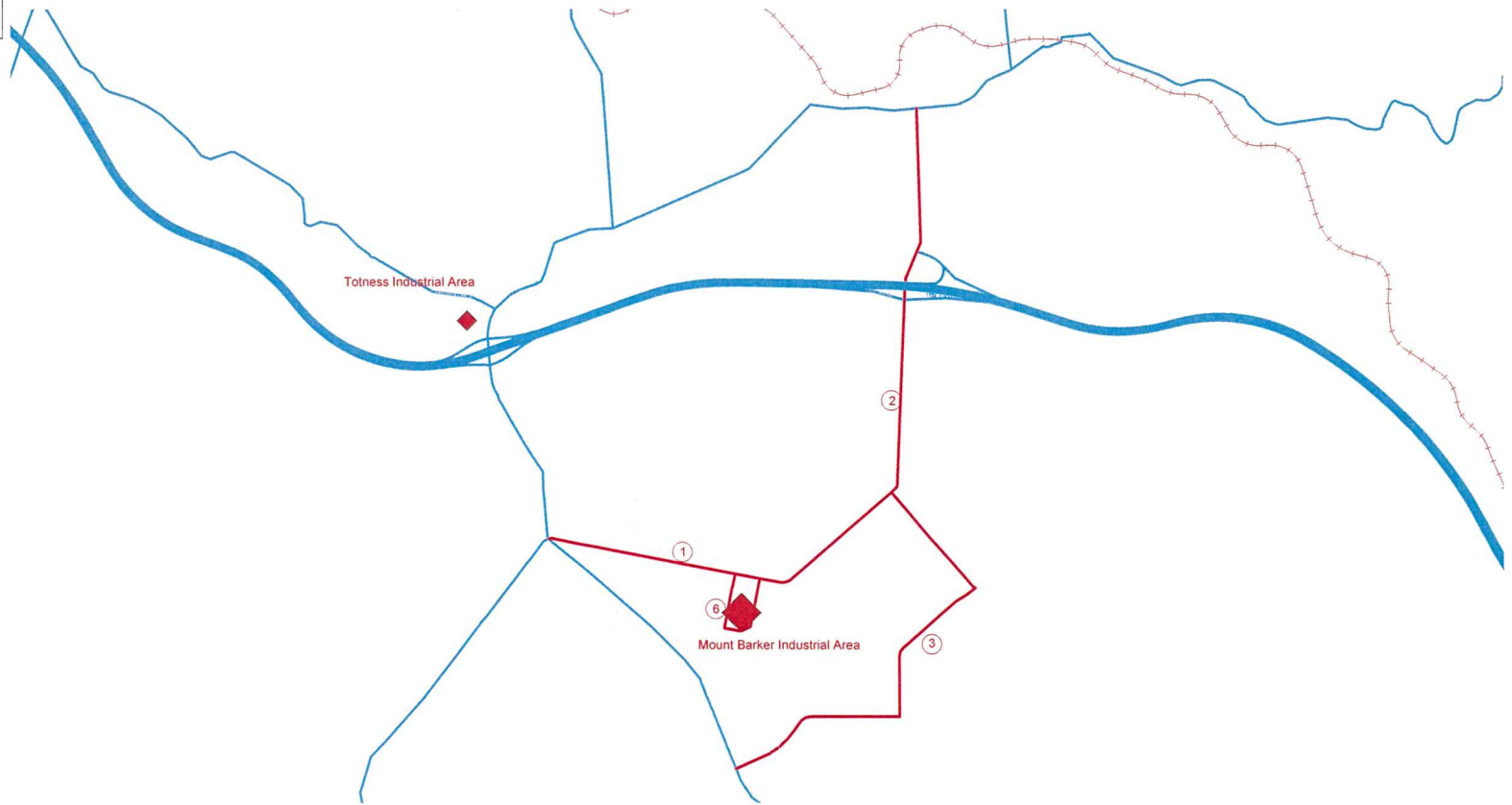
**Southern & Hills Local Government Association**  
**2020 Transport Plan**

**Regional Freight Routes**  
**Goolwa / Port Elliot**

Drawing No.  
**2020TP-F-T-02**  
 REVISION A









**Legend**

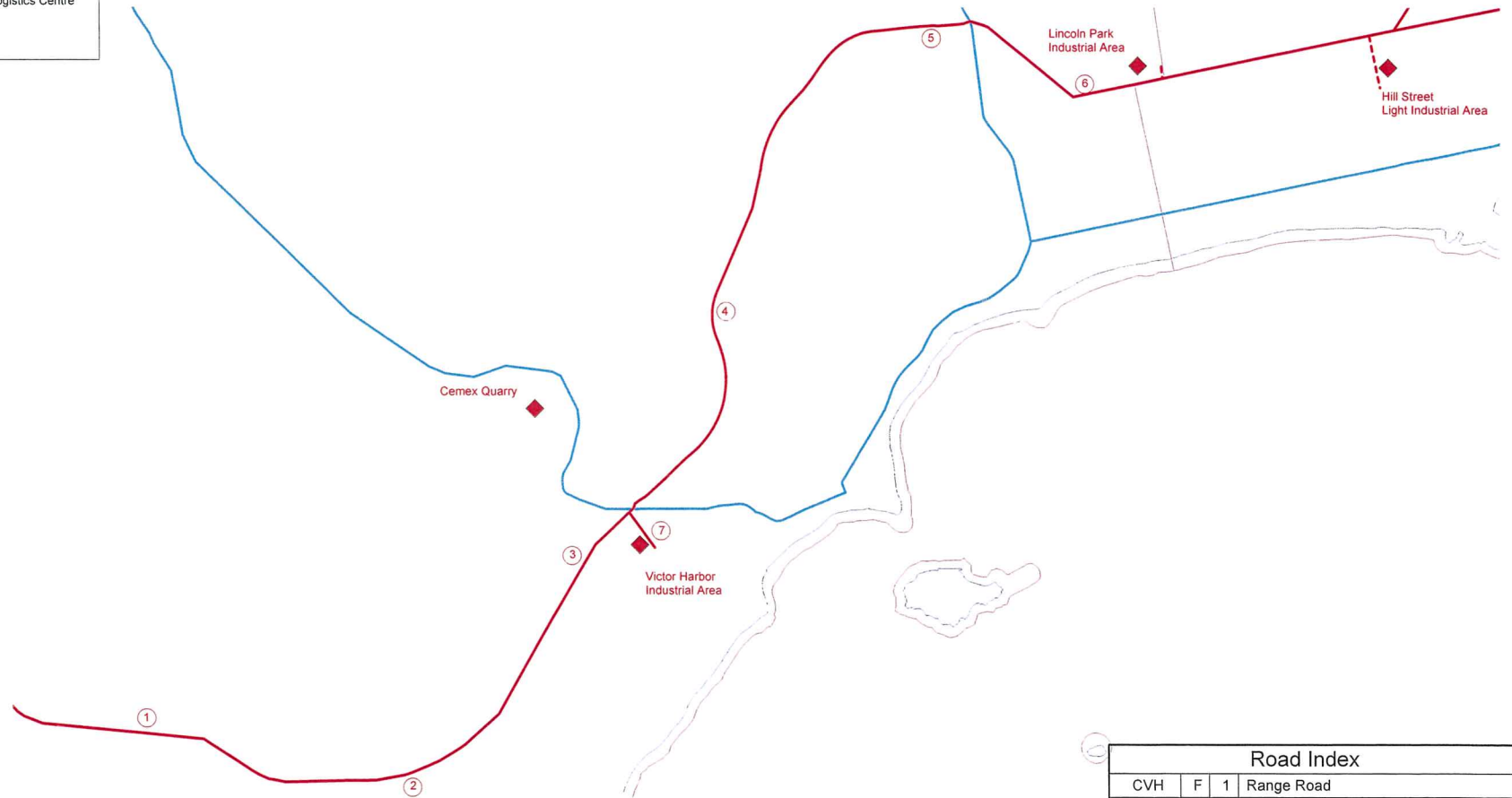
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Road Index			
MBDC	F	1	Alexandrina Road
MBDC	F	2	Bald Hills Road
MBDC	F	3	Heyson Boulevard / Springs Road
MBDC	F	4	Mine Road
MBDC	F	6	Oborn Road
MBDC	F	7	Proctor Road

**Legend**

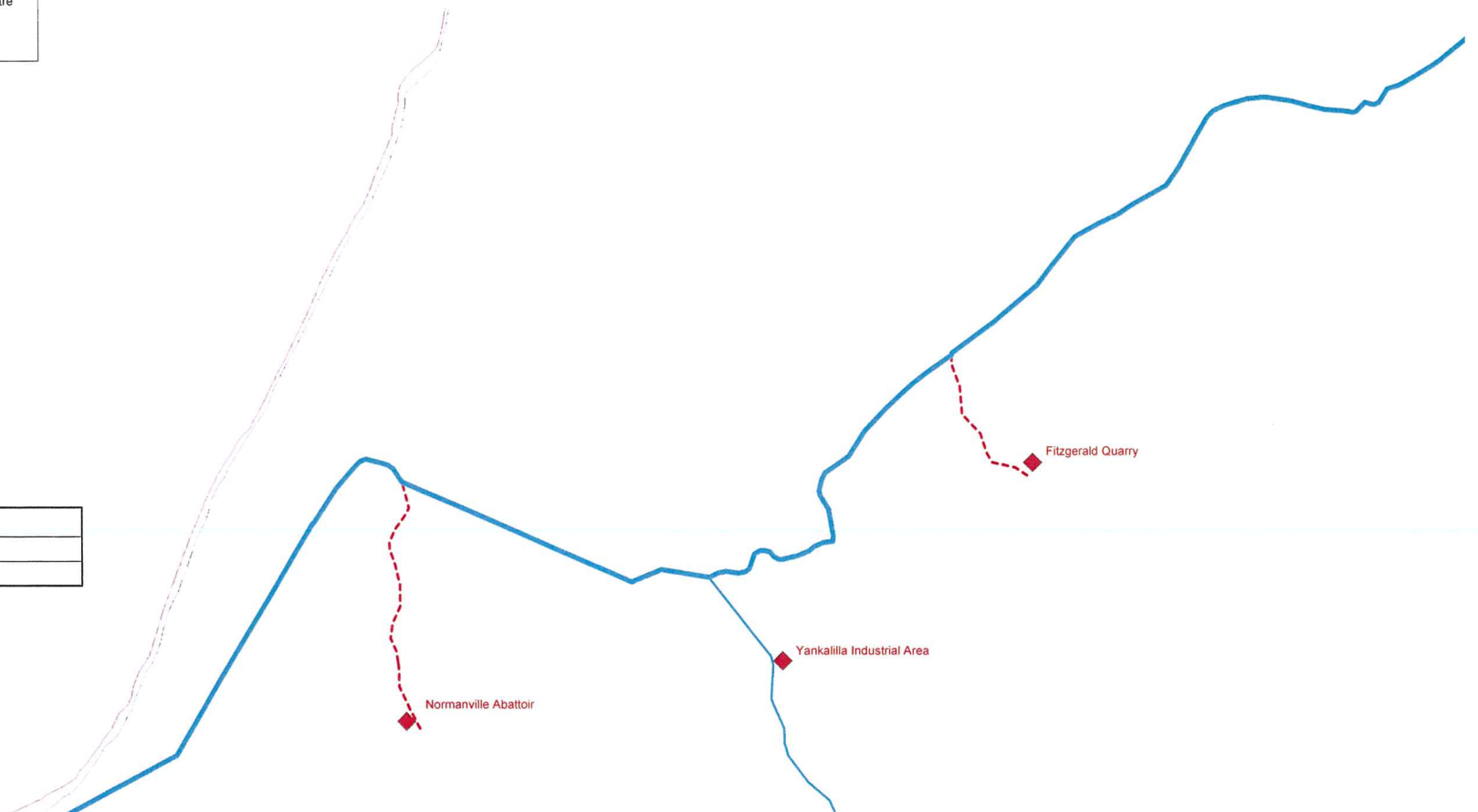
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Legend









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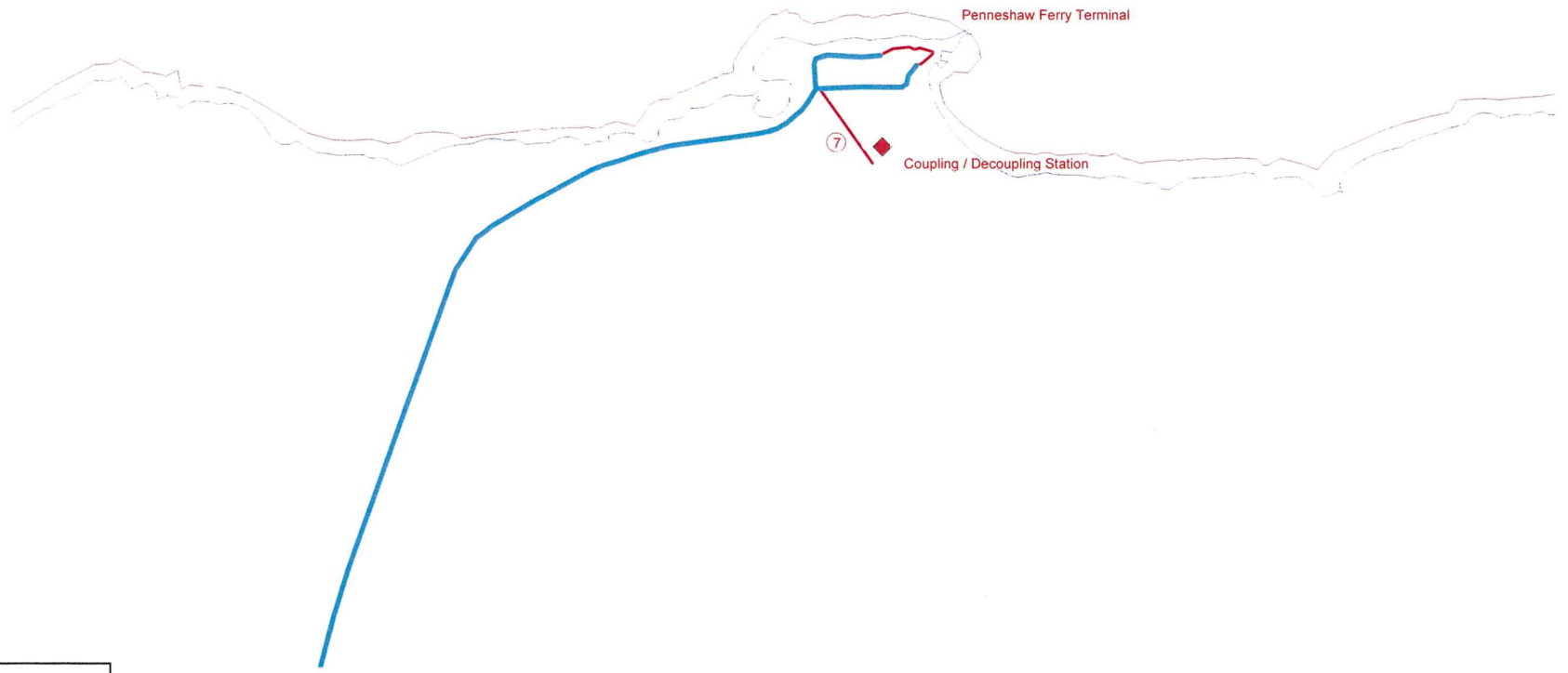


Road Index

DCY	F	1	Range Road
DCY	F	2	Cole Road

**Legend**

















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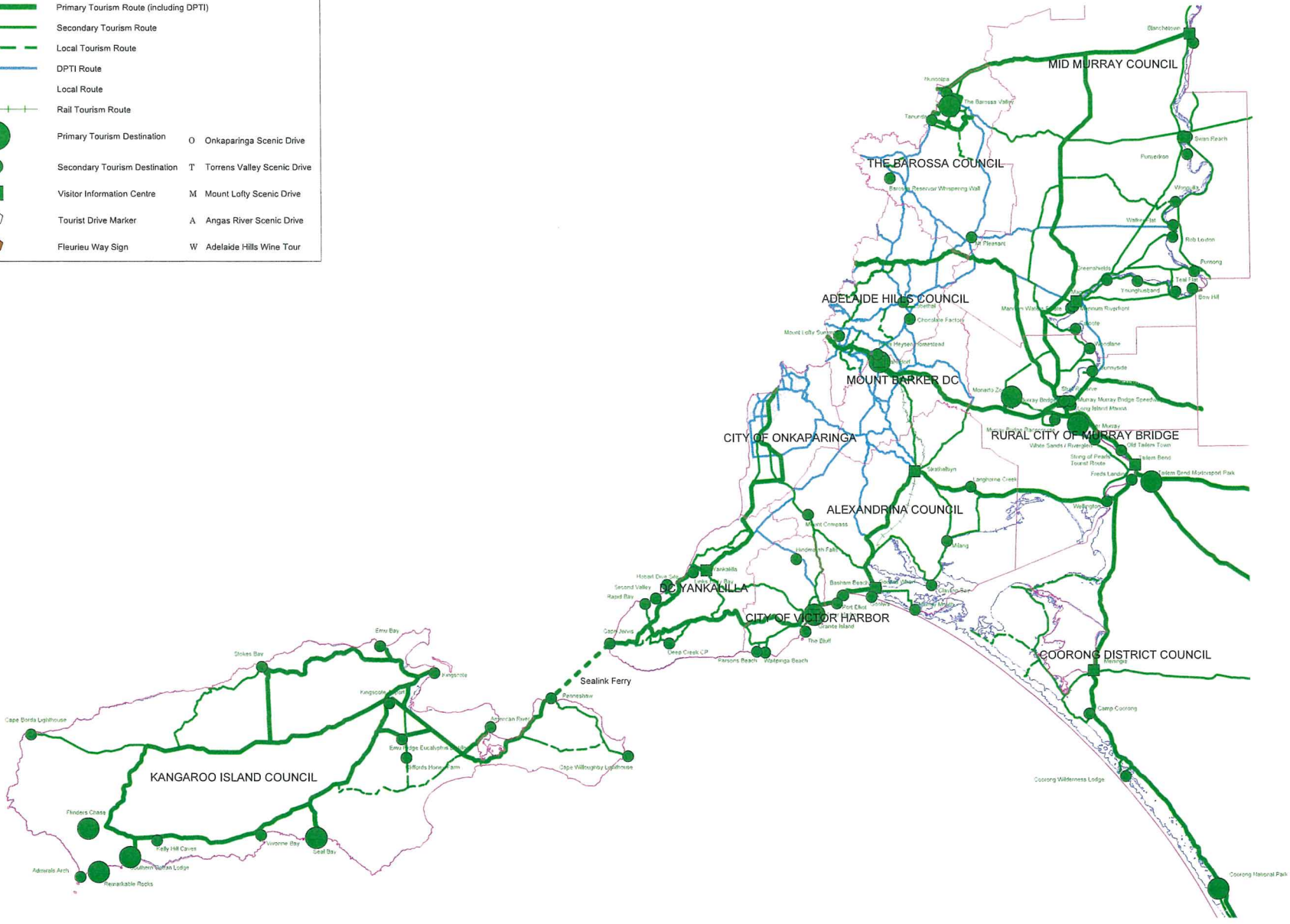


Road Index			
KIC	F	1	Playford Highway
KIC	F	2	Mount Taylor Road
KIC	F	4	Birchmore Road
KIC	F	5	Arranmore Road
KIC	F	6	Redbanks Road / Ballast Head Road
KIC	F	7	The Lane



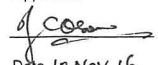
# Legend

-  Primary Tourism Route (including DPTI)
-  Secondary Tourism Route
-  Local Tourism Route
-  DPTI Route
-  Local Route
-  Rail Tourism Route
-  Primary Tourism Destination
-  Secondary Tourism Destination
-  Visitor Information Centre
-  Tourist Drive Marker
-  Fleurieu Way Sign
-  Onkaparinga Scenic Drive
-  Torrens Valley Scenic Drive
-  Mount Lofty Scenic Drive
-  Angas River Scenic Drive
-  Adelaide Hills Wine Tour



Prepared by  
  
 277 Magill Road  
 Trinity Gardens SA 5068  
 Telephone: 08 8333 3760  
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 Email: sa@hdsaustralia.com.au

  
 John C Olson  
 FIEAust  
 Chartered Professional Engineer  
 Member No. 506394

















Approved  
  
 Date 10 Nov 16

## Southern & Hills Local Government Association 2020 Transport Plan

## Regional Tourism Routes

















Drawing No.  
 2020TP-T-R-01  
 REVISION B

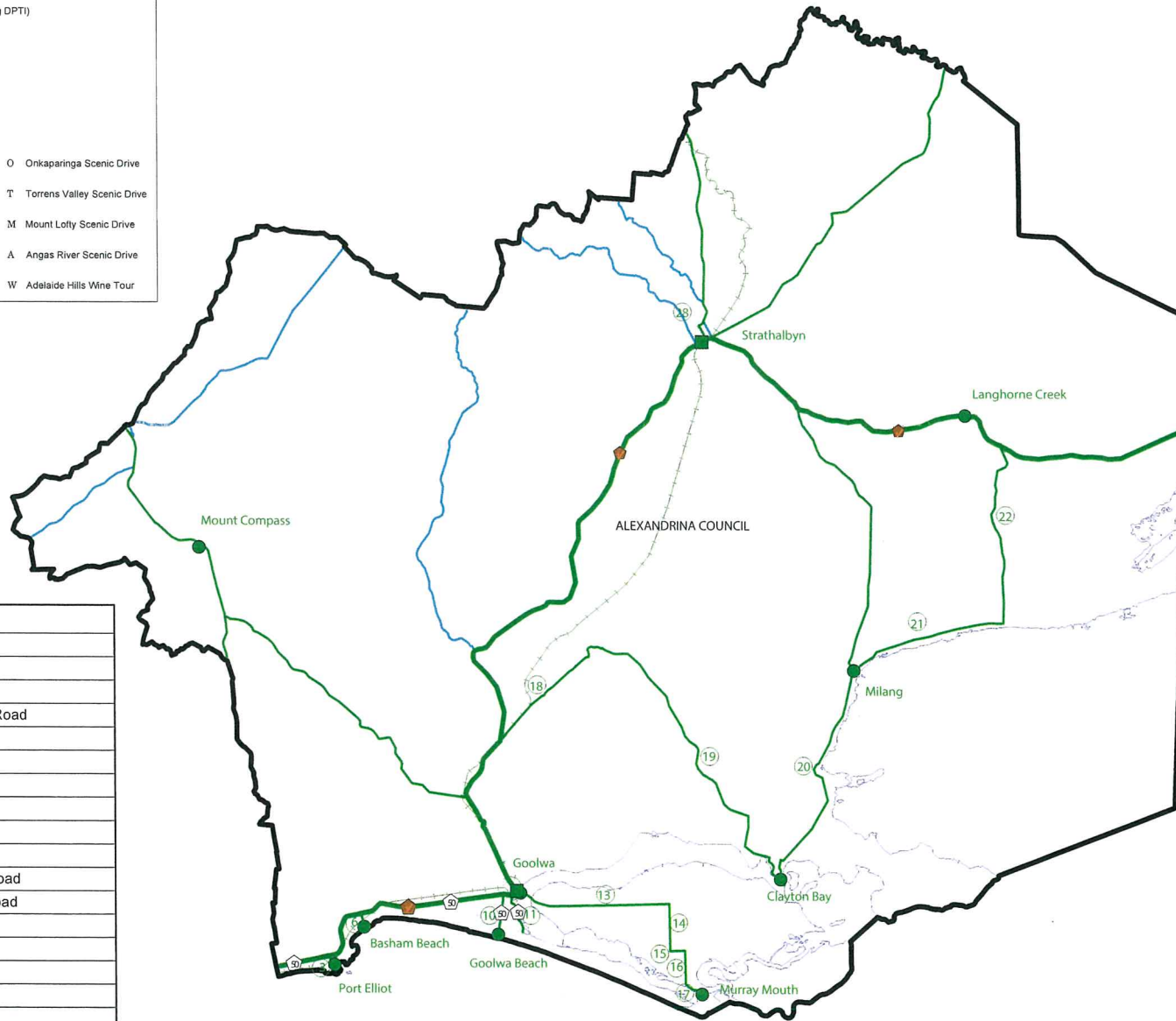
### Legend

-  Primary Tourism Route (including DPTI)
-  Secondary Tourism Route
-  Local Tourism Route
-  DPTI Route
-  Local Route
-  Rail Tourism Route
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-  Mount Lofty Scenic Drive
-  Angas River Scenic Drive
-  Adelaide Hills Wine Tour



















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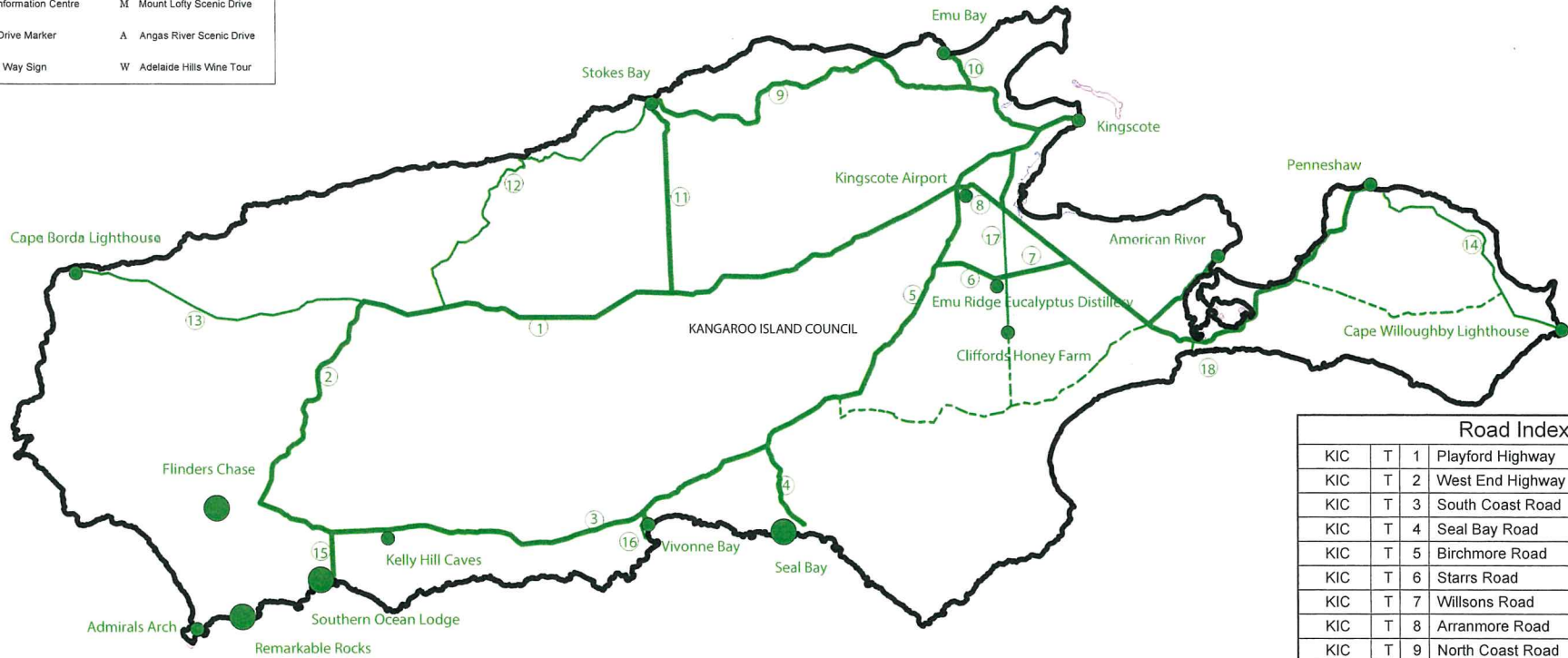
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Road Index			
AC	T	3	The Strand
AC	T	6	Basham Beach Road
AC	T	10	Beach Road
AC	T	11	Oliver Street / Barrage Road
AC	T	13	Randall Road
AC	T	14	Semaschko Road
AC	T	15	Bongalong Road
AC	T	16	Murray Mouth Road
AC	T	17	Sugars Avenue
AC	T	18	Winery Road
AC	T	19	Finniss - Clayton Bay Road
AC	T	20	Milang - Clayton Bay Road
AC	T	21	Lake Road
AC	T	22	Lake Plains Road
AC	T	23	Goolwa Terrace
AC	T	24	Brooking Street
AC	T	25	Cutting Road
AC	T	26	Dunbar Road
AC	T	28	High Street / North Parade

### Legend

-  Primary Tourism Route (including DPTI)
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### Road Index

KIC	T	1	Playford Highway
KIC	T	2	West End Highway
KIC	T	3	South Coast Road
KIC	T	4	Seal Bay Road
KIC	T	5	Birchmore Road
KIC	T	6	Starrs Road
KIC	T	7	Willsons Road
KIC	T	8	Arranmore Road
KIC	T	9	North Coast Road
KIC	T	10	Emu Bay Road
KIC	T	11	Stokes Bay Road
KIC	T	12	North Coast Road (West of Stokes Bay)
KIC	T	13	Cape Borda Road
KIC	T	14	Cape Willoughby Road
KIC	T	15	Hanson Bay Road
KIC	T	16	Jetty Road
KIC	T	17	Elsegood Road
KIC	T	18	Pennington Bay Road

Prepared by



277 Magill Road  
Trinity Gardens SA 5068  
Telephone: 08 8333 3760  
Facsimile: 08 8333 3079  
Email: sa@hdsaustralia.com.au



John C Olson  
FIEAust  
Chartered Professional Engineer  
Member No. 506394

Approved

*J. Coen*  
Date 31 AUG 16












**Southern & Hills Local Government Association**  
**2020 Transport Plan**

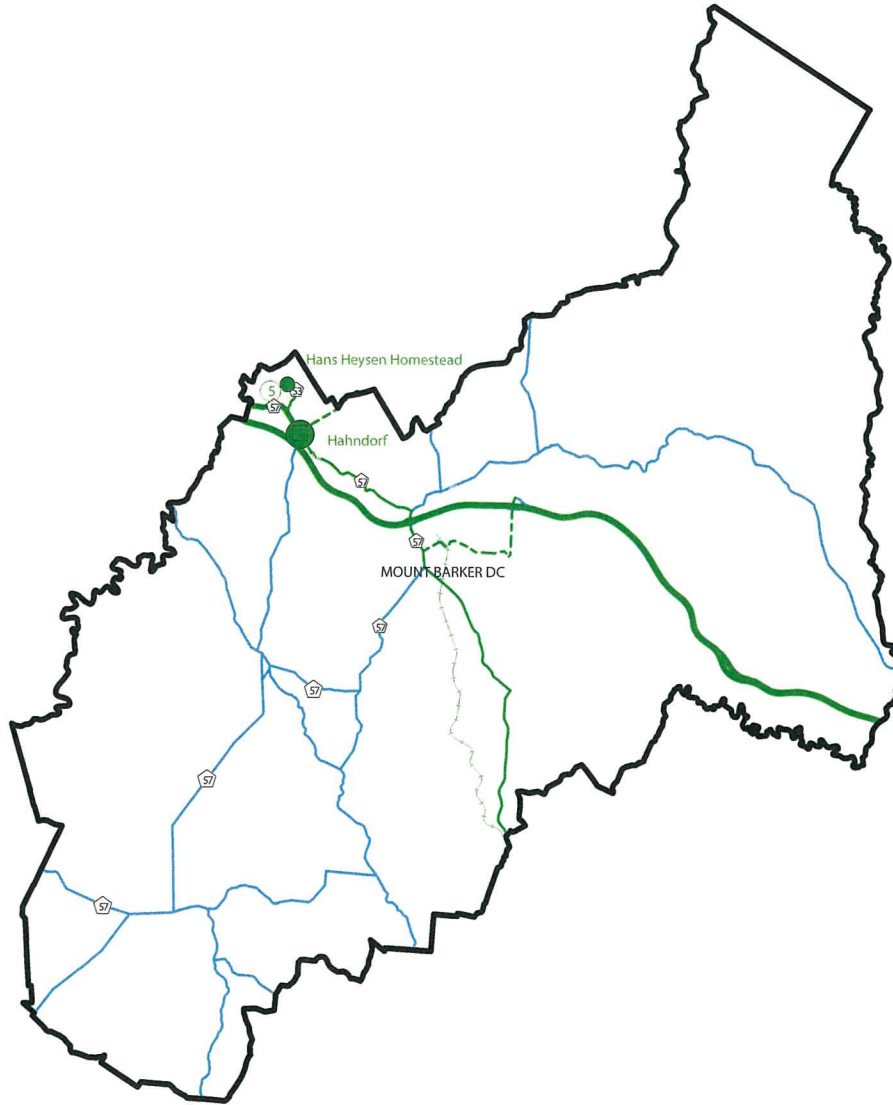
**Regional Tourism Routes**  
**Kangaroo Island Council**

Drawing No.

**2020TP-T-C-04**  
REVISION B

















### Legend

-  Primary Tourism Route (including DPTI)
  -  Secondary Tourism Route
  -  Local Tourism Route
  -  DPTI Route
  -  Local Route
  -  Rail Tourism Route
  -  Primary Tourism Destination
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  -  Fleurieu Way Sign
- O Onkaparinga Scenic Drive
  - T Torrens Valley Scenic Drive
  - M Mount Lofty Scenic Drive
  - A Angas River Scenic Drive
  - W Adelaide Hills Wine Tour



Road Index			
MBDC	T	5	Ambleside Road / Heyson Road

### Legend

















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### Road Index

CVH	T	1	Waitpinga Road
CVH	T	2	Mill Road
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CVH	T	4	Welch Road
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CVH	T	6	Parsons Beach Road
CVH	T	7	Dennis Road
CVH	T	11	Hindmarsh Falls Road
CVH	T	16	Crozier Road
CVH	T	17	Victoria Street
CVH	T	18	Ocean Street
CVH	T	19	Flinders Parade
CVH	T	20	Granite Island Access
CVH	T	22	Bartel Boulevard
CVH	T	23	Bay Road
CVH	T	24	Battye Road
CVH	T	25	Range Road

### Legend

















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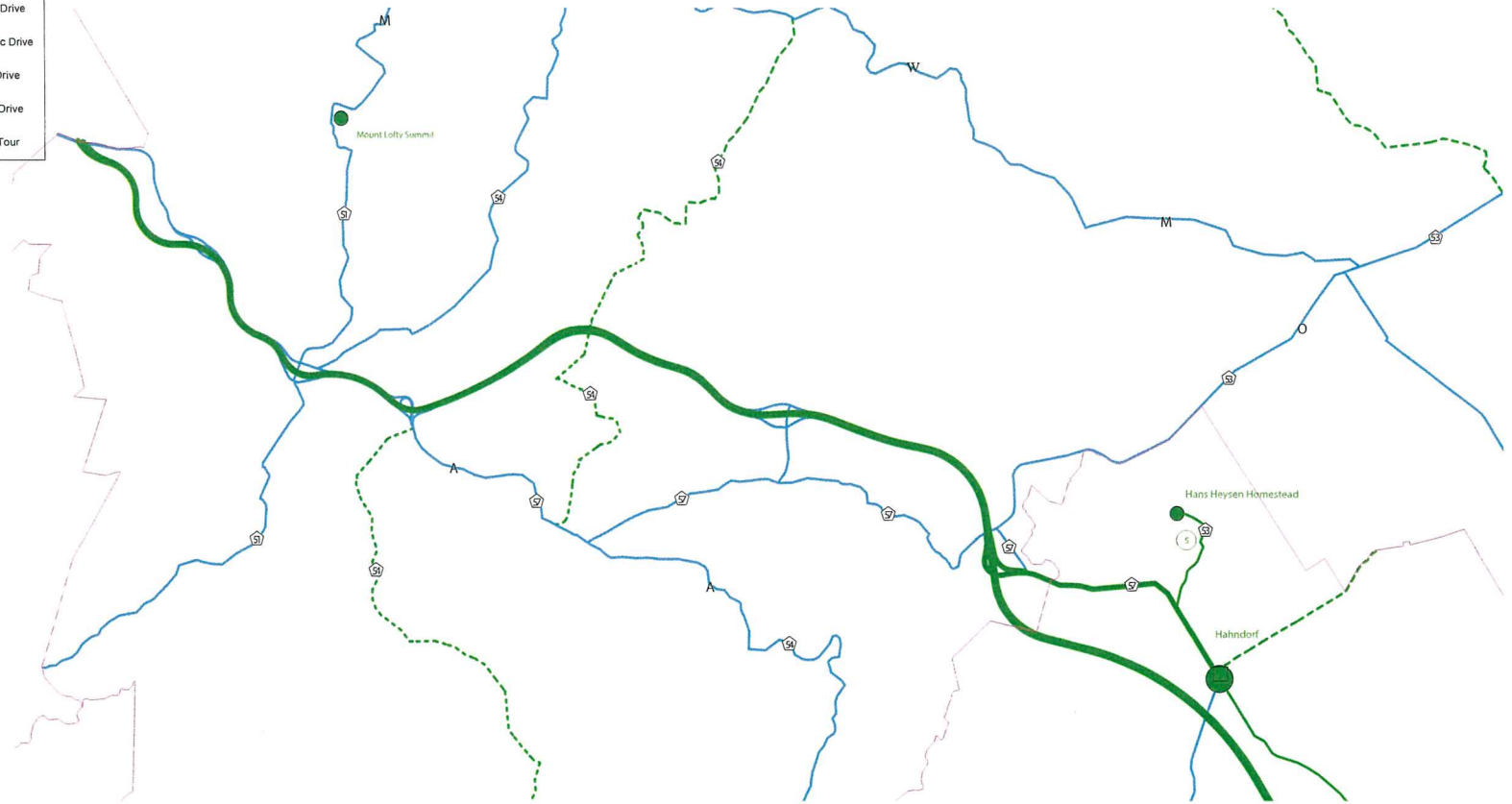


### Road Index

DCY	T	1	Fork Tree Road
DCY	T	2	Reservoir Road
DCY	T	3	Carrickalinga Road
DCY	T	4	Jetty Road
DCY	T	5	Parawa Road
DCY	T	6	Torrens Vale Road
DCY	T	7	Paradise Drive
DCY	T	8	Rapid Bay Road
DCY	T	9	Range Road
DCY	T	10	Cole Road
DCY	T	11	Tapanappa Road
DCY	T	13	Dog Trap Road
DCY	T	15	Finniss Vale Drive

















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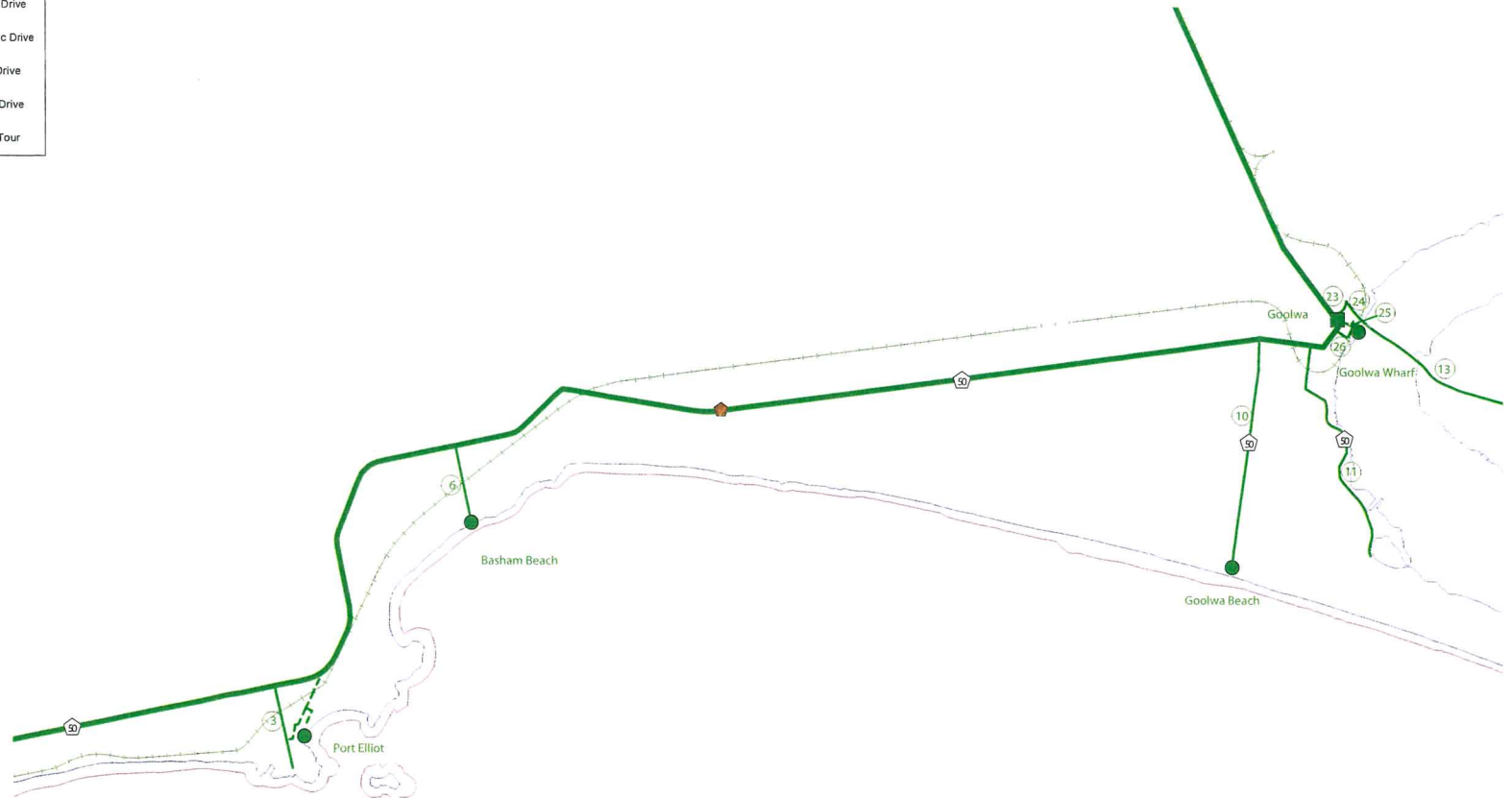
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Prepared by  
  
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 Trinity Gardens SA 5068  
 Telephone: 08 8333 3760  
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 Email: sa@hdsaustralia.com.au



John C Olson  
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



Approved  
  
 Date 31 AUG 16

**Southern & Hills Local Government Association**  
**2020 Transport Plan**

**Regional Tourism Routes**  
**Goolwa / Port Elliot**

Drawing No.  
**2020TP-T-T-02**  
 REVISION A

### Legend












-  Primary Tourism Route (including DPTI)
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### Road Index

MBDC	T	5	Ambleside Road / Heyson Road
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### Legend

















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  -  Secondary Tourism Route
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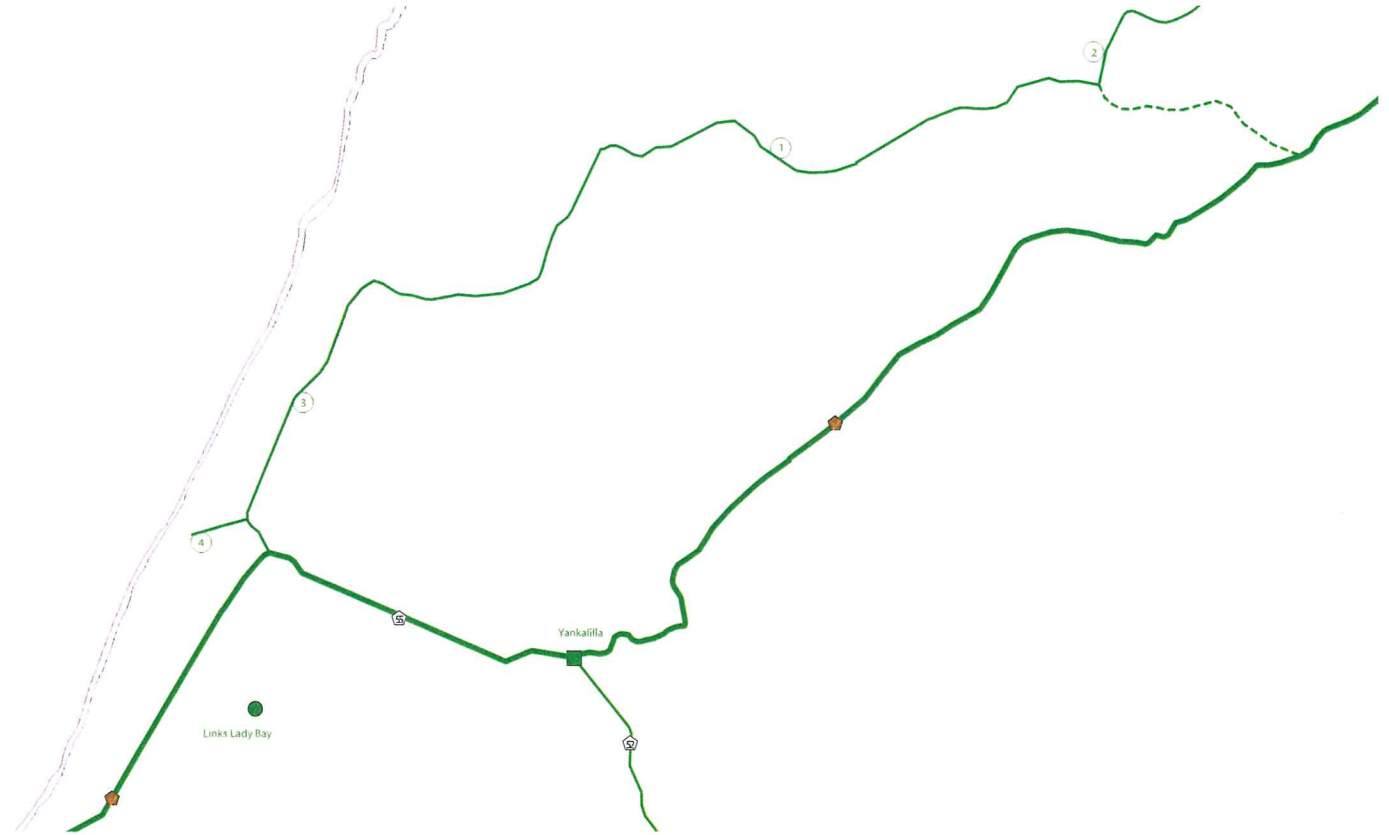


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Prepared by



277 Magill Road  
Trinity Gardens SA 5068  
Telephone: 08 8333 3760  
Facsimile: 08 8333 3079  
Email: sa@hdsaustralia.com.au



John C Olson  
FIEAust  
Chartered Professional Engineer  
Member No. 506394

Approved

*J. C. Olson*  
Date 31 Aug 16

**Southern & Hills Local Government Association**  
**2020 Transport Plan**

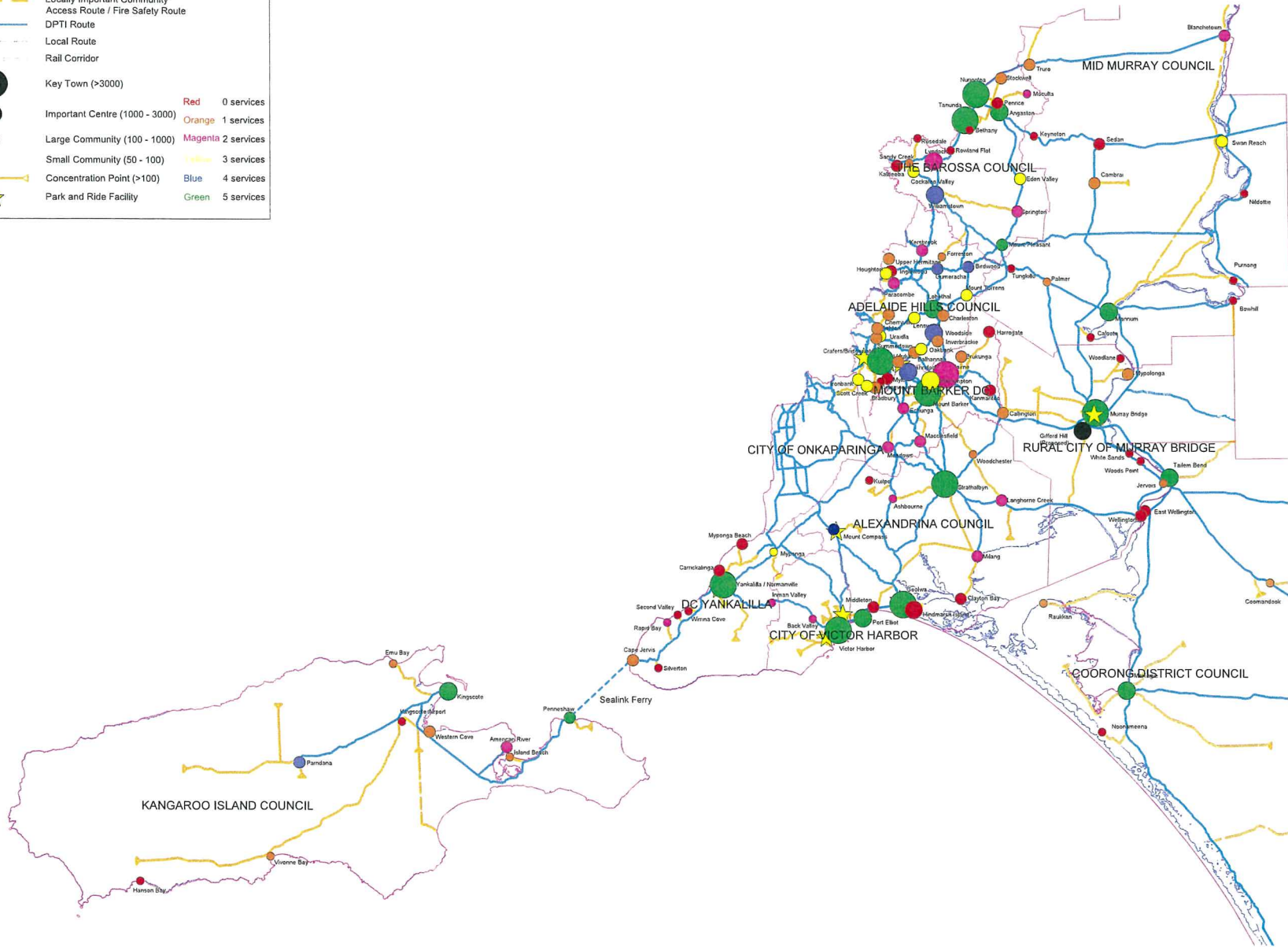
**Regional Tourism Routes**  
**Yankalilla / Normanville**

Drawing No.  
**2020TP-T-T-06**  
REVISION A

Legend

- Regionally Significant Community Access Route
- - - Locally Important Community Access Route / Fire Safety Route
- DPTI Route
- Local Route
- Rail Corridor
- Key Town (>3000)
- Important Centre (1000 - 3000)
- Large Community (100 - 1000)
- Small Community (50 - 100)
- ★ Concentration Point (>100)
- ★ Park and Ride Facility

- Red 0 services
- Orange 1 services
- Magenta 2 services
- Yellow 3 services
- Blue 4 services
- Green 5 services



Prepared by  
**hds**  
 AUSTRALIA  
 277 Magill Road  
 Trinity Gardens SA 5068  
 Telephone: 08 8333 3760  
 Facsimile: 08 8333 3079  
 Email: sa@hdsaustralia.com.au



John C Olson  
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Approved  
*J. Olson*  
 Date 10 Nov 16

**Southern & Hills Local Government Association**  
**2020 Transport Plan**

Regional Community Access Routes

Drawing No.  
**2020TP-C-R-01**  
 REVISION B

**Legend**

- Regionally Significant Community Access Route
- Locally Important Community Access Route / Fire Safety Route
- DPTI Route
- Local Route
- Rail Corridor
- Key Town (>3000)
- Important Centre (1000 - 3000)
- Large Community (100 - 1000)
- Small Community (50 - 100)
- Concentration Point (>100)
- Park and Ride Facility

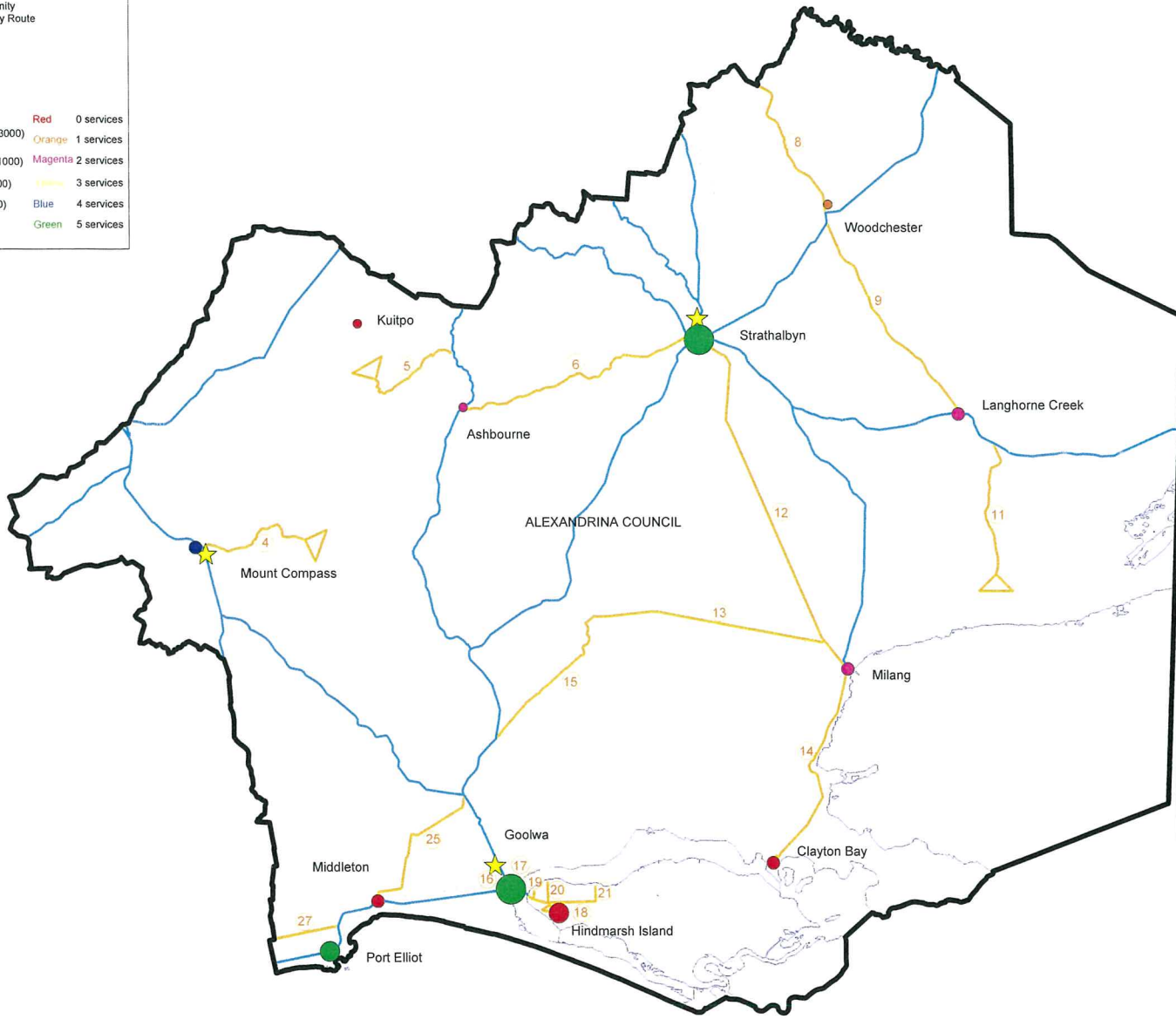
	Red	0 services
	Orange	1 services
	Magenta	2 services
	Yellow	3 services
	Blue	4 services
	Green	5 services



### Legend

- Regionally Significant Community Access Route
- - - - Locally Important Community Access Route / Fire Safety Route
- DPTI Route
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- Rail Corridor
- Key Town (>3000)
- Important Centre (1000 - 3000)
- Large Community (100 - 1000)
- Small Community (50 - 100)
- ★ Concentration Point (>100)
- ★ Park and Ride Facility

Red	0 services
Orange	1 services
Magenta	2 services
Yellow	3 services
Blue	4 services
Green	5 services

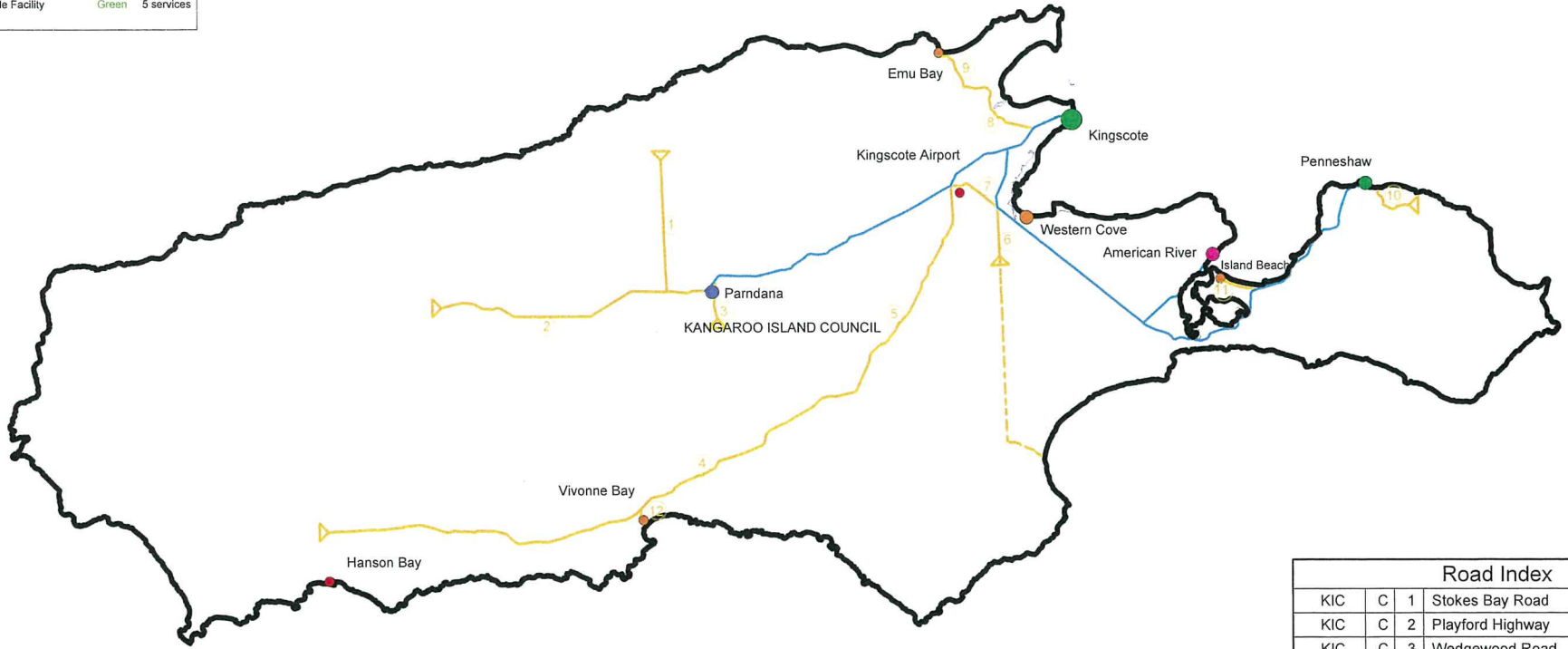


Road Index		
AC	C 4	Nangkita Road
AC	C 5	McHargs Creek Road
AC	C 6	Ashbourne Road
AC	C 8	Wellington Road
AC	C 9	Meechi Road
AC	C 11	Lake Plains Road
AC	C 12	Nine Mile Road
AC	C 13	Finniss - Milang Road
AC	C 14	Milang - Clayton Bay Road
AC	C 15	Winery Road
AC	C 16	Gardiner Street
AC	C 17	Brooking Street
AC	C 18	Randall Road
AC	C 19	O'Connell Avenue
AC	C 20	Captain Sturt Road
AC	C 21	Monument Road
AC	C 25	Airport Road / Flagstaff Hill Road
AC	C 27	Waterport Road

**Legend**

- Regionally Significant Community Access Route
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- Park and Ride Facility












Red	0 services
Orange	1 services
Magenta	2 services
Yellow	3 services
Blue	4 services
Green	5 services



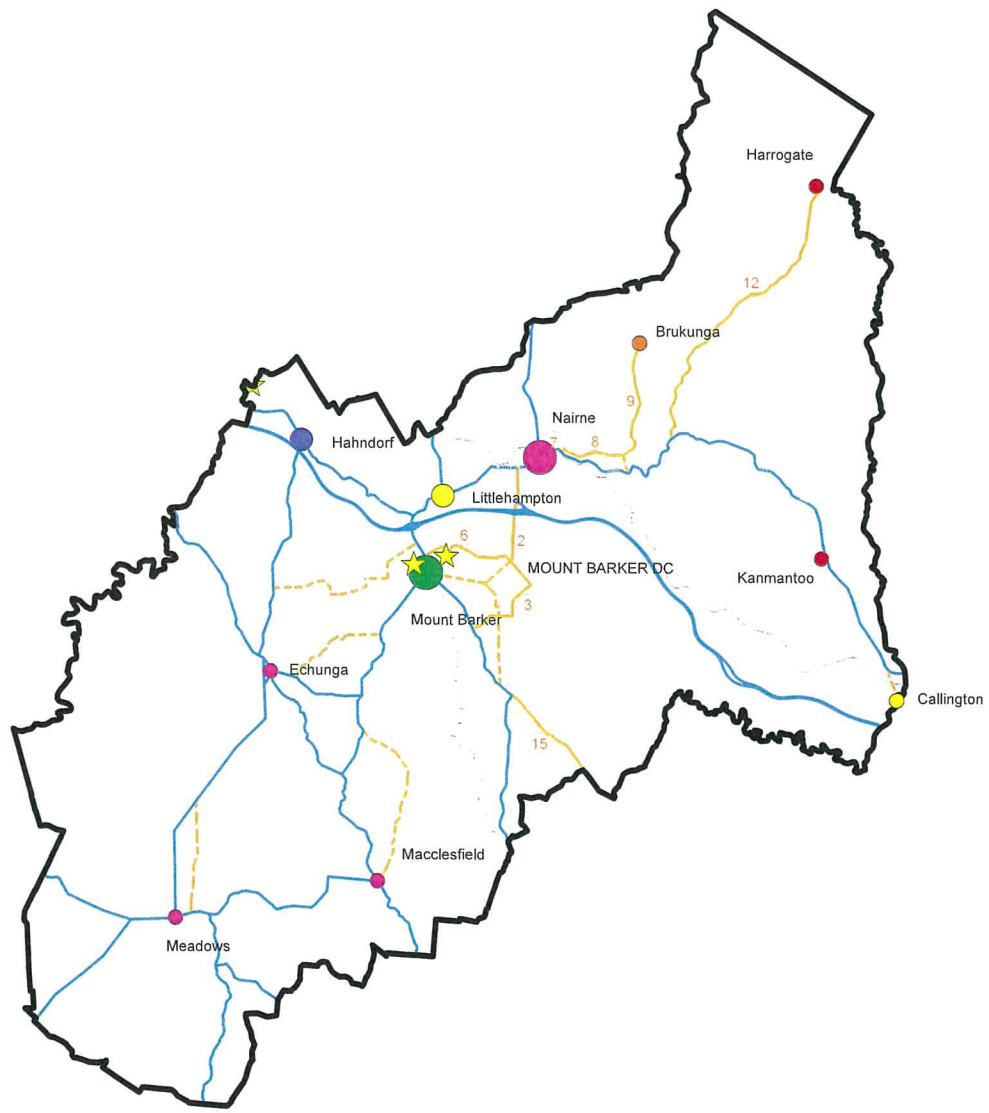
Road Index			
KIC	C	1	Stokes Bay Road
KIC	C	2	Playford Highway
KIC	C	3	Wedgewood Road
KIC	C	4	South Coast Road
KIC	C	5	Birchmore Road
KIC	C	6	Elsegood Road
KIC	C	7	Arranmore Road
KIC	C	8	North Coast Road
KIC	C	9	Emu Bay Road
KIC	C	10	Cape Willoughby Road
KIC	C	11	Island Beach Road
KIC	C	12	Knofel Drive



### Legend

-  Regionally Significant Community Access Route
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-  Local Route
-  Rail Corridor
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-  Small Community (50 - 100)
-  Concentration Point (>100)
-  Park and Ride Facility

-  0 services
-  1 services
-  2 services
-  3 services
-  4 services
-  5 services



Road Index			
MBDC	C	2	Bald Hills Road
MBDC	C	3	Heysen Boulevard / Springs Road
MBDC	C	6	Springs Road
MBDC	C	7	Bridge Street
MBDC	C	8	Sydney Road
MBDC	C	9	Pyrites Road
MBDC	C	12	Harrogate Road
MBDC	C	15	Wellington Road

**Legend**

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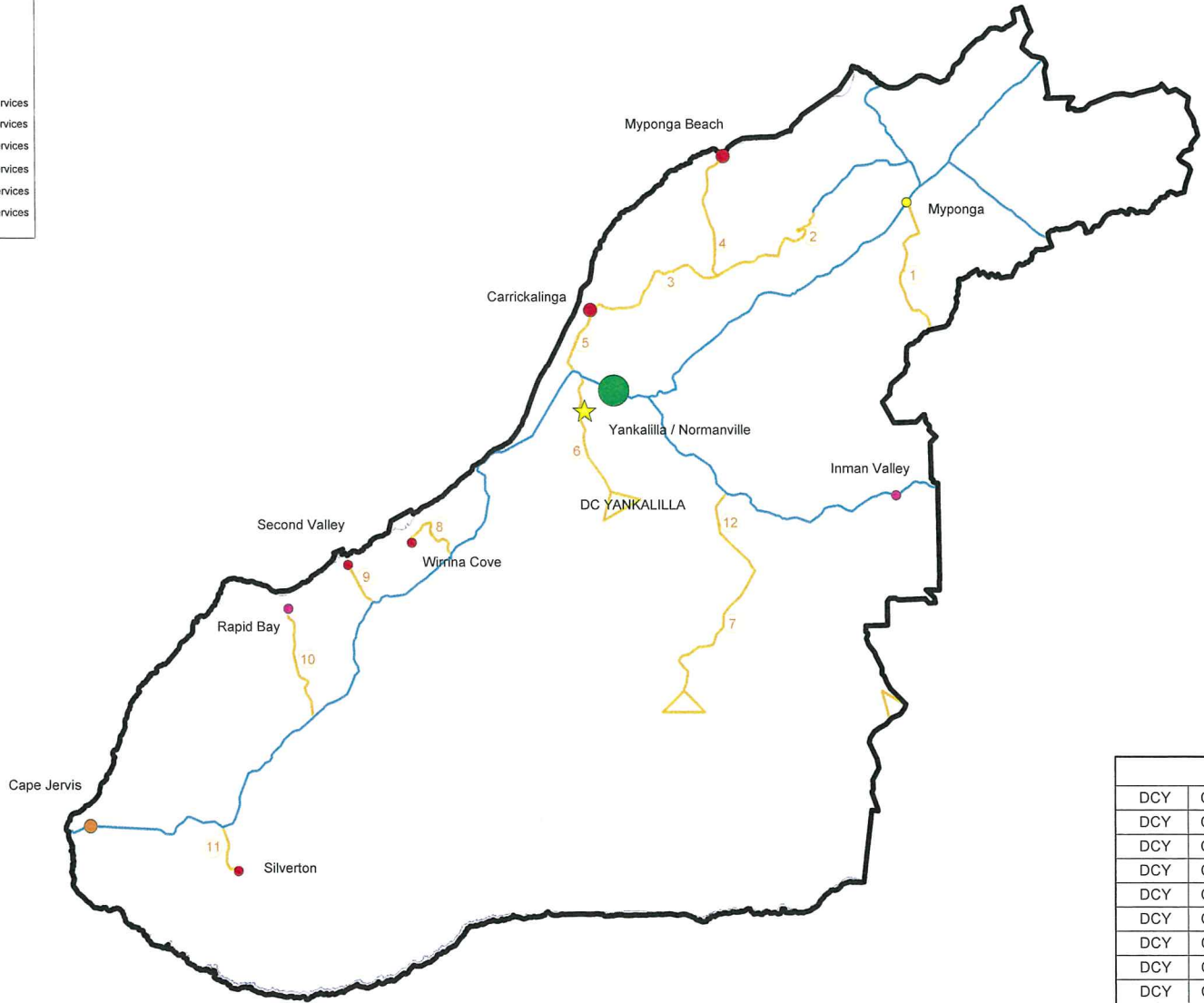


Road Index			
CVH	C	1	Range Road
CVH	C	2	Waitpinga Road
CVH	C	3	Battye Road
CVH	C	4	Tugwell Road
CVH	C	5	Tabernacle Road
CVH	C	6	Bay Road
CVH	C	7	Mill Road
CVH	C	8	Armstrong Road
CVH	C	9	Cartwright Road
CVH	C	10	Greenhills Road
CVH	C	11	Seaview Road
CVH	C	12	Welch Road
CVH	C	13	Lipizzaner Drive
CVH	C	14	Waterport Road
CVH	C	15	Ocean Road
CVH	C	17	McCracken Drive
CVH	C	18	The Parkway
CVH	C	19	Field Avenue
CVH	C	20	Pine Avenue
CVH	C	21	Crozier Road
CVH	C	22	Oval Park Road

### Legend

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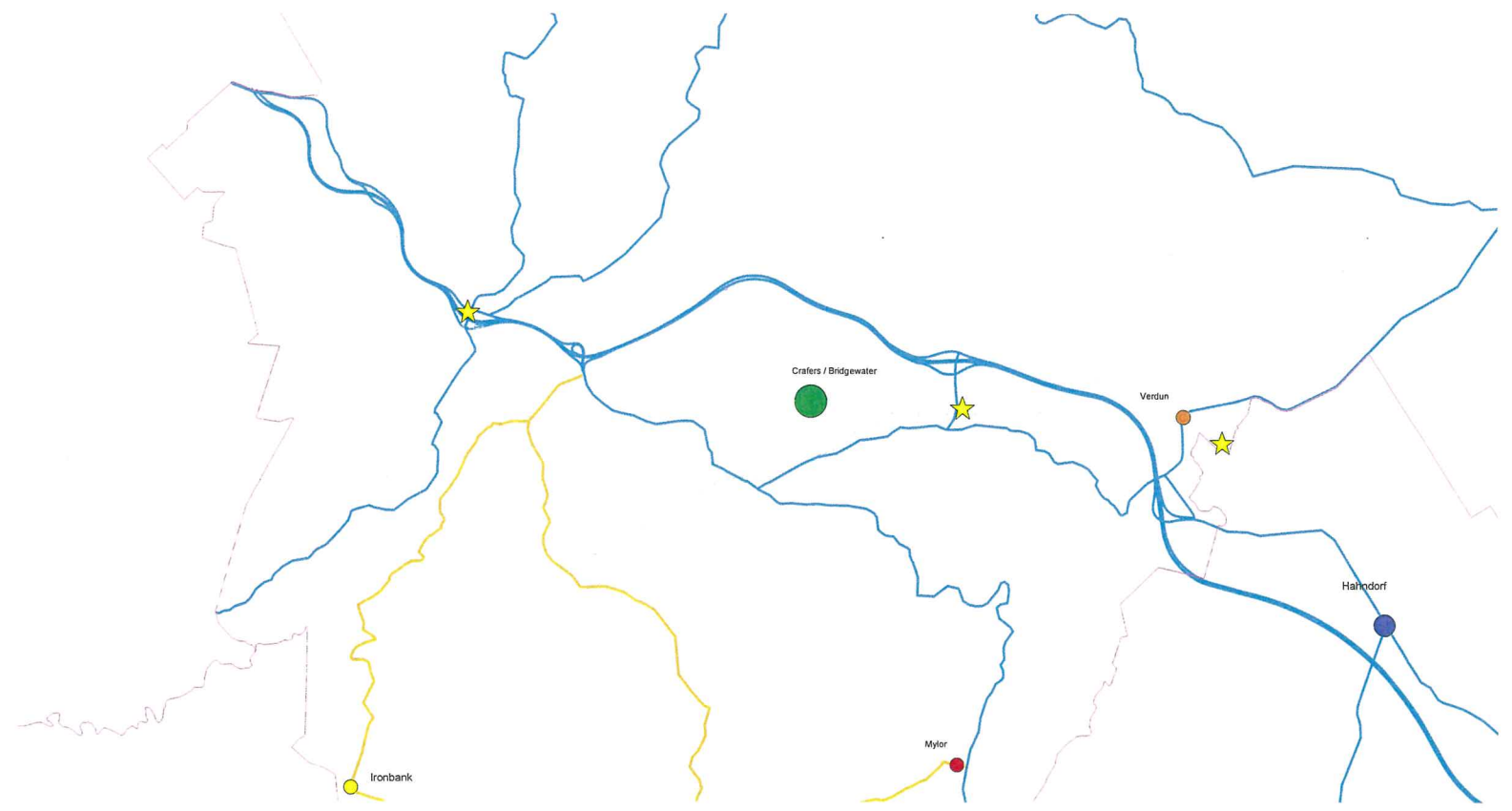


Road Index			
DCY	C	1	James Track
DCY	C	2	Reservoir Road
DCY	C	3	Fork Tree Road
DCY	C	4	Myponga Beach Road
DCY	C	5	Carrickalinga Road
DCY	C	6	Hay Flat Road
DCY	C	7	Parawa Road
DCY	C	8	Paradise Drive
DCY	C	9	Finnis Vale Drive
DCY	C	10	Rapid Bay Road
DCY	C	11	Range Road West / Rarking Road
DCY	C	12	Torrens Vale Road

### Legend

- Regionally Significant Community Access Route
- Locally Important Community Access Route / Fire Safety Route
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- Local Route
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- Key Town (>3000)
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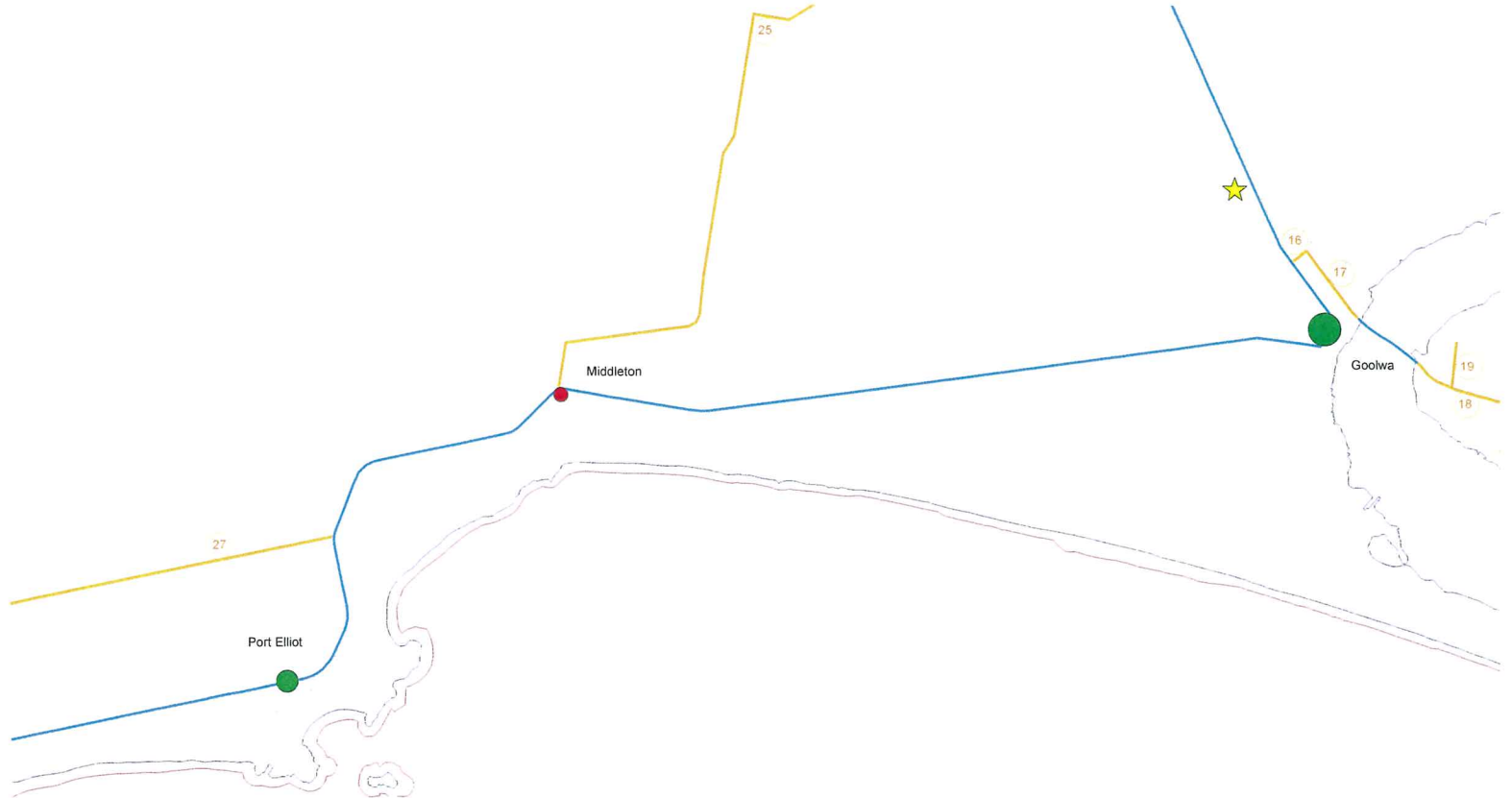
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	Blue	4 services
	Green	5 services



### Legend

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AC	C	13	Finniss - Milang Road
AC	C	14	Milang - Clayton Bay Road
AC	C	15	Winery Road
AC	C	16	Gardiner Street
AC	C	17	Brooking Street
AC	C	18	Randall Road
AC	C	19	O'Connell Avenue
AC	C	20	Captain Sturt Road
AC	C	21	Monument Road
AC	C	25	Airport Road / Flagstaff Hill Road
AC	C	27	Waterport Road

Prepared by  
 277 Magill Road  
 Trinity Gardens SA 5068  
 Telephone: 08 8333 3760  
 Facsimile: 08 8333 3079  
 Email: sa@hdsaustralia.com.au



John C Olson  
 FIEAust  
 Chartered Professional Engineer  
 Member No. 506394












Approved  
  
 Date 31 Aug 16

**Southern & Hills Local Government Association**  
**2020 Transport Plan**

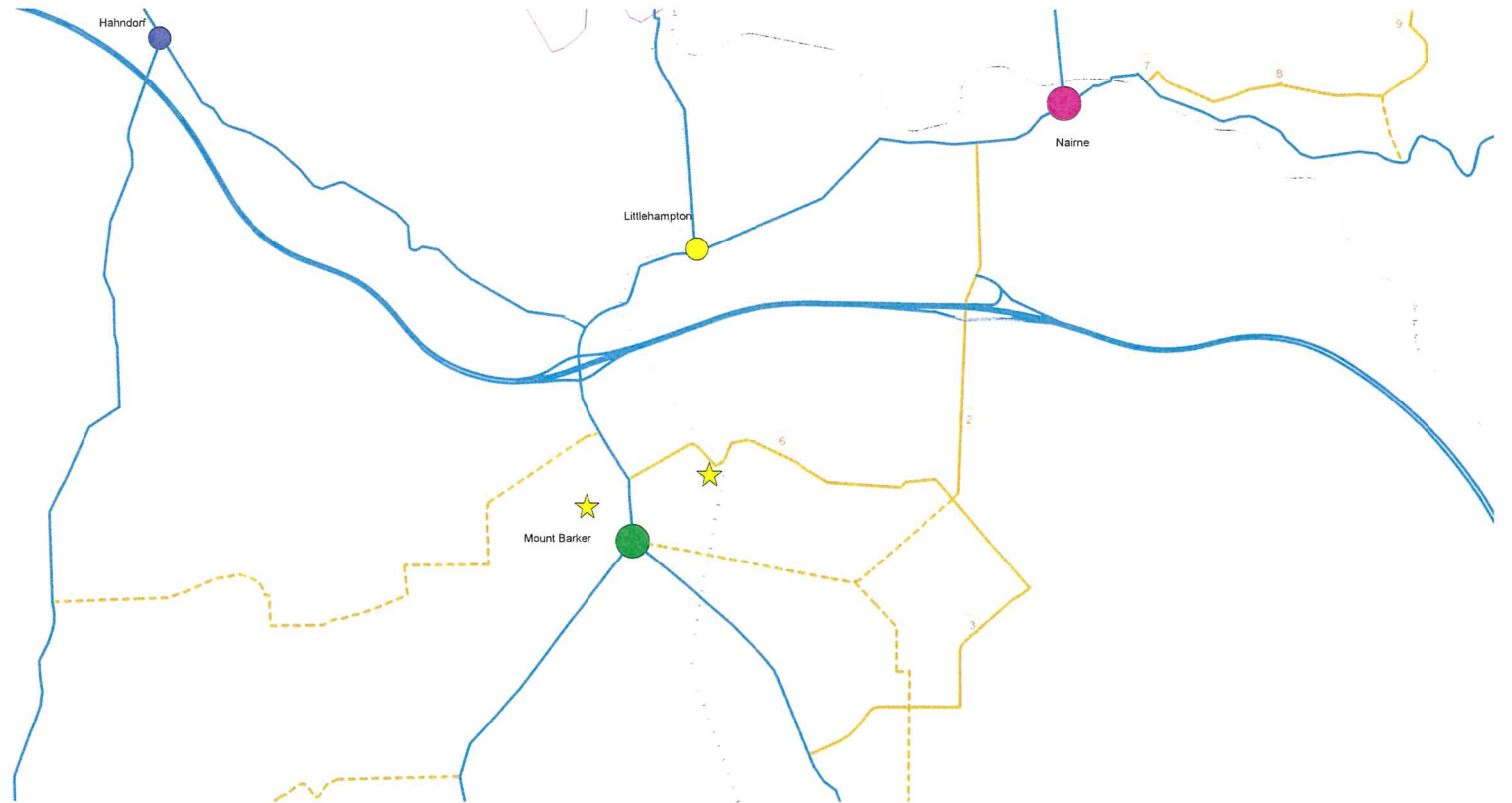
**Regional Community Access Routes**  
**Goolwa / Port Elliot**

Drawing No.  
**2020TP-C-T-02**  
 REVISION A

### Legend

-  Regionally Significant Community Access Route
-  Locally Important Community Access Route / Fire Safety Route
-  DPTI Route
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Road Index			
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MBDC	C	3	Heysen Boulevard / Springs Road
MBDC	C	6	Springs Road
MBDC	C	7	Bridge Street
MBDC	C	8	Sydney Road
MBDC	C	9	Pyrites Road
MBDC	C	12	Harrogate Road
MBDC	C	15	Wellington Road

Prepared by  
  
 277 Magill Road  
 Trinity Gardens SA 5068  
 Telephone: 08 8333 3760  
 Facsimile: 08 8333 3079  
 Email: sa@hdsaustralia.com.au



John C Olson  
 FIEAust  
 Chartered Professional Engineer  
 Member No. 506394

Approved  
  
 Date 10 Nov 16

## Southern & Hills Local Government Association 2020 Transport Plan

Regional Community Access Routes  
 Mount Barker

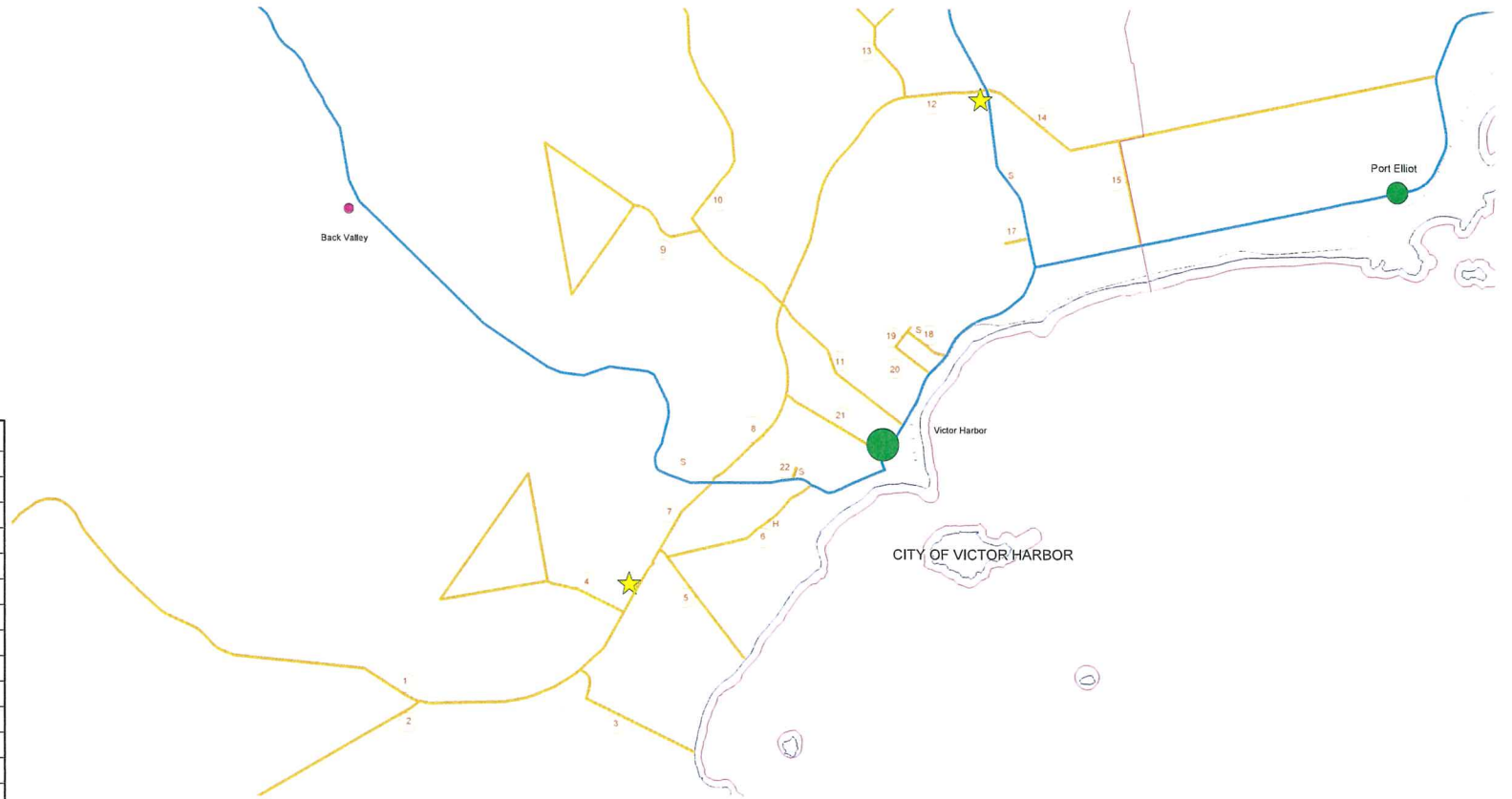
Drawing No.  
 2020TP-C-T-03  
 REVISION C

### Legend

















-  Regionally Significant Community Access Route
-  Locally Important Community Access Route / Fire Safety Route
-  DPTI Route
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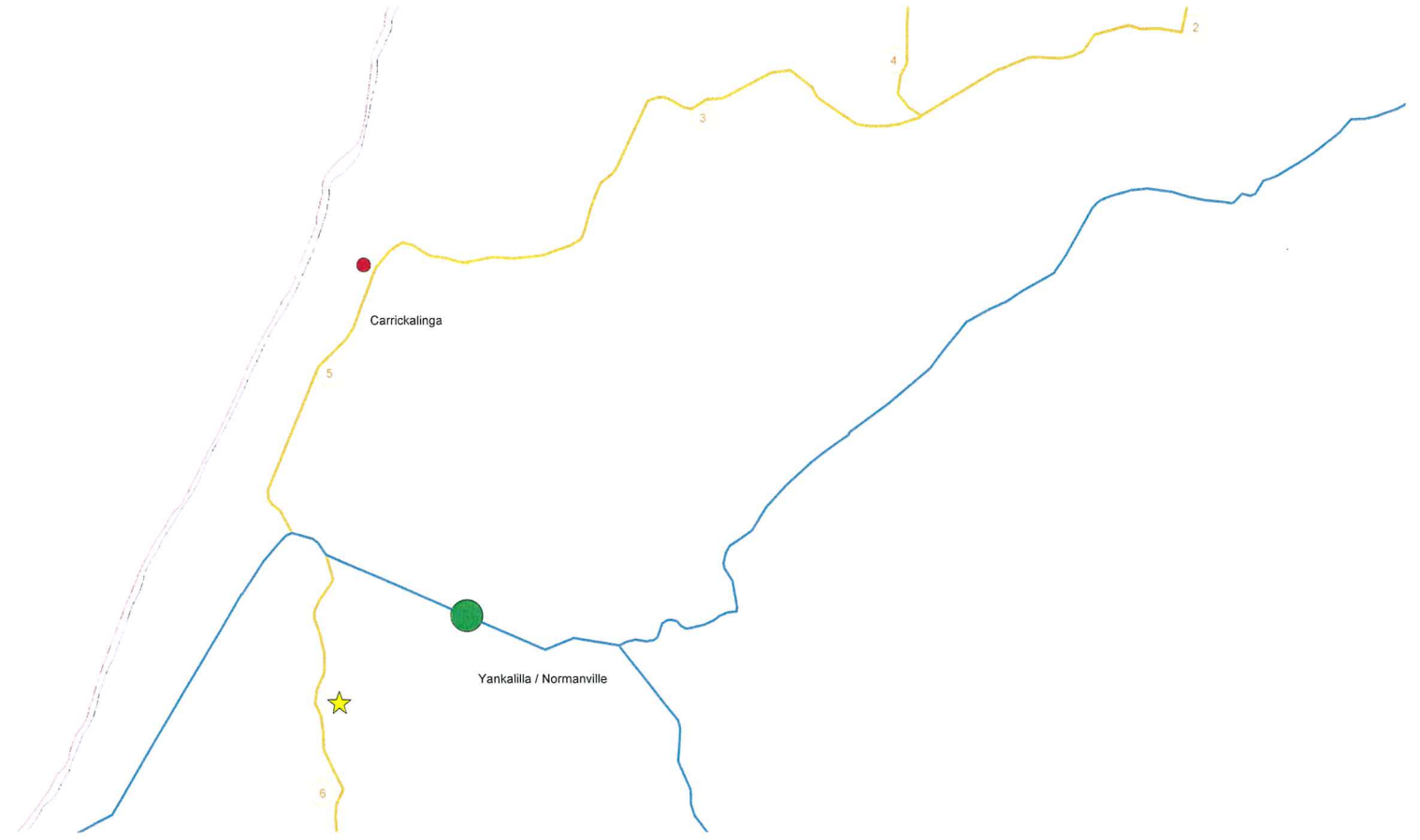
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-  Green 5 services

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CVH	C	5 Tabernacle Road
CVH	C	6 Bay Road
CVH	C	7 Mill Road
CVH	C	8 Armstrong Road
CVH	C	9 Cartwright Road
CVH	C	10 Greenhills Road
CVH	C	11 Seaview Road
CVH	C	12 Welch Road
CVH	C	13 Lipizzaner Drive
CVH	C	14 Waterport Road
CVH	C	15 Ocean Road
CVH	C	17 McCracken Drive
CVH	C	18 The Parkway
CVH	C	19 Field Avenue
CVH	C	20 Pine Avenue
CVH	C	21 Crozier Road
CVH	C	22 Oval Park Road



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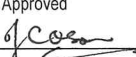


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DCY	C	5	Carrickalinga Road
DCY	C	6	Hay Flat Road
DCY	C	7	Parawa Road
DCY	C	8	Paradise Drive
DCY	C	9	Finnis Vale Drive
DCY	C	10	Rapid Bay Road
DCY	C	11	Range Road West / Rarking Road
DCY	C	12	Torrens Vale Road

Prepared by  
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John C Olson  
 FIEAust  
 Chartered Professional Engineer  
 Member No. 506394

Approved  
  
 Date 31 AUG 16

## Southern & Hills Local Government Association 2020 Transport Plan

Regional Community Access Routes  
 Yankalilla / Normanville

Drawing No.  
 2020TP-C-T-06  
 REVISION A



## **Appendix B**

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2020 Transport Plan – 2015 Update  
Regional Road Deficiency Action Plans  
(as at 17 Feb 14)

Road	Segment Description (from/to)	Regional Routes(s) F/T/C or Combo	Segment Length (nearest 0.1 km)	Speed Environment	Dimensions	Geometry	Strength / Durability	Action Plan	Cost for Action Plan 1 Only (nearest \$0.1 million)
<b>Alexandrina Council</b>									
<b>Sub-Total</b>			<b>0.0</b>						
<b>Kangaroo Island Council</b>									
Cape Willoughby Road (sealed section)	Hog Bay Road through to end of seal	T(local)/C	8.9	Compliant	Major	Minor	Major	1	0.7
Island Beach Road	West of Hog Bay Road through to end	C	3.3	Compliant	Minor	Major	Major	1	0.2
<b>Sub-Total</b>			<b>12.2</b>						
<b>District Council of Mount Barker</b>									
Alexandrina Road	Secker Road to Bald Hills Road	F/T(local)/C(local)	0.6	Compliant	Major	Minor		1	2.1
<b>Sub-Total</b>			<b>0.6</b>						
<b>City of Victor Harbor</b>									
Ocean Rd	Waterport Rd to Goolwa / Port Elliot Rd	C	1.2	Minor	Minor	Minor	Major	1	2.2
The Parkway	Riverview to Field Ave	C	0.2	Major	Minor	Minor	Major	1	0.5
Waitpinga Rd	Range Rd to Blockers Rd	T/C	4.0	Major	Minor	Minor	Minor	1	3.5
<b>Sub-Total</b>			<b>5.4</b>						
<b>District Council of Yankalilla</b>									
Finnis Vale Drive	Main South Road to RRD 800	C	0.8	Compliant	Compliant	Compliant	Major	1	0.2
James Track	Stephens Road to Causeway Road	C	1.7	Minor	Compliant	Minor	Major	1	0.4
Rapid Bay Road	Essington Lewis Drive to RRD1000	T/C	1.0	Major	Compliant	Major	Minor	1	0.2
Rapid Bay Road	RRD 1000 to RRD 2900(Morris Road)	T/C	2.9	Minor	Compliant	Minor	Major	1	0.5
Torrens Vale Road	Inman Valley Road to RRD 1500	T/C	1.5	Compliant	Compliant	Compliant	Major	1	0.3
<b>Sub-Total</b>			<b>7.9</b>						
<b>TOTAL</b>			<b>26</b>						<b>9.2</b>

Road	Segment Description (from/to)	Regional Routes(s) F/T/C or Combo	Segment Length (nearest 0.1 km)	Speed Environment	Dimensions	Geometry	Strength / Durability	Action Plan	Cost for Action Plan 1 Only (nearest \$0.1 million)
<b>Alexandrina Council</b>	<b>Sub-Total</b>		<b>0.0</b>						
<b>Kangaroo Island Council</b>									
Birchmore Road	North of South Coast Road intersection through to Playford Highway	F(part)/T/C	22.2	Compliant	Major	Minor	Minor	2	
Mount Taylor Road	South from Playford Highway through to South Coast Road	F	21.9	Compliant	Major	Minor	Minor	2	
North Coast Road (unsealed section west of Stokes Bay)	West of Stokes Bay Road through to Playford Highway	T	28.5	Compliant	Minor	Minor	Major	2	
Redbanks Road / Ballest Head Road	East from Hog Bay Road through to end	F	19.1	Compliant	Major	Major	Minor	2	
Vivonne Bay Access Road (Knofel Drive Only)	South of South Coast Road through to end	T/C	1.0	Compliant	Major	Minor	Major	2	
Wedgewood Road (sealed section)	South of Playford Highway to end of seal	C	3.7	Compliant	Major	Minor	Major	2	
<b>Sub-Total</b>			<b>96.4</b>						
<b>District Council of Mount Barker</b>									
Bald Hills Road Interchange Access Ramps	Full Length	F/T(local)/C	2.0	Major	Major	Major	Major	2	
Kanmantoo Mine Road	Open speed zone	F	1.3	Major	Major	Major	Minor	2	
Mount Barker Connector Road	Full Length	F/C(local)	3.0	Major	Major	Major	Major	2	
Wellington Road	Full Length to AC boundary	C	5.1	Compliant	Minor	Major		2	Alignment to be determined
<b>Sub-Total</b>			<b>11.4</b>						
<b>City of Victor Harbor</b>									
Greenhills Rd	Seaview Road to Hutchinson Road	C	5.5	Minor	Minor	Minor	Minor	2	
Hindmarsh Falls Rd	Hindmarsh Tiers Road to Hindmarsh Falls Carpark	T	1.4	Compliant	Minor	Minor	Compliant	2	
Ocean St	Torrens St to Albert Place	T	0.5	Minor	Minor	Compliant	Compliant	2	
Oval Park Rd	George Main Road to Kullaroo Road	C	0.2	Minor	Minor	Minor	Compliant	2	
Parsons Beach Rd	Waitpinga Road to National Parks Carpark (Beach)	T	2.2	Compliant	Major	Minor	Minor	2	
Strawberry Hill Rd	Victor Harbor Rd to end of north-south section	C	0.4	Minor	Major	Minor	Minor	2	
Tabernacle Rd	Mill Rd/Waitpinga to Franklin Parade	T/C	1.5	Major	Major	Minor	Minor	2	
Three Gullies Rd	Waitpinga Rd to Jagger Road	T/C	1.6	Minor	Minor	Minor	Minor	2	
<b>Sub-Total</b>			<b>13.3</b>						
<b>District Council of Yankalilla</b>									
<b>Sub-Total</b>			<b>0.0</b>						

TOTAL

121

Road	Segment Description (from/to)	Regional Routes(s) F/T/C or Combo	Segment Length (nearest 0.1 km)	Speed Environment	Dimensions	Geometry	Strength / Durability	Action Plan	Cost for Action Plan 1 Only (nearest \$0.1 million)
<b>Alexandrina Council</b>									
<b>Sub-Total</b>			<b>0.0</b>						
<b>Kangaroo Island Council</b>									
Arranmore Road	East of Playford Highway through to Hog Bay Road	F/T/C	5.2	Compliant	Minor	Minor	Minor	3	
Elsegood Road	South of Hog Bay Road through to Moores Road	T/C(part)	5.3	Compliant	Compliant	Minor	Minor	3	
Emu Bay Road	North of North Coast Road through to end	T/C	42.7	Compliant	Minor	Minor	Minor	3	
Hanson Bay Road	South of South Coast Road through to end	T	4.7	Compliant	Minor	Minor	Minor	3	
North Coast Road (sealed section)	West of Playford Highway through to end of seal	T/C(part)	11.0	Compliant	Minor	Minor	Minor	3	
North Coast Road (unsealed section)	West of end of seal through to Stokes Bay Road	T	34.4	Compliant	Compliant	Minor	Minor	3	
Playford Highway	West of Parndana through to end of seal at the intersection with West End Highway	F(part)/T/C(part)	33.5	Compliant	Minor	Minor	Minor	3	
Seal Bay Road	South of intersection with South Coat Road through to end	T	8.8	Compliant	Minor	Minor	Minor	3	
South Coast Road	East of intersection with West End Highway through to Birchmore Road	T/C(part)	61.7	Compliant	Minor	Minor	Minor	3	
Starrs Road	East of Birchmore Road through to Elsegood Road	T	6.8	Compliant	Compliant	Minor	Minor	3	
Stokes Bay Road	North of Playford Highway through to end	T/C(part)	18.3	Compliant	Compliant	Minor	Minor	3	
West End Highway	South of intersection with Playford Highway through to South Coast Road	T	23.8	Compliant	Minor	Minor	Minor	3	
Willsons Road	East of Elsegood through to Hog Bay Road	T/F	6.1	Compliant	Compliant	Minor	Minor	3	
<b>Sub-Total</b>			<b>262.3</b>						
<b>District Council of Mount Barker</b>									
Alexandrina Road	Adelaide Road to Secker Road	F/T(local)/C(local)	1.5	Compliant	Minor	Compliant		3	
Dawsley Road / Donald Street	Full Length	C(part local)	1.0	Minor	Minor	Minor		3	
Harrogate Road	80 km/h zone sealed	C	9.8	Minor	Minor	Minor		3	
Harrogate Road	80 km/h zone unsealed	C	0.7	Minor	Compliant	Compliant		3	
Harrogate Road	50 km/h zone unsealed	C	0.3	Compliant	Compliant	Minor		3	
Harrogate Road	50 km/h zone sealed	C	1.0	Compliant	Minor	Minor		3	
Kanmantoo Mine Road	80 km/h zone	F	1.6	Minor	Minor	Minor		3	
Oborn Road	Full Length	F	1.2	Compliant	Compliant	Minor		3	
Pyrites Road	Full Length	C	4.7	Minor	Minor	Minor		3	
Springs Road	80 km/h zone	T(local)/C	1.9	Minor	Minor	Minor		3	
<b>Sub-Total</b>			<b>23.7</b>						
<b>City of Victor Harbor</b>									
Crozier Rd	Albert Place to Armstrong Rd	T/C(part)	1.7	Compliant	Compliant	Compliant	Minor	3	
Dennis Rd	Waitpinga Road to National Parks Carpark (Beach)	T	3.7	Compliant	Minor	Minor	Minor	3	
Field Avenue	Renown Ave to The Parkway	C	0.3	Compliant	Compliant	Compliant	Minor	3	
Franklin Parade	Bluff Jetty Rd to Kent Reserve	T(part local)	3.6	Compliant	Minor	Compliant	Compliant	3	
Glenvale Rd / Cartwright Rd	Greenhills Rd to Stockridge Rd	C	1.8	Compliant	Compliant	Minor	Compliant	3	
Jagger Rd	Bluff Jetty Rd to Three Gullies Rd	T	3.6	Minor	Minor	Minor	Minor	3	
Mill Road	Inman Valley Rd to Tabernacle Rd	F/T/C	1.0	Compliant	Compliant	Minor	Minor	3	
Range Road	Waitpinga Rd to DCY Boundary	F/C	12.6	Minor	Minor	Minor	Minor	3	
Renown Ave	Hindmarsh Rd to Field Avenue	C	0.5	Compliant	Compliant	Compliant	Minor	3	
Seaview Rd	Torrens St to Greenhills Rd	T(local)/C	0.9	Compliant	Compliant	Compliant	Minor	3	
Tugwell Rd	Waitpinga Rd to Ferrier Drive	C	0.9	Minor	Minor	Compliant	Minor	3	
Waterport Road	Victor Harbor Rd to AC Boundary	F/C	1.9	Compliant	Minor	Compliant	Compliant	3	
<b>Sub-Total</b>			<b>32.5</b>						

<b>District Council of Yankalilla</b>										
Hayflat Road	Main South Road to RRD 2200	C	2.2	Compliant	Compliant	Compliant	Minor	3		
Rapid Bay Road	RRD 2900(Morris Road) to Main South Road	T/C	1.6	Minor	Compliant	Minor	Minor	3	0.1	
Torrens Vale Road	Sampson Hill Road to Parawa Road	T/C	0.9	Compliant	Compliant	Compliant	Minor	3	0.1	
	<b>Sub-Total</b>		<b>4.7</b>							
<b>TOTAL</b>			<b>323</b>							

Road	Segment Description (from/to)	Regional Routes(s) F/T/C or Combo	Segment Length (nearest 0.1 km)	Speed Environment	Dimensions	Geometry	Strength / Durability	Action Plan	Cost for Action Plan 1 Only (nearest \$0.1 million)
<b>Alexandrina Council</b>									
<b>Sub-Total</b>			<b>0.0</b>						
<b>Kangaroo Island Council</b>									
<b>Sub-Total</b>			<b>0.0</b>						
<b>District Council of Mount Barker</b>									
Bald Hills Road	Full Length	F/T(local)/C	4.6	Compliant	Compliant	Compliant	Compliant	N/A	Completion expected 2014
Kanmantoo Mine Road	50 km/h zone	F	1.2	Compliant	Compliant	Compliant	Compliant	N/A	
Springs Road	50 km/h zone	T(local)/C	1.1	Compliant	Compliant	Compliant	Compliant	N/A	
Springs Road	One way section	T(local)/C	0.3	Compliant	Compliant	Compliant	Compliant	N/A	
<b>Sub-Total</b>			<b>7.2</b>						
<b>City of Victor Harbor</b>									
Armstrong Road	Waggon Rd to Inman Valley Rd	F/T/C	5.0	Compliant	Compliant	Compliant	Compliant	N/A	Upgrade early 2014 Upgraded 2013 DPTI Ownership
Bay Rd	Victoria St/George Main Rd to Tabernacle Rd	T(part)/C	1.9	Compliant	Compliant	Compliant	Compliant	N/A	
Flinders Parade	Esplanade to Eyre Tce	T	0.5	Compliant	Compliant	Compliant	Compliant	N/A	
Granite Island Access (DPTI)	Esplanade to Granite Island Causeway	T	0.1	Compliant	Compliant	Compliant	Compliant	N/A	
Lipizzaner Drive	Welch Rd to Arabian Court	C	0.9	Compliant	Compliant	Compliant	Compliant	N/A	
McCracken Drive	Adelaide Rd to Golf Course	C	0.3	Compliant	Compliant	Compliant	Compliant	N/A	
The Parkway	Hindmarsh Rd to Riverview Road	C	0.3	Compliant	Compliant	Compliant	Compliant	N/A	
Victoria St / Albert Place	Torrens St to Esplanade	T	0.4	Compliant	Compliant	Compliant	Compliant	N/A	
Welch Road	Waggon Rd to Victor Harbor Rd	F/T/C	0.9	Compliant	Compliant	Compliant	Compliant	N/A	
<b>Sub-Total</b>			<b>10.3</b>						
<b>District Council of Yankalilla</b>									
<b>Sub-Total</b>			<b>0.0</b>						

**TOTAL****18**

Road	Segment Description (from/to)	Regional Routes(s) F/T/C or Combo	Segment Length (nearest 0.1 km)	Speed Environment	Dimensions	Geometry	Strength / Durability	Action Plan	Cost for Action Plan 1 Only (nearest \$0.1 million)
<b>Alexandrina Council</b>									
Sandergrove Road (DPTI)	Chainage 00 - Chainage 1045 (intersection Milnes Road)	T	1.0	Minor	Minor	Minor	Compliant	3	1.5
Nine Mile Road	1.62kms south Navarino Road to end of seal Ameroo Avenue Milang	C(local)	5.6	Minor	Minor	Compliant	Minor	3	1.3
<b>Kangaroo Island Council</b>									
Bark Hut Road	West of Playford Highway through to Stokes Bay Road	F/C	19.7	Compliant	Major	Major	Major	1	1.4
Bullock Track	Playford Highway through to Cordes Road	T/C	3.3	Compliant	Major	Major	Minor	1	0.3
Cape Willoughby Road (unsealed section)	End of seal to North of Cape Willoughby Lighthouse	T (local)	18.6	Compliant	Major	Major	Major	1	1.2
East West One Highway	East of Harriet Road through to Birchmore Road	F	27.5	Compliant	Major	Minor	Minor	3	
East West Road	East of Hog Bay Road through to Wilson River Road	F	9.1	Compliant	Major	Minor	Minor	1	0.6
Harriet Road	South of Playford Highway through to South Coast Road	F/C	21.3	Compliant	Major	Minor	Minor	2	
Hickmans Road	South of Wedgewood through to South Coast Road	C	10.9	Compliant	Major	Minor	Major	1	0.7
Playford Highway (to Cape Borda)	West of Playford Highway through to end )	T (local)	28.1	Compliant	Minor	Minor	Minor	3	
Rowland Hill Highway	East of Wedgewood through to Birchmore Road	F/C	19.3	Compliant	Major	Minor	Minor	1	1.2
Seaview Road	Reeves Point through to Cordes Road	T	1.2	Compliant	Major	Major	Minor	2	
South Coast Road	South of Wilsons Road through to end of seal	F	20.2	Compliant	Major	Major	Minor	3	
Springs Road	West of Playford Highway through to North Coast Road	F/C	24.5	Compliant	Major	Minor	Major	1	1.6
Three Chain Road	East of Woods Road through to Hog Bay Road	F	22.5	Compliant	Major	Minor	Minor	1	1.4
Wedgewood Road (unsealed section)	End of seal to intersection with Hickmans and East West Highway One	C	3.9	Compliant	Major	Minor	Major	1	0.4
Wilson River Road	East of intersection with East West Road through to Cape Willoughby	F/C	21.1	Compliant	Major	Minor	Minor	1	1.4
<b>District Council of Mount Barker</b>									
Ambleside Road	60 km/h zone	T(local)	1.1	Compliant	Minor	Minor		3	
Ambleside Road	80 km/h zone	T(local)	0.9	Minor	Minor	Minor		3	
Bridge Street	Full Length	C(local)	0.1	Compliant	Minor	Minor		3	
Callington Road	Full Length	C(local)	1.2	Compliant	Minor	Minor		3	
Gemmell Road	80 km/h zone	C(local)	5.5	Minor	Minor	Major		2	
Gemmell Road	50 km/h zone	C(local)	0.5	Compliant	Minor	Compliant		3	
Hampton Road	Full Length	C(local)	1.5	Minor	Compliant	Minor		3	
Kondoparinga Road	80 km/h zone	C(local)	3.3	Minor	Minor	Minor		3	
Kondoparinga Road	50 km/h zone	C(local)	0.6	Compliant	Compliant	Compliant		N/A	
McIntyre Road	Full Length	C(local)	1.7	Minor	Major	Minor		2	
Old Princes Highway	Full Length	C(local)	2.0	Major	Major	Major		2	
Paech Road	Full Length	C(local)	2.7	Minor	Minor	Minor		3	
Stamps Road	80 km/h zone	C(local)	5.5	Minor	Minor	Minor	Minor	3	
Stamps Road	50 km/h zone	C(local)	0.6	Compliant	Minor	Compliant		3	
Sydney Road	Full Length	C(local)	1.5	Minor	Minor	Compliant		3	
<b>City of Victor Harbor</b>									
Esplanade	Flinders Parade to Inman St	T(local)	1.1	Compliant	Compliant	Compliant	Compliant	N/A	
Harbour View Tce	Bay Rd to Malen	T(local)	0.3	Compliant	Major	Major	Major	1	0.5
Pages Rd	Swains Crossing to Greenhills Rd	T(local)	0.5	Minor	Minor	Minor	Compliant	3	
Swains Crossing Rd	Inman Valley Rd to Finnis Road	T(local)	1.6	Compliant	Minor	Compliant	Compliant	3	

## **Appendix C**

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2020 Transport Plan – 2014 Roads Database  
Summary and Assessment Worksheets



## Summary of Road Proposals

Sort in Descending Order using Data / Sort by Column "C" and Column "E", then reorder as "F", "T" and "S"

Council	Road Proposal	Purpose	Council Priority	Score	Funding Priority
DCMB	Alexandrina Road - Hartman Road to Secker Road	F	I	79	Very High
CVH	Waitpinga Road - Range Road to Blockers Road	T	VS	50	High
DCY	Rapid Bay Road - CH 1000 to Morris Road	T	I	42	Moderate
DCY	Rapid Bay Road - Essington Lewis Drive to CH1000	T	M	42	Moderate
DCY	Torrens Vale Road - Inman Valley Road to RRD 1500	T	M	33	Low
KIC	Cape Willoughby Road - Howard Drive to Seal End	C	I	49	Moderate
CVH	Ocean Road - Waterport Road to Port Elliot Road	C	I	49	Moderate
DCMB	Springs Road - Daddow Road to Bald Hills Road	C	I	46	Moderate
CVH	The Parkway - Hindmarsh Road to Field Avenue	C	VS	42	Moderate
DCY	Finnis Vale Drive - Main South Road to CH 800	C	I	33	Low
KIC	Island Beach Road - Hog Bay Road to End	C	VS	32	Low
DCY	James Track - Stephens Road to Causeway Road	C	I	24	Very Low

**Note** - The following recommended "2014 Regional Priorities", sorted both by "Primary Purpose" and "Overall", are based upon all road segments submitted for consideration with "I" council priority (being a subset of road segments listed in the 2014 Roads Database), sub-grouped by the likelihood of funding within their individual purpose categories, then re-grouped for an overall ranking.

Council	Road Proposal	Regional Priority by Primary Purpose	Overall Regional Priority (Cost in \$million)
DCMB	Alexandrina Road - Hartman Road to Secker Road	F1	R1 (1.7)
KIC	Cape Willoughby Road - Howard Drive to Seal End	C1	R2 (0.7)
CVH	Ocean Road - Waterport Road to Port Elliot Road	C2	R3 (2.2)
DCMB	Springs Road - Daddow Road to Bald Hills Road	C3	R4 (4.5)
DCY	Rapid Bay Road - CH 1000 to Morris Road	T1	R5 (0.5)
DCY	Finnis Vale Drive - Main South Road to CH 800	C4	R6 (0.2)
DCY	James Track - Stephens Road to Causeway Road	C5	R7 (0.4)

**Weighted Scoring Methodology**

(based upon Section 6.3 of the S&HLGA 2020 Transport Plan Final Report, dated December 2011)

Define categories, criteria and set weights on this page	Category		Criteria				
	Set Category Score	Set Criteria Weighting within Category	Criteria Weighting as a Percentage of Category	Individual Maximum Category Score			
<b>Secondary Purpose(s)</b>	Maximum Score	Minimum Score					
Does the proposal have at least one regionally significant secondary purpose ?	2	0	10	50.0%	5.0	Criteria Total	20
Does the proposal have two regionally significant secondary purposes ?	2	0	10	50.0%	5.0		
<b>Total - Secondary Purpose(s)</b>	<b>4</b>	<b>0</b>	<b>10%</b>			Check Total	10.00
<b>Regional Significance</b>	Maximum Score	Minimum Score					
Is the proposal identified as a route with community significance ?	2	0	10	33.3%	8.3	Criteria Total	30
Is the proposal identified as a route with regional significance ?	2	0	10	33.3%	8.3		
Is the proposal identified as a route with state significance ?	2	0	10	33.3%	8.3		
<b>Total - Regional Significance</b>	<b>6</b>	<b>0</b>	<b>25%</b>			Check Total	25.00
<b>Economic Development</b>	Maximum Score	Minimum Score					
To what extent will the proposal assist in the attraction of economic investment to the region ?	3	0	20	19.0%	3.8	Criteria Total	105
To what extent will the proposal provide for B-Doubles and higher mass vehicles ?	3	0	60	57.1%	11.4		
To what extent will the proposal ensure goods arrive at their market in a fit for purpose condition ?	3	0	10	9.5%	1.9		
To what extent will the proposal reduce delays and operating costs for heavy vehicles ?	3	0	15	14.3%	2.9		
<b>Total - Economic Development</b>	<b>12</b>	<b>0</b>	<b>20%</b>			Check Total	20.00
<b>Access</b>	Maximum Score	Minimum Score					
To what extent will the proposal improve access to a regionally significant tourism site ?	3	0	30	23.1%	3.5	Criteria Total	130
To what extent will the proposal improve accessibility to and between areas/towns in this region ?	3	0	10	7.7%	1.2		
To what extent will the proposal improve access to and availability of public transport services both within the region and to Adelaide ?	3	0	10	7.7%	1.2		
What is the current <u>peak</u> daily traffic volume on the road (note - may be higher than the measured daily two way count shown above)?	3	0	60	46.2%	6.9	<100=0, 101-500=1, 501-1000=2, >1000=3	
What is the expected annual growth in peak daily traffic volume over the next five years ?	3	0	20	15.4%	2.3		
<b>Total - Access</b>	<b>15</b>	<b>0</b>	<b>15%</b>			Check Total	15.00
<b>Safety</b>	Maximum Score	Minimum Score					
To what extent will the proposal reduce conflicts between tourist, commuter and freight traffic ?	3	0	15	37.5%	7.5	Criteria Total	40
To what extent will the proposal improve safety in particular reducing accidents associated with run off road, hit object and overtaking related accidents ?	3	0	25	62.5%	12.5		
<b>Total - Safety</b>	<b>6</b>	<b>0</b>	<b>20%</b>			Check Total	20.00
<b>Environmental</b>	Maximum Score	Minimum Score					
To what extent will the proposal reduce heavy vehicle movements in town centres ?	3	0	30	54.5%	5.5	Criteria Total	55
To what extent will the proposal reduce environmental impacts of the transport system ?	3	0	15	27.3%	2.7		
To what extent will the proposal improve facilities for other modes of transport (sea, air and rail) ?	3	0	10	18.2%	1.8		
<b>Total - Environmental</b>	<b>9</b>	<b>0</b>	<b>10%</b>			Check Total	10.00
<b>Total All Categories</b>	<b>52</b>	<b>0</b>	<b>100%</b>		<b>100.0</b>	Check Total	100.00

Council and Road Name

Category / Criteria  <i>(Insert Name of Roads on this Page)</i>	From Setweight		DCY	DCY	DCY	DCY	DCY	DCMB	DCMB	CVH	CVH	CVH	KIC	KIC
	Maximum	Minimum	Rapid Bay Road - CH 1000 to Morris Road	Rapid Bay Road - Essington Lewis Drive to CH1000	Torrens Vale Road - Inman Valley Road to RRD 1500	James Track - Stephens Road to Causeway Road	Main South Road - Finniss Vale Drive - CH 800	Alexandrina Road - Hartman Road to Secker Road	Springs Road - Daddow Road to Bald Hills Road	Ocean Road - Waterport Road to Port Elliot Road	The Parkway - Hindmarsh Road to Field Avenue	Waipunga Road - Range Road to Blockers Road	Cape Willoughby Road - Howard Drive to Seal End	Island Beach Road - Hog Bay Road to End
<b>Primary Purpose of Road</b>			T	T	T	C	C	F	C	C	C	T	C	C
<b>Council Priority</b>			I	M	M	I	I	I	I	I	VS	VS	I	VS
<b>Secondary Purpose(s)</b>														
Does the proposal have at least one regionally significant secondary purpose ?	2	0	2	2	2	0	2	1	1	0	0	2	1	0
Does the proposal have two regionally significant secondary purposes ?	2	0	0	0	0	0	0	1	0	0	0	0	0	0
<b>Regional Significance</b>														
Is the proposal identified as a route with community significance ?	2	0	2	2	2	2	2	2	2	2	2	2	2	2
Is the proposal identified as a route with regional significance ?	2	0	2	2	2	2	2	2	2	2	2	2	2	2
Is the proposal identified as a route with state significance ?	2	0	0	0	0	0	0	2	0	0	0	2	0	0
<b>Economic Development</b>														
To what extent will the proposal assist in the attraction of economic investment to the region ?	3	0	1	1	1	0	1	3	1	2	1	2	2	1
To what extent will the proposal provide for B-Doubles and higher mass vehicles ?	3	0	0	0	0	0	0	3	0	0	0	0	1	0
To what extent will the proposal ensure goods arrive at their market in a fit for purpose condition ?	3	0	0	0	2	1	0	2	2	1	0	0	2	0
To what extent will the proposal reduce delays and operating costs for heavy vehicles ?	3	0	0	0	2	1	0	2	1	0	1	0	1	0
<b>Access</b>														
To what extent will the proposal improve access to a regionally significant tourism site ?	3	0	2	2	1	0	1	1	1	1	0	3	3	0
To what extent will the proposal improve accessibility to and between areas/towns in this region ?	3	0	3	3	2	2	2	1	2	2	2	2	2	3
To what extent will the proposal improve access to and availability of public transport services both within the region and to Adelaide ?	3	0	0	0	0	0	1	2	2	1	2	1	0	0
What is the current peak daily traffic volume on the road (note - may be higher than the measured daily two way count shown above)?	3	0	2	2	2	0	3	3	3	3	2	0	0	0
What is the expected annual growth in peak daily traffic volume over the next five years ?	3	0	0	0	0	0	1	3	2	3	2	0	2	0
<b>Safety</b>														
To what extent will the proposal reduce conflicts between tourist, commuter and freight traffic ?	3	0	1	1	0	0	0	2	1	2	1	2	1	0
To what extent will the proposal improve safety in particular reducing accidents associated with run off road, hit object and overtaking related accidents ?	3	0	2	2	0	1	0	2	2	3	3	2	3	3
<b>Environmental</b>														
To what extent will the proposal reduce heavy vehicle movements in town centres ?	3	0	0	0	0	0	0	2	0	0	0	0	0	0
To what extent will the proposal reduce environmental impacts of the transport system ?	3	0	0	0	0	1	0	2	1	0	0	0	0	0
To what extent will the proposal improve facilities for other modes of transport (sea, air and rail) ?	3	0	0	0	0	0	0	0	1	0	0	0	0	0
	<b>52</b>	<b>0</b>	<b>17</b>	<b>17</b>	<b>16</b>	<b>10</b>	<b>15</b>	<b>36</b>	<b>24</b>	<b>22</b>	<b>18</b>	<b>20</b>	<b>22</b>	<b>11</b>

Category / Criteria	Max Score From Methodology	DCY	DCY	DCY	DCY	DCY	DCMB	DCMB	CVH	CVH	CVH	KIC	KIC
		Rapid Bay Road - CH 1000 to Morris Road	Rapid Bay Road - Essington Lewis Drive to CH1000	Torrens Vale Road - Inman Valley Road to RRD 1500	James Track - Stephens Road to Causeway Road	Finnis Vale Drive - Main South Road to CH 800	Alexandrina Road - Hartman Road to Secker Road	Springs Road - Daddow Road to Bald Hills Road	Ocean Road - Waterport Road to Port Elliot Road	The Parkway - Hindmarsh Road to Field Avenue	Waipinga Road - Range Road to Blockers Road	Cape Willoughby Road - Howard Drive to Seal End	Island Beach Road - Hog Bay Road to End
<b>Primary Purpose of Road</b>		<b>T</b>	<b>T</b>	<b>T</b>	<b>C</b>	<b>C</b>	<b>F</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>T</b>	<b>C</b>	<b>C</b>
<b>Council Priority</b>		<b>I</b>	<b>M</b>	<b>M</b>	<b>I</b>	<b>I</b>	<b>I</b>	<b>I</b>	<b>I</b>	<b>VS</b>	<b>VS</b>	<b>I</b>	<b>VS</b>
<b>Total - Secondary Purpose(s)</b>	<b>10%</b>												
Does the proposal have at least one regionally significant secondary purpose ?	5.0	5.0	5.0	5.0	0.0	5.0	2.5	2.5	0.0	0.0	5.0	2.5	0.0
Does the proposal have two regionally significant secondary purposes ?	5.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total - Regional Significance</b>	<b>25%</b>												
Is the proposal identified as a route with community significance ?	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
Is the proposal identified as a route with regional significance ?	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
Is the proposal identified as a route with state significance ?	8.3	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	8.3	0.0	0.0
<b>Total - Economic Development</b>	<b>20%</b>												
To what extent will the proposal assist in the attraction of economic investment to the region ?	3.8	1.3	1.3	1.3	0.0	1.3	3.8	1.3	2.5	1.3	2.5	2.5	1.3
To what extent will the proposal provide for B-Doubles and higher mass vehicles ?	11.4	0.0	0.0	0.0	0.0	0.0	11.4	0.0	0.0	0.0	0.0	3.8	0.0
To what extent will the proposal ensure goods arrive at their market in a fit for purpose condition ?	1.9	0.0	0.0	1.3	0.6	0.0	1.3	1.3	0.6	0.0	0.0	1.3	0.0
To what extent will the proposal reduce delays and operating costs for heavy vehicles ?	2.9	0.0	0.0	1.9	1.0	0.0	1.9	1.0	0.0	1.0	0.0	1.0	0.0
<b>Total - Access</b>	<b>15%</b>												
To what extent will the proposal improve access to a regionally significant tourism site ?	3.5	2.3	2.3	1.2	0.0	1.2	1.2	1.2	1.2	0.0	3.5	3.5	0.0
To what extent will the proposal improve accessibility to and between areas/towns in this region ?	1.2	1.2	1.2	0.8	0.8	0.8	0.4	0.8	0.8	0.8	0.8	0.8	1.2
To what extent will the proposal improve access to and availability of public transport services both within the region and to Adelaide ?	1.2	0.0	0.0	0.0	0.0	0.4	0.8	0.8	0.4	0.8	0.4	0.0	0.0
What is the current peak daily traffic volume on the road (note - may be higher than the measured daily two way count shown above)?	6.9	4.6	4.6	4.6	0.0	6.9	6.9	6.9	6.9	4.6	0.0	0.0	0.0
What is the expected annual growth in peak daily traffic volume over the next five years ?	2.3	0.0	0.0	0.0	0.0	0.8	2.3	1.5	2.3	1.5	0.0	1.5	0.0
<b>Total - Safety</b>	<b>20%</b>												
To what extent will the proposal reduce conflicts between tourist, commuter and freight traffic ?	7.5	2.5	2.5	0.0	0.0	0.0	5.0	2.5	5.0	2.5	5.0	2.5	0.0
To what extent will the proposal improve safety in particular reducing accidents associated with run off road, hit object and overtaking related accidents ?	12.5	8.3	8.3	0.0	4.2	0.0	8.3	8.3	12.5	12.5	8.3	12.5	12.5
<b>Total - Environmental</b>	<b>10%</b>												
To what extent will the proposal reduce heavy vehicle movements in town centres ?	5.5	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0
To what extent will the proposal reduce environmental impacts of the transport system ?	2.7	0.0	0.0	0.0	0.9	0.0	1.8	0.9	0.0	0.0	0.0	0.0	0.0
To what extent will the proposal improve facilities for other modes of transport (sea, air and rail) ?	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>41.8</b>	<b>41.8</b>	<b>32.6</b>	<b>24.1</b>	<b>32.9</b>	<b>78.7</b>	<b>46.2</b>	<b>48.9</b>	<b>41.6</b>	<b>50.5</b>	<b>48.5</b>	<b>31.6</b>	

## **Appendix D**

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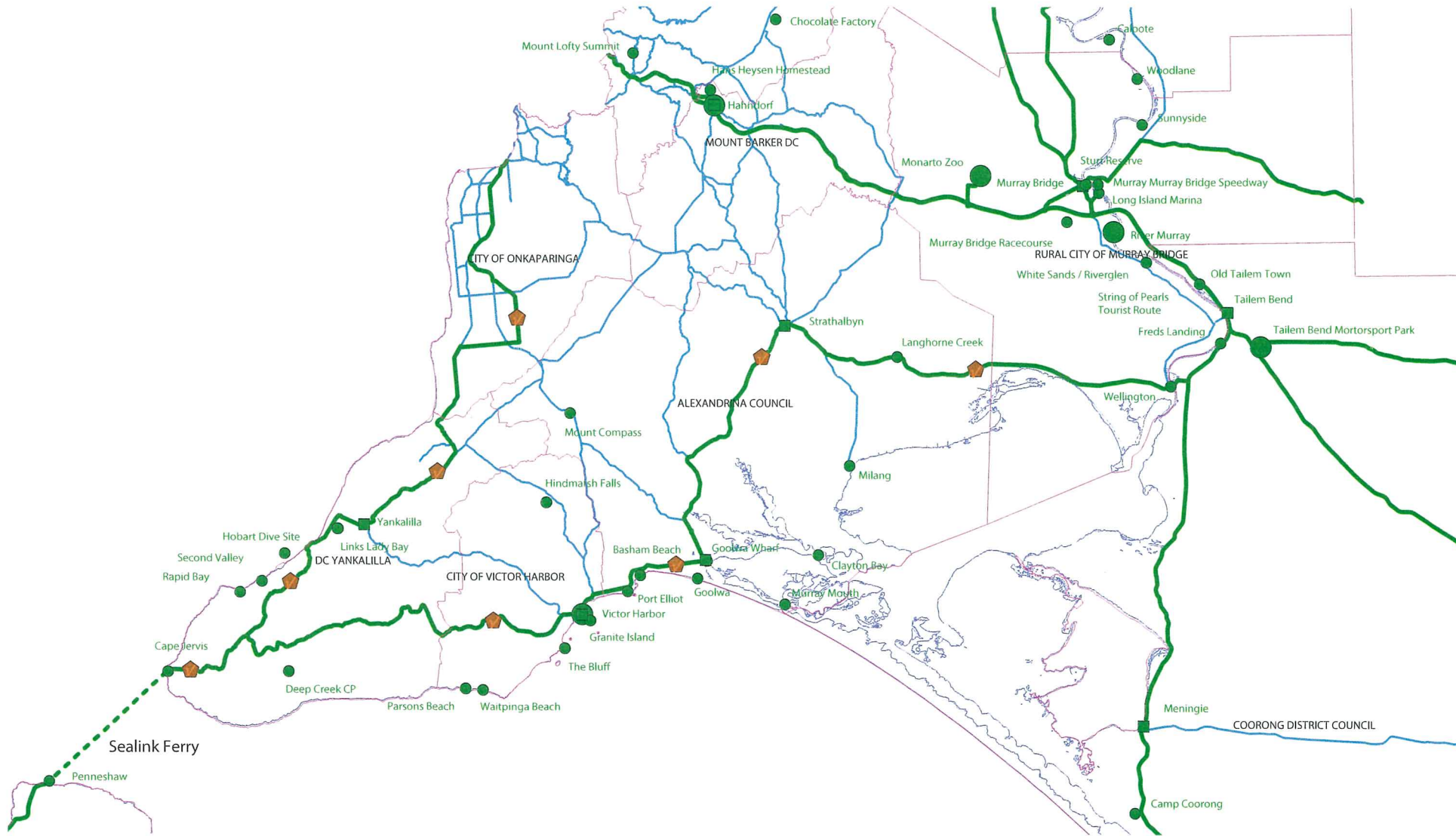
2020 Transport Plan – 2015 Update  
South Coast Freight Corridor



## **Appendix E**

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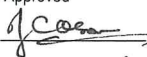
2020 Transport Plan – 2015 Update  
Fleurieu Way Regional Tourism Route



Prepared by  
**hds**  
 AUSTRALIA  
 277 Magill Road  
 Trinity Gardens SA 5068  
 Telephone: 08 8333 3760  
 Facsimile: 08 8333 3079  
 Email: sa@hdsaustralia.com.au



John C Olson  
 FIEAust  
 Chartered Professional Engineer  
 Member No. 506394

Approved  
  
 Date 10 Nov 16

**Southern & Hills Local Government Association**  
**2020 Transport Plan**

**Fleurieu Way**

Drawing No.



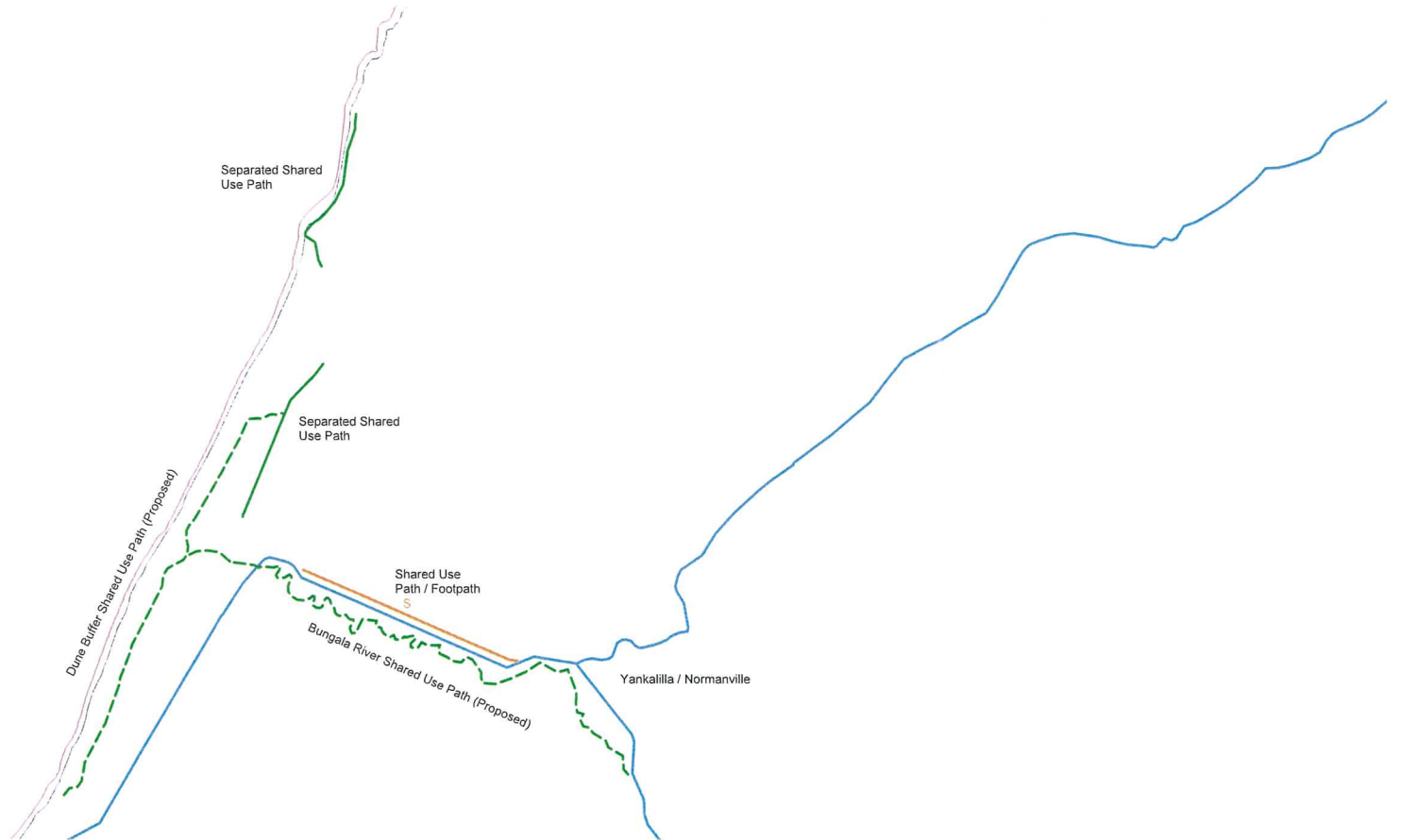
## **Appendix F**

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2020 Transport Plan – 2015 Update  
Regional Cycling Routes (*Sample Only*)

Legend

- Tourism Cycling Route (Existing)
- Tourism Cycling Route (Proposed)
- Community Cycling Route (Existing)
- Community Cycling Route (Proposed)
- DPTI Route
- Local Route

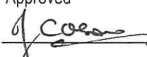


DRAFT

Prepared by  
**hds**  
 AUSTRALIA  
 277 Magill Road  
 Trinity Gardens SA 5068  
 Telephone: 08 8333 3760  
 Facsimile: 08 8333 3079  
 Email: sa@hdsaustralia.com.au



John C Olson  
 FIEAust  
 Chartered Professional Engineer  
 Member No. 506394

Approved  
  
 Date 10 Nov 16

**Southern & Hills Local Government Association**  
**2020 Transport Plan**

**Regional Cycling Routes**  
**Yankalilla / Normanville**

Drawing No.  
**2020TP-B-T-06**