

GIPPSLAND
LOCAL
GOVERNMENT
NETWORK

Gippsland's United Voice

Gippsland Freight Strategy

GIPPSLAND LOCAL GOVERNMENT NETWORK

June 2013



The Gippsland Local Government Network (GLGN) is an alliance of six Gippsland Councils who represent the collective interests of Gippsland and work cooperatively on issues and projects of mutual interest.

The six GLGN councils are:

- Bass Coast Shire Council
- Baw Baw Shire Council
- East Gippsland Shire Council (Chair)
- Latrobe City Council
- South Gippsland Shire Council
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1. Introduction

Since the establishment of the State Electricity Commission in 1921, and the commissioning of the first oil and gas rigs in Bass Strait in 1969, the Gippsland region has powered the Victorian economy. Today, the region produces 85% of Victoria's electricity and 90% of Victoria's natural gas, with around 20% of Australia's oil coming from the Bass Strait fields.

Due to the high moisture content of Victorian brown coal (as compared to Queensland or New South Wales black coal), virtually all coal mined within Gippsland is used for domestic energy generation; only small volumes of coal (in the form of briquettes and carbon products) are transported to customers inside and outside the region, including overseas markets.

However, rising energy demand in Asia and growing concern over greenhouse gas emissions have stimulated research and development into clean coal technologies, which will build on the natural advantages of the Gippsland brown coal resource. Although many of the proposals are still only at concept or pilot phase, there is a potential for multi-billion dollar investment to occur should the technology be proven. If such investment were to occur, it would generate a very significant freight task, potentially limited only by the extent of the supporting transport infrastructure network.



In addition to being Victoria's powerhouse, Gippsland is also a source for much of its fresh produce, dairy and meat commodities. With a mild climate and higher rainfall than many other parts of the State, Gippsland supports a strong agriculture industry. A recent regional economic study identified more than \$800 million worth of value-adding opportunities within the Gippsland agricultural sector. These opportunities are likely to grow in the coming years as primary industry in the region intensifies due to the favourable growing conditions.

Gippsland also plays host to a significant tourism industry hosting attractions that bring large number of international and interstate visitors. The tourism industry is worth \$2.8 billion (direct and indirect expenditure) to the Gippsland economy (source: Gippsland Economic Impact of Tourism (2012) – Urban Enterprise) and as at 2011 contributed 3,228 local jobs in Bass Coast alone. The industry is predicted to grow and continue to provide jobs into the future. The industry is reliant on transport options and a road network that supports the movement of freight and people.

To help realise the region's opportunities, the Gippsland Local Government Network (GLGN) has worked closely with the Department of Transport and industry representatives to develop this Gippsland Freight Strategy. The Strategy sets out the actions necessary to enable the efficient movement of a growing freight task. It identifies the scale and diversity of the existing freight task and the task required to accommodate new and emerging industries. This includes identifying investments in critical infrastructure, regulatory reforms to facilitate heavy vehicle access between Gippsland and other regions (including southern New South Wales), improved access to skills training and job opportunities and planning to ensure that the communities in Gippsland can accommodate the future freight task while minimising amenity impacts.

The Gippsland Freight Strategy provides an invaluable resource for State and Federal Governments and industry stakeholders alike - by setting out the region's long-term vision for managing Gippsland's freight needs. The document reinforces the GLGN and Victorian Government's directions for growing regional freight, as stated in the *Transport Solutions Framework 2010-11*, *Gippsland Regional Plan 2010* along with evolving priorities to be included in the *Gippsland Integrated Land Use Plan* and *Victoria –The Freight State- The Victorian Freight and Logistics Plan* .

The Gippsland Freight Strategy recognises the strategic importance of Gippsland to the Victorian and Australian economies. Providing the necessary transport system changes will be critical if the advantages of these interdependencies are to be fully realised.



2. Executive Summary

The Gippsland region is home to over 260,000 people and is of significant economic importance to the State of Victoria. The region has a diverse economy with a total Gross Regional Product (GRP) estimated at \$13.3 billion (2010), with the agricultural, mining, manufacturing, energy, construction and service sectors operating as the key economic drivers.

The energy industry is of particular regional importance, as the Gippsland brown coal fields are amongst the largest in the world, and industry participants have shown a strong interest in developing the brown coal resource into an export quality product. The Gippsland Regional Plan 2010 identifies the potential export of high value added brown coal derivatives as a key driver of economic growth in coming years. In the future, export of value-added coal products could eventually become the largest single transport task in the State of Victoria.

In addition to the potential development of a coal derivative export industry, the intensification of primary industry due to favourable soil and climatic conditions is also likely to generate a significant increase in the freight task. Both tasks will place pressure on the existing transport network and stretch the capacity of existing transport operators. Other critical challenges include urban expansion and congestion (particularly in Melbourne's outer south east), and a changing demographic mix.



The region is clearly well placed to assume an increasingly important role as a resource and food based economy. It is critical that future investment decisions by the private sector can rely on an appropriately planned and operated transport network that is vertically integrated and able to satisfy a diverse array of internal and external movements. Gippsland Regions existing agriculture and forestry industries will also benefit immensely from the improved road and transport infrastructure due to likely reduction in cost to the transport operations, operating in the region.

The Gippsland Freight Strategy has been developed in collaboration with local Councils, State Government agencies and industry. Through this consultation, a number of interventions have been identified as responses to the regional challenges facing the freight task. These interventions can be grouped into four key areas:

- Transport Infrastructure
- Regulation
- Skills Development and Employment
- Strategic and Community Planning

The resulting actions seek to deliver a range of benefits, including reduced operating costs for business; a stronger regional economic base; increased safety on the region's transport network; enhanced desirability of Gippsland as a lifestyle and investment destination; and improved local and regional environments.

2.1. Priority Actions

1. Infrastructure planning to support the coal and mining industry

Work with the Victorian Government to plan for improved transport connections in Gippsland to facilitate the development of new clean coal industries. This includes:

- Increased rail capacity on the Gippsland line and strongly advocate for the transport of new bulk exports of coal by rail.
- The capacity increase to include direct rail access from the Gippsland line to the Ports of Hastings and Melbourne and line upgrades sufficient to provide the capacity increase without detriment to passenger traffic.
- Planning and design work for capacity increases should begin immediately, including appropriate land reservation.

Priority Actions *continued*

2. Connections to the National Network

Continue to develop transport options for improving road and rail connections from the Gippsland corridor to other parts of the National Network.

3. Princes Highway upgrades

Progressively enhance the capacity and alignment of the Princes Highway to 'M' class standard (between Melbourne and Sale). Review by the Federal Government to gain national highway status for the Princess Highway, east of Sale.

Commence planning work on town alternate truck routes for key towns on the Princes Highway.

4. South Gippsland Highway

Progressively enhance the capacity and alignment of the South Gippsland Highway in line with the South Gippsland Highway Corridor Strategy.

5. Bass Highway

Progressively enhance the capacity and alignment of the Bass Highway in line with the Bass Highway and Phillip Island Road Corridor Strategy.

6. 'B' and 'C' class roads

Upgrade selected Victorian arterial roads that support the movement of freight across the Strzelecki and Great Dividing Ranges, such as the Traralgon/Maffra Road. A greater particular emphasis on the upgrading of the Benambra-Corryong Road as an alternative key north-south transport route.

Review of the Phillip Island Road Corridor Strategy to support the growth in tourism and freight industry

7. Local Roads

Improve key local roads to meet the needs of the mining, agriculture, tourism and forestry industries.



8. Productivity

Improve industry productivity in Gippsland by maintaining road conditions to appropriate performance standards.

9. Melbourne-Bairnsdale rail line

Improve the capacity of the Bairnsdale-Melbourne rail line to capture opportunities to grow freight on rail, particularly via new emerging bulk freight tasks to support the minerals sector.

Advocate for an increase in rail capacity along the Dandenong Rail Corridor to improve freight services to and from Gippsland.

Duplicate remaining single track sections of the rail line between Pakenham and Moe.

Given its critical importance in linking to export markets, include the Melbourne-Bairnsdale rail line on the National Network.

10. South Gippsland rail line

Maintain State ownership of the South Gippsland rail corridor.

11. Intermodal Facilities

Work with the Commonwealth and State Governments and industry to promote the development of rail-road intermodal facilities at Morwell, West Sale and Bairnsdale where there is a valid business case.

12. Development of the Port of Hastings

The proposed Port of Hastings development will consider the opportunity for the future export of large scale bulk trades from Gippsland, as well as becoming a future container handling facility.

Develop a plan for rail freight access from Gippsland to the Port of Hastings.

Priority Actions *continued*

13. Local port facilities in Gippsland

Work with the Department of Transport, Gippsland Ports and the private sector to maintain and enhance local port facilities to support the oil, gas, fishing industries and recreational boating.

Support the resumption of scheduled sea freight service from Flinders Island to Port Welshpool.

14. Gippsland air freight

Promote the development of an air freight service out of Gippsland, subject to its commercial viability.

15. Improving B-Double access

Consider opportunities to increase B-Double access across the Great Dividing Range, subject to completion of the necessary road network improvements.

16. Cross-border harmonisation of regulations

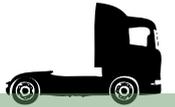
Engage with the National Heavy Vehicle Regulator to harmonise cross-border regulations for heavy vehicles, noting the data and recommendations contained in the SEATS Cross-Border Vehicle Study.

17. High Productivity Freight Vehicles (HPFV)

Consider an extension of the HPFV network to Sale, subject to satisfactory outcomes of the current HPFV trial, completion of the Traralgon to Sale duplication, access control between Longwarry and Nar Nar Goon including the Sand Road Interchange and resolution of issues within Metropolitan Melbourne.

18. Over dimensional vehicles

As part of the Gippsland Regional Infrastructure Study, identify appropriate routes for the import of over-dimensional plant and equipment.



19. Access to training and learning opportunities

Work with education and training providers and local industry to improve access to training and learning opportunities.

20. Employment opportunities in transport and logistics

Work with the Victorian Ministerial Freight Advisory Council, Transport and Logistics Workforce Advisory Group (T&LWAG) and local industry to identify opportunities to increase the diversity and flexibility of the transport and logistics workforce.

21. Socio-economic and community development

In partnership with the State Government, develop and implement the Gippsland Integrated Land Use Plan to accommodate further urban expansion within Gippsland towns, without compromising the potential development of the region's natural resources.



3. Background

3.1. Gippsland Regional Profile

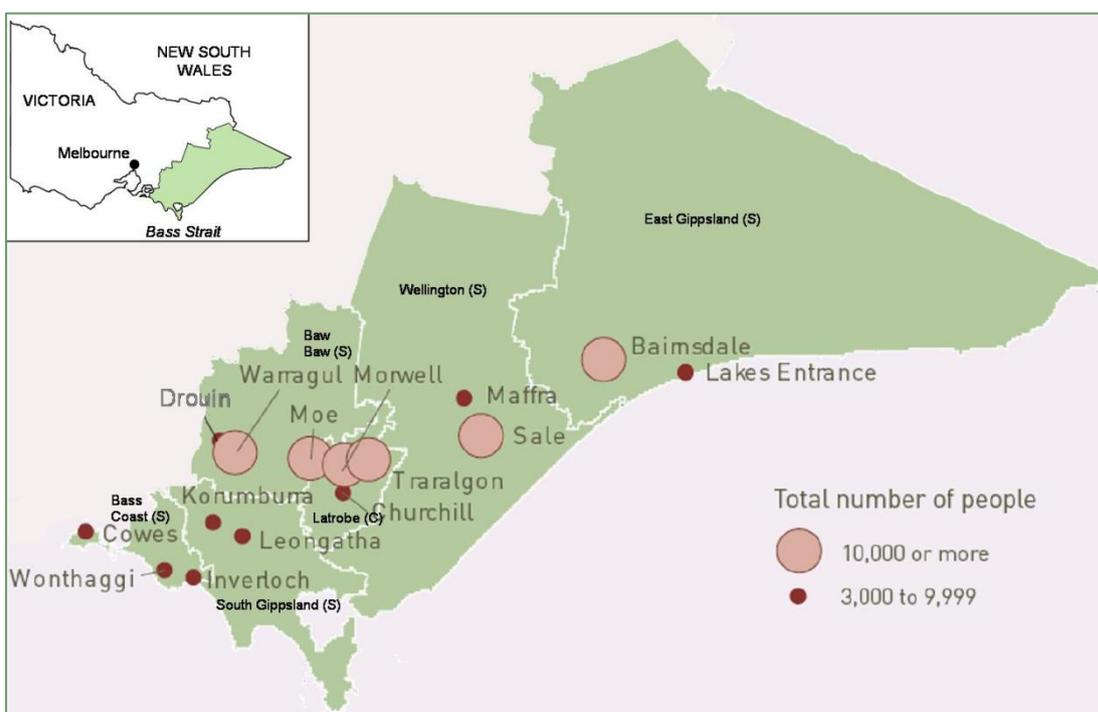
The Gippsland region is located in the south-east corner of Victoria. It extends from the edge of Melbourne’s metropolitan area in the region’s west to the New South Wales border; the Great Dividing Range forms its northern boundary, with Bass Strait bordering the region to the south. The Gippsland region includes six local government municipalities: Bass Coast, Baw Baw, East Gippsland, Latrobe, South Gippsland and Wellington. The region covers around 4.3 million hectares, or 18% of Victoria’s total land area. Approximately 60% of the Gippsland region remains in public ownership, principally as State Forest or National Park.

The region has an estimated population of 260,000, with approximately one third residing in the Latrobe Valley urban area. The region’s population is growing at a faster rate (1.5% per annum) than regional Victoria as a whole (1.3% per annum), with the population estimated to reach 300,000 within the next twenty years. In 2010/11, Bass Coast Shire (3.7%) and Baw Baw Shire (2.8%) were two of the four fastest growing local government areas in regional Victoria. The major towns and regional centres in Gippsland are shown in Figure 1.



The Gippsland region has a diverse regional economy with a total Gross Regional Product (GRP) estimated at \$13.3 billion (2010). The key economic drivers in Gippsland are the agricultural, mining, manufacturing, energy, construction and service sectors. Strong economic linkages exist between the region's primary and secondary industries with electricity and gas supply, dairy products and pulp and paper manufacturing making the largest contribution to economic output in Gippsland. When combined, the agricultural, mining, manufacturing, energy and construction sectors account for 88% of the region's exports, 48% of the Gross Regional Product and 31% of the region's employment.

Figure 1: Towns and Regional Centres in Gippsland



Source: Department of Planning and Community Development (DPCD) 2005

3.2. Project Challenges

The Gippsland region is largely self-sufficient in its energy and water needs. This self-sufficiency has been a significant driver for the diversity of the economy to date, and is likely to stimulate further investment in the years to come. To support this growth, the transport network must have sufficient capacity to manage both export-related freight tasks and production inputs into the region as well as accommodate the needs of a

growing population – particularly in the western part of the region. In addition, the region’s changing demographics may force government and industry to reconsider existing workforce planning strategies.

3.2.1. Development of the coal resource

Victoria has the world’s largest recoverable economic demonstrated resources (EDR) of brown coal. Geoscience Australia estimates that, in 2008, total Victorian EDR was approximately 37.2 gigatonne (Gt), which accounted for 25% of the world’s total recoverable brown coal EDR. About 86% (or 32.2 Gt) of the total recoverable brown coal EDR is accessible, with most of this resource located in the Gippsland Region. The resource life of the accessible EDR is estimated to be 490 years.

Commercial interest has been expressed in potential large-scale multi-billion dollar investments which would develop coal into a wide range of value-added products including: fertilisers, briquettes, synthetic diesel fuel, ethanol and dried brown coal. Although many of the proposals are still only at concept or pilot phase, the potential development of the brown coal resource will place a strain on existing land transport and port infrastructure. The construction, development and product transport requirements resulting from a successful proposal would be of national significance and require the support of all levels of government.

3.2.2. Intensification of primary industry

The Gippsland region’s temperate climate, high quality soils and reliable rainfall have long supported traditional primary industries such as dairy, beef and horticulture. As farmland in drier parts of the State become more marginal, the natural advantages of the Gippsland region will lead to an increased share of the State’s primary production. Urban development pressures in Melbourne are also leading to the intensification of primary industry within the region. Traditional market garden areas near Melbourne, such as Cranbourne, are being redeveloped for residential use. This is resulting in an expansion of horticulture production in key growing areas, such as the Macalister Irrigation District and the Mitchell River District. The reliability and availability of water in these locations has encouraged the conversion of land that was traditionally used for dairy production. This intensification will stimulate opportunities for further investment in the key food manufacturing sector to take advantage of growing export markets in Asia and the Middle East.



Despite suitable soil and climatic conditions, industry growth may be restricted by the lack of safe and efficient connections to farm gate and key markets. Many industries are moving to larger trucks for farm collection, but few local roads have been designed to accommodate such traffic. Failure to maintain and manage an appropriate transport network will compromise safety, efficiency and capacity, and may deter industry investment in the region.

3.2.3. Urban expansion and congestion

Although population growth in Melbourne's south-east in the coming decades is expected to be lower than in previous decades, the residential population south east of Dandenong is still expected to increase from 412,000 in 2006 to 675,000 in 2026 – an increase of 2.5% per annum. Similar population growth rates are predicted in West Gippsland.

This population growth will generate increased demand on the road and rail routes from Gippsland to central Melbourne and beyond, thereby increasing travel times for the movement of freight to and from Melbourne. On the Gippsland rail corridor, any increase in the number of passenger services is likely to require a more strategic approach to rail operations that can take advantage of limited train path availability.

Increasingly, bulk freight originating in the Gippsland region may need to be exported through other ports (e.g. Hastings) to avoid the congestion in the Melbourne metropolitan area. Urban development in West Gippsland may also conflict with existing farming and food manufacturing industry practices. New residents may seek to curtail freight access to towns at certain times, or along particular routes. Alternatively, there may be pressure to rezone rural farming land to accommodate residential growth. These challenges will require urban expansion to be carefully planned and managed, with attention paid to the integration of land use and transport proposals.

3.2.4. Changing demographics

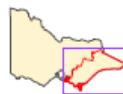
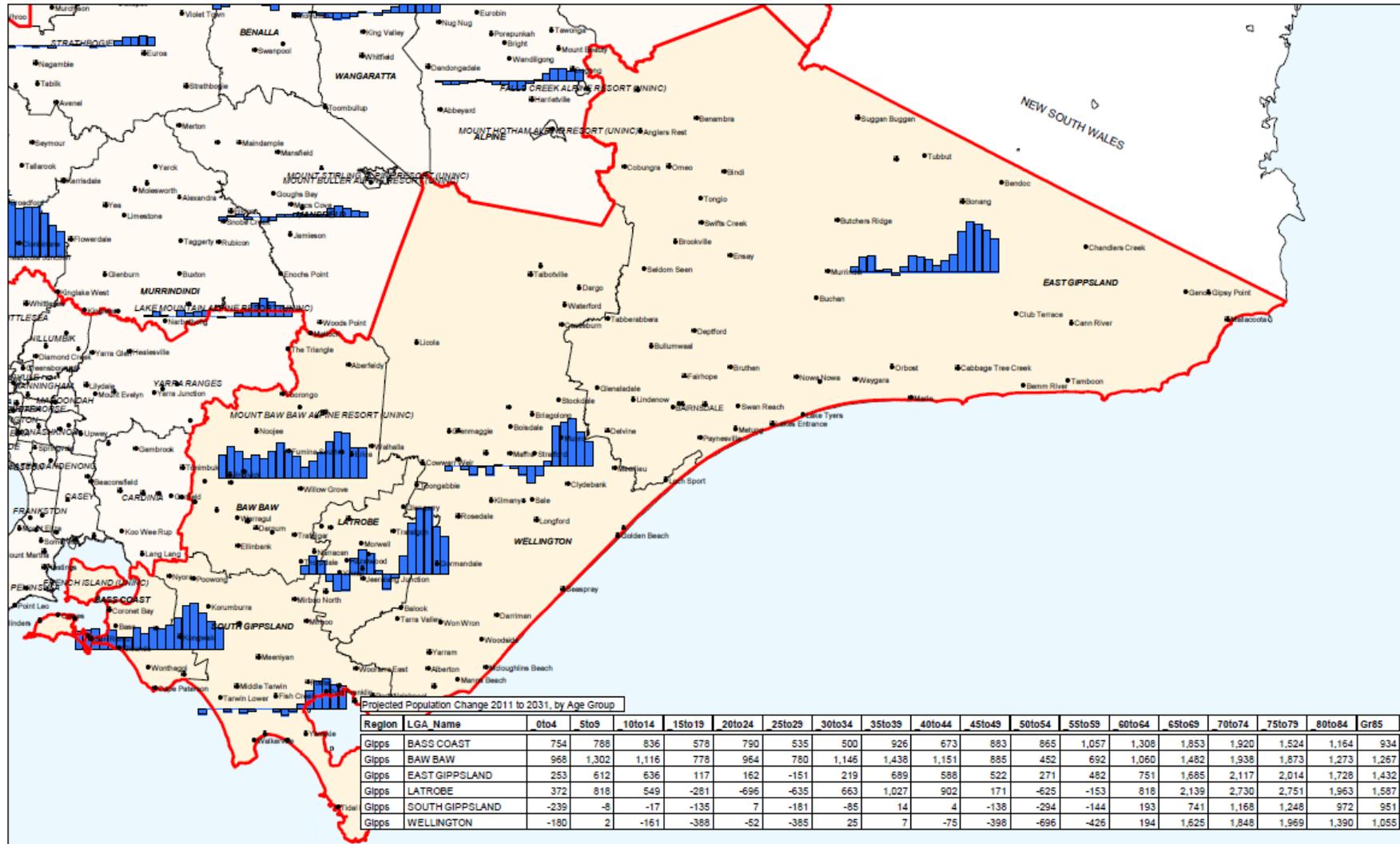
The changing demographics of the Gippsland region, in particular an ageing workforce, may make it increasingly difficult to attract and retain a sufficiently skilled and diverse workforce within the transport and logistics industry. Figure 2 shows the age profile of Gippsland residents in both 2006 and 2026. On current trends, the working age population of the Gippsland region (i.e. the population aged between 15 and 64) is predicted to rise only marginally over the next twenty years.



In contrast, the population aged 65 years or more is expected to more than double from 41,000 in 2006 to 85,000 in 2026.

These challenges will force government and industry to consider more innovative approaches to attracting and retaining skilled workers, if the economic advantages of the region are to be fully realised. The challenge will be particularly acute in the transport and logistics industry, which is already over-represented by older males.

Figure 2: Gippsland Population Change 2011 – 2031



4. Project Objectives



4.1. Freight Strategy Goal

The goal of the *Gippsland Freight Strategy* is to identify the actions that will facilitate the efficient movement of the Gippsland freight task.

4.2. Freight Strategy Objectives

The key objectives of the *Gippsland Freight Strategy* are to identify transport system changes that will:

- Reduce operating costs for business;
- Strengthen the regional economic base;
- Increase safety on the region's transport network;
- Enhance the desirability of Gippsland as a lifestyle and investment destination;
- and
- Improve local and regional environments.



4.3. Freight Strategy - Approach Adopted

The development of the *Gippsland Freight Strategy* was project managed by GLGN and the Department of Transport, in close consultation with other State Government agencies, transport and distribution sector peak bodies, South East Australian Transport Study (SEATS)) and industry. A Project Reference Group (with representatives from local government, industry and SEATS) was established to help formulate the draft Strategy by identifying critical issues and possible actions; a Project Steering Committee including senior State and Local Government representatives was established to oversee the Strategy's development and approve the draft document.

The Strategy outlines:

- The policy context;
- The dimensions of the current and future freight task;
- Critical issues preventing the efficient movement of freight and key actions to address the region's freight needs in each of the following areas:
 - Transport Infrastructure
 - Regulation
 - Skills Development and Employment
 - Strategic and Community Planning
- An implementation plan.

It should be noted that the *Gippsland Freight Strategy* does not include detailed analysis of passenger transport services and traffic (including tourist traffic) needs. It is acknowledged that tourism traffic has an impact of the road network and input to the economic development of Gippsland. Its seasonal impacts may impact on the efficiency of the freight task if not managed correctly.



5. Policy Context

The *Gippsland Freight Strategy* has been developed in the context of current Commonwealth, Victorian and local government policies and strategies. These key policy frameworks highlight the importance of responding to the freight transport demands of the Gippsland region.

5.1. Commonwealth Government

5.1.1. Nation Building Program

The Commonwealth Government's Nation Building Program seeks to assist national, regional economic and social development through funding to enhance the performance of land transport infrastructure. The existing Nation Building Program is delivering significant investment in transport corridors on the National Land Transport Network in the 2009-2014 period, including \$4 billion of investment in Victoria's road, rail and intermodal networks.

The National Land Transport Network is a single integrated network of land transport linkages of strategic national importance, which is funded by Commonwealth, State and Territory Governments. The National Land Transport Network is based on national and inter-regional transport corridors including connections through urban areas, links to ports and airports, rail, road and intermodal connections that together are of critical importance to national and regional economic growth development and connectivity. The Princes Highway between Melbourne and Sale has been recognised as a transport link of strategic national importance, and is included on the National Land Transport Network.



Through the *Nation Building Program*, the Commonwealth and Victorian Governments are investing \$175 million to commence the duplication of the Princes Highway between Traralgon and Sale. This project is evidence of the joint Commonwealth-State commitment to developing and improving this corridor. Similarly, the *Gippsland Freight Strategy* recognises the Princes Highway as the primary corridor linking the Gippsland region to Melbourne and export ports. With the Great Dividing Range acting as a geographic barrier to access from the north, maintaining the function of the Melbourne-Sale corridor is vital.

In May 2012, the Commonwealth Government released details of the next round of the Nation Building Program 2014-2019. The Program's focus will be on investment in infrastructure that supports productivity growth. The program has four key funding streams:

- Moving Freight
- Connecting People
- Safety
- Innovation

The Commonwealth Government has said that priority will be given to projects that align with key national objectives outlined in strategic Commonwealth plans and policies, including the National Ports Strategy, the forthcoming National Land Freight Strategy and the National Urban Policy.

5.1.2. National Ports Strategy

The strategic priorities of the National Ports Strategy are to:

- Promote long term planning for nationally significant ports;
- Ensure port plans can be executed through the implementation of appropriate regulatory and governance settings;
- Improve the landside efficiency, reliability, security and safety of container ports; and
- Promote greater transparency and accountability in planning for ports.

The development of the ports of Hastings, Melbourne, Geelong and Portland are consistent with the strategic priorities of the Strategy.

5.1.3. National Land Freight Strategy

In its June 2012 Report to COAG, Infrastructure Australia cite three key national issues for freight identified through consultation on its draft National Land Freight Strategy. These issues are:

- The need to address road governance issues to enable a coordinated approach to road use for freight;
- The need to ensure that freight is considered in strategic planning and long term land use; and
- The need to secure a broad based commitment to reform.

In helping to address these issues, Infrastructure Australia has recommended a trial of B-triples on the Hume Highway in New South Wales and Victoria. A final strategy is expected to be released in late 2012.

5.1.4. Regional Infrastructure Fund

The Commonwealth Government's Regional infrastructure Fund will provide \$6 billion over 10 years to 2021 to promote development and job creation in mining communities and in communities that support the mining sector. Eligible projects include major large-scale economic infrastructure projects such as rail, road, ports, airports, energy, communications and water. Infrastructure Australia will assess projects to be considered for funding.

There is potential for Gippsland to attract investment from the Fund given the region's nationally significant mining and energy sectors.

5.1.5. Infrastructure Australia

Infrastructure Australia is an advisory body established by the Commonwealth Government in 2008 to help drive the development of a long-term, coordinated national approach to infrastructure planning and investment, focussing on transport, water, energy and communications. Infrastructure Australia advises the Commonwealth Government on Australia's current and future infrastructure needs and priorities and infrastructure policy, pricing, financing and regulation.

In assessing nationally significant infrastructure priorities, Infrastructure Australia seeks submissions from jurisdictions. In its 2012 submission to Infrastructure Australia, the Victorian Government outlined its priority projects for Commonwealth



funding. The submission includes a number of transport projects relevant to Gippsland. These are:

- Port of Hastings including planning for transport links such as the Western Port Highway.
- Princes Highway East upgrades – Traralgon to Sale.
- Princes Highway East – Nar Nar Goon to Longwarry North – removal of unrestricted at-grade access.
- East West Link.
- Dandenong Rail Capacity Program.

The Victorian Government's submission also includes the Government's priorities for planning for longer term infrastructure, including the North East Link. A number of these projects were included as priorities in the Gippsland Regional Plan 2010 for supporting communities and industry in the region.

5.1.6. National Regulatory Reform

In July 2009 the Council of Australian Governments (COAG) agreed to establish single national regulators for the heavy vehicle, rail safety and maritime safety industries.

These national reforms are aimed at improving safety outcomes and driving national productivity and efficiency benefits, by seeking to harmonise regulations and reducing the administrative burden on industry across the three sectors. These will reduce the number of regulators for the three sectors across Australia from 23 to three. The national schemes are expected to commence in 2013.

The new National Heavy Vehicle Regulator will be established as an independent body responsible for regulating all vehicles in Australia over 4.5 tonnes. A critical part of the new regulatory framework will be to harmonise the heavy vehicle legislation currently operating across all the states and territories. The Regulator will administer one nationally consistent set of rules for Australia's heavy vehicle owners, operators and drivers under the Heavy Vehicle National Law, creating efficiency benefits and improved safety for the commercial road freight sector. Complementary pricing reforms are being progressed through a COAG project on heavy vehicle charging and infrastructure investment, with a longer term aim of providing a more efficient and equitable basis for recovering the costs imposed by heavy vehicle usage and for funding infrastructure provision and maintenance. A single, Australia wide registration system is also proposed for heavy vehicles; and this is expected to lead to greater efficiencies by comparison with the eight different systems that currently exist.



The objective of the rail safety regulatory reform is to have one national rail safety regulator, one piece of national rail safety legislation, and a common approach across Australia to the safety regulation of rail transport operators and railway operation. National regulation of rail safety is expected to lead to improved national productivity and freight efficiency, principally due to a reduction in administrative burden and less paperwork. These reforms will be of particular benefit to long haul interstate rail operations.

The maritime reforms will develop a national approach to the safety regulation of domestic commercial vessels and will establish the Australian Maritime Safety Authority (AMSA) as the single national regulator for domestic commercial vessel safety in Australia. Vessels covered by the new national scheme include some that have traditionally been beyond the reach of the Commonwealth Constitutional powers, requiring Victorian legislation to be enacted to apply the national law. For example, owners of fleets of unpowered hire and drive vehicles (such as canoes and kayaks) will be captured under the national scheme (and hence will be regulated by AMSA once the national scheme commences).



5.2. Victorian Government

5.2.1. Transport Integration Act 2010

The Transport Integration Act 2010 brings together, for the first time, all elements of the transport system under one statute to ensure a focus on delivering a clear set of economic, social and environmental objectives. Under the legislation, the following decision-making objectives must be applied when decisions related to the planning, provision, management and use of the transport system:

- Integrated decision-making;
- Triple bottom line assessment;
- Equity between people;
- Transport system user perspective;
- Precautionary principle;
- Stakeholder engagement and community participation; and
- Transparency.

This integrated approach has guided the development of the *Gippsland Freight Strategy*, and will facilitate better planning and delivery outcomes for the initiatives identified in the plan.

5.2.2. Victoria the Freight State

Victoria - The Freight State the Victorian Freight and Logistics Plan (the Plan) released in August 2013 outlines the long term strategy to improve freight efficiency, grow productivity and better connect Victorian businesses with their markets, whether local, national or international.

The Plan is supported by a series of key directions, strategies and actions intended to provide greater certainty to the private sector and to help inform business planning and investment decisions. These have been developed through extensive data and evidence gathering and by listening to the views of stakeholders, including those businesses operating in the freight and logistics sector, those which depend on efficient freight movements and the local government community.

The Plan uses forecast modelling of future growth and trends to provide detailed scenarios of the freight and logistics sector up to 2050. The information has been

captured through multiple independent analysis and all measurements indicate that the freight task is estimated to roughly triple in size by 2050.

This growth, faster than population growth and broadly in line with economic growth, presents a major challenge if Victoria is to maintain a strong and competitive freight and logistics sector.

To meet future challenges the Plan contains strategies and actions proposed for implementation over the next one to five years involving a combination of project delivery, project planning, network efficiency and regulatory reform initiatives.

These strategies and actions are designed to ensure Victoria is able to meet the long-term goals and objectives of the Plan in a flexible and affordable manner.

The strategies and actions have been developed on the basis of extensive technical studies and evidence gathering, including consultation input from a wide range of industry stakeholders through the Ministerial Freight Advisory Council (MFAC) and a series of ten 'roundtables' conducted across metropolitan and regional Victoria with many key stakeholders.

All projects/initiatives requiring budget funding will be subject to future Government consideration in relation to budget capacity, business cases and the rigorous use of cost-benefit analysis.

The strategies and actions cover:

- freight gateway capacity
- better use of the freight network
- an efficient freight network
- land use planning and protections
- planning for efficient and sustainable urban freight movements
- planning for efficient and sustainable regional freight movements

5.2.3. Metropolitan Planning Strategy

During 2012-14 the Victorian Government will be preparing a new metropolitan planning strategy to manage Melbourne's growth and change. The strategy will contribute to the overall vision for the State including links with regional Victoria.



The strategy will help guide Melbourne’s growth and change over the next 30-40 years. It will give communities, businesses and local government the confidence, flexibility and certainty needed to make informed decisions about their future.

A key feature of this planning updates is establishing efficient and effective links between Melbourne and Victoria’s regional centres, including Latrobe Valley. The Casey- Cardinia area to Melbourne’s south-east is a significant growth corridor – this growth will have a significant impact on the freight movements that moves between Melbourne and Gippsland.

5.2.4. Regional Growth Plans

The *Regional Growth for the Future* program will deliver eight Regional Growth Plans that are the responsive to each of Victoria’s region’s strategic aspirations and directions set out in Regional Strategic Plans. Regional Growth Plans will translate and integrate emerging State-wide regional planning policy and provide the basis for regional coordination and planned provision of infrastructure to support regional employment and communities.

Transport infrastructure (both for private use, tourism and for freight) within and between regions and regional centres and nationwide access routes will be considered in planning for future growth. The regional growth plans may recommend further investigation of additional transport infrastructure and transport corridors as a result of potential increased growth.

The Gippsland Integrated Land Use Plan is being developed as an action emerging from the Gippsland Regional Plan and will become one of the State Government's Regional Growth Plans.

5.2.5. The Latrobe Valley Industry and Employment Roadmap

The *Latrobe Valley Industry and Employment Roadmap* (the Roadmap), is the Victorian Government's framework for guiding future investment in the Latrobe Valley, outlines a number of strategic directions to diversify its economy in order to meet the significant structural adjustment challenge facing the region.

The energy sector is an important contributor to the region's economy and the adjustment task, forced on the region by the introduction of a national carbon price, will lead to a restructure of the sector resulting in potential job losses, decrease in economic activity and flow-on effects in the broader economy.

The Victorian Government has expanded the \$10 million Latrobe Valley Industry and Infrastructure Fund (LVIIIF) with an additional \$5 million to broaden the scope to align with the strategic directions of the Roadmap and support businesses to adjust, including small businesses through the provision of smaller grants. Specifically, the LVIIIF will work to strengthen the workforce, invest in infrastructure, support enhanced competitiveness and innovation and attract and facilitate investment into the Latrobe Valley.

5.2.6. Regional Growth Fund

The Victorian Government's \$1 billion Regional Growth Fund will provide more flexible and responsive funding to assist business and industry in regional Victoria. Funding will also support studies to investigate the technical or economic feasibility of potential projects.

The *Regional Growth Fund* will facilitate the strengthening of partnerships to investigate local needs and better inform local priorities. The Fund will provide flexible and responsive funding that will support communities to be more resilient, contribute to a better quality of life and further strengthen the Victorian economy.



For the next four years, \$500 million will be allocated to focus of the following areas:

Strategic Initiatives component - \$300 million

- Economic Infrastructure Program
 - Growing and Sustaining Regional Industries and Jobs
 - Transforming and Transitioning Local Economies
 - Building Strategic Tourism and Cultural Assets
 - Energy for the Regions
- Developing Stronger Regions Program
- Building Stronger Regions*
 - Regional Partnerships Facilitation Fund
 - Council Planning Flying Squad
 - Local Solutions Year 12 Retention Fund
 - Bushfires 'open for Business' Loans

Local Initiatives component

- Local Government Infrastructure Program - \$100 million
- Putting Locals First Program - \$100 million

The remaining \$500 million will be allocated for 2015-2018.

5.3. Local Policies

5.3.1. Gippsland Regional Plan 2010

Strategic Priority - Gippsland Gateways

Extend Gippsland's gateways to market through improvements to rail, roads and ports and in particular the:

- Establishment of the North East Link direct link between the Eastlink and Hume corridors.
- Construction of East West Link as a priority to create an alternative to the Monash-West Gate Freeway and enhance connectivity for Gippsland's industries to Melbourne and other regions.
- Capability for Gippsland's bulk exports.
- Enhancements to local ports including Lakes Entrance.
- Improvement of the regional community's access to regional services, education and training, employment opportunities and recreational activities.

Continuing to engage with the Department of Transport on the Transport Solutions Framework, using the strategic story and projects identified in this *Gippsland Freight Strategy* as a primary source.

5.3.2. Gippsland Transport Strategy 2008

The *Gippsland Transport Strategy 2008* was developed by the Gippsland Local Government Network to guide collective effort in improving the region's transport infrastructure and services.

The strategy identifies five major challenges facing the development of transport projects in the Gippsland region:

- The movement of project cargo in and export cargo out (e.g. as a consequence of major coal and energy projects).
- Carbon pricing and the rising cost of fuel.
- Urban encroachment on western Gippsland.
- Competing demands on rail services from increasing passenger demand and an increased freight task moving by rail.



- Continued reliance on the Port of Melbourne for the growing containerised export task and a greater need for effective connections to the Port of Hastings, particularly for bulk exports. In terms of regional priorities for future investment, four were identified by the strategy.
- Connectivity improvements, particularly from Gippsland into Melbourne, to the Victorian ports and the interstate freight rail network.
- Improvements to intra-regional connectivity to ensure that supply chain flows around identified bottlenecks are improved.
- Development of road/rail intermodal connection points to increase the export potential for bulk commodities, as well as mitigating against possible future fuel price rises and carbon pricing considerations.
- Resolution of non-infrastructure issues (e.g. through operational or regulatory changes) that enables the transport network to meet the needs of private, business and commuter travel within Gippsland.

5.3.3. South Eastern Australian Transport (SEATS) Cross Border Heavy Vehicle Freight Study (2012)

The *Cross Border Heavy Vehicle Freight Study* was undertaken by the SEATS to support its strategic objective being *to promote efficient and effective freight movement*. The study provides a better understanding of the nature and indicative impacts of cross

border regulatory and physical infrastructure constraints on heavy vehicle freight movements between Victoria and New South Wales.

The study which was supported by the Victorian Department of Transport and Transport for New South Wales will provide the opportunity for initiatives to be assessed which can improve the productivity for cross border freight operators. The introduction of the National Heavy Vehicle Regulator on 1 January 2012 provides a mechanism for regulatory efficiencies to address constraints identified in the study.

5.3.4. Latrobe Valley and East Gippsland Railfreight Task Assessment (2012)

The *Latrobe Valley and East Gippsland Railfreight Task Assessment* provides a detailed analysis of current and potential railfreight users in Gippsland. The assessment was undertaken to inform Latrobe City and East Gippsland Shire Councils of potential operators for the Gippsland Logistics Precinct at Morwell and an intermodal facility at Bairnsdale.

The assessment examines the current freight task and logistics arrangements by sector, analyses future growth in the freight task and provides advice on the future use of rail. It provides advice on the issues and opportunities for the operation of the intermodal facilities as well as analysis of broader regional transport infrastructure requirements.

6. The Dimensions of the Freight Task



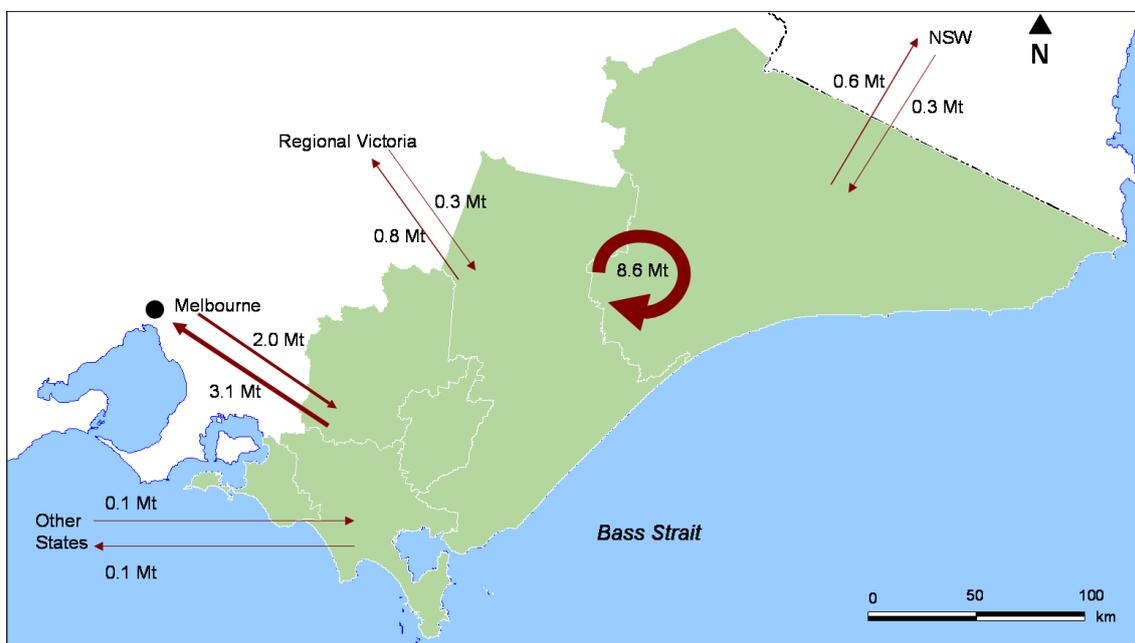
In 2001, the total Gippsland freight task was estimated at approximately 16 million tonnes per annum (Figure 3). Of this freight task, approximately 54% (or 8.6 million tonnes per annum) moved to a destination within the region. The majority of the remaining freight task (32%, or 5.1 million tonnes per annum) was transported to and from Melbourne. More than 900,000 tonnes of freight (primarily timber to the Port of Eden) was transported across the Victorian-New South Wales border.

More recent data on the total Gippsland freight task is not available. However, applying the Bureau of Transport and Regional Economics' latest freight model suggests that the total regional freight would have increased by approximately 50% over the last decade, to 24 million tonnes per annum.

Traditionally, the Gippsland economy has relied on primary and secondary production, with the main generators of freight movements in the region coming from the dairy, quarrying and forestry industries. Other industries are significant in terms of their economic contribution and freight demand in the region, but are relatively small in comparison to the major supply chains. These include the livestock (especially beef cattle and lamb), horticulture and fishing industries. While the coal, oil and gas industries have long played a critical role in underpinning the region's economy, these sectors generate only a very small freight transport task at present, with the vast majority of product either consumed on-site by power generation facilities (coal) or transported to Melbourne via pipeline (gas).



Figure 3: Estimated Gippsland Freight Task



Source: Australian Bureau of Statistics (ABS) 2001

6.1. Mining

6.1.1. Coal

The coal supply chain currently constitutes only a very small proportion of the total Gippsland freight transport task. This is because the vast majority of coal mined within the Latrobe Valley is consumed by power generation facilities located at the site of the coal deposits and coal is moved from the mine to the power stations using conveyor belt systems (Figure 4). In 2008/09, 68 million tonnes of brown coal was used in Victoria for energy generation, while less than 300,000 tonnes of coal products (briquettes and carbon products) were transported to domestic and international customers. Concerns over the high carbon dioxide (CO₂) emissions that are produced through burning sub-bituminous brown coal have stimulated investment in new technologies.

These technologies would reduce the moisture content of brown coal and allow for the development of a range of coal by-products as potential alternative energy sources, including briquettes, diesel, ethanol and dried brown coal. High-quality fertilisers are another known by-product of brown coal.

The Victorian Government is committed to working with industry to maximise the value of Victoria's coal resources in order to best deliver the economic, social and environmental objectives for local communities and Victoria.

The Victorian Government is encouraging companies developing low emission coal upgrading technologies in the Latrobe Valley and is progressing a new coal allocation framework to open up new reserves of coal.

Although many of the coal derivative proposals are still only at concept or pilot phase, there is potential for multibillion dollar investment to occur should the technology be proven and environmental conditions met. If all such investment were to occur, it would generate a very significant freight task, potentially in the order of 30 million tonnes per annum by 2030 (Figure 5). To put this freight task in context, this volume would represent an increase of 12% in Australia's current coal exports.

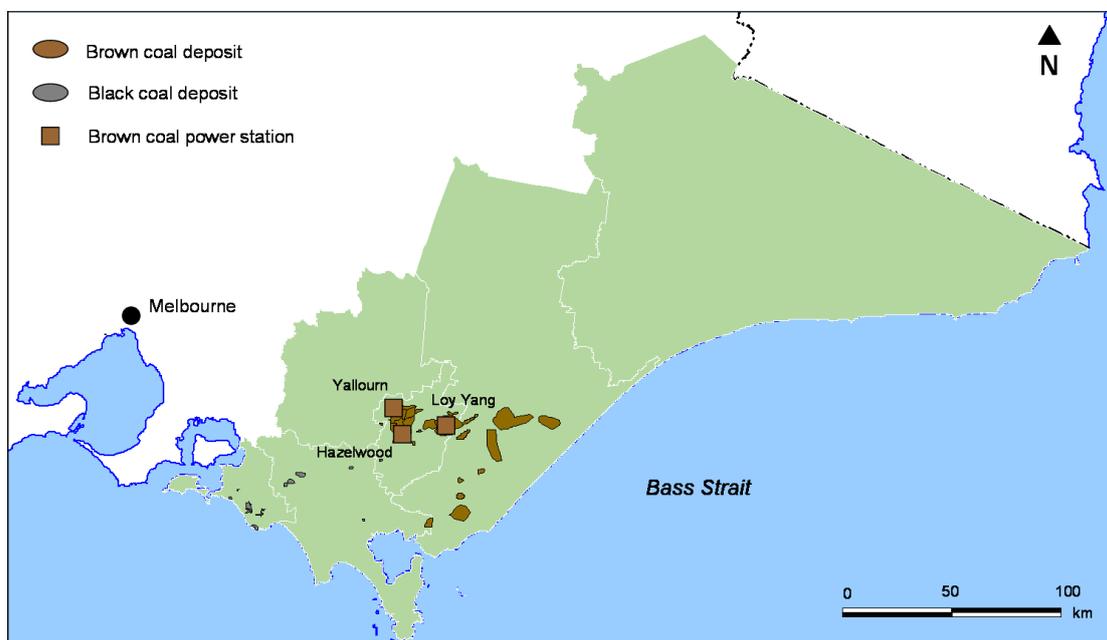
In the short-term (i.e. within five years), the freight task is expected to be largely driven by an increase in market demand for coal derivative products that are based on proven technologies. Key products include high value-added hardened brown coal (e.g. briquettes), and fertilisers/soil conditioners containing urea produced through brown coal gasification. Escalating global prices for energy and fertiliser are increasing the economic viability of manufacturing these products from brown coal. Analysis suggests that there is a potential, short term demand for one million tonnes per annum of each product, with briquettes primarily destined for export markets and fertilisers replacing existing imports.

Briquettes would be transported by road or rail to either Melbourne (if containerised) or Geelong (if bulk). Bulk transport through to Geelong appears to be the preferred option for project proponents, subject to maintaining product integrity. Fertilisers would be transported by road for local and regional distribution, but could be transported by rail to Geelong for interstate distribution.

Early entrants to the dried brown coal market could increase the freight task by a further two million tonnes per annum late in the decade.



Figure 4: Gippsland Coal Reserves and Power Stations



Source: Department of Primary Industries (DPI) 2010

Longer-term investment by the coal derivatives industry could necessitate significant upgrading of transport infrastructure both inside and outside region. While road, rail and port improvements could accommodate most product requirements, pipelines (along existing easements) may also be an appropriate form of product transport.

The specific transport infrastructure requirements for potential developments which could see the need to export between 5 and 20 million tonne per annum (Mtpa) will need to be considered by the Victorian Government as part of the broader investment strategy to support a diversified coal industry.

Once this process is completed and there is an increased investment certainty by project proponents, this *Gippsland Freight Strategy* could be reviewed to ensure that the necessary infrastructure initiatives are appropriately captured.

ACTION 1

Work with the Victorian Government to plan for improved transport connections in Gippsland to facilitate the development of new clean coal industries.

6.1.2. Oil and Gas

Since the opening of the Bass Strait oil and gas fields in 1969, almost four billion barrels of crude oil and around seven trillion cubic feet of gas have been produced. In 2008, the oil and gas fields of the Gippsland Basin yielded 31.3 million barrels of crude oil and condensate (or just over of 86,000 barrels per day). Total annual gas production was 271 billion cubic feet of sales gas, and 12.2 million barrels of natural gas liquids (LPG and ethane). At current rates of production it is estimated, there are sufficient gas reserves in the Gippsland Basin for production to continue for a further 30 years.

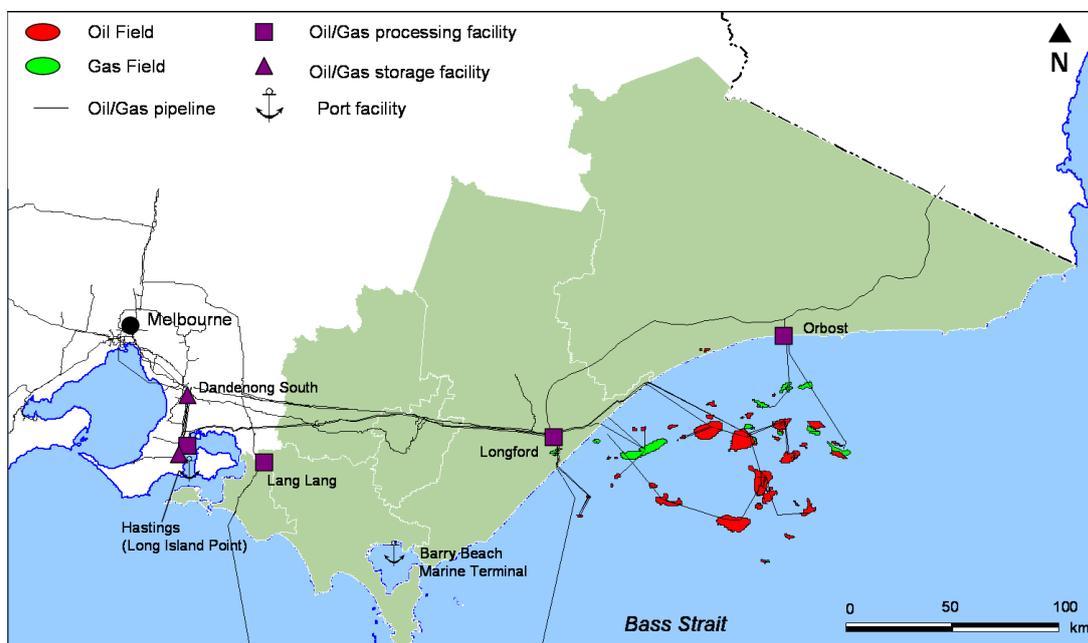
Figure 5 shows the oil and gas reserves, pipelines and processing and storage facilities in the Gippsland region. The Bass Strait oil rigs (operated by ESSO) feed a network of 600km of underwater pipelines and keep the oil and gas flowing 24 hours a day. Most of the crude oil and raw gas is initially piped to a major processing facility located at Longford, near Sale. The Longford facility has a peak production capacity of about 1,000 terajoules¹ (TJ) of natural gas and over 8 million litres of raw LPG. From Longford, natural gas is piped to Melbourne and Sydney, while heavier gas liquids and stabilised crude oil is piped to Long Island Point (near Hastings) for further processing and storage; naturally occurring liquid gases (e.g. LPG) are piped to a storage facility in Dandenong South. From Long Island Point, most of the oil and gas products are either shipped through the Port of Hastings, or piped to refineries in Altona and Geelong. However, road transport provides an important freight task in the distribution of LPG (from both Dandenong and Hastings) to locations throughout the state.

The Exxon-Mobil berth at Barry Beach Marine Terminal in South Gippsland provides an important service point for its oil and gas platforms in Bass Strait. Each year, around 70,000 tonnes of cargo are shipped to the Bass Strait platforms from Barry Beach. Other petroleum operations in the region include:

- Santos's Patricia Baleen plant in Eastern Victoria (near Orbost) feeds gas into the Eastern Gas Pipeline and has a capacity of about 75 TJ/day.
- Roc Oil produces oil from its Basker Manta field through a floating production storage and off-take (off-loading) vessel. Peak oil production is 20,000 barrels per day and the shuttle tankers deliver crude to east coast refineries.
- The Origin Energy processing plant near Lang Lang in Gippsland services the Yolla field, which is located in the Bass Basin within Tasmanian waters. The plant delivers annually, about 23 petajoules) of sales gas per annum (54 TJ/day average), 80,000 tonnes of LPG and 1.2 million barrels of condensate.



Figure 5: Gippsland Oil and Gas Reserves and Connection



Source DPI 2010

6.1.3. Sand and Stone Extraction

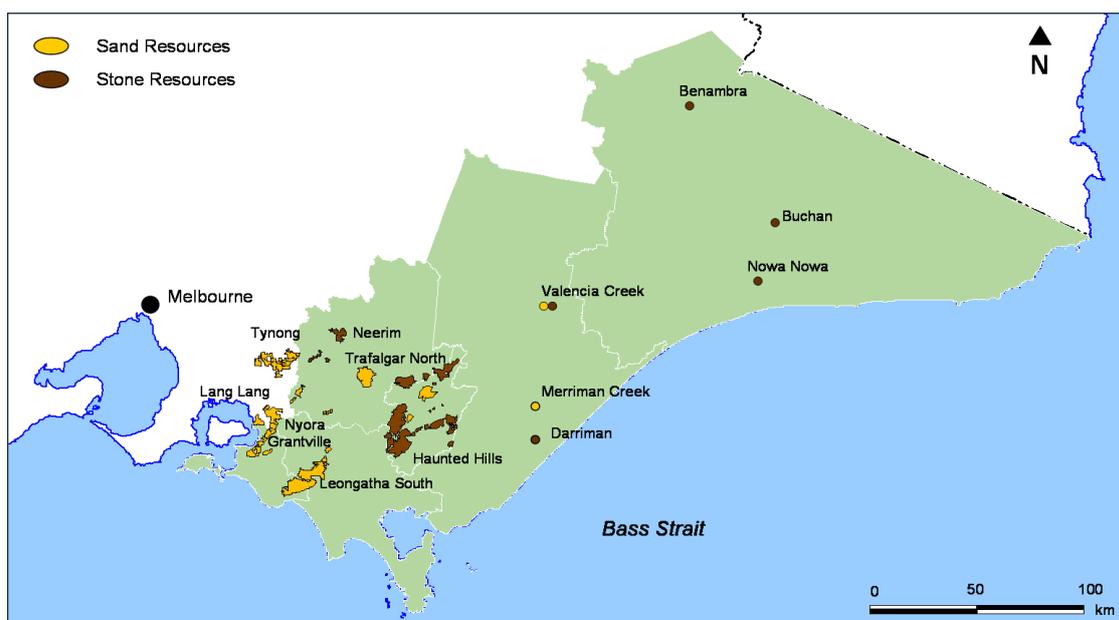
The *Melbourne Supply Area – Extractive Industry: Interest Areas Review* (2003) identifies the key current and future sources of sand and stone for use in the Melbourne construction industry (Figure 6). Along with the Tynong deposits (immediately west of the Bunyip River), the Lang Lang – Grantville – Nyora region of West Gippsland is identified as a major source of sand due to the high quality of the deposits and their proximity to Melbourne. Deposits at Neerim and the Haunted Hills are an important source of granite and basalt. Extensive resources of sand, gravel and granite are also found at Benambra, Darriman, Merriman Creek, and Valencia Creek. These deposits are largely used for construction within East Gippsland. High-quality limestone is sourced from Buchan and Nowa Nowa in East Gippsland and used in the production of quicklime, flux, stockfeed, paper manufacture and other agricultural purposes.

The extraction and processing of sand, clay, gravel, crushed rock and stone for use in the construction of domestic, commercial and civil infrastructure is the region's single largest freight transport task. Including the granite and sand deposits extracted at Tynong, approximately 2.5 million tonnes of bulk quarry materials are extracted from the Gippsland region every year. Although all material that is currently extracted in

Gippsland is transported by road, rail has previously been used to transport sand from Lang Lang to Spotswood for use in glass manufacture. The rail sector has the capacity to transport product to Melbourne from locations close to rail infrastructure, principally in the Morwell area.

The Gippsland region is expected to continue to be major source of material for the Melbourne construction industry. Sites at Maryvale, Trafalgar North and Leongatha South have been identified as potential future sand and gravel resources once the Lang Lang – Grantville – Nyora quarries are depleted. Baw Baw Shire Council has recognised the importance of the Trafalgar North sand resource by placing an Environmental Significance Overlay over the deposit.

Figure 6: Extractive Industry - Areas of Interest



Source: Olshina & Burn 2003; DPI 2010

6.1.4. Minerals

The Gippsland region has long history of mining for both precious and base minerals, particularly in the Walhalla and Omeo-Swifts Creek areas. The Walhalla goldfield is currently the subject of a long term gold exploration project by Orion Gold, who hold the majority of exploration licences in the Walhalla-Woods Point district.

The Independence Group is programming development of a major copper mine at Benambra which will generate 180,000 tonnes per annum of containerised



concentrate. This product could be transported by road to port, or by road/rail ex the Bairnsdale intermodal facility.

Other major mining activities being investigated include significant minerals sands reserves north of Stratford (Metallica) and iron ore at Nowa Nowa (Eastern Iron). The prospect of mining operations in the region would also require large-scale construction materials, service equipment and ongoing supplies to be transported into the region via the road network.

6.2. Agriculture

The Gippsland agriculture industry is the region's largest generator of freight, with an estimated freight task of 4.3 million tonnes per annum. Approximately 80% of this freight moves within the region from farm-gate to processing centres. Of the remaining 800,000 tonnes, some 84% is moved (primarily as processed product) to Melbourne for both domestic use and export, with small quantities moved to New South Wales, South Australia and other parts of regional Victoria.

6.2.1. Dairy

The Gippsland region produces 32% of Victoria's total dairy output, or 2.1 billion litres of raw milk, and accounts for about a third of Victoria's total dairy revenue. There is a large dairy-processing sector within the region producing fresh pasteurised milk, milk powder, butter, cheese and other products for domestic and significant export markets. Several speciality cheese businesses also exist in Gippsland producing a wide range of high quality cheeses and other value added dairy products. Milk is collected from farms and transported to production facilities at Darnum, Korumburra, Leongatha, Longwarry, Maffra, Morwell and Poowong (Figure 7). Increasingly, the dairy

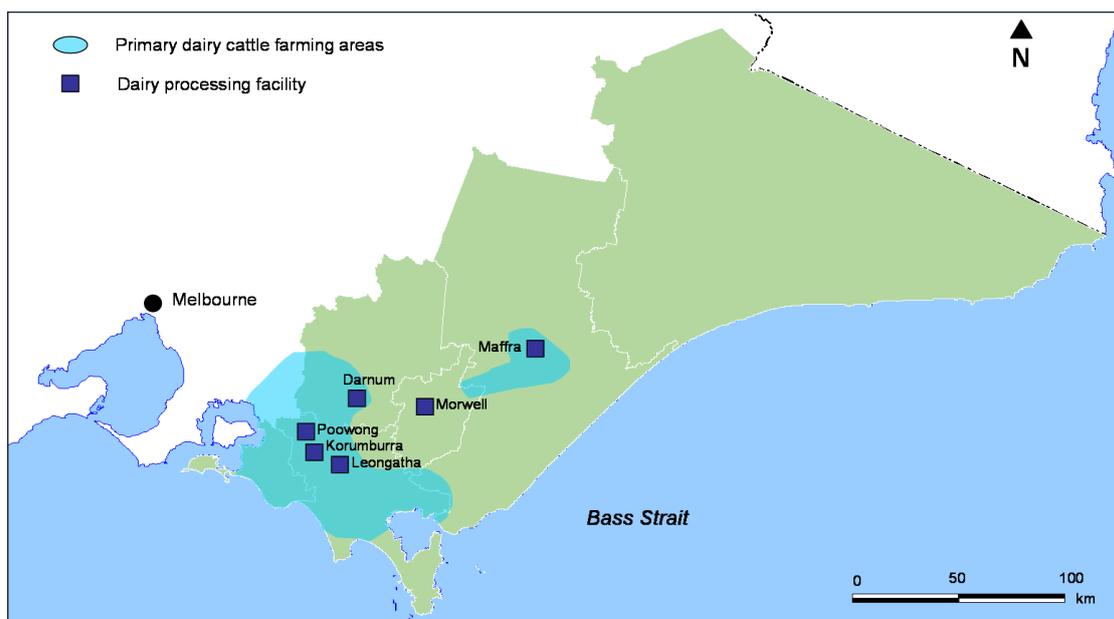


industry is shifting to the use of B-Double trucks for farm collection.

Product from dairy processing plants is transported by heavy vehicle either to other facilities outside the region (e.g. distribution centres in the Melbourne metropolitan area) or to the Port of Melbourne for export. Some 300,000 tonnes a year of dairy products are currently transported to Melbourne each year, including approximately 30,000 tonnes of exports. This entire freight task is transported by road. Stock feed is the main input to the dairy industry, and is actually a larger freight task than the outbound movement of dairy products. As the Gippsland region does not have its own significant grain industry, it is estimated that as much as one million tonnes of grain and stock feed flows into the region each year. Much of the grain is sourced from north-west Victoria and processed in Melbourne for distribution into Gippsland by road. There has been local interest expressed in establishing a central distribution hub for feed grain, which would store product railed in from the State's production areas.

Gippsland's temperate climate and the reliability of its rainfall have provided some certainty to dairy farmers and processors alike about the future of the industry, and are encouraging further investment. For example, Burra Foods has completed a new skim milk powder plant in Korumburra, which doubled its output to approximately 40,000 tonnes per annum. All of this product is transported to Melbourne by road.

Figure 7: Gippsland Dairy Industry – Key Production and Processing Locations



Source: DPI 2006b



6.2.2. Livestock

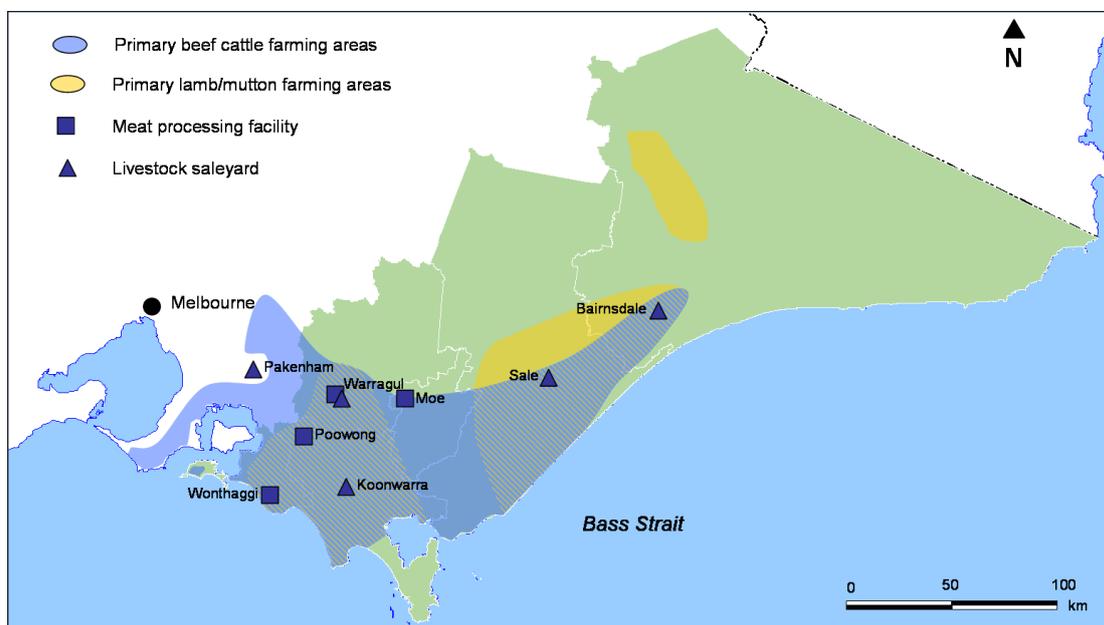
Gippsland has a significant grazing industry based predominantly on beef and prime lamb production. The cattle and sheep industries generate truck movements within the region from farm gate to saleyards at Bairnsdale, Koonwarra (Leongatha), Pakenham, Sale and Warragul (Figure 8). Livestock saleyards north of the Great Dividing Range (e.g. at Corryong) are also an important destination for graziers in East Gippsland.

The Victorian Livestock Exchange (VLE) facility at Koonwarra is the largest undercover livestock sales complex in the Southern Hemisphere, and has a throughput of more than 350,000 head of cattle each year, with auctions held three days each week. The facility generates traffic volumes in the order of 500 vehicles per day including on non-auction days where livestock transporters are bringing stock into market. In recent years, smaller saleyards have been progressively closed and consolidated into larger regional facilities. In the Gippsland region, saleyards have closed at Dandenong (1998), Yarram (2006), Korumburra (2007) and Traralgon (2008). Further rationalisation of sites is expected, with facilities such as VLE Pakenham under pressure due to urban expansion. If this site were to close, many of the sales would relocate to VLE Koonwarra, resulting in a predicted doubling of freight volumes.

A significant proportion of the high value grass-fed beef and lamb produced in Gippsland is transported from saleyards to export-focussed meat processing plants at Moe, Poowong, Warragul and Wonthaggi. Facilities within the Melbourne metropolitan area at Cranbourne, Dandenong and Pakenham also serve the Gippsland market. The emerging organic industry is quickly developing in Gippsland, with Radfords of Warragul recognised as Victoria's only certified organic abattoir.

Gippsland is a major supplier of cattle for the live dairy export market. Approximately 30% (or more than 19,000 head of cattle) of the total live cattle exports are sourced from Gippsland. These cattle are transported from saleyards in Gippsland to Portland by road. The trade is expected to continue in the short to medium term with strong export demand from China. Gippsland is also a major source of sheep for live export. An estimated 300,000 sheep are moved by road annually from Gippsland to Portland. A further 150,000 sheep are moved through Gippsland from the Eden-Monaro area in New South Wales. This equates to some 1,125 semi trailer trips each way per annum. In addition to export supply, Victoria is also one of the major domestic sources of feeder steers for Queensland and New South Wales feed lots.

Figure 8: Gippsland Livestock Industry - Key Production and Processing Locations



Source: DPI 2006c

6.2.3. Horticulture

The horticultural industry in Gippsland produces more than 16% (by weight) of Victoria's total vegetables, including more than 85% of Victoria's beans, snow peas and sweet corn. Although some regional manufacturers (e.g. Vegco in Bairnsdale and Select Produce in Korumburra) are utilising value-adding techniques such as cleaning and packaging to meet 'consumer ready' markets, the majority of product is supplied fresh to both the Melbourne and interstate domestic markets. The product is time sensitive and extremely reliant on good linkages out of the region to ensure competitiveness. The estimated freight task to Melbourne is in excess of 100,000 tonnes a year, with the majority of this freight originating in one of three regions: the Maffra-Longford-Lindenow region of East Gippsland (asparagus, beans, broccoli, cabbages, carrots, lettuce, sweet corn); the Thorpdale region of West Gippsland (onions, potatoes); and the region south of Korumburra (snow peas) (Figure 9). Approximately two thirds of horticultural output from the Maffra-Lindenow region (approximately 36,000 tonnes) is sent to Sydney via the Princes and Monaro Highways.

As with other industries, climate change is expected to have a significant impact on future horticulture production. East Gippsland's milder winters (compared to other Victorian regions) have already encouraged the cultivation of crops that would be more difficult to grow elsewhere in the State. With rainfall in East Gippsland likely to be more reliable than many other parts of the State, new horticultural opportunities

may arise. The Gippsland Climate Change Adaption Project is a joint venture between the Department of Primary Industries, Melbourne University and GLGN, which is researching long term weather projections in the region with a view to identifying alternate agricultural production in a climate-variable setting. This is particularly the case in the Macalister Irrigation District (near Maffra), where intensive dairy farming over many years has resulted in poor environmental and water quality on site, and significant offsite impacts including high nutrient loads. Some farmers have begun converting marginal dairy pastureland into cultivated land, for intensive horticulture production. These trends will lead to more concentrated traffic flows, particularly to the east where total traffic volumes are coming off a low base.

Figure 9: Gippsland Horticulture Industry - Key Production and Processing Locations



Source: ABS 2008

6.3. Fishing

The fishing industry is an important contributor to the Gippsland economy with key ports located at San Remo, Port Albert, Port Franklin, Port Welshpool, Lakes Entrance and Mallacoota. The main fishing in the region is based around Lakes Entrance, Victoria’s largest fishing port. Approximately 60 vessels operate out of Lakes Entrance bringing in more than 10,000 tonnes of fresh fish, scallops and bait fish each year. While total volumes are small compared to other commodities, the importance of the

fishing industry stems from the high value of its produce. The majority of the catch which is landed at Lakes Entrance is transported to Melbourne, with 50-60 per cent of the fresh fish sold at the Melbourne fish markets being caught by the Lakes Entrance fleet. A significant proportion of the catch (approximately 20% of the fresh fish catch) is transported to Sydney.

While smaller in catch volume than Lakes Entrance, the port facilities of Corner Inlet (Port Welshpool, Port Franklin and Port Albert) also play an important role in the freight task. Similar to the product unloaded at Lakes Entrance, fish is transported daily to the Melbourne market, including the higher quality inlet species like King George whiting that is required by the restaurant trade. Due to its proximity to the main domestic markets (travel time to Melbourne is almost two hours less than from Lakes Entrance); many operators unload their catch at Port Welshpool in preference to ports further east.

6.4. Forestry

With native forests and both softwood and hardwood plantations spread throughout Gippsland, the forestry and forest products industry operates the region's most complex supply chain. Approximately 3.0 million m³ of logs is harvested each year from plantations and native forests located within the Gippsland region. The biggest single consumer of the harvested product is the Australian Paper pulp and paper mill at Maryvale, which converts 1.4 million m³ of log and sawmill chip into 1 million tonnes of pulp and paper products each year. The pulp and paper is transported by both rail and road from a dedicated intermodal facility at Maryvale to Melbourne for distribution to the domestic (60%) and export (40%) markets. A further 0.6 million m³ of native logs are transported to woodchip mills at Eden and Geelong for chipping and export. Approximately 65% of this freight task heads east to New South Wales.

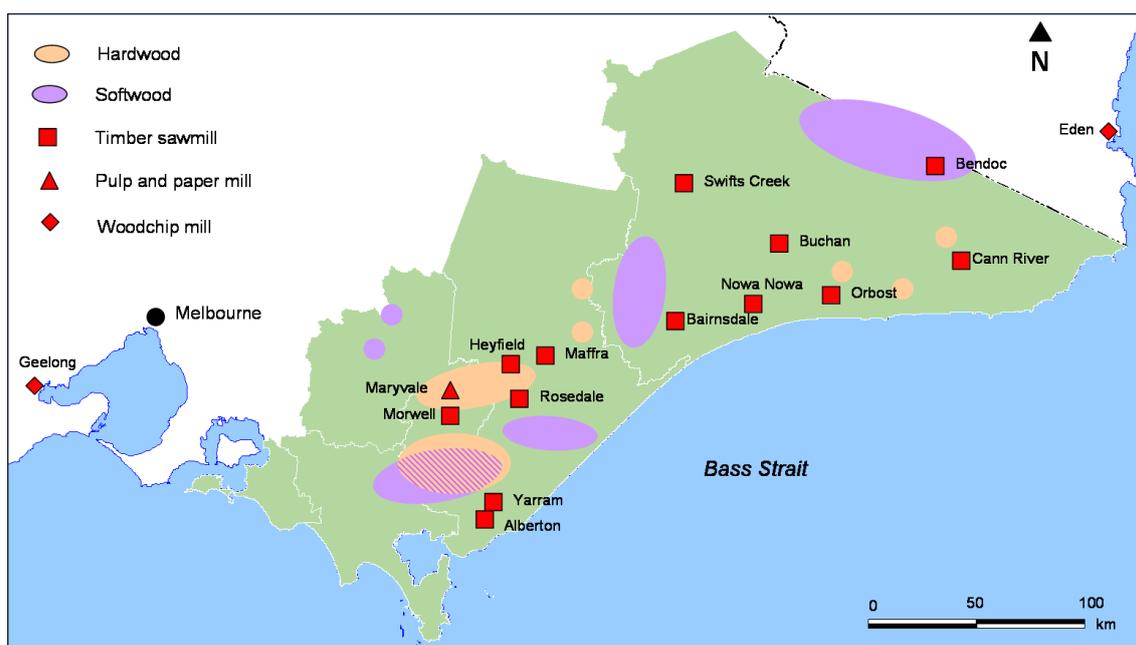
The remaining (1.0 million m³) is largely processed at local mills for sawn timber, woodchips and value added timber products. Approximately 200,000 tonnes of sawn timber and value added timber products are produced in Gippsland each year; these products are transported from various mills around the region to Melbourne for domestic consumption. These product flows are illustrated in Figure 10.



With plantations and native forests dispersed across the entire Gippsland region (Figure 12), the forestry industry places a significant level of demand on many parts of the local and arterial road network. The peak area of demand is east of Morwell where the roads connecting the major mills join the corridor. Over the next decade, the timber sector will continue to be a major user of the Gippsland road network and while inter-regional road links from coupe or forest to production centres and intermodal transition points have been greatly improved in recent years, demand for continued road improvements remains strong. Rail also plays an important role in the forestry industry supply chain (for pulp and paper to Melbourne and previously for logs to Geelong).

Ensuring that this freight task can continue to be serviced by rail will be critical to the ongoing sustainability of this sector.

Figure 10: Distribution of Timber Resources and Centres of Activity



Source: Australian Government 2007





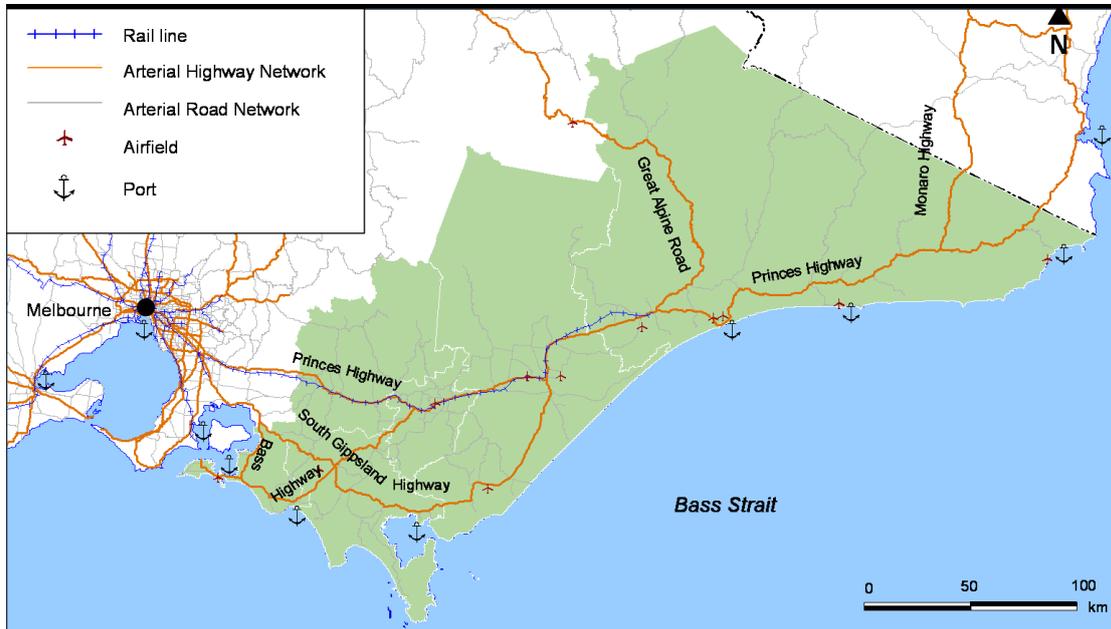
7. Transport Infrastructure

7.1. Principal Freight Network

The Principal Freight Network is that part of the larger transport network over which the movement of heavy freight will be supported and increasingly consolidated. The Principal Freight Network is a network of freeways, railways and key arterial roads connecting commercial ports, airports, industrial areas and intermodal terminals. Through its road space allocation and traffic signal control systems, VicRoads will encourage use of roads on the Principal Freight Network for freight movements. The Department of Transport is developing a similar plan to encourage the use of the Principal Freight (Rail) Network. Support for freight movements will be balanced with the demands of other users, particularly during peak periods.

Figure 11 shows the key road, rail and port links within the Gippsland region.

Figure 11: Gippsland Freight Transport Network



Victorian Road Classifications

- ‘M’ roads provide a consistent high standard of driving conditions with divided carriageways and four traffic lanes and sealed shoulder.
- ‘A’ roads provide similar consistency with two lane two way traffic and sealed shoulders.
- ‘B’ roads have sealed pavements wide enough for two lanes, good centreline and shoulders.
- ‘C’ roads generally have sealed pavements wide enough for two lanes. Standards are determined by terrain, traffic and crash history.

7.1.1. Principal Freight Network – Regional

The regional component of the Principal Freight Network is shown in Figure 12. Within Gippsland, the Principal Freight Network has four major elements:

- Princes Freeway/Highway (Melbourne to NSW border).
- South Gippsland Freeway/Highway (Melbourne to Leongatha).
- Melbourne to Bairnsdale rail line.
- Intermodal terminals at Morwell and Bairnsdale.

These links carry large volumes of freight traffic and provide vital connections to the rest of the Principal Freight Network, including Victoria’s commercial trading ports.



7.1.2. Principal Freight Network – Metropolitan

The metropolitan component of the Principal Freight Network is shown Figure 13. Although none of the areas shown in this map are located within Gippsland, road and rail freight movements originating in Gippsland are heavily influenced by the metropolitan network. The lack of connectivity between the Metropolitan Ring Road and EastLink is of particular concern to freight operators in the Gippsland region as key freight destinations, such as the Port of Melbourne, Tullamarine Airport, and industrial precincts in Melbourne's western and northern suburbs are only accessible through congested inner city and suburban areas. Similarly, both the Port of Geelong and the National Land Transport Network (which provides the key freight network linking Melbourne with the other state capitals), are only connected to Gippsland through CityLink and the Westgate Bridge.

Having a single point of access into Melbourne is likely to become even more critical in the coming years. The growing population of Melbourne's south eastern suburbs will stretch the capacity of the existing road and rail network, and increase travel time for freight movements originating from Gippsland. Continuing to develop connection options, such as the East West and North East Links will be essential if the Gippsland corridor is to form an integral part of a national transport network.

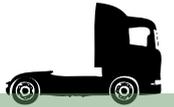
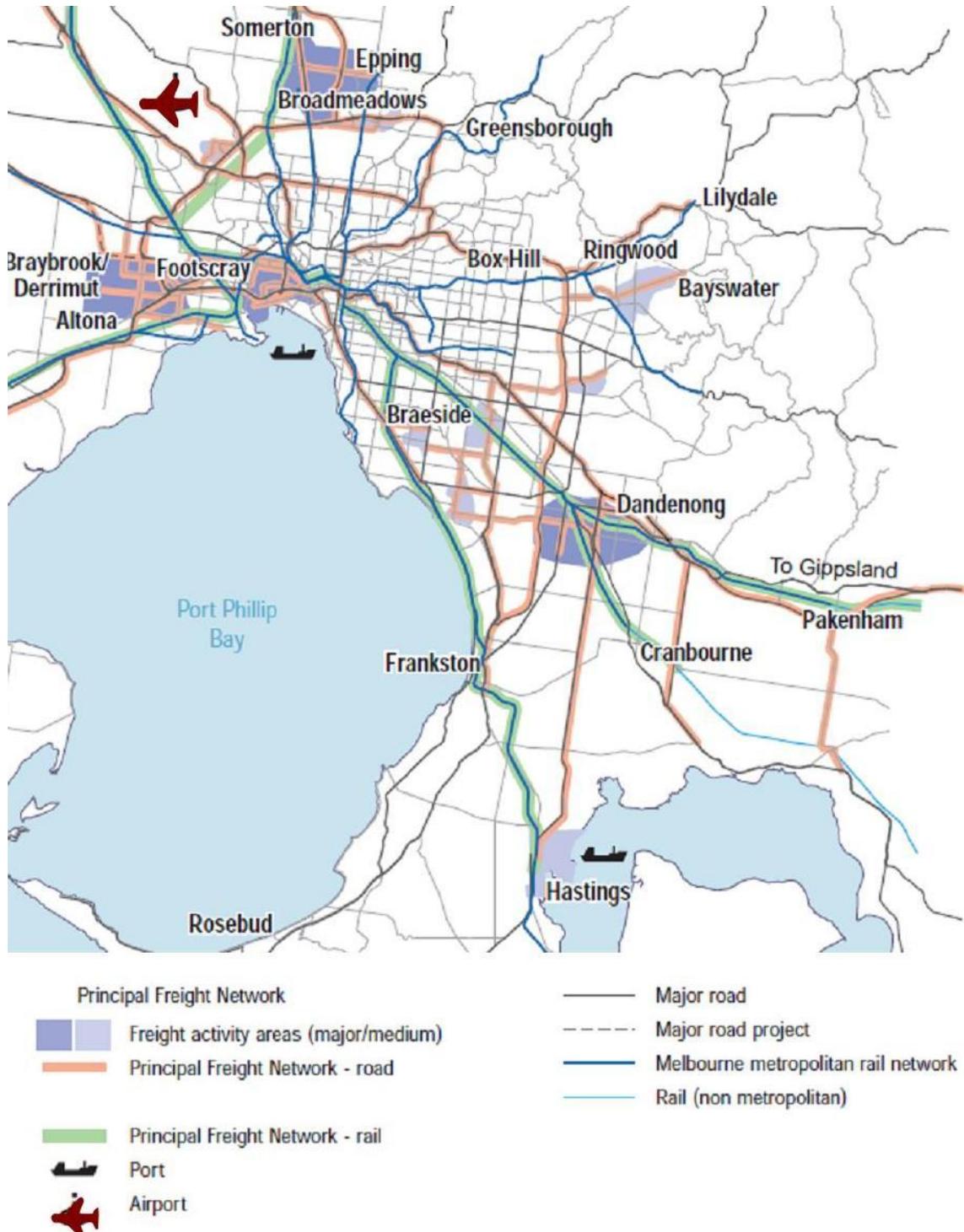


Figure 13: Principal Freight Network – Metropolitan



Source: Victorian Government 2008

7.2. Road Network

The road network in Gippsland is heavily constrained by the region's two main geographic features: the Great Dividing Range in the north, and the Strzelecki Ranges in the south. The Princes Freeway/Highway (M1/A1) bisects the two ranges and provides the most direct connection between Melbourne and East Gippsland. The South Gippsland Highway (M420/A440) runs between Dandenong and Sale, to the south of the Strzelecki Ranges, and is the main transport corridor servicing the South Gippsland region. These two highways carry the majority of freight movements in Gippsland, particular for inter-regional freight movements. The Bass Highway (A420 to Phillip Island) is also a critical part of the Gippsland arterial road network, although it primarily caters for the tourist traffic between Melbourne and Phillip Island.

ACTION 2

Continue to develop transport options for improving road and rail connections from the Gippsland corridor to other parts of the National Network.

7.2.1. Princes Freeway/Highway (M1/A1)

The Princes Highway is the main transport 'spine' of Gippsland, supporting key regional industries and the major regional centre of Latrobe Valley as well as Warragul, Sale and Bairnsdale. Efficient freight connections along the corridor are essential for the movement of building materials, fresh and processed food, and paper to Melbourne, and the movement into Gippsland of manufactured consumer goods, stock feed, and capital equipment and spare parts for the energy industry.

The Princes Highway provides access to the Port of Eden in New South Wales, which is of particular importance to the East Gippsland forestry, horticulture and seafood industries. The corridor also carries large volumes of intra-regional freight. The overall size of the freight task is estimated at more than six million tonnes a year, with an estimated export-related task of 600,000 tonnes per annum.

Average traffic volumes on the Princes Highway, between Pakenham and Traralgon vary between 15,000 and 25,000 vehicles per day (vpd), with traffic volumes between Traralgon and Bairnsdale varying between 5,000 and 10,000 vpd; traffic volumes drop



significantly east of Lakes Entrance. Heavy vehicles make up approximately 18% of vehicles west of Bairnsdale. Due to low traffic volumes, commercial vehicles comprise one-third of all traffic on the Princes Highway between Cann River and the New South Wales border. Traffic volumes are growing at 2%-3% per annum; these growth rates could increase significantly if some of the brown coal derivative projects were developed to a large scale prior to an appropriate rail solution being delivered.

The Route 1, Route 620 Corridor Strategy: Princes Highway East Dandenong to NSW Border, (1997) provides a plan for progressively developing the Princes Freeway/Highway. The key initiatives of the strategy are to develop a divided carriageway (Class 'M' road) between Melbourne and Sale, and to upgrade the highway between Sale and the NSW border to an 'A' class road.

The upgrade to 'M' standard between Melbourne and Traralgon is largely complete, with duplication of the highway now being extended through to Sale. Over recent budgets, the Victorian and Australian Governments have committed \$175 million towards this project. Construction has already been completed on the first stage of works, from Traralgon-Maffra Road to Stammers Road in Traralgon East and Sale to Wurruk in the eastern part of the project.

The section of the existing M1 route between Nar Nar Goon and Longwarry, is not access controlled with this section of highway experiencing higher than average crash rates. With traffic volumes on the Princes Highway increasing due to population growth and intensification of primary industry, the remaining uncontrolled access points may pose an unacceptable safety risk. The separation of at-grade intersections at Sand Road, Bunyip-Tonimbuck Road, Garfield Road and Tynong Road and other access control treatments would ensure no direct access to the highway from properties or north-south roads providing freeway conditions for freight. .

Land has been reserved for a future Traralgon bypass, with the Amendment C42 to the Latrobe Planning Scheme approved in June 2009.

Many sections of the Princes Highway east of Sale do not currently meet Class 'A' standards (particularly between Orbost and the New South Wales border). While traffic volumes along this section of highway are lower than that further west, these volumes are growing steadily, in response to a buoyant horticulture and forestry industry. In the short term, providing town bypasses or alternative heavy vehicle routes may be appropriate to deal with capacity, safety and amenity concerns in the key centres of Sale and Bairnsdale. In the longer term, shoulder sealing and overtaking lanes may be required along selected sections of the route to upgrade the road to 'A'

class standard. This section of road is also characterized by extensive sections of overhanging vegetation which have created public safety issues in recent years and caused traffic closures.

It also requires ongoing attention to alignment improvements and setbacks to potentially hazardous overhanging trees.

Key actions on the Princes Highway corridor are:

- Access control improvements between Nar Nar Goon and Longwarry including Sand Road Interchange.
- Completion of the Traralgon – Sale duplication.
- Commence business case for Traralgon bypass.
- Identify preferred alignments for Sale and Bairnsdale truck alternate routes.
- Safety and truck rest area improvements east of Bairnsdale.

The critical role that the Princes Highway plays in contributing to the national economy is recognised through its inclusion on the Commonwealth Government’s National Network. The *Melbourne-Sale Corridor Strategy* is a reflection of the shared strategic priorities of the Commonwealth and Victorian Governments for the long term development (20-25 year) of this important corridor. However, the entire Princes Highway corridor plays an important role in the national economy, with significant volumes of dairy, horticultural, seafood and forestry products being transported from East Gippsland into New South Wales and the Australian Capital Territory. Given its critical importance in linking to export markets in both Victoria and New South Wales, GLGN believes that, subject to agreement from the Victorian, New South Wales and Australian Governments, the National Network (Princes Highway corridor) should be extended from Sale to the Port of Eden.

ACTION 3

Progressively enhance the capacity and alignment of the Princes Highway to ‘M’ class standard (between Melbourne and Sale).

Progressively enhance the capacity and alignment of the Princes Highway to ‘A’ class standard between Sale and the NSW border).

Commence planning work on town alternate truck routes for key towns on the Princes Highway.



7.2.2. South Gippsland Highway (A440)

The South Gippsland Highway, between Dandenong and Sale, is a major strategic link in Victoria's rural arterial road network. The highway provides access to the dairy processing facilities at Poowong, Korumburra and Leongatha; the abattoir at Poowong; the livestock saleyards at Koonwarra; the snow pea packaging plant at Korumburra; port facilities at Barry Beach and Port Welshpool for the oil, gas and fishing industries; and the major gas processing and crude oil stabilisation plants at Longford and Lang Lang. Traffic volumes on the South Gippsland Highway are between 1,000 and 8,000 vpd, with the highest volumes occurring in Leongatha. Commercial vehicles make up approximately 17% of the traffic in the rural areas.

The *South Gippsland Highway Corridor Strategy* (1999) sets the framework for how the South Gippsland Highway is to be progressively developed. The key initiatives of the strategy are to provide an improved 'M' class road to bypass Cranbourne, and to upgrade the highway between Lang Lang and Sale to an 'A' class road. The Principal Freight Network proposes two connections between the Princes Freeway and the South Gippsland Highway to effectively bypass Cranbourne: Berwick - Cranbourne Road and Healesville - Koo Wee Rup Road. The opening of the Pakenham Bypass has seen a significant increase in traffic volumes using the Healesville - Koo Wee Rup Road to bypass Cranbourne and Tooradin. VicRoads are currently undertaking planning studies to allow for the future upgrade of this road to 'M' class standard.

Since the release of the *South Gippsland Highway Corridor Strategy*, many upgrades on the South Gippsland Highway have been completed, including the Sale Swing Bridge realignment (2002), Loch Bypass (2003) and the Loch to Bena realignment (2007). Funding has been allocated from the Victorian State Budget towards Stage 3 of the Longford to Sale upgrade (Cox's Bridge). However, many unimproved highway sections remain. These lengths of road typically have unsealed shoulders a poor alignment.

The entrance to the Koonwarra saleyards is located at the top of the Black Spur, near a curve in the road. Livestock transport operators have expressed concern that the deceleration lane for B-Double trucks coming up the hill and wanting to turn left into the facility is too short and requires trucks to cross into the opposing traffic stream. The Bena-Leongatha section of the highway has also been identified as a high crash area, particularly for crashes involving heavy vehicles.

Key actions on the South Gippsland Highway corridor are:

- Continuation of planning work for the upgrade of Healesville-Koo Wee Rup Road.

- Road realignment or widening from Bena to Leongatha.
- Detailed planning for Leongatha truck alternate route.
- Intersection improvements at entrance to Koonwarra Saleyards.
- Road realignment or widening through the 'Black Spur' (Koonwarra).

ACTION 4

Complete planning work on an alternate truck route for Leongatha on the South Gippsland Highway.

Progressively enhance the capacity and alignment of the South Gippsland Highway in line with the South Gippsland Highway Corridor Strategy.

7.2.3. Bass Highway

The Bass Highway is a strategic link in Victoria's road network. It provides access between Melbourne and the State's premier natural tourism destination the Penguin Parade at Phillip Island, and to Wilson's Promontory and the Bass Coast Region. The highway carries high volumes of freight transport, business travel, tourism travel and private commuters. Important industries served by the highway include tourism and agriculture, dominated by dairy, beef production and horticulture. The highway has also become important to Melbourne's construction industry with sand transported from deposits at Lang Lang and Grantville.

Since the release of the Bass Highway and Phillip Island Corridor Strategy the highway has been progressively duplicated between Lang Lang and Phillip Island Road at Anderson. Beyond Anderson to Wonthaggi, Inverloch and Leongatha the road typically has sections with unsealed shoulders and limited overtaking opportunities.

The township of Wonthaggi is experiencing high levels of population growth with this expected to continue with proximity to Phillip Island and the South East of Melbourne. Bass Coast Shire Council has identified the need for an alternate route to take heavy vehicles out of the centre of town. Council has undertaken preliminary planning based on an identified alignment.

Key actions in the Bass Highway corridor are:

- Overtaking lanes between Anderson and Inverloch.
- Widen narrow pavement between Inverloch and Leongatha.



- Progress planning for alternate truck route for Wonthaggi.

ACTION 5

Progressively enhance the capacity and alignment of the Bass Highway in line with the Bass Highway and Phillip Island Road Corridor Strategy.

7.2.4. 'B' and 'C' class roads

The 'B' and 'C' Class arterial road network provide the key linkages to the major highway network. While traffic volumes on these routes are relatively low compared to the Princes and South Gippsland Highways, commercial vehicles comprise 15% - 20% of these volumes, transporting milk, cattle, logs and fresh produce to processing centres in major towns.

Within Gippsland, the 'B' class arterial road network provides the main connections across the Great Dividing and Strzelecki Ranges. Key connections across the Great Dividing Range are provided by the Great Alpine Road (B500) between Bairnsdale and Wangaratta and the Monaro Highway (B23) between Cann River and Canberra. The Monaro Highway provides the shortest route from central and east Gippsland to Canberra and Sydney. The Bass Highway (B460 between Anderson and Leongatha) and Strzelecki Highway (B460) between Leongatha and Morwell (across the Strzelecki Ranges) provide critical links to dairy processing centres at Korumburra and Leongatha, and the livestock saleyards at Koonwarra. There are a large number of 'C' class arterial roads in Gippsland, which also provide an important freight function.

For Victoria's 'B' Class arterial road network, there is a long term objective of providing sealed pavements wide enough for two traffic lanes, with good centreline and edge line-marking, 2.0m wide shoulders and a high standard of guidepost delineation. Additional overtaking lanes will be provided on higher volume 'B' roads to improve road safety and capacity. The undulating and, at times, mountainous topography of Gippsland has meant that much of the 'B' class arterial road network is characterised by road alignments that have steep gradients and sharp curves, which generally do not meet the desired standards. Recent investment on these routes has focused on wire rope barriers and guard rails to reduce the risk and severity of run off road crashes. 'C' roads are generally designed to be two lane sealed roads with shoulders. Standards are determined on the basis of cost-effectiveness, depending on traffic and terrain,

accident records, load restrictions and frequent flooding. Great Alpine Road – capacity enhancements The Great Alpine Road is Australia’s highest all weather road. Significant sections of the road have steep gradients and sharp curves. Freight volumes on the road are relatively small at present, and consist largely of log trucks and a small number of cattle trucks.

If mining operations in Benambra commence, it is estimated that 15,000 semi-trailers or the equivalent of 10,000 B-Double trips per annum will be added to existing traffic volumes between Omeo and Bairnsdale.

Monaro Highway

The Monaro Highway provides a critical link for the estimated 200,000 tonnes of freight which moves from Gippsland to the Canberra and Sydney markets. Total traffic volumes on the road are relatively small at present (less than 400 vpd), but commercial vehicles represent about 30% of total volumes. The section of the highway between Noorinbee North and the NSW border (a distance of approximately 20 km) is characterised by sharp curves and long inclines.

Strzelecki Highway

Links between the Princes Highway, South Gippsland Highway and Bass Highway in West Gippsland are particularly important due to increasing traffic volumes, and the increased use of B-Doubles to transport milk from farm-gate to processing plants. However, the steep terrain means that B-Double access between these major corridors is limited to the Strzelecki Highway (B460) and the Mirboo North-Trafalgar Road (C463). While sections of the Drouin-Korumburra Road, Korumburra-Warragul Road, and Korumburra-Wonthaggi Road could be upgraded to provide B-Double access, improving road safety and capacity on the Strzelecki Highway with overtaking lanes will provide a larger benefit, and consequently is of a higher priority.

Phillip Island Tourist Road

Phillip Island Tourist Road is a strategic link in Victoria’s road network for tourism. It provides access between Bass Highway and the State’s premier natural tourism destination the Penguin Parade at Phillip Island, The Phillip Island Tourist Rd high volumes of tourism travel and private commuters. In particular buses of international visitors.

The development of a proposed long-term tourism strategy for Phillip Island, and an integrated transport vision for San Remo and Phillip Island (Currently in development) will provide guidance to the needs of the road network for the future.



ACTION 6

Upgrade selected Victorian arterial roads that support the movement of freight across the Strzelecki and Great Dividing Ranges.

Review of the Phillip Island Road Corridor Strategy to support the growth in the movement of tourists and freight.

7.2.5. Local Roads

Many local roads also play a key role in transporting building materials, milk, cattle, fresh produce and logs from quarries, farm gate and timber coupes to the arterial road network. A number of these roads, while appropriate for past primary production, may not be suitable for a more intensive freight transport task. Examples are Baw Baw and East Gippsland Shires, where future mining and quarrying activities could greatly increase future traffic volumes. Specific concerns relate to the width of pavement, strength of pavement and the ability of structures to carry loads.

A particular problem in Gippsland is the condition of the existing local road and bridge network, and its ability to support the use of B-Doubles. Additionally, many local roads intersect at acute angles and are difficult to address due to significant level differences. This road geometry can result in unsafe driving practices, such as turning into a side road (or farm gate) from the wrong side of the road. The region's mountainous terrain, and relatively high rainfall, means that VicRoads and Councils need to maintain a significant number of bridges. Many of these are timber bridges, which do not have the strength to handle current heavy vehicle loads. For example, the Shire of East Gippsland alone maintains 118 timber bridges, of which 54 have weight limits on them and a further 20 or more that are close to having limits imposed.

ACTION 7

Improve key local roads to meet the needs of the mining, agriculture, forestry and tourism industries.

7.2.6. Productivity

Arterial roads and many local roads play a vital role in the region's freight task. The level of road and roadside maintenance provided by governments and councils has an impact on road condition and road freight productivity. In the Gippsland region many industries like timber and agriculture rely heavily on accessing roads often in hilly terrains with poor alignment and pavement deficiencies.

Poor road condition increases costs for freight operators and the community:

- Vehicle operating costs including tyres and vehicle maintenance are higher.
- Taking alternate routes increase vehicle, fuel and driver charges.
- The inability to use higher mass vehicles on poorly maintained roads.
- Crashes involving heavy vehicles.

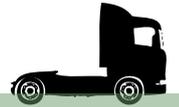
Poor roadside conditions can impact of freight productivity:

- Damage from overhanging branches.
- Road closures from fallen trees in flood and fire events.

Increased transport costs flow on to increase the market price of local Gippsland production affecting, local, interstate and international market competitiveness and consequent employment. Industry efficiency and competitiveness in Gippsland must be supported by appropriate road performance standards.

ACTION 8

Improve industry productivity in Gippsland by maintaining road conditions to appropriate performance standards.



7.3. Rail Network

7.3.1. Gippsland Rail Line

The Gippsland rail line, between Melbourne and Bairnsdale, provides rail connection to and from Gippsland for freight (and passenger) services. The broad gauge line is double track between Caulfield and Moe (a distance of approximately 120km), except for a small section of single track where the line crosses the Bunyip River. Beyond Moe, the line is single track with four passing loops (at Hernes Oak, Morwell, Traralgon and Sale). A private siding east of Morwell Railway Station runs to the Australian Paper intermodal facility at Maryvale. In addition, there is a disused but reuseable branch line from Morwell to the nearby EnergyBrix briquette factory, adjacent to the Morwell Open Cut mine. At the Melbourne end, recent improvements to the rail network provide direct rail access into the Port of Melbourne and there is also connectivity to Geelong.

Like the Princes Highway, the Gippsland rail line provides a high-quality, potentially high-capacity, integrated transport link connecting Gippsland to Melbourne and beyond. The rail infrastructure has been substantially upgraded in recent years, including signalling, rerailing and installation of concrete sleepers between Pakenham and Traralgon. These works have facilitated an expansion of passenger services on the corridor.

There are currently 18 return passenger rail services between Melbourne and Traralgon each weekday, and three return services to Bairnsdale, providing a public transport alternative for passengers travelling along the corridor. In 2011/12, 2.04 million passenger trips were made on the Gippsland line, representing an increase of over 300 per cent of 2000-01 patronage levels (Figure 16). Australian Paper currently moves 2250,000 tonnes per annum of product by rail from its siding to Melbourne for domestic and export purposes.. This is the biggest non grain freight commodity volume on the Victorian intrastate rail system.

The recently completed *Latrobe Valley and East Gippsland Rail Freight and Supply Chain Task Assessment* identified significant opportunities for bulk commodities from the region over the medium to longer-term., particularly coal derivatives and minerals.

Even if the cost of a freight rail service is competitive, services face an increasing challenge in accessing a train path through the Melbourne metropolitan area. Section 38H of the *Rail Corporations Act 1996* (Vic) establishes the principle of passenger priority, whereby train paths for passenger trains are given priority over freight trains. As population in Melbourne's outer south east and hinterland areas of West Gippsland grows, passenger rail services in both peak and off-peak times are likely to expand, which requires astute management of train paths to operate additional rail freight train services.

An increase in rail capacity along the Dandenong Rail Corridor will provide for more high-capacity and frequent train services, including regional passenger and freight services to and from Gippsland. Increased capacity can be achieved with priority grade separations, signalling upgrades and platform lengthening to allow the running of high-capacity trains. The potential growth in agriculture and earth resources export from Gippsland will require additional freight capacity. The ability to increase rail freight capacity along this corridor will also improve the efficiency of and impact on the road network.

The single line section of track east of Moe generally limits freight train lengths to 700m, so they can use the Hernes Oak loop. While this infrastructure has previously handled more freight trains, this was at a time when there were fewer passenger services, and hence more available train paths. If the logistical challenges can be met, many industry participants have expressed a desire to increase the use of rail where it is economically viable. Initial increases in freight volumes are likely to come from the re-establishment of an intermodal facility at the Gippsland Logistics Precinct and from mining activity in East Gippsland.

Analysis by the Latrobe City Council has suggested that up to 20,000 tonnes and 20,950 TEU (tonne equivalent units) of freight could be moved through this terminal in the first two years of operation, increasing to 270,000 tonnes and 44,950 TEU within five years. To enable this freight task to be met, a review of train operating schedules may be required to facilitate additional train paths and/or longer trains. Duplication of the line between Morwell and the Morwell East siding may also be warranted should volumes increase significantly. Increased rail capacity along the Dandenong Rail Corridor will also provide for more high-capacity and frequent freight trains to and from Gippsland.

In the short to medium term, duplication of the rail line between Bunyip-Longwarry may be required to accommodate the freight demands of a future bulk export industry as well as the increased number of passenger trains. Standardisation of the Gippsland



rail line is not being considered by Government at this time, but should be reviewed at some future point in the context of evolving gauge transformation elsewhere in the State's intrastate network.

Rail connectivity to the Port of Hastings will enhance Gippsland's access to export markets particularly with the diversified coal derivative export task likely to evolve in the future. Planning for the Port of Hastings development should include an investigation of options for rail connectivity.

The reduction in the State's rail freight task over the last decade has occurred largely as a consequence of:

- Lack of competition with broad gauge freight providers.
- Ageing locomotives and rolling stock.
- Improved efficiencies in the road freight sector, through road infrastructure improvements and higher productivity vehicles.
- A shift by operators to larger vehicles for long distance freight tasks and highly integrated logistics practices. (in the case of the dairy and horticultural sectors, the logistics supply chains are totally road-focused).

The closure of the Gippsland Intermodal Freight Terminal (GIFT) in 2002 also impacted on rail freight volumes out of Gippsland. While rising fuel costs and increasing congestion on Melbourne's road network, particularly around the port precinct, may reverse some of this long term decline, there are institutional and infrastructure challenges standing in the way of creating a more efficient rail freight sector.

There are currently only three operators that offer a rail freight service on the Victorian broad gauge network. New entrants to the market are restricted by the complex access regime (e.g. a train from Bairnsdale to Geelong must seek access from both the metropolitan and regional rail access provider), the complex rail safety accreditation process and the high start-up costs associated with the lease or purchase of rolling stock. These institutional barriers distort the market and force higher costs on to customers. However, where rail rates and services levels are competitive with road, rail has shown that it can provide an efficient freight transport alternative. Following the buyout of the rail infrastructure lease, the Gippsland line is now controlled by the Victorian Government through VicTrack.

Although the Gippsland rail line is not currently part of the declared National Network, the line provides a potentially critical link to export ports for the region's forestry industry (logs and paper) and therefore contributes significantly to enhanced

economic, social and environmental outcomes on the Princes Highway between Melbourne and Sale (which is part of the National Network). While volumes are relatively small (approximately 225000 tonnes per annum or 7% of the regional rail freight task), if the same volume of freight were carried by road, about 11,000 B-Double trips would have been required. Avoiding these truck trips has improved social and environmental outcomes for the community by decreasing emissions, reducing congestion on the Monash Freeway, and improving road safety outcomes along the corridor, particularly through towns that have not been bypassed by the Princes Freeway.

The community and national benefits provided by the rail line are likely to increase substantially in coming years with national and international markets opening up for minerals, quarry products (e.g. stone), and coal derivatives, as well as increased output from the timber and paper industries.

With a number of potentially rail-contestable freight opportunities becoming apparent in East Gippsland, a number of further infrastructure improvements are needed, including a new intermodal facility west of Bairnsdale and replacement of the deteriorated Avon River bridge at Stratford. The Gippsland rail line's broad gauge should not be seen as a barrier to the line's inclusion on the National Network, as it serves a similar function to the broad gauge rail line on the Melbourne-Mildura corridor (which transports around 650,000 tonnes of grain and containerised freight each year). While the Gippsland line carries slightly less freight than the Mildura line at present, it has the potential to be the most heavily trafficked line in Victoria should the coal developments proceed.

ACTION 9

Improve the capacity of the Bairnsdale-Melbourne rail line to capture opportunities to grow freight on rail, particularly via new emerging bulk freight tasks to support the minerals sector.

Advocate for an increase in rail capacity along the Dandenong Rail Corridor to improve freight services to and from Gippsland.

Duplicate remaining single track sections of the rail line between Pakenham and Moe.

Given its critical importance in linking to export markets include the Melbourne-Bairnsdale rail line on the National Network.



7.3.2. South Gippsland Rail Line

The South Gippsland rail line, between Dandenong, Leongatha and Yarram, was closed in stages with passenger services ending in 1993 and freight services terminating in 1998. The section between Dandenong and Cranbourne was electrified and connected to the metropolitan network in 1995. South Gippsland Railway operates a tourist train service on the line between Nyora and Leongatha.

Parts of the line between Cranbourne and Koo-Wee-Rup have been dismantled and converted to a walking path, but the reservation through to Leongatha and Yarram remains in State Government ownership should it ever be required for transport purposes in the future.

The short branch line from Toora to the Exxon-Mobil wharf at Barry Beach has also been dismantled but remains zoned for transport purposes. This line was used for the transport of bulk oil and pipes for the offshore oil and gas sector until 1992.

ACTION 10

Maintain State ownership of the South Gippsland rail corridor.

7.3.3. Intermodal Terminals

Rail-road intermodal terminals are purpose built freight handling facilities that allow consolidation of small volume and dispersed road freight into higher volume, longer distance rail freight tasks. Until recently, intermodal traffic operated through sidings at both Morwell and Bairnsdale. The Morwell EnergyBrix siding loaded brown coal briquettes to a number of interstate and intrastate locations until 2002.

Container freight was handled at the Gippsland Intermodal Freight Terminal (GIFT) until its closure in 2002. Until 2005, the Morwell East siding loaded logs for transport to Geelong. Intermodal terminals at Morwell, Bairnsdale and other potential sites along the rail corridor (e.g. West Sale) are likely to become increasingly important in the coming years, given the anticipated increase in bulk commodity exports originating from Gippsland.

The proposed Gippsland Logistics Precinct incorporates the GIFT and 64 hectares of adjacent land owned by Latrobe City Council. Council is currently seeking expressions of interest for the development and operation of the site, with the aim of creating an open access freight rail hub to service the central Gippsland region.

ACTION 11

Work with the Commonwealth and State Governments and industry to promote the development of rail-road intermodal facilities at Morwell, West Sale and Bairnsdale where there is a valid business case.

7.4. Ports

7.4.1. Commercial sea ports

All four of Victoria's commercial trading ports, as well as the New South Wales port of Eden are used for the export of goods originating in the Gippsland region.

Port of Melbourne

The Port of Melbourne is Australia's largest container and general cargo port, handling around 38 per cent of the nation's container trade. Container exports originating in the Gippsland region were estimated at 10,000 TEU in 2007, and are predicted to grow to 32,000 TEU by 2035. These figures do not include the estimated 30,000 TEU per annum that originate from Australian Paper's Maryvale facility, of which approximately 40% are exported. Nor do the figures include products which originate in Gippsland, but are transported to Melbourne for containerisation (such as occurs at Murray Goulburn's Laverton warehouse).

Port of Hastings

The Port of Hastings is a major bulk liquids port which has been designated by the State Government as a future secondary container facility for Victoria due to the Port of Melbourne approaching capacity limits. Given its proximity to Melbourne, the Port of Hastings will become increasingly important for commercial shipping over the next two to three decades. However, consideration should also be given to its potential to handle bulk trades from the Gippsland region.

The Port of Hastings Land Use and Transport Strategy (PLUTS) proposes that the Long Island Point precinct be progressively developed in three stages over the next 30 years (Figure 18). The staging and timing of this expansion will be influenced and triggered by trade growth and the development of other Victorian ports. Stage 1 of the



development would provide facilities for non-containerised bulk and break bulk trades that may need to be relocated from the Port of Melbourne, and emerging bulk trades from Gippsland (e.g. coal derivatives). Preliminary development work undertaken for Stage 1 suggests an initial port expansion could handle up to 8 million tonnes per annum of dry bulk and break bulk product. With more significant investment in port infrastructure, the Port of Hastings could handle up to 25 million tonnes per annum of dry bulk and break bulk product.

If export volumes through the Port of Hastings are significant, the construction of a new rail connection to the port may be required. PLUTS identified two preferred options for a potential rail connection to Hastings: the Port Phillip corridor (i.e. via EastLink and the existing Stony Point Line) or the Western Port corridor (i.e. parallel to the Western Port Highway). Preliminary analysis from the Department of Transport has shown that, if introduced with capacity improvements on the Gippsland line between Pakenham and Dandenong, up to 8 million tonnes of freight could be transported on a new Dandenong to Hastings rail line. For large bulk volumes (above 8 million tonnes per annum), other rail options may need to be considered.

ACTION 12

The proposed Port of Hastings development will consider the opportunity for the future export of large scale bulk trades from Gippsland, as well as becoming a future container handling facility.

Develop a plan for rail freight access from Gippsland to the Port of Hastings.

Support the resumption of scheduled sea freight service from Flinders Island to Port Welshpool.

Port of Geelong

The Port of Geelong handles 25 per cent of Victoria's overseas exports, most of which are raw materials like petroleum products, bulk and bagged grain and woodchips, including from Gippsland. Each year, approximately 100,000 tonnes of logs are transported from the Gippsland region to Midway at the port of Geelong for export. There is potential for the Port of Geelong to handle up to 8 million tonnes per annum of coal and coal derivatives if the appropriate upgrades are made to berths and rail connections into the port. However, to access the Port of Geelong, all freight originating in Gippsland would need to pass through the Melbourne metropolitan area. Initial analysis suggests that, due to the needs of the public transport system, the

metropolitan rail network does not have the capacity to accommodate this volume of freight. However, there is capacity to handle annual loadings of up to 4 million tonnes with careful attention to train pathing and operational issues.

Port of Portland

The Port of Portland also handles bulk and break bulk products specialising in woodchips, mineral sands and grain. Although the Port of Portland is more than 500 km from Gippsland, much of the live cattle exports are transported through Portland. As the rail line is on standard gauge, direct rail connectivity from the Gippsland region is not possible.

Port of Eden

The Port of Eden (in New South Wales) is also of strategic importance for the East Gippsland forestry industry. Approximately half of all the timber harvested in East Gippsland (or 250,000 tonnes per annum) is transported east to mills in southern New South Wales for export as woodchips. In the year ending 30 June 2009, a total of 900,000 tonnes of woodchips was exported out of the Port of Eden by South East Fibre Exports.

7.4.2. Local ports

Local ports in Gippsland also serve an important role, particularly to provide enabling infrastructure for the fishing industry, recreation, tourism and oil and gas service sectors.. Gippsland Ports is the largest port manager in region, with responsibility for 1,431 km² of waterways across five designated local ports (Anderson Inlet; Corner Inlet and Port Albert; Gippsland Lakes; Snowy River; and Mallacoota) and two waterways (Lake Tyers and Shallow Inlet). Gippsland Ports is a Committee of Management with responsibilities delegated by the Minister for Ports to deliver waterway management, harbour control and manage infrastructure assets that include navigation aids, public jetties, berth and mooring facilities, boat lifting and vessel servicing facilities and dredging operations. Gippsland Ports assists recreational boating, charter vessels, commercial vessels, professional fishing, marine and offshore industries. Gippsland Ports head office is located in Bairnsdale, with depots at Lakes Entrance, Port Welshpool and Paynesville.

Lakes Entrance has the State's largest permanent fishing fleet and the Gippsland Lakes provide for recreational boating and charter boating. The sand bar at Lakes Entrance is restricted by depth and requires dredging from time to time to ensure that the entrance remains reliable. Other important local ports in the region are the Port of Anderson Inlet, Port Albert and Port Franklin (within the Port of Corner Inlet and Port



Albert), Port of Snowy River and Port of Mallacoota. Sand migration and limited channel depth restrict access to these ports.

The Port of Corner Inlet and Port Albert plays an important role in supporting the oil and gas service industry and commercial fishing. ExxonMobil maintains a private berth and warehousing facilities at Barry Beach to service its Bass Strait oil and gas facilities. A number of significant resource developments have been completed in recent times, including the Kipper, Tuna and Turrum (KTT) oil and gas project. This type of project requires 5 support vessels, barges and tugs being deployed to the Port of Corner Inlet and Port Albert. Contractors supporting Origin Energy with vessel requirements for the Yolla and Thylacine facilities in Bass Strait operate from Port Welshpool.

‘Port Anthony’, adjacent to the Exxon Mobil facility at Barry Point, is part of the declared Port of Corner Inlet and Port Albert and is being developed by Ancon Australia. It is initially intended to be used as a small bulk facility to service resource based commodities as well as an import gateway for prefabricated construction modules. The area has some constraints including a shallow draft requiring major dredging to handle handy size vessels and is located in an internationally recognized Marine Park. It has adjacent Industrial-1 zoned land and moderate standard road connections to the Latrobe Valley. The Victorian Government has provided infrastructure funding to allow crane facilities to be provided.

The Exxon-Mobil facility was previously served by a broad gauge rail line connecting to the now-closed South Gippsland railway. In the event that large scale coal based derivatives are produced in the Latrobe Valley, potential routes exist for a rail route running direct to the port. A notional corridor from the Latrobe would see a new line branching off the existing Gippsland. The Bass Strait oil and gas industry remains strong, and the potential for increased exploration and extraction activity is likely to increase demand for port service in Corner Inlet.

For many years, a fortnightly shipping service operated between Bridport (TAS)-Flinders Island-Port Welshpool, principally for the cattle and general freight business (with limited passenger accommodation). Following a restructure of the operation, services are now only extended to Port Welshpool on as required basis.

ACTION 13

Work with Gippsland Ports, Department of Transport and the private sector to maintain and enhance local port facilities to support the oil, gas and fishing industries.

Support the resumption of scheduled sea freight service from Flinders Island to Port Welshpool.

7.4.3. Airports

A number of public and private airfields operate within Gippsland. The Latrobe Regional Airport (near Traralgon) is owned and managed by Latrobe City Council and hosts a significant Emergency Services facility with Helimed, DSE Fire Base and CFA all located on the site. Latrobe Regional Airport has 24/7 operational capability and is home to Gippsland Aeronautics, Australia's only passenger aircraft manufacturer, employing over 150 staff.

Wellington Shire is a significant regional aviation centre with the RAAF Base East Sale, complemented by West Sale Airport and Parkside Aerodrome at Yarram, providing extensive facilities for defence, general and recreational aviation. Other regional aerodromes in Gippsland are located at Bairnsdale, Great Lakes (Kepper Field), Lakes Entrance, Leongatha, Mallacoota, Orbost, Gelantipy and Phillip Island. Leongatha Airport is important for agricultural spraying and provides the only landing facility for South Gippsland's air ambulance. Hotham Airport, which receives commercial passenger flights, is located just outside the Gippsland region.

At present, no scheduled air freight services operate out of Gippsland, although there has been occasional interest expressed in commencing an air freight service to Sydney and Adelaide. Latrobe Regional Airport is only a two hour drive from Lakes Entrance; accordingly, fresh seafood could be delivered to the Sydney or Adelaide fish markets three to four hours earlier than would occur if the cargo was freighted from Tullamarine or Avalon.

Development of a proposed third airport in south east metropolitan Melbourne could also potentially offer an alternative gateway for fresh produce from Gippsland.

ACTION 14

Promote the development of an air freight service out of Gippsland, subject to its commercial viability.



8. Regulation

8.1. B-Double access

All 'M' Class, 'A' Class and roads in Gippsland are open to B-Doubles operating at Higher Mass Limits. While most 'B' and 'C' Class roads have also been approved for B-Double use, there are some critical gaps in the steepest sections of the network. In particular, B-Double approved routes across the Strzelecki and Great Dividing Ranges are very limited (Figure 14). Within the Strzelecki Ranges, B-Double routes are restricted to the Strzelecki Highway, the Mirboo North-Trafalgar Road and the Hyland Highway. Across the Great Dividing Range, there is no B-Double access north of Benambra, nor between Omeo and Harrietville on the Great Alpine Road.

These gaps in the network create significant inefficiencies in the freight task, particularly for a livestock industry which seeks access to markets in both Gippsland and north-east Victoria. For example, livestock transporters can either run B-Doubles via Melbourne (thereby adding 9 to 10 hours to each trip) or operate 19.0 metre semi-

trailers, with their smaller payload, over the mountains. In the summer of 2009-10, a convoy of six B-Double vehicles carrying livestock travelled on the Benambra-Corryong Road under VicRoads escort. While travel time savings were recorded, some operators expressed concern about the additional strain placed on drivers, vehicles and stock due to the difficulty of the route.

The movement of B-Doubles from East Gippsland into New South Wales is also a critical issue, particularly for the timber industry accessing the Port of Eden. The *Cross Border Heavy Vehicle Freight Study 2012* was undertaken by the South Eastern Australia Transport Strategy Inc. (SEATS) to promote its strategic objective being to promote efficient and effective freight movement. The study provides a better understanding of the nature and indicative impacts of cross border regulatory and physical infrastructure constraints on heavy vehicle freight movements between Victoria and New South Wales. The study will provide the opportunity for initiatives to be assessed which can improve the productivity for cross border freight operators.

The introduction of the National Heavy Vehicle Regulator (NVHR) on 1 January 2012 provides a mechanism for regulatory efficiencies to address constraints caused by variations in heavy vehicle regulation between Victoria and New South Wales. Queensland will be hosting the regulator and heavy vehicle national law. This will provide a common set of laws for heavy vehicles from all states and territories. Standardised national regulations for mass, dimension and load restraint, heavy vehicle standards and fatigue management. It is expected that freight operators in Gippsland will be able to achieve improvements in efficiency, safety and productivity.

ACTION 15

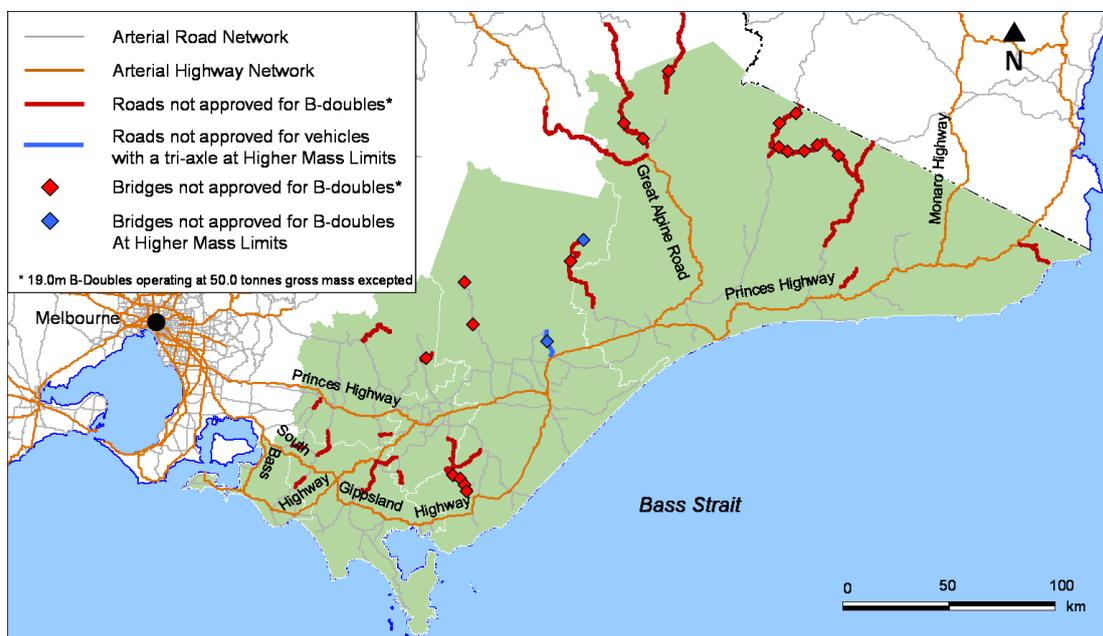
Consider opportunities to increase B-Double access across the Great Dividing Range, subject to completion of the necessary road network improvements.

ACTION 16

Engage with the National Heavy Vehicle Regulator to harmonise cross-border regulations for heavy vehicles, noting the data and recommendations contained in the SEATS Cross-Border Vehicle Study.



Figure 14: B-Double Restricted Routes



Source: VicRoads 2004

8.2. High Productivity Freight Vehicles

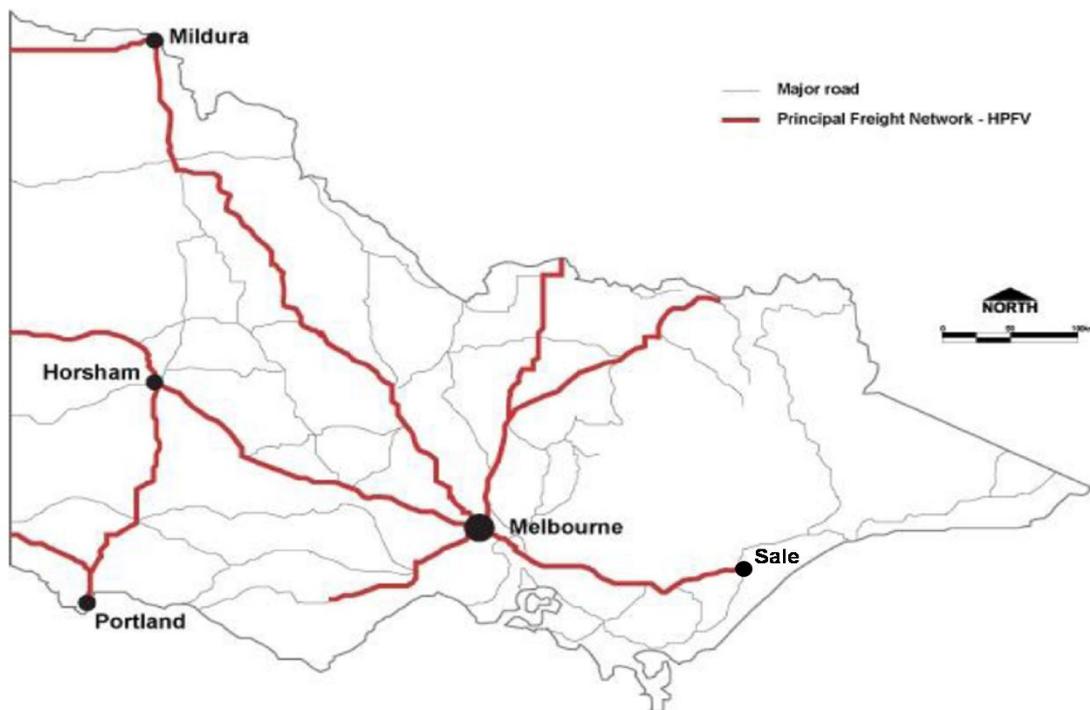
The Victorian Government has committed to introducing more efficient heavy vehicles, such as HPFVs, to improve economic efficiency, safety, environmental and amenity outcomes. HPFVs operate on approved routes, including the Principal Freight Network, and address the growing freight task in Victoria.

Next generation HPFVs can carry approximately 25% more weight, and 33% more volume than standard B-Doubles operating at Higher Mass Limits. A trial of HPFVs is currently being carried out around the Port of Melbourne precinct and in the Green Triangle Region. The completion of the Princes Highway (Traralgon to Sale) duplication will be necessary before the HPFV network can be extended to Sale; issues relating to the movement of HPFVs through Melbourne's south east and inner city (e.g. on CityLink) will also need to be resolved.

ACTION 17

Consider an extension of the HPFV network to Sale, subject to satisfactory outcomes of the current HPFV trial, completion of the Traralgon to Sale duplication, access control between Longwarry and Nar Nar Goon including the Sand Road Interchange and resolution of issues within metropolitan Melbourne.

Figure 15: Proposed HPFV Network



Source: Victorian Government 2008



8.3. Over-dimensional Vehicles

The geography of the Gippsland region also poses challenges for the movement of other over-dimensional vehicles, such as Class 1 vehicles carrying large indivisible items (e.g. farm machinery, construction equipment) and Class 3 vehicles carrying silage and similar products between farms.

VicRoads' *Oversize Load Carrying Vehicles: Information Bulletin* summarises the operating conditions for oversize and over mass Class 1 vehicles up to 49.5 tonnes. Under the guidelines, Class 1 load carrying vehicles must have a maximum width of 3.5 metres and a maximum length of 25.0 metres. However, within Gippsland these limits do not apply in the designated 'Mountainous Area' or 'Gippsland Ranges Area' (Figure 16). Except on roads designated as 'Special Routes' (where the standard guidelines apply), or where a specific permit has been issued, a vehicle travelling in the Gippsland Ranges Area must not exceed 3.0 metres wide and/or 22.0 metres in length; in the Mountainous Area the vehicle must not exceed 2.5 metres wide and/or 19.0 metres in length. This includes the section of Great Alpine Road between Omeo and Harrietville. Accordingly, a vehicle exceeding 2.5 metres width or 19.0 metres in length wishing to travel between East Gippsland and North-East Victoria would need to travel via Melbourne unless a specific permit for that trip is issued.

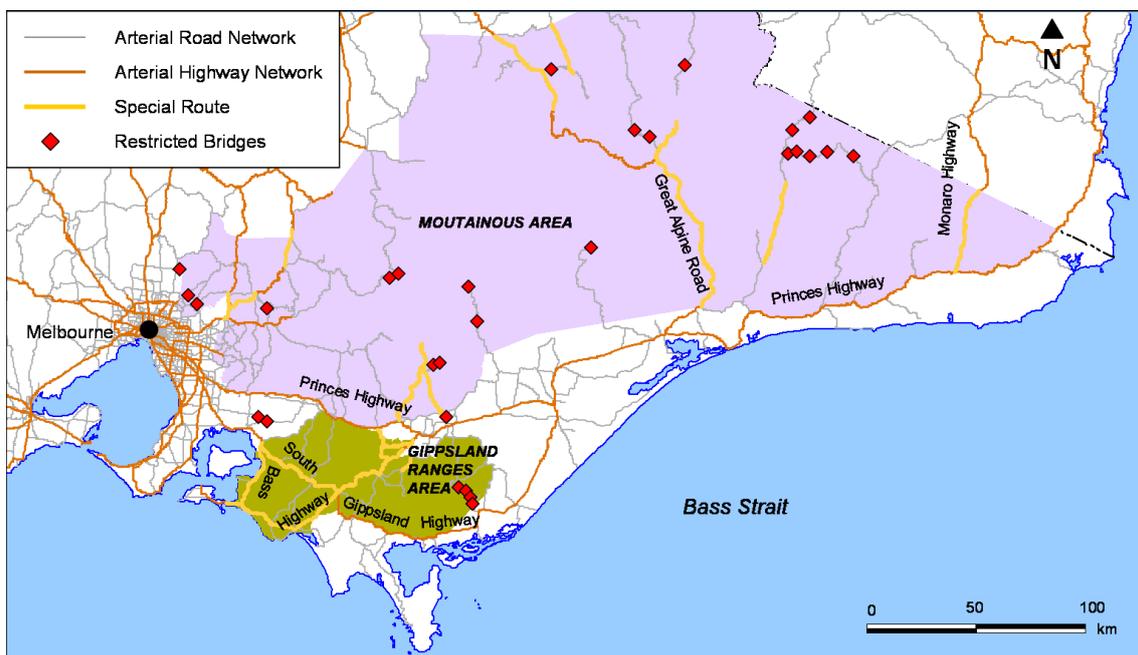
Class 1 vehicles exceeding these mass and dimension limits require a specific permit for operation, and are restricted to a small number of routes. The Princes Highway is a designated over-dimensional route between Dandenong and the Latrobe Valley. Loads up to 350 tonnes may be carried on this route, with the appropriate permits and supervision. These load limits have been designed to allow for the import of large equipment and heavy machinery for the Latrobe Valley power generators. An over-dimensional route is also provided between the Barry Beach Marine Terminal and Longford for the transport of equipment to the Longford gas plant. Some project proponents in the coal derivatives industry have indicated a desire to import very large (i.e. possibly in excess of 350 tonnes) prefabricated modules as part of their production process. Depending on the preferred location of these projects, further infrastructure works may be required facilitate movement from import location to site.

In May 2010, the Victorian Government announced new guidelines for Class 3 vehicles transporting silage within Victoria. Many silage trailers currently owned by Victorian farmers are up to three metres in width. However, prior to the new guidelines being introduced, silage trailers were expected to conform to the regulatory requirements of other trailers that carry freight, i.e. trailers needed to be registered if they exceeded 2.5 metres in width. The new guidelines allow farmers to operate silage trailers up to 3.0 metres in width without registration. These new allowances will give farmers added flexibility in the movement of silage from paddock to paddock.

ACTION 18

As part of the Gippsland Regional Infrastructure Study, identify appropriate routes for the import of over-dimensional plant and equipment.

Figure 16: Over-Dimensional Load Restrictions (Class 1 Vehicle)



Source: VicRoads 2007



9. Skills Development and Employment

According to the *2006 Census of Population and Housing*, more than 86,000 people are employed within the Gippsland region. Approximately 3.2% (or 2,800) of these workers are classified as working within the Transport, Postal and Warehousing industry. Many other industries, particularly those that have large (e.g. dairy, mining) or complex (e.g. livestock, forestry) supply chains, also employ people who have skills and experience in the transport and logistics field. With the Gippsland freight task anticipated to grow due to investment in agriculture and coal derivatives, it is expected that further employment opportunities will arise across a range of transport and logistics occupations, including logisticians, rail and road drivers, and heavy machinery operators. Attracting and retaining an appropriately skilled transport and logistics labour force to fill the available vacancies will be a critical challenge for regional industry.

9.1. Enhancing Skill Sets

Across all industry sectors in Gippsland, approximately 7,200 workers are employed as machinery operators or drivers. Less than half of these workers (40%) have completed some form of post-school qualification. This is significantly lower than the 54% qualification rate for all employed persons in Gippsland. While skilled labour could be

attracted to Gippsland from other parts of Victoria, the State average for machinery operators or drivers with at least certificate-level qualifications is, at 35%, lower than in Gippsland.

New industries are likely to require more highly skilled transport and logistics staff because of the nature and volume of product moved. For example, the bulk of the coal currently mined is simply consumed on site by power generators. Transporting coal derivatives to an export port will require a more sophisticated range of skills, such as knowledge of materials storage, handling and transport processes. Accordingly, there will need to be a strong emphasis on improving the skills of new and existing workers.

The Gippsland region is relatively well resourced in terms of skills and training opportunities. Major education providers are distributed throughout the Gippsland region and include GippsTAFE in Morwell, Yallourn, Warragul and Leongatha; Advance TAFE in Bairnsdale, Lakes Entrance and Sale; Apprenticeships Group Australia in Morwell; and Monash University, located in the Gippsland Education Precinct in Churchill. These education providers work closely with local industry to meet industry demands for a skilled workforce, with providers offering a variety of courses ranging from apprenticeships in trades, transport and logistics, to tertiary qualifications in business, engineering and environmental science. The evolution of the Gippsland coal industry from energy generation to manufacturing and processing will require the continued collaboration of education providers and local industry to ensure that new and existing workers are provided with the necessary skill sets.

9.2. Access to Education and Training

According to the region's education providers, one of the most critical issues impacting upon skills development is the lack of access to training opportunities for local residents, particularly for young apprentices. Many young people do not drive and rely on public transport to get to their classes and places of work. However, unlike other regions in Victoria, the population of Gippsland is not concentrated in a single large regional city. This makes it difficult to provide an appropriate level of public transport service coverage and frequency that can meet the population's disparate travel demands.

The Victorian Government has previously identified this as an issue for Gippsland, and has invested in improved services within the region and to/from Melbourne. In 2009 improved bus and coach services in the South Gippsland and Bass Coast regions were



introduced. Stage One improvements delivered an additional 134 weekly services to the region, improving transport connections between towns in the region and to and from Melbourne. Stage Two improvements started in late 2009 and delivered a further 179 weekly services. In total, these improvements have increased bus service levels by 94% since 2008.

There is an opportunity to build on this investment, by examining the adequacy of regional public transport connections, including bus service provision to major education centres in Warragul and Morwell. There may also be opportunities to further explore non-class based training opportunities, including audio, on-line and workplace based initiatives.

9.3. Addressing Labour Shortages

A particular problem is the demographic profile of the existing transport and logistics workforce, with males aged over 55 representing 21% of all drivers/machinery operators in the Gippsland region (Figure 22). The Victorian Government recently released a *Workforce Strategy for Road Freight Drivers*. The strategy predicts that the growing freight task coupled with imminent driver retirements means that in the coming years, industry will be looking to employ the equivalent of 150% of the current driver workforce.

Attempts to replace the workforce with a younger, more diverse workforce is proving problematic due to the high insurance premiums, the existing graduated licensing system, the seasonal nature of some jobs (e.g. in forestry), and the attractiveness of highly paid contract jobs in other regions of the country.

The *Workforce Strategy for Road Freight Drivers* specifically seeks to address projected shortages of suitably skilled drivers in the transport and logistics industries in Victoria over the next 20 years. The strategy also outlines the extent and nature of the challenges associated with driver recruitment, retention and skills training and examines how industry and government might collaboratively address driver shortages, better target available assistance and improve the image of the professional driver workforce.

ACTION 19

Work with education and training providers and employers in the Gippsland region to improve access to training and learning opportunities.

9.4. Indigenous Training and Employment Opportunities

Approximately 10% of Victoria's indigenous population resides in Gippsland, with indigenous Australians representing 1.3% of the total Gippsland population (compared to only 0.6% of Victoria's population). More than one third of Gippsland's indigenous population lives in East Gippsland.

A number of education providers have specifically targeted young indigenous people to address the relatively high levels of unemployment that exist within the indigenous community. East Gippsland TAFE runs an indigenous program out of Lake Tyers, and through Forestech – East Gippsland TAFE's specialised education facility for the forestry and fishing industries - offer a number of non-traditional transport and logistics courses that offer pathways to work in the conservation and land management sector.

Apprenticeships Group Australia is a not-for-profit organisation that provides secure employment and high quality training to apprentices. Apprenticeships Group Australia offers, in partnership with the Koori community, indigenous apprenticeship pathways through its Morwell and Bairnsdale locations. In the first semester of 2010, Apprenticeships Group Australia accepted 150 apprentices, six of whom are indigenous.

ACTION 20

Work with the Victorian Ministerial Freight Advisory Council, Transport and Logistics Workforce Advisory Group (T&LWAG) and local industry to identify opportunities to increase the diversity and flexibility of the transport and logistics workforce.

10. Strategic and Community Planning



The Gippsland region is currently experiencing strong population growth, particularly within the Shires of Bass Coast and Baw Baw. The main factor contributing to this growth is migration from Melbourne, with new residents attracted to the lifestyle advantages offered by these areas, while remaining within commuting distance to Melbourne. Should a coal derivatives export industry be developed, the consequent increase in employment opportunities would be expected to stimulate significant population growth across the whole Gippsland region, with particularly strong growth in the Latrobe and Wellington local government areas.

The anticipated population growth that would be driven by the coal derivatives industry may reflect the recent growth that has occurred in the Bowen Basin in Queensland (coal), and the Pilbara region in Western Australia (iron ore) in response to the most recent mining boom. In the five years to 2009, the Isaac Shire and Central Highlands Shire in Queensland grew by 2.6% and 2.5% respectively, making them the 16th and 17th fastest growing municipalities in the state. In Western Australia, the East Pilbara Shire grew by 5.0% in the five years to 2009, making it the 8th fastest growing municipality in the state, and the 13th fastest growing municipality in the country.

The population impacts in Gippsland may be even more pronounced than those in Queensland and Western Australia as many workers in those states are believed to operate on “fly-in, fly-out” rosters, which may not be applicable in Gippsland. The Gippsland coal industry will also require employment in the downstream processing sectors, whereas in Queensland and Western Australia the focus is primarily on mining and product transport.

10.1. Planning for Regional Growth

The projected demographic changes present a number of urban planning challenges, especially for West Gippsland and the Latrobe Valley. An increase in population will generate a greater need for housing and land, as well as increased demand for community services and amenities, such as schools, health services and sporting and cultural facilities. Accommodating these demands, while enhancing Gippsland’s desirability as a lifestyle destination, will require a co-operative and holistic approach to be taken by State and local governments towards strategic, land use and community planning.

The Gippsland Integrated Land Use Plan is a joint initiative of the Victorian Government and GLGN and is the regional planning component for a sustainable and prosperous regional and rural Victoria. A key strategy of the Plan will be the establishment of a new approach to regional planning and development, including support the planning and design of regional cities and towns, support for the development of new growth areas in regional cities, support for future planning in coastal areas for local government. The Plan will outline the basis for population growth assumptions in the Gippsland region, and identify the strategic implications of the predicted population change on settlement patterns, housing demand, infrastructure, sustainability and development.



10.2. Provision of Housing and Land

State and local governments need to ensure that there is an adequate supply of residential and industrial land in the region, and that this land is made available at appropriate times so that housing remains affordable for new and existing residents alike. Special attention will need to be paid to land supply in the Latrobe Valley, so as to not isolate the coal resource. Councils will also need to support and assist new businesses establish in the region by providing information on adequately zoned land, the availability of utilities and services, and information regarding labour markets.

10.3. Provision of Services and Facilities

New investment in the Gippsland region will create challenges and opportunities for councils in setting budget priorities to provide infrastructure and services to towns and regional centres. Increased population will potentially have an impact on a number of other service providers, including State Government with respect to education, health and community services; utility providers with respect to energy, water and sewage; and retailers and manufacturers with respect to commercial shopping and industry expansion.

ACTION 21

In partnership with the State Government, develop and implement the Gippsland Integrated Land Use Plan to accommodate further urban expansion within Gippsland towns, without compromising the potential development of the region's natural resources.

To be inserted as directed by Latrobe City Council: "There should be a balanced approach involving consideration of social, economic and environmental issues in managing conflicts between coal accessibility and land use".



11. Implementing the Gippsland Freight Strategy



The Gippsland Local Government Network will work with the Department of Transport, other State agencies, the private sector to ensure that the initiatives identified in the *Gippsland Freight Strategy* are successfully implemented, managed and monitored.

The financial challenges faced by the local Councils in absorbing costs associated with the upgrade of the local road network to support High Productivity Freight Vehicles is also noted and as such GLGN will work with State Government and Federal Government bodies to maximise any possible funding opportunities to undertake the necessary local road network improvement works at a future time, as identified as part of priority actions.

The high-level monitoring and implementation group established by the Regional Management Forum will assist ongoing development of the priorities contained within this Strategy, and help drive implementation of priority projects. This group comprises of representatives from the Victorian Government agencies and local governments in Gippsland.

The Strategy will be used as a document to inform both State and Commonwealth Governments of the strategic freight transport priorities for Gippsland.

12. Acknowledgements



The following organisations contributed to the development of the *Gippsland Freight Strategy*:

Gippsland Freight Strategy Project Steering Committee

Department of Business and Innovation	Major Projects Victoria
Department of Primary Industries	Regional Development Victoria
Department of Transport	VicRoads
Gippsland Local Government Network	

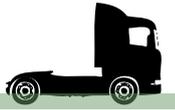
Gippsland Freight Strategy Reference Group

Bass Coast Shire Council	Latrobe City Council
Baw Baw Shire Council	Regional Development Victoria
Committee For Gippsland	South East Australia Transport Strategy (SEATS)
Department of Planning and Community Development	South Gippsland Shire Council
Department of Primary Industries	VicRoads
Department of Transport	Victorian Freight and Logistics Council
East Gippsland Shire Council	Wellington Shire Council
Gippsland Ports	

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Australian Forest Contractors Association	Monash University Gippsland
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Branstrans Pty Ltd	Riseley's Transport
Contented Chooks	RTL Transport
Dell Vista Pty Ltd	VicForests
Dyers Transport	Victorian Farmers Federation
Advance TAFE, East Gippsland	Victorian Forest Contractors Association
Gendove Tractors and Machinery	Victorian Livestock Transporters' Association
Geoff Owen Transport	V/Line
GippsTAFE	
Jelbart Dairy	

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GIPPSLAND
LOCAL
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Gippsland's United Voice

Gippsland Freight Strategy

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