Freight Futures
Victorian Freight Network Strategy
for a more prosperous and liveable Victoria
The ability to move goods efficiently, seamlessly and sustainably around Victoria makes a significant contribution to the prosperity and liveability of our State.

Transport costs flow directly on to the costs of everyday goods on our supermarket shelves and affect the competitiveness of our export businesses.

The location of freight activity areas and the way we move goods between them – the modes, the types of vehicles, the routes and the times of day – can also have a significant impact on the amenity of particular communities and the liveability of the State generally.

As Victoria’s population and economy continue to grow strongly, so does the size of the freight task, placing added pressure on existing infrastructure and systems and requiring us to look to the future to ensure that we make the right decisions now.

For these reasons, all Victorians have an interest in ensuring that our freight networks, systems and infrastructure continue to perform well in meeting the current and future freight task.

*Freight Futures* is the Victorian Government’s long term plan for achieving this objective.

*Freight Futures* recognises that the movement of freight is primarily a private sector activity and that the Government’s role is best focussed on aspects of the task on which it can have a material and beneficial impact.

For this reason, *Freight Futures* does not attempt to address every aspect of freight supply chain development and management, but rather focuses on the freight network – its planning, delivery and management.

The Victorian Government, in close cooperation with industry and other levels of Government, has a clear responsibility for ensuring that each of these aspects of the freight task are properly addressed and supported.

**Minister’s Message**

The ability to move goods efficiently, seamlessly and sustainably around Victoria makes a significant contribution to the prosperity and liveability of our State.

Transport costs flow directly on to the costs of everyday goods on our supermarket shelves and affect the competitiveness of our export businesses.

The location of freight activity areas and the way we move goods between them – the modes, the types of vehicles, the routes and the times of day – can also have a significant impact on the amenity of particular communities and the liveability of the State generally.

As Victoria’s population and economy continue to grow strongly, so does the size of the freight task, placing added pressure on existing infrastructure and systems and requiring us to look to the future to ensure that we make the right decisions now.

For these reasons, all Victorians have an interest in ensuring that our freight networks, systems and infrastructure continue to perform well in meeting the current and future freight task.

*Freight Futures* is the Victorian Government’s long term plan for achieving this objective.

*Freight Futures* recognises that the movement of freight is primarily a private sector activity and that the Government’s role is best focussed on aspects of the task on which it can have a material and beneficial impact.

For this reason, *Freight Futures* does not attempt to address every aspect of freight supply chain development and management, but rather focuses on the freight network – its planning, delivery and management.

The Victorian Government, in close cooperation with industry and other levels of Government, has a clear responsibility for ensuring that each of these aspects of the freight task are properly addressed and supported.
Over the past two years, I have spent considerable time and energy discussing and debating with industry, local government and community stakeholders the problems and issues confronting Victoria’s freight network and how we might best work cooperatively to build an efficient and sustainable future.

I believe *Freight Futures* reflects the positive outcomes of this engagement and reinforces the need to continue such processes as we move forward into delivery, review and refinement stages.

Of particular importance in delivering *Freight Futures* will be the need to engage with the exciting new national infrastructure agenda being created by the Commonwealth Government. Much of the significant investment which will be required to implement *Freight Futures* will be of a scale which is beyond the capacity of any one State to resource alone. This is particularly the case in relation to the major capital infrastructure investments recommended by Sir Rod Eddington’s report, *Investing in Transport*.

I believe the directions and initiatives in *Freight Futures* are entirely consistent with the Commonwealth Government’s new agenda and the key recommendations of *Investing in Transport* and I look forward to a productive partnership with our Commonwealth counterparts in implementing this new agenda.

A key feature of Victoria’s freight network is that most of it is a shared network, whether it is trucks with private vehicles on our freeways and arterial roads, or freight trains with passenger trains on the public transport system. Generally, this shared approach is the best means of optimising the utilisation of our freight network. However, it does mean a cooperative approach to the freight and passenger interfaces in the more densely trafficked parts of the network in the metropolitan area will become increasingly important in the early resolution of potential issues and achieving the best possible utilization of our valuable transport infrastructure.

In developing *Freight Futures*, we have looked closely at approaches adopted in other jurisdictions, both in Australia and internationally. While this has been useful in understanding the range of possible options available to us, it has not replaced the need for us to tailor an approach which is quite specific to Victoria, recognising our place in the national and global economies, our previous patterns of infrastructure investment and our own community attitudes and aspirations.

*Freight Futures* forms an important companion document to *The Victorian Transport Plan* and was developed in close collaboration with that document. It is both consistent with *The Victorian Transport Plan* and provides detailed support and elaboration of the Government’s thinking in relation to freight in the Plan.

I look forward now to getting on with the job of implementing the *Freight Futures* vision and Strategic Directions. It is clear we have a major task ahead of us, but a task that can’t be deferred if we are to maintain Victoria’s position as the nation’s pre-eminent freight State.

Tim Pallas  
Minister for Roads and Ports
# Contents

## Minister's Message

## Introduction
- The need for a Victorian Freight Network Strategy  
- The policy context  
- A partnership approach

## Goals, Objectives and Priorities
- Goals
- Objectives
- Priorities

## The Freight Challenge
- Drivers of change in the freight industry
- An overview of the Victorian Freight Story

## Responding to the Challenge

## Strategic Directions
- Planning and protecting the freight network
- Building and maintaining the freight network
- Managing and regulating the freight network

## Delivering Freight Futures
- Implementing *Freight Futures* in partnership with stakeholders
- Working with the Commonwealth Government

## Appendix 1: The Victorian Freight Story - Metropolitan

## Appendix 2: The Victorian Freight Story - Regional

## Appendix 3: Freight Facts and Projections

## Glossary of Terms
The need for a Victorian Freight Network Strategy

Future growth in the Victorian economy will generate significant increases in the volume of freight moving around the state, as well as the distances travelled on the freight network. This strong growth has many implications for Victoria and the national economy.

By 2036, Victoria will have a population approaching seven million. This will generate significant growth in personal travel and freight movements, and increased demand for goods and services. Combined with increasing competition for the supply of goods from interstate and overseas, this growth presents a core challenge for the Victorian economy and for the state’s freight, distribution and logistics industry.

By 2025, the number of kilometres travelled by road freight vehicles is expected to increase by 70 per cent, with 60 per cent more vehicles on Victoria’s roads. By 2035, the Port of Melbourne is expected to be handling up to eight million standard (twenty foot equivalent) containers per year, four times the current level of two million containers.

In Victoria, freight transport and logistics activities contribute an estimated 14.7 per cent to Gross State Product and 334,000 jobs in freight and logistics activities across all industry sectors. The freight and logistics industry is not only a major part of the Victorian economy; it also supports other industries critical to the national economy, including manufacturing, services and agriculture.

Ensuring that these industries have access to, and are able to operate on, a sustainable and efficient freight network is critical.

The efficient movement of freight in a sustainable way is vital to maintaining the liveability of Victoria’s cities and towns, with the standard of living and quality of life currently enjoyed by Victorians dependent upon being able to access goods and services in a timely and cost effective manner.

At the same time, the movement of large numbers of vehicles carrying freight through towns and cities has an impact on the environment and the amenity of some residential areas.

Population growth and increased economic activity will also increase road congestion. Congestion erodes liveability, hinders the efficient movement of freight and imposes substantial economic costs.

Victoria needs an efficient and reliable freight distribution network – a network that will keep pace with Australia’s future economic and population growth, while matching community expectations that freight will be moved around the state safely and sustainably.
The purpose of the Strategy

The Victorian Government is committed to ensuring that a high quality, high capacity, well connected, flexible and sustainable freight network exists in Victoria – a network that supports the operation of a highly competitive freight industry and that meets the challenges of growth, while maintaining Victoria’s liveability. In this context:

The overarching purpose of Freight Futures is to drive the development of an efficient, sustainable freight network for the future that balances the needs of the growing Victorian economy and population with the quality of life aspirations of the Victorian community.

The policy context

Freight Futures has brought together and developed freight directions and initiatives from a range of existing Victorian Government policies and strategies, including:

- **Growing Victoria Together** – the Government’s long term vision for the state’s future under which the Channel Deepening Project was identified as a key priority and is now well advanced
- **Melbourne 2030** – (and, most recently, **Melbourne @ 5 million**) – the Government’s vision for planning the future development of Melbourne, which identified the significance of key freight places and infrastructure, including the ports, and put in place relevant policies to support essential freight activity
- **Victorian Ports Strategic Framework** – which sets out the Government’s views on the roles and a broad sequence of development for Victoria’s commercial sea ports over the next 30 years and has resulted in the preparation of long term land use and development plans and economic impact statements for each of the ports
- **Keeping Melbourne Moving** – the Government’s immediate plan to ease congestion, focusing on peak periods, within a ten kilometre radius around the CBD

Freight Futures also responds to key freight network elements of recently completed reports including:

- **The Victorian Rail Freight Network Review** (December 2007)
- **Investing in Transport** (April 2008)

More particularly, Freight Futures complements and provides detailed support in relation to freight matters for **The Victorian Transport Plan** (December 2008), the Government’s long term vision for sustainable and effective transport for all Victorians.

Freight Futures is an important element in the Government’s agenda to maintain Victoria as a competitive place to do business and an attractive place to live.
A partnership approach

Recognising the central role of the private sector in freight, the Victorian Government will work in partnership with industry, as well as Local Government and the Commonwealth Government, to implement Freight Futures.

Freight Futures acknowledges the important role of Local Government in the freight network. In particular, the Victorian Government recognises that many local Councils have or are developing regional transport plans that address freight transport issues. The Government is committed to working with councils in the development and implementation of these plans, particularly in relation to the delivery of Freight Futures.

Freight Futures also recognises the critical importance of developing a close partnership with the Commonwealth Government to ensure that Victoria’s strategies, initiatives and aims complement relevant national initiatives and programs, including:

- The National Transport Policy reform process being progressed under the auspices of the Australian Transport Council (ATC)
- The objectives and strategic priorities of Infrastructure Australia and the Commonwealth Building Australia Fund (BAF)
- The AusLink Program of the Commonwealth Government, recently renamed the Building Australia Program (BAP)

Victoria is recognised as a national leader in providing sustainable freight and logistics infrastructure. The development of Freight Futures reflects the Victorian Government’s commitment to continue this leadership and to work together with Local Government and the Commonwealth Government to build a sophisticated, integrated freight and logistics network that is crucial to Australia’s future growth and prosperity.

The Victorian Government welcomes the Commonwealth Government’s renewed commitment to developing Australia’s national infrastructure and notes that many important state-based freight initiatives are of national significance, with national consequences. Accordingly, the full implementation of the major capital projects within Freight Futures is subject to the availability of Commonwealth funding through the Building Australia Fund (BAF).
Goals

Freight Futures has been developed with a particular focus on the Victorian Government’s role as the owner of much of the infrastructure upon which freight is transported. In this role, the Government is responsible for planning and protecting, building and maintaining, and managing and regulating the use of the infrastructure. The Government meets these responsibilities in partnership with infrastructure users and those who are affected by the operation of the infrastructure.

As a responsible owner, the Government must ensure that public infrastructure operates within a network that serves the needs of its users and that it is integrated with parts of the freight supply chain owned and/or operated by others.

In this context, the key goals of Freight Futures are to:

- Maintain and improve the efficiency of the freight network – ensuring that the road and rail links, ports, terminals and related facilities for handling and moving goods around our cities, towns and State are operating to their maximum efficiency to support Victoria’s continued economic growth
- Ensure the availability of sufficient capacity in the freight network to handle the growing freight task – both through achieving better utilisation of existing infrastructure and providing new infrastructure as required
- Enhance the sustainability of the freight network – by planning and operating the network in a manner that maximises public safety outcomes and minimises environmental and amenity impacts on the Victorian community

Objectives

In pursuing these goals and seeking to deliver a practical, long-term framework that will directly assist Victoria’s freight and logistics sector to serve the growing state and national economies, Freight Futures adopts the following objectives:

- Facilitate the efficient movement of freight in Victoria
- Reduce the cost and improve the reliability of supply chains
- Manage and mitigate any adverse impacts of freight planning and operations on communities and the environment
- Optimise the use of existing network infrastructure
- Provide appropriate priority for freight on the network in the context of competing demands
- Plan and deliver new network infrastructure in a timely manner
- Identify and protect freight network options where necessary to ensure future capacity, flexibility and certainty
- Provide a policy environment that encourages private sector investment

Priorities

Within this context, Freight Futures identifies and addresses a number of priorities, including:

- Proactive land use planning – planning for future port and freight facilities and their land use requirements, including buffering strategies
- Effective targeting of infrastructure investment by optimising the use of existing public infrastructure, identifying future infrastructure priorities and, together with the Commonwealth Government, contributing to future infrastructure capacity
- Greater integration of the network – working in close collaboration with industry to deliver new initiatives that promote supply chain efficiency
- Improved regulatory arrangements – providing the right regulatory and institutional settings to foster a sustainable freight and logistics sector
- Effective management of community and environmental impacts – seeking to mitigate the negative impacts of freight growth
- Continuous improvement of safety and security performance – adopting best practice safety management principles and implementing further measures to mitigate security threats to land, sea and air transport in accordance with relevant legislation

Freight Futures recognises the need to plan ahead, to invest in and grow the existing network, to obtain the best use and maximum value out of the network, and to manage the impact on the network of changing economic, social and environmental factors.

The Victorian Government will immediately commence the delivery of Freight Futures, working in partnership with the Commonwealth Government, Local Government and industry, to ensure that Victoria and Australia benefit from the new directions and actions to be implemented under Victoria’s first fully integrated freight network strategy.
Drivers of change

To remain competitive, Victoria’s freight and logistics industry must be responsive to change, whether this is change in patterns of supply and demand, change in the Victorian and Australian economies, change in the local and global trading landscapes, or change in equipment and technology. In addition to local population growth, fluctuations in consumption patterns, climate change and external economic factors impact on how and where freight needs to be moved.

Freight Futures recognises the long term need to drive increases in productivity in the face of such change to improve Victoria’s economic prosperity and ensure that Victoria is well placed to face any challenges that may arise.

Changes in the freight and logistics environment are expected to continue at an even greater pace into the future. Freight Futures attempts to anticipate the key drivers of change, as outlined below.

Significant growth in the freight task

World freight trade is increasing with economic growth, the globalisation of supply chains, the use of larger vessels and the implementation of more efficient freight and logistics systems.

In addition to these trends, the Victorian freight task is expected to grow significantly due to strong population growth and increasing consumption. Freight volume across all transport modes is expected to grow by close to 50 per cent by 2020 and by around 100 per cent by 2030 from today’s levels.

The number of tonnes of freight moving around Melbourne by road will almost double by 2030 from today’s levels.

In particular, total container trade through the Port of Melbourne is projected to increase at least four-fold to eight million containers (TEU’s) by 2035. This growth will increase the need to better integrate the port with its hinterland and to manage the difficulties involved in sustaining ports in built-up and increasingly residential inner urban settings. Improved productivity in road and rail modes will be needed to support this greatly expanded port task.

The capacity of the freight and logistics industry to move an escalating volume of freight efficiently, cost-effectively and sustainably will be vitally important to ensuring the competitiveness of Victorian businesses, as well as continuing to drive economic development in our regions and attracting investment and jobs to Victoria.

Impacts of increasing congestion on freight costs

Managing increasing levels of traffic and associated congestion is a challenge being faced by large cities around the world. Loss of amenity, increasing travel times and environmental damage can have a significant impact on the liveability of cities and the efficiency of the economy.

Congestion is an issue for all types of traffic, including road freight. Congestion has an impact on the efficiency of freight movements and therefore on the prices of the goods that are carried. The growing freight task also contributes to increased levels of traffic and congestion, particularly in areas of concentrated freight activity.

Truck dwell time on arterial roads will be increased by congestion. Travel times are expected to increase under a ‘business as usual’ scenario. If this is compounded with general operating cost increases, which are forecast to increase 2.5 times by 2030, Victoria’s international competitiveness will be adversely affected.

Growing the capacity of our public transport network, to maximise the number of passenger journeys by train, tram and bus rather than by car, will be a crucial component of our response to addressing road congestion and protecting the competitiveness of Victoria’s freight industry. The Victorian Transport Plan details the Government’s vision for a future where far more Victorians will be able to have their travel needs met by efficient and effective public transport – this vision will also be of vital benefit to the long term success of our freight industry.
Climate change

Our natural environment is changing as a result of climate change. The environment in Victoria is forecast to be hotter and drier over the coming decades and many of the natural resources upon which we have relied for transport energy over the past 100 to 150 years will become increasingly scarce. The Commonwealth Government’s carbon pollution reduction schemes will also lead to rising energy prices. These developments will result in rising costs for the freight and logistics industry (and other energy users), driving the search for greater efficiencies. As Victoria makes the transition to a low carbon economy, the industry will also need to reassess and possibly change many of its business practices in order to move towards carbon neutral operations.

Climate change and drought are changing the geographical focus of agricultural activity and supporting supply chain patterns. For example, availability of rainfall and groundwater supplies in the Western District and south-west Victoria have led to the expansion of cropping activities in this region and significant growth in the timber plantation industry.

Australia’s transport sector currently generates approximately 14 per cent of national carbon dioxide emissions, of which 6 per cent can be attributed to freight movements. It is clear that the freight and logistics industry must play its part in Victoria’s move towards a low emissions future through strategies aimed at reducing emissions and developing industry standards in energy efficiency.

Increased public awareness of sustainability and liveability issues

For large cities, such as Melbourne, the requirement to balance liveability, mobility and sustainability is becoming a substantial social and industrial challenge. Because of its high visibility, the road freight industry is an operational sector that must implement sustainability initiatives – and be seen to be implementing these initiatives.

Road freight noise levels and vehicle emissions are being progressively reduced through application of Australian Design Rules (ADRs) for new vehicles, supported by the Environment Protection Authority, which works with other government agencies to monitor and enforce standards. However, there will be a need in the future for more integrated approaches to land use, freight activity consolidation and the development of next generation High Productivity Freight Vehicle (HPFV) networks to further manage the impact of freight operations on surrounding communities.

Higher security and safety standards

Community expectations about improved safety have increased in recent years. The annual economic cost of road trauma in Victoria is estimated to be $3 billion.

Victoria is recognised nationally and internationally as a leader in road safety policy and programs and the Victorian Government remains committed to continual improvement though strategies such as arrive alive 2008 – 2017, the Government’s road safety strategy.

Crashes involving trucks are less frequent than other crashes, but the consequences can be more severe. Reducing the incidence of heavy vehicle crashes is a priority of arrive alive.

Victoria is fortunate in having a close and cooperative relationship between regulatory authorities and the freight and logistics industry, including the Transport Workers Union and the Victorian Transport Association, in relation to improving safety. It is vital for the future of the road transport industry that continuous improvement in road safety and occupational health and safety performance remains a priority.

Rail operators, the Australian Rail Track Corporation (ARTC) and the Rail, Tram and Bus Union have also supported and implemented best practice reforms in rail safety. The Victorian Government will continue to progress reforms to national rail safety regulation in partnership with the Commonwealth Government and rail industry.

Security, including security in transport, has become a major issue in recent years in response to increased threats from global terrorism. The Commonwealth Government is working with State and Territory Governments and industry to improve the security of Australia’s transport system and reduce the likelihood of transport being a target or a vehicle for terrorism.

In 2005/06, a new Aviation Security Identification Card was introduced. All regulated airports, airlines and air cargo agents were required to produce Transport Security Programs. Maritime Security Plans (MSPs) are required for operators and service providers at Victoria’s four commercial sea ports. In early 2007, a national Maritime Security Identification Card system was introduced.

Victoria’s changing economy

Victoria’s manufacturing sector, and the transport task it generates, will continue to be important to the Victorian and national economies, although it is expected to make up a smaller proportion of overall Gross State Product (GSP) in the future.
Primary production industries will also experience challenges in the future as a result of climate change, water supply and other environmental impacts that may lead to changes in production. While climate change will present challenges for Victoria’s primary producers, there will also be opportunities and the transport network will need to be adaptable to take advantage of these developments.

The services sector, on the other hand, is expected to play an increasingly important role in the growth of the freight and logistics industry and the broader Victorian economy in the years to come.

These changes in key components of the Victorian economy will have an impact on freight flows and the nature of the demand for freight and logistics services.

**Increasing oil prices**

Global oil production is likely to peak at some time between now and 2030 – within the horizons of Freight Futures and Melbourne 2030. In response, oil prices are predicted to triple or quadruple, even if alternative fuels (which are generally more expensive to produce) succeed in powering a significant amount of freight, commercial and personal travel.

Fuel typically accounts for 10 to 40 per cent of the total costs of road freight and around 7 to 10 per cent for rail freight. Overall, fuel costs make up about 20 per cent of transport costs in Australia across all modes. Fuel for transport is approximately 2 to 5 per cent of total production and supply chain costs, averaged over all industries.

In Melbourne, rising fuel prices have contributed to a significant move to public transport. As fuel prices continue to rise, this trend is likely to continue. Freight is less able to change mode, but efficiencies will be needed to mitigate the impact of increasing fuel prices.

**Labour and skills shortages**

The increasing freight task is requiring a greater number of truck, delivery and freight train drivers. However, the 2006 Census of Population and Housing disclosed that the average ages of truck and train drivers are higher than that of the workforce in general. Associated with this, the proportions of truck and train drivers aged over 50 years are higher than for the workforce in general, indicating that a large proportion of current drivers will reach retirement age in the next 20 years.

The Department of Transport is developing a Workforce Strategy for Freight Drivers in recognition of current and likely future labour and skill shortages amongst freight drivers. The strategy is designed to support the freight and logistics industry in its workforce planning endeavours, without removing its responsibility in this area. It identifies components of workforce planning that the industry is struggling to address. It considers how the freight and logistics industry can better plan for its workforce needs and recommends areas where government can improve its regulation of the industry and provide support through facilitation and coordination. This strategy will be finalised and released shortly.

**Changes to industry structure and technology**

In addition to external factors, there are a range of internal developments within the freight and logistics industry which are driving change in the way the industry operates. These developments include:

- **Strategic alliances and amalgamations along supply chains**

  Over the last decade, a number of very large vertically integrated freight companies have emerged to dominate the transport and logistics industry, with the aim of containing costs through economies of scale and reduced handling charges. Where once companies specialised as truck, train or shipping operators, large companies are increasingly seeking to operate along the entire supply chain in order to provide a complete ‘door to door’ service. This has led to a concentration of freight transport capacity.

  Over the last three decades, large freight customers have been moving gradually to an increased use of outsourcing and partnering arrangements with third party logistics providers to deliver a range of needs including warehousing, pick and pack, own fleet and sub-contractor road freight transport.

  In many cases, the result has been the development of larger distribution centres. Within Melbourne, the western suburbs of Laverton, Derrimut and Ardeer are examples of where significant growth has occurred as a consequence of these customer arrangements. Similarly, the greater Dandenong region, including Braeside and Hampton Park, have experienced a continuing trend towards the development of large distribution centres.
Increasing ship and ship container size

One result of the massive growth in global trade can be seen in current orders for increasingly larger container ships with capacities of up to 14,000 twenty foot equivalent units (TEUs), such as the Maersk ‘E-series’ vessels. These larger vessels are also carrying a greater proportion of 40 foot containers.

Although the largest of these ships are not expected to visit the Port of Melbourne, vessel sizes will increase substantially by 2020 as they displace the vessels currently servicing the main east-west trade routes onto the north-south routes, including the Australian trade. Container movements through the Port of Melbourne are projected to quadruple by 2035 and the larger vessels, carrying more and larger containers, will require larger scale and more efficient container handling infrastructure. Larger ships also mean larger container transfers per visit and significant increases in periods of high intensity landside transport operations.

Increased use of intermodal solutions

In response to the need to contain increasing costs, the freight industry is continually searching for more efficient ways of moving freight from origin to destination. One response, especially internationally, has been the trend towards intermodal solutions to cut dwell times and avoid road congestion. Intermodal solutions, especially road/rail, can deliver customer benefits and also reduce the growth in road freight movements. Connectivity to intermodal operations can occur at hubs that may be at a local, regional or interstate level. If the combination of modes can meet customer service requirements, then intermodal services can be an effective alternative to single mode only operations.

Advances in road freight vehicle performance, size and technology

Since the mid 1970s, articulated truck mass limits have risen from 30 tonnes Gross Vehicle Mass (GVM) to 68 tonnes GVM (for a 25 metre B-Double operating at Higher Mass Limits).

The freight and logistics industry has already recognised the benefits of next generation High Productivity Freight Vehicles and has submitted a number of proposals for their use in Victoria under the national Performance Based Standards (PBS) program for heavy vehicles. Larger freight vehicles can actually mean less traffic. They can move more freight at lower cost in fewer vehicles. Under the PBS framework these larger vehicles will also be safer – there are 11 safety standards that PBS vehicles must meet in order to be accredited which are designed to ensure that these vehicles are generally safer than vehicles designed under the existing prescriptive regulatory system.

Advances in rail rolling stock performance, size and technology

Over recent years the length of interstate freight trains has increased from 1500 metres to 1800 metres, together with an increase in the permissible axle load – which determines the maximum loading of individual wagons – to 21 tonnes and in some cases up to 23 tonnes. These advances have resulted in an increase in the productivity of interstate trains.

On the other hand, the standards for Victorian intra-state regional freight trains have not advanced since the 1970s. Regional freight trains are typically less than 1000 metres long and operate at only 19 tonne axle loads, restricting their productivity and viability compared with road transport, which has advanced considerably over the past three decades.

Although handling longer, heavier freight trains presents various challenges to rail and terminal infrastructure, these challenges will need to be addressed on the intrastate network to achieve similar productivity improvements.

The increasing role of information and communication technology (ICT)

ICT, and especially web-based technologies, is becoming critical as ‘virtual infrastructure’ that supports freight operations on physical infrastructure. However, while there have been very significant ICT developments in the freight and logistics industry, ICT is still highly dependent upon telephone, facsimile and e-mail. The take-up of multi-applications, such as portal technologies, hosted ‘software as a service’ applications (SaaS), public user booking systems, public user track and trace systems, e-markets and even common user Radio Frequency Identification (RFID) scan storage systems has been limited. The move towards these technologies should deliver a significant improvement in the efficiency of the freight and logistics industry.

In addition to changes in the freight and logistics industry enabled by ICT development, significant changes are also occurring due to the uptake of ICT by others in the logistics system. For example, improvements in inventory control, warehouse management and ordering mean that ‘just-in-time’ logistics is now thought of in terms of single freight items rather than pallets or containers. This approach affects freight transport in many ways, including the types of vehicles used, frequency of delivery and delivery lead times.
An overview of the Victorian freight story

The efficient movement of freight around Victoria and to and from interstate and international market-places is a key component of the prosperity and liveability of Victoria. As Victoria’s economy has grown and evolved into an active participant in the international marketplace, so too has the freight task grown and evolved in response. Understanding this ‘freight story’ is crucial to planning an effective freight network.

Currently, road trucks carry most of the freight in Victoria by volume, moving 89 per cent of the task in tonnes. Sea and rail represent 9 per cent and 2 per cent respectively, while air freight moves only 0.1 per cent of the task in tonnes. However, rail performs best moving large volume commodities over long distances while air typically moves very time sensitive, high value commodities.

Table 1 shows that, since 1995, the freight handled by the Victorian freight and logistics industry has grown at approximately 5 per cent per year. While Victoria’s freight network has managed this growth extremely well until now, there is increasing evidence that the forecast growth in freight and industry changes will place pressure on the network to improve current levels of performance.

Changes in population, industry practices, demographic trends and global influences, such as where people are living and working are all having an impact on how and why freight is transported around Victoria. In particular, as standards of living have risen, Victoria’s economy has been gradually shifting its focus towards services, knowledge based activities and less intensive manufacturing. As wealth and knowledge have increased, people are increasingly demanding more choice and variety in the goods and services they purchase. Firms are reacting by carrying more varied and responsive stocks and this stock is increasingly imported. These growing volumes of imported stock have led to the growth of off-site warehousing and distribution operations that can provide quick shuttles of goods from large Distribution Centres (DCs) to keep shelves continually stocked. These trends are evident in the strong growth in trade through our ports, growing expenditure on warehouse construction and the expanding use of freight vehicles in urban areas.

These trends are also driving a strong increase in the numbers of Light Commercial Vehicles (LCVs) operating on the network, which is shown in Table 2.

Table 2 – Victorian road vehicle fleet 1995 – 2007

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>1998</th>
<th>2007</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCVs</td>
<td>363,782</td>
<td>360,037</td>
<td>490,513</td>
<td>+35%</td>
</tr>
<tr>
<td>Rigid Trucks</td>
<td>82,674</td>
<td>84,643</td>
<td>93,131</td>
<td>+13%</td>
</tr>
<tr>
<td>Articulated Trucks</td>
<td>17,399</td>
<td>16,946</td>
<td>22,254</td>
<td>+28%</td>
</tr>
<tr>
<td>Total</td>
<td>463,855</td>
<td>461,626</td>
<td>605,898</td>
<td>+31%</td>
</tr>
</tbody>
</table>

Source: ABS SMVU 9208.0, BTRE 2006

LCVs (defined by the Australian Bureau of Statistics as freight carrying vehicles smaller than 3.5 tonnes) represent 11.5 percent of traffic flow (vehicle kilometres travelled) in Melbourne, whereas rigid trucks over 3.5 tonnes account for 3.1 percent and articulated trucks make up only 0.9 percent of traffic flow in Melbourne. However, the majority of the freight task is carried by Victoria’s rigid and articulated truck fleet, as shown in Figures 1 and 2.
When distance travelled is taken into account, the importance of the roles played by rigid and articulated trucks becomes larger, as shown by Figure 2.

Generally, LCVs do not travel long distances compared with rigid and articulated trucks. This is due to their major role as a ‘tool of trade’ for trades people and people involved in rural industries (often doubling after hours as a personal vehicle) and their role in undertaking short journeys distributing freight to retail outlets and direct to end-users. Victoria is, by many measures, Australia’s freight and logistics capital. Figure 3 shows that the Port of Melbourne is the largest container port in the country. It handles 36 per cent of Australia’s container trade, significantly more than any other Australian port, and is well placed to continue strong growth in the years ahead. Economies of scale due to the size of our freight industry contribute to lower per unit operating costs in Victoria.

There has also been significantly more expenditure on warehouse construction in recent years in Victoria than in other States, as shown in Figure 4, reflecting Melbourne’s role as a national freight hub.

B-Double uptake in Victoria, 41 per cent of all of Australia’s B-Doubles compared to 20 per cent in Queensland and 21 per cent in NSW, is another indicator of Victoria’s national edge in higher capacity vehicles and freight innovation.

The freight data shown in Appendix 3 gives an overview of Victoria’s freight task looking forward to 2020 and 2030. For example:

- By 2020, freight volume across all transport modes will increase by 47 per cent from today’s levels. By 2030, the freight task will be almost double its current size.
The number of kilometres travelled by road freight vehicles within metropolitan Melbourne will increase by 77 per cent by 2020.

The number of tonnes of freight moving around Melbourne by road will at least double by 2030 from today’s levels.

By 2030, there will be an increase of 85 per cent in the number of freight vehicles registered in Victoria and an increase of more than 100 per cent in the number of Light Commercial Vehicles registered in the State.

By 2030, the Port of Melbourne will be handling nearly seven million containers (twenty foot equivalent units) each year, over three times the current level, and accommodating at least a 57 per cent increase in the number of ships visiting the port.

These figures highlight a story of continued, sustained growth in the freight task (and even faster growth in international container trade) and the growing freight vehicle fleet required to service the task.

For a closer examination of Victoria’s freight challenge, the freight story has been divided into two components found in Appendices 1 and 2:

- **Metropolitan freight** – product moved into, out of and around metropolitan Melbourne for a range of uses; including groceries and other consumer goods, building products, fuel and general courier vehicles
- **Regional freight** – freight moved within regional Victoria, including product moved between points within regional Victoria, product moving to and from regional Victoria, product moving to and from international marketplaces through Victorian regional trading ports and product moving to and from Victoria and marketplaces interstate

These two components of Victoria’s freight task differ in the mixture of modes and methods used. The mixture is driven by the makeup of the commodities being moved, the distances covered and the nature of the origins and destinations of the consignments. While focusing on the overall growth and evolution of Victoria’s freight task, *Freight Futures* has taken into account the unique aspects of the metropolitan and regional freight stories.

Victoria’s metropolitan and regional freight tasks are carried on an extensive system of freight infrastructure that links Victoria to the rest of Australia and the world. This system includes roads, rail lines, commercial sea ports, freight airports and intermodal terminals.

---

**Victoria’s road network**

Victoria has approximately 150,000 kilometres of roads used by general traffic as well as other minor roads and tracks in parks and forests. VicRoads manages freeways and arterial roads.

All declared arterial roads managed by VicRoads have the capacity to carry heavy freight traffic. The most important freight routes in Victoria are designated as being part of the national AusLink network, meaning that they have priority for Commonwealth funding under the AusLink program. Local roads are funded through Local Government with significant assistance from the Commonwealth Government and some assistance from the Victorian Government.

Important, while some roads clearly carry the bulk of the freight task, all roads carry freight to some extent. Many important origins and destinations for freight are on local roads, managed by Local Government.

**Victoria’s rail system**

Three interlinked rail networks operate in Victoria. All are owned by VicTrack, a Victorian Government corporation. Following broadening of the ARTC lease, the network will comprise:

- 1,213 kilometres of standard gauge interstate and intrastate non-urban track leased to the ARTC
- 400 kilometres of urban broad gauge track franchised to Connex, the metropolitan network access manager and passenger service operator
- 3,278 kilometres of intrastate, non-urban rail network franchised to V/Line Passenger, the regional network access manager and passenger service operator

These component networks operate on two different track widths, broad and standard gauge:

- The urban or metropolitan network consists of the wider broad gauge track, predominantly servicing commuter passenger services within Melbourne
- The intrastate network is also predominantly broad gauge track, servicing regional freight and passenger services
- The interstate network is exclusively standard gauge track, also servicing both freight and passenger services
Victoria’s commercial sea ports

Ports act as Victoria’s gateways to the world, making efficient and cost effective port infrastructure vital to the viability of our export industries.

There are four commercial sea ports in Victoria: the Ports of Melbourne, Geelong, Hastings and Portland. The Port of Melbourne is Australia’s largest international container port and a key strategic asset for Victoria. The Port of Melbourne and Port of Hastings are owned by the Victorian Government and are managed on its behalf by the Port of Melbourne Corporation and the Port of Hastings Corporation respectively. The Port of Geelong and Port of Portland are privately owned and operated.

The regional commercial trading ports of Geelong, Portland and Hastings play a critical role in moving large volumes of non-containerised bulk cargoes into and out of Victoria, including grain, fertiliser, woodchips, chemicals, petrochemicals and crude oil.

Victoria’s freight airports

Victoria has two airports – Melbourne and Avalon – which handle significant quantities of freight. Melbourne Airport, in particular, is a national airfreight hub, as well as being a major passenger airport. Melbourne Airport handles 350,000 tonnes of airfreight per annum, giving it more than 30 per cent of Australia’s airfreight market. Melbourne Airport has five dedicated airfreighter positions on its Southern Freighter Apron, ensuring significant capacity for growth in airfreight over the next decade. The Airport is also the domestic airfreight hub for Australia, delivering freight to and from Australian destinations daily.

The absence of a night curfew at Melbourne Airport compared to its main air freight competitor, Sydney Airport, provides an important strategic advantage for Victoria and the local airfreight industry. In 2007/08, it was calculated that 24 hour operation at Melbourne Airport contributed around $309 million to Gross State Product and $77 million to the local value of production (2008 Melbourne Airport Economic Impact Study). Avalon Airport freighted specialised goods, such as vehicles and event equipment for the Australian Grand Prix.

Victoria’s intermodal terminal network

In addition to the ports and airports, Victoria has an established network of intermodal terminals on its rail network located at Horsham, Mildura, Wodonga, Warnambool, Ballarat, Shepparton, Morwell, Donald, Boort, Bairnsdale, Laverton, Altona and Somerton. These terminals allow freight to be moved by rail and then transported a relatively short distance by road to its destination. These intermodal terminals typically handle grain and containerised freight.
Freight Futures seeks to respond to the freight challenge by setting out a clear rationale and an ambitious agenda for the planning, delivery and management of Victoria’s Principal Freight Network.

Victoria already leads the nation in terms of the capacity and efficiency of its freight infrastructure and facilities, and has maintained its reputation as a highly liveable state.

However, Freight Futures makes clear that we cannot rest on these achievements. Major challenges are looming – the challenges of managing strong population growth, supporting a changing economic base, making the shift to a low carbon economy and managing the growing freight task itself.

At the same time, community attitudes to issues of amenity, safety and the environmental performance of the freight system are hardening. In addition, factors beyond Victoria’s control, such as rising oil prices and global climate change, are driving changes in the way we do business and think about the future.

To maintain prosperity and liveability in the challenging times ahead, Victoria must act now. We must plan prudently for the future – and a vital part of such planning is ensuring that Victoria has the infrastructure, network and regulatory environment required to move goods reliably and efficiently around the state and to and from domestic and international marketplaces.

Understanding how freight moves around the State now, how it might move in the future and the implications of this movement is a complex technical task. Determining what can and should be done to support this movement is an even more complex and difficult task.

Freight Futures deals with this complexity from the perspective of government. It focuses on the Victorian Government’s responsibility for planning, providing and managing the network infrastructure platform on which freight activity occurs. However, Freight Futures acknowledges that the activity of moving freight is undertaken almost exclusively by private businesses and that many stakeholders have a role to play in the successful delivery of the task, including other levels of government, industry and community interest groups.

Because of this complexity and diversity of interests, the Government recognises that not all stakeholders will agree with all aspects of Freight Futures. The freight business is highly competitive with tight margins and a mix of small operators and large vertically integrated enterprises. These businesses will naturally tend to focus on the commercial implications for their own operations on particular parts of the network.

The role of Freight Futures is to look beyond these individual interests and provide a balanced plan of action in the interests of the freight network and the state as a whole. In developingVictoria’s first integrated freight network strategy, Freight Futures challenges industry to think more broadly and work cooperatively with the Government and other stakeholders to achieve the best possible freight outcomes for all Victorians.

Freight Futures has also been designed to complement the six key priorities for action set out in The Victorian Transport Plan:

- **Shaping Victoria** – Linking jobs, services and homes
- **Linking rural, regional and metro Victoria** – Strengthening the connections between regional, rural and metropolitan Victoria so all parts of the State share in prosperity
- **Creating a Metro System** – Taking practical steps to increase the capacity, frequency, reliability and safety of trains and trams, and move towards a modern Metro system
- **Moving around Melbourne** – Linking our communities by closing gaps, reducing congestion and improving safety on the road network
- **Taking practical steps to a Sustainable Future** – Moving towards a sustainable and lower emissions transport system to help Victorians preserve their environment
- **Strengthen Victoria’s and Australia’s Economy** – Enabling efficient and effective access for people to jobs and services, and freight to markets
The development of The Victorian Transport Plan has, in particular, highlighted the crucial interaction between land use patterns and derived transport demands, and the need to optimise this interaction to achieve efficient and sustainable outcomes.

Victoria, and Melbourne in particular, has developed a highly centralised transport network associated with its traditional focus of significant employment in Melbourne’s central business district. As Melbourne has grown, the centralised nature of our network has contributed to increasing trip times, longer distances being travelled, growing congestion and transport inefficiency.

The Victorian Transport Plan recognises the need for the Government to play its part in shaping urban form in order to achieve optimal transport pattern outcomes and redress the heavily centralised nature of Melbourne’s land use patterns. Encouraging development of activity and employment away from Melbourne’s Central Business District to Central Activities Districts such as Dandenong, Footscray and Broadmeadows is a key focus of The Victorian Transport Plan and the recently released Melbourne @ 5 million.

A similar centralised pattern has developed for Melbourne’s freight movements and reshaping land use is of equal importance in creating a sustainable future for the freight network.

Preliminary modelling work by the Department of Transport (DOT) has indicated that significant reductions in vehicle and tonne kilometres travelled, of the order of 5 to 6 per cent, can be achieved if growth in freight activity can be effectively concentrated into a relatively small number of major freight and logistics precincts around outer metropolitan Melbourne. This, in turn, would translate into similar levels of reduction in fuel use and associated emissions, including greenhouse gases.

Consolidation of freight activities in this way also enables operators to take advantage of the benefits of co-locating related activities rather than having these more dispersed across different locations.

While movements to and from inner Melbourne make up only a relatively small percentage of total freight activity in Victoria, the Dynon/Port precinct remains the largest distribution hub in our freight network and its location has a significant influence on flows across the whole freight network. The current configuration of Melbourne’s freeway network also contributes to more journeys than necessary passing through inner Melbourne.

The Government is committing, through Freight Futures, to taking a lead role in reshaping the freight network by encouraging the development and growth of a relatively small number of key freight activity centres, dispersed strategically around the periphery of the metropolitan area and in regional Victoria, rather than allowing the more dispersed pattern of freight distribution centres which is likely to evolve without such direction.

To achieve this outcome, Freight Futures focuses on the more concentrated patterns of freight movement on higher capacity routes, carried by larger vehicles. While acknowledging the important role played by LCVs and the large number of trips made by these vehicles, as noted in the previous section, it is the larger rigid and articulated trucks which carry the majority of the freight task.

LCVs by their nature will continue to have a more dispersed pattern of movement, similar to private cars. Consequently, the measures outlined in The Victorian Transport Plan to address road congestion will assist most in accommodating and managing the increasing numbers of LCVs on the network. The measures described in Direction 6 for improving planning for ‘last kilometre’ freight journeys are also relevant to LCVs engaged in the freight distribution task.

Freight Futures has also been developed with a strong focus on the key priorities being pursued by Infrastructure Australia as it assesses projects for investment under the Commonwealth Government’s new process for developing Australia’s national infrastructure. Funding support from the BAF will be critical to the delivery of key elements of Freight Futures. These priorities are:

- Expand Australia’s productive capacity
- Increase Australia’s productivity
- Diversify Australia’s economic capabilities
- Build on Australia’s global competitive advantages
- Develop our cities and regions
- Reduce greenhouse gas emissions
- Improve social equity, and quality of life, in our cities and regions
- Improve links to other projects and to other jurisdictions (projects that benefit more than one State or Territory)

In responding to these challenges and priorities and addressing the three key goals for the freight network set out in Chapter 2 – efficiency, capacity and sustainability – Freight Futures sets out 20 Strategic Directions. These are detailed in the following chapters.
The Victorian Government aims to secure Victoria’s position as the national leader in the provision of sustainable ports, freight and logistics infrastructure and in developing and maintaining a sophisticated, integrated freight and logistics network.

Responding to the freight challenge requires a comprehensive plan of action by the Victorian Government, in partnership with the Commonwealth Government, Local Government, industry and other stakeholders.

*Freight Futures* sets out twenty Strategic Directions that provide the foundation of the Government’s commitment to building a sustainable freight future for Victoria. These Strategic Directions reflect the Government’s core role in the freight network: planning and protecting the network; building and maintaining the network, and managing and regulating the network.

*Freight Futures*, and the directions and actions arising from it, will be implemented in partnership with other tiers of government, with industry (including the Victorian Freight and Logistics Council [VFLC]) and with a new government/industry joint forum that will meet every six months.

*Freight Futures* will be included in Government planning processes and within Victoria’s planning framework, and will be subject to regular assessment of its progress. These Strategic Directions will significantly shape Victoria’s freight network for decades to come, ensuring that the network is well placed to meet the long term needs of a growing population and expanding economy.

**Freight Futures’ 20 Strategic Directions**

**Planning and protecting the freight network**

**Direction 1**: Identify and develop a Principal Freight Network for Victoria

**Direction 2**: Identify and develop Freight Activity Centres

**Direction 3**: Plan and protect future freight corridors and activity centres

**Direction 4**: Plan and develop a Metropolitan Freight Terminal Network

**Direction 5**: Plan for growth in regional freight

**Building and maintaining the freight network**

**Direction 6**: Improve planning for the ‘last kilometre’ of freight journeys

**Direction 7**: Invest in the Principal Freight Network – Roads

**Direction 8**: Invest in the network and trial next generation HPFVs

**Direction 9**: Revitalise the Principal Freight Network – Rail

**Direction 10**: Enhance commercial port efficiency, capacity and integration

**Direction 11**: Alleviate the impact of truck movements in Melbourne’s inner west

**Direction 12**: Support increased take up of information and communications technology

**Managing and regulating use of the freight network**

**Direction 13**: Maximise efficient use of the Principal Freight Network

**Direction 14**: Minimise the amenity, environmental and climate change impact of freight transport

**Direction 15**: Enhance the safety and security of freight transport

**Direction 16**: Undertake regulatory reform and reduce the regulatory burden

**Direction 17**: Implement improved governance arrangements for ports

**Direction 18**: Establish governance arrangements for the Metropolitan Freight Terminals Network

**Direction 19**: Actively manage access for vehicles carrying overdimensional loads

**Direction 20**: Implement a new freight data collection and analysis capability
Planning and protecting the freight network

In developing Freight Futures, the Victorian Government has given priority to planning for future freight growth. While ensuring the most efficient possible movement of freight, this needs to take into account environmental impacts and the social impacts on Victorian communities. For such forward planning to be successful, existing vital freight infrastructure must be identified and protected, and new corridors, freight activity areas and logistics precincts must be defined and set aside for future development and use.

The term Freight Activity Centre (FAC) broadly defines key nodes where intense freight and logistics activity takes place. These centres may include ports, airports, rail yards, intermodal terminals, manufacturing activity, warehouses and distribution centres. Activities within these precincts may include empty container parks, container handling and storage facilities, and terminal related warehousing and freight packing and unpacking facilities. Freight Activity Centres are connected by the Principal Freight Network.

Freight corridors are the tracts of land that accommodate the infrastructure (roads, railways, pipelines and shipping channels) connecting Victoria’s sea ports, airports and industrial zones. If new corridors are not identified and protected, the cost of providing them at a later date will be very high because land has not been reserved in advance.

Protection of FACs and freight corridors is vital to those parts of the freight network that are under pressure from non-industrial and residential uses, particularly ports, which generally occupy prime waterfront land. It is also critical to plan for surrounding land use activities to be compatible with the freight network, including appropriate transitional uses and buffers and for local road feeder systems that will support these activities.

Through Freight Futures, the Government is for the first time clearly identifying a Principal Freight Network (PFN) for Victoria which it will protect and prioritise for investment. Through planning controls and more direct involvement, the Government will be responsible for identifying and protecting FACs and key freight corridors, ensuring that there is space to grow to meet future freight demands.

Existing freight corridors, particularly in regional Victoria, hold important remnant vegetation. It will be important that planning for the future development of the freight network has regard to this vegetation and other relevant environmental and heritage considerations.

The Government will review the statutory planning provisions affecting the freight network and make appropriate changes to the Victoria Planning Provisions and planning schemes to ensure that land use and development decisions in these areas contribute to the objectives of Freight Futures.
**DIRECTION 1: Identify and develop a principal freight network for Victoria**

While freight has always travelled (and will continue to travel) on shared transport infrastructure, particularly on arterial roads and railways, Victoria has never clearly identified a Principal Freight Network (PFN). This has meant that freight transport requirements are not always given sufficient priority when new transport network capacity is planned and constructed.

Through **Freight Futures**, the Government has identified a PFN for Victoria. The regional component of the network is shown in Figure 5 and the metropolitan component in Figure 6. The PFN is that part of the larger transport network over which the movement of freight will be encouraged. This will be achieved by upgrading the capacity of the network to move freight, while ensuring that the network is managed efficiently to reduce freight travel times and increase the reliability of freight movement.

**Figure 5 – The Principal Freight Network – Regional**

The criteria for inclusion of links on the PFN include volumes of freight currently utilising the link, projected future freight volumes, functionality within the network (eg contribution to connectivity between Freight Activity Centres, avoidance of route duplication) and suitability of the infrastructure for the current and future task. These criteria will be progressively refined and formalised as the PFN evolves over time.

By identifying this network for the first time, **Freight Futures** aims to achieve a fully connected freeway network, parts of which in future would be suitable for the movement of freight by larger, more efficient freight vehicles.

VicRoads will encourage use of roads on the PFN for freight movements and discourage use of roads off the PFN through its road space allocation and traffic signal control systems. Priority for freight movements will be balanced with the demands of other users of roads on the PFN, particularly during periods of peak commuter activity. In certain specific situations, for example, approaching high volume FACs, it may be appropriate for dedicated freight lanes or roads to be designated.
Figure 6 – The Principal Freight Network – Metropolitan
Encouraging freight movements on the PFN during periods of the day when there are high levels of spare road space, particularly during the night, will be a key aim.

The Government will also seek to achieve appropriate priority for rail freight on the rail component of the PFN through improved rail network governance and operating arrangements.

The PFN will need to be upgraded and extended over time and will require substantial investment if it is to reach its full productive potential. Priorities for investment on the network will be determined and funding targeted accordingly. Adequate maintenance funding will also need to be allocated to the network to ensure that it continues to provide a high level of service to road vehicles and trains that are moving freight.

Improved noise attenuation on the Principal Freight Network

The anticipated doubling in the Victorian freight task over the next 20 years will lead to increased levels of freight exposure for many local communities – particularly those in close proximity to high volume elements of the PFN. In responding to this growth, the use of larger, more productive vehicles will be critical to maintaining and enhancing freight efficiency. Fewer vehicles will be required to carry the same freight task and these vehicles will employ the latest technologies to minimise air and noise emissions.

Nevertheless, to manage the potential impacts of the growing freight task on the PFN, the Government has announced, in The Victorian Transport Plan, additional funding support for measures to mitigate the impact of freight activities. This will be primarily through noise walls consistent with current noise policies. Other noise attenuation measures may be considered on a case by case basis. Funding will be targeted at high volume freight routes within urban areas on the PFN, including Melbourne’s freeways.

**Direction 1 – Actions**

- Designate, publish and update as necessary a Principal Freight Network (road and rail) for Victoria
- Review and make appropriate changes to the Victoria Planning Provisions and planning schemes to formally recognise and protect the Principal Freight Network
- Use the Principal Freight Network as a basis for securing and prioritising investment in freight network efficiency, capacity and sustainability
- Fund improved noise attenuation on the Principal Freight Network, consistent with current noise policies

**Direction 2: Identify and develop freight activity centres**

Melbourne 2030 plans for the location of industry and freight transport infrastructure to service key industrial precincts in metropolitan Melbourne. It incorporates measures to prevent land use conflicts and to protect and invest in the long term potential of Melbourne’s airports, ports and other transport terminals. It also recognises the need to improve transport links between key industrial areas and activity centres within Melbourne.

Given the economic importance of freight to Victoria and the projected strong growth of the freight task, there is a need to further improve the integration of freight planning with the Melbourne 2030 planning process, other key State planning strategies and the Victorian land use planning system more generally.

The focus on airports and commercial sea ports will need to be complemented by effective land use planning for the precincts adjacent to freight terminals, freight corridors and distribution networks, to ensure a broader and more complete integration of land use and transport planning. Once identified and confirmed, it will be important to protect FACs with appropriate zoning recognition in the relevant planning schemes and to plan and facilitate their development and growth in a coordinated manner.

Identifying and planning for the sustainable development of the principal FACs in metropolitan and regional Victoria will be a priority under Freight Futures. This will involve developing and formalising appropriate criteria for designating and classifying FACs of various types and importance within the freight network.

Freight Futures also recognises the need to protect community amenity in proximity to FACs, while preserving the economic and functional requirements for efficient freight operations.

More broadly, it is proposed that Freight Futures will be recognised within the Victoria Planning Provisions and in local planning schemes to ensure that its Strategic Directions are considered when key planning decisions relevant to FACs are made. The existing Referral Authority roles of the Department of Transport and VicRoads will be extended and coordinated to ensure that, where relevant, the needs of freight are considered in decisions about land use planning.
Planned precincts supporting the Metropolitan Freight Terminal Network

The establishment of FACs and the development of a Metropolitan Freight Terminal Network (as proposed in Direction 4) will need to be augmented by land use planning of the precincts ‘outside the terminal gate’. The aims will be to group like activities to help create viable freight volumes and achieve the benefits of agglomeration; to buffer these activities from residential and community uses; and to ensure that ‘first and last kilometre’ freight movements are efficiently connected to the Principal Freight Network.

*Freight Futures* proposes the use of appropriate policy and zoning tools within the *Victoria Planning Provisions*, such as Comprehensive Development Zones, to support the development of FACs and a defined Metropolitan Freight Terminals Network.

Encouraging the development of strategically located FACs and appropriate zonings will provide the basis for a more efficient, decentralised pattern of freight activity and distribution in the metropolitan area which, over time, will serve to lessen congestion and amenity pressures on the Port/Dynon precinct and central Melbourne more generally.

The Government also recognises that it is desirable that locational planning of other land use activities, such as commercial and retail outlets, educational facilities and residential areas, be integrated with planning for FACs and Metropolitan Freight Terminals. The Government has funded and is working with the Institute of Logistics and Supply Chain Management at Victoria University of Technology to develop the concept of ‘logistics cities’, comprehensively planned mixed use precincts surrounding key FACs, to create viable communities and act as a catalyst for local and regional economic development and employment generation.

The logistics cities planning model would be similar in concept to the most significant Principal Activity Centres, linked by the Principal Public Transport Network (PPTN), already incorporated in *Melbourne 2030* and Victoria’s planning schemes. The work being undertaken by the Institute of Logistics and Supply Chain Management will provide, for consideration by the Government, a generic logistics city model, a proposed implementation process and possible locations for commencing logistics city development within metropolitan Melbourne.

Port strategic land use planning

Ports are particularly important and sensitive FACs. Throughout Australia and the world, commercial sea ports are facing pressure from urban encroachment and conflicting uses of land and water around the port environment. Port-related facilities and businesses are often located on land that has become increasingly sought after for residential purposes due to its waterfront location. The Government recognises the vital importance of protecting port operations and ensuring that existing buffering around ports is retained and strengthened. This is particularly important at the Port of Melbourne in view of its location in the heart of the metropolitan area and projected strong growth in trade.

Ensuring that development in areas close to key port facilities is compatible with the operational needs of the port (or otherwise buffered from the port) is an urgent and critical task and one that is vital to maintain the competitiveness of Victoria’s commercial sea ports. Accordingly, the Victorian Government – in collaboration with the ports – has supported the preparation of a number of long term port land use development plans. In addition, Economic Impact Studies have been prepared for each port.

While the port-urban interface issues at the Port of Melbourne have been most evident, these issues are also present at the commercial sea ports of Geelong, Portland and Hastings. Recent land use conflicts near port land in Geelong and Portland highlight the growing pressures facing regional ports.

Protection of current and future port operations requires effective port planning frameworks, including buffers around port areas. While much work has been undertaken to prepare port land use and transport strategies for each commercial port, it will be important now to formalise statutory arrangements and protections through appropriate recognition in the *Victoria Planning Provisions* and relevant planning schemes.

Protection of sustainable access corridors will also be critical to the ongoing viability of Victoria’s commercial sea ports. This may in some cases require the development of freight specific infrastructure designed to reduce the amenity impact of trucks moving to and from ports an example of this is the impact on local amenity in Melbourne’s inner west of truck movements on approaches to the Port of Melbourne.
The Port of Melbourne and Port Environs Planning Framework

The Port of Melbourne Corporation (PoMC) is working with relevant Government agencies and local councils to prepare the *Port of Melbourne Port Environs Planning Framework*, which involves a significant review of planning controls applying to the port environs and the identification of changes to address deficiencies in port buffer land uses.

The primary conclusion of the work to date is that in order to ensure an adequate port buffer, the existing planning provisions require strengthening, including some re-zoning.

The Government will continue to work with PoMC to finalise this important piece of work during 2009, including further consultation with local Councils and appropriate endorsement of policy directions.

Melbourne Airport

Melbourne Airport is one of Victoria’s key strategic assets and a key focal point for the State’s economic and transport infrastructure. The Victorian Government strongly supports the continued growth, development and operation of the Airport and recognises its contribution to the Victorian economy. *Melbourne 2030* recognises that Melbourne Airport is a key transport gateway and freight link. Retaining and building on the Airport’s competitive advantages is a priority.

In 1989, the Victorian Government and the Federal Airports Corporation (FAC) jointly prepared the *Melbourne Airport Strategy* (MAS). Its associated Final Environmental Impact Statement (EIS) was approved by both the Victorian and Commonwealth Governments in December 1990. The approved EIS required the FAC to acquire an additional 434 hectares of land identified for development of the future third and fourth runways.

The Victorian Government identified the land for Commonwealth acquisition in relevant planning schemes in 1992. The Commonwealth Government confirmed the need in approving airport master plans in 1998 and 2003 which are also referenced in Victorian planning schemes. In 2007, the Commonwealth Government advised the Victorian Government that it did not wish to be nominated nor accept any liability as the acquiring authority for the land.

The Victorian Government believes it is important that certainty exists regarding future acquisition of the land and will work cooperatively with the Commonwealth Government to ensure that Melbourne Airport, the country’s second international airport gateway, can continue to develop in accordance with the MAS (and EIS) and its approved master plans and that the interests of affected landowners are dealt with fairly, equitably and transparently.

Since 1992, Melbourne Airport's operators have acquired a number of properties by negotiation with landowners. However, other larger properties remain in private hands. It is not expected that the third runway will be required before 2026. However, such projects require long lead times and the airport operator may require access to the land much sooner.

To ensure that any development of the remaining land does not prejudice the future of Melbourne Airport, the Victorian Government has ensured that the Department of Transport has assumed a referral authority role monitoring planning applications in the area and this is reflected in the *Hume Planning Scheme* and the *Draft Melbourne Airport Master Plan 2008*.

Direction 2 – Actions

- Identify and classify a hierarchy of Freight Activity Centres in metropolitan and regional Victoria (including ports, airports and freight terminals of various types and sizes), connected and serviced by the Principal Freight Network
- Review and make appropriate changes to the *Victoria Planning Provisions* and planning schemes to recognise and support Freight Activity Centres, including the application of suitable zonings
- Further develop the logistics city planning concept and assess its potential as a model for land use planning and integrated economic development around Freight Activity Centres
- Complete and publish port land use and development plans for Victoria’s four commercial trading ports in 2009 and ensure that they are regularly updated
- Complete and publish the *Port of Melbourne Port Environs Planning Framework* and apply the principles established for buffer strategies to the other commercial trading ports and Freight Activity Centres generally
- Formally recognise port land use and transport strategies and key buffering principles and policies in the *Victoria Planning Provisions* and relevant planning schemes
- In partnership with the operator of Melbourne Airport:
  - continue to monitor planning applications affecting land required for future runway development
  - establish formal arrangements with the Commonwealth Government to ensure that the airport operator has access to land required for future runway development in accordance with its approved plans

Planning and protecting the freight network
**DIRECTION 3:**
*Plan and protect future freight corridors and activity centres*

With population and economic growth generating significant increases in freight volumes, it is essential that the Victorian Government plan ahead to ensure the sustainable co-existence of people and freight by identifying and reserving future freight corridors. Over time, considerable residential and industrial growth will occur to the south west, west, north and south east of Melbourne, consistent with *Melbourne 2030*. Maintaining and enhancing efficient freight connections between these areas will be a key focus for future planning.

Funding has been allocated in *The Victorian Transport Plan* (VTP) for the purpose of reservation and acquisition of future transport corridors – the VTP ‘corridor identification and reservation program’ is of crucial importance to future freight efficiency.

Planning for major future freight corridors will be undertaken as part of overall transport network planning for the whole of the Melbourne metropolitan region. In most cases, corridors will be designed to accommodate road and rail infrastructure to avoid closing off either option in the future. Critical future freight corridor plans will include completing Melbourne’s existing orbital road network and planning for future orbital links (particularly an outer western orbital link), improving east-west connections to supplement the function of the Monash-West Gate corridor and providing future connections to critical freight activity centres, such as the Port of Hastings.

Consideration of long term transport network planning will encourage a longer term view about the directions of Melbourne’s future growth beyond the outlook of *Melbourne 2030*. Major transport infrastructure needs a longer term planning horizon than many other forms of land use planning due to the need for long, connected land corridors, often passing through multiple Local Government Areas and different types and densities of land use.

In addition to corridors through emerging and growing areas, corridors through existing areas of Melbourne also need to be considered to provide additional freight network capacity and to relieve pressure on existing arterial road corridors. A key focus of network planning will be to ensure that the amenity impacts of any new freight corridors are minimised.

A number of corridors in regional Victoria will also require additional capacity in future years. Planning to enable conversion to full freeway conditions where warranted will be critical to growing the regional network.

Planning activities will continue to identify long term transport needs to support freight. These activities will include progressing planning for the Port of Hastings transport corridor, the outer metropolitan ring transport corridor and the north east transport corridor.

**Planning for growth at the Port of Hastings**

The Port of Hastings in Western Port will become increasingly important for commercial shipping over the next two to three decades. The port includes state-owned land and infrastructure at Long Island Point, Crib Point and Stony Point, as well as privately owned land and infrastructure at the BlueScope Wharf. Patrick Ports Hastings manages the port land and channels under an agreement with the Government owned Port of Hastings Corporation and the Victorian Regional Channels Authority. The port currently provides berthing at three facilities for crude oil, liquid petroleum gas, chemicals and steel.

With the release of the *Victorian Ports Strategic Framework* in November 2004, the Victorian Government earmarked the Port of Hastings for future development as an international container port to supplement the Port of Melbourne when it reaches capacity.

None of the other possible port locations offers the same overall advantages as Hastings for handling future container trade. Hastings is a natural deepwater port and has sufficient land zoned for port-related activities to allow the development of significant new facilities, although it does have significant environmental issues which need careful consideration.

The draft *Port of Hastings Land Use and Transport Strategy* provides a comprehensive framework for the development of the Port of Hastings over the next 30 years. The strategy identifies the future growth areas, port berthing preferences and transport access corridors that are likely to be required for new and emerging trade opportunities and displaced Port of Melbourne trades, and to supplement the existing facilities at the Port of Melbourne.

The Government supports appropriate new port development to the north east of Hastings in the Long Island Precinct. Through the Department of Transport and the Port of Hastings Corporation, the Government will continue to plan for the delivery of new port capacity at Hastings in the timeframes required and in a manner that is sustainable and meets the highest environmental standards.
As trade volumes continue to grow through the Port of Melbourne, there is increasing interest in the potential for moving non-containerised bulk and break bulk trades through the Port of Hastings. The emergence of interest in the export of products derived from brown coal from Gippsland may also influence the timing of a Stage 1 development at the Port of Hastings. Stage 1 development would involve the construction of three new berths in the Long Island Point precinct. In the longer term, development of the port will involve construction of container terminal facilities to the north of the existing BlueScope facility over two further stages.

Figure 7 – Port of Hastings Development Zones

Rail access to the Port of Hastings is presently via the broad gauge Frankston-Stony Point line and only carries BlueScope Steel products. This connection is likely to be inadequate to cope with future rail demand for movements to and from metropolitan Melbourne in the longer term, particularly when the port is developed for container trade.

Growth in the export of products derived from brown coal from Gippsland in coming years may also require a rail connection. Specific planning work will be required in relation to these exports.

More detail on port development processes and preferred long term rail corridors to the Port of Hastings will be provided in Port Futures (an update to the 2004 Victorian Port Strategic Framework), to be released separately by the Government in 2009. Further detail on Port Futures is set out in Direction 17 – Implement improved governance arrangements for ports.

Direction 3 – Actions

- Identify and evaluate potential new freight corridors and Freight Activity Centres required to meet long term growth in the freight task
- Subject to detailed assessment and consultation, establish appropriate planning overlays to protect future corridors and Freight Activity Centres and support necessary land acquisition
- Commence detailed environmental benchmark studies and initial concept designs in preparation for formal environmental impact assessment processes for development of the Port of Hastings
- Plan for the timely and sustainable delivery of new port capacity at Hastings, including commencement of detailed planning and design for a Stage 1 multi-purpose berth development
- Identify and protect a preferred future rail freight corridor for the Port of Hastings to service its proposed development as an overflow container port for the Port of Melbourne
- Identify and protect a corridor for a potential rail connection to Gippsland for the export of products derived from brown coal, should it be required in the future

Planning and protecting the freight network
DIRECTION 4:
Plan and develop a metropolitan freight terminal network

Transporting the increasing freight task between the Port of Melbourne and key Freight Activity Centres

As Victoria’s population continues to grow, the freight task in tonnage terms in metropolitan Melbourne is forecast to double by 2030, when compared to today’s task. This significant growth will need to be effectively managed in order to maintain an efficient, reliable and sustainable freight network.

The forecast growth in the freight task will be particularly evident at the Port of Melbourne as international trade flows continue to increase. The number of containers moved through the port every year is forecast to grow from the current level of just over two million TEUs to approximately eight million TEUs in 2035, a fourfold increase. Further, by 2035 it is expected that over 80 per cent of these eight million TEUs will be heading through inner suburban Melbourne to and from locations within the metropolitan area, rather than points outside Melbourne. This will predominantly involve movements to and from Melbourne’s urban fringe where most industrial development is planned to occur.

In order to best manage the forecast growth in the freight task, the Victorian Government is committed to working in partnership with the freight industry to develop systems with the higher capacity required to effectively and efficiently manage a much larger task.

The Port of Melbourne is already a high capacity facility, efficiently handling thousands of containers every day. However, these containers must then be moved through metropolitan Melbourne to and from their origins and destinations. As the freight task grows, the capacity of the Principal Freight Network (PFN) beyond the port, including road and rail connections and the terminals that send and receive containers, must be enhanced to efficiently handle the growing task.

Figure 8 characterises the current relatively dispersed pattern of freight movement by road between the Port/Dynon precinct and locations within metropolitan Melbourne, including the major industrial centres to the west, north and southwest.

The competitive advantages enjoyed by road transport within the urban environment (door to door service and the quick and cheap movement of smaller volumes) mean that, if no action is taken, metropolitan freight will continue to be carried almost exclusively by trucks. Over time, with congestion predicted to intensify around Melbourne’s inner suburbs, freight movements will become increasingly inefficient and their urban amenity impacts more marked as trucks struggle to move through the centre of Melbourne, to and from the major industrial centres.

Given the pressures already being experienced around the Port/Dynon precinct as a result of truck numbers and their impact on surrounding communities, the Government recognises that continuing with the current movement patterns indefinitely into the future is inefficient and unsustainable.

The Victorian Government is committed to working in partnership with the freight industry to achieve a more sustainable and efficient pattern of metropolitan freight flows.

Reshaping freight flows to and from the Port of Melbourne

Under Freight Futures, subject to funding support from the Commonwealth Government through AusLink (now the Building Australia Program [BAP]) and the Building Australia Fund (BAF), the Victorian Government will commence work on establishing a Melbourne Freight Terminal Network (MFTN), comprised of a series of Metropolitan Freight Terminals (MFT), comprising of a series of Metropolitan Freight Terminals (MFTN), comprised of a series of Metropolitan Freight Terminals and key, high capacity transport links on the PFN. When fully developed, it is envisaged that the MFTN will include:

• A new Melbourne International Freight Terminal, to be developed to the north of Footscray Road, integrated with the Port of Melbourne
• A series of major ‘open access’ Metropolitan Freight Terminals located in Melbourne’s west, north and south-east, servicing current and future areas of intensive industry and related freight and logistics activity
• An integrated system of high capacity rail and road transport links on the Principal Freight Network connecting the Metropolitan Freight Terminals and the Port of Melbourne
To provide capacity for critical land-side infrastructure required to cater for the projected growth in international trade through the Port of Melbourne, particularly the proposed Melbourne International Freight Terminal, it will be necessary to progressively decentralise and relocate non-port-related freight activities to suitable locations away from the Port/Dynon precinct.

This decentralisation will be supported by the development of the Metropolitan Freight Terminals and surrounding freight precincts in outer metropolitan locations, which will accommodate many of these activities and also act as collection and distribution points for the major industrial centres. The terminals will also service flows of domestic freight between to and from the key industrial areas.
Metropolitan Freight Terminals will be located with good access to rail and road connections to ensure that the most effective and appropriate mode can be utilised as the network develops. In the early stages, it is expected that the Metropolitan Freight Terminals will service increasing volumes of road freight, transported by existing approved High Productivity Freight Vehicles (HPFVs) and the trial of next generation HPFVs on designated high capacity road links. The Government will investigate measures to encourage these vehicles to operate in inter-peak hours and, increasingly, at night.

To accommodate these movements, it will be essential that the MFTN is accessible to all carriers (i.e. ‘open access’) and operate on a 24/7 basis. As volumes by road on key corridors between the freight terminals increase, rail will become increasingly attractive as a competing mode, even for these relatively short haul movements.

Figure 9 illustrates the more sustainable, concentrated pattern of freight movement between the central Port/Dynon hub and industrial areas on the periphery of Melbourne expected to result from the progressive implementation of the MFTN. Concentration of heavy freight movements on the MFTN is expected to reduce such movements off the network and improve amenity for communities in some areas currently affected by truck traffic.
Rail operators have generally concentrated on moving freight for which rail has a natural competitive advantage – most often moving large volumes over long distances from rural areas to ports or along the major inter-capital corridors. In the urban market, rail must cover the extra cost of freight interchanges between trains and trucks by providing a cheaper, more reliable line-haul movement between terminals and the port. However, as freight volumes moving between Metropolitan Freight Terminals and the Port of Melbourne grow, rail’s ability to move high volumes quickly, efficiently and reliably, free of the delays and congestion on the urban road system and with lower external environmental impacts, is likely to make it increasingly attractive to industry.

To be successful, *Freight Futures* proposes that the MFTN must be planned, implemented and managed as an integrated system of terminals and high capacity connecting transport services, with appropriate involvement from both Government and the private sector.

Managed as an integrated system, the MFTN is expected to generate a range of benefits, including improved transport reliability and transit times, more efficient management of empty containers, improved urban amenity and safety, and lower liquid fuel consumption and greenhouse gas emissions per unit of freight moved.

*Freight Futures* acknowledges that it is not the role of Government to operate commercial terminal and freight transport businesses. These roles are more appropriately undertaken by the private sector. The role of Government is to establish appropriate policy settings and create the right governance and regulatory environment to ensure effective co-ordination of the network as a whole, enabling the private sector to invest and participate with confidence.

**Key Steps in Implementing the Metropolitan Freight Terminal Network**

Implementing the MFTN concept (see Figure 10) will be a complex task with a number of overlapping and interrelated components and stages. In summary, it is envisaged that the following key steps and tasks will need to be undertaken:

- Establishment of appropriated governance arrangements and responsibilities to drive planning and implementation activities
- Preparation of a strategic plan and detailed business planning, establishing key network design parameters, processes and timeframes for testing the market for interest in participating in/operating various components of the MFTN
- Facilitating the development of a Stage 1 Terminal Network, based around existing sites and infrastructure in the Altona/Laverton, Somerton and Dandenong areas, by investing in facility and access infrastructure upgrades
- Planning and protecting options for a longer term Stage 2 Terminal Network by identifying and, where appropriate, acquiring sites and/or establishing appropriate zonings in the statutory planning system
- Detailed planning for the reconfiguration of the Dynon precinct to provide for the decentralisation of non-port-related activities to external sites, the establishment of the Melbourne International Freight Terminal on vacated land between Footscray and Dynon Roads and its effective integration with the Port stevedoring terminals and the MFTN
- Facilitating the relocation of the South Dynon Interstate rail terminal to a new location in the Donnybrook/Beveridge area, to the north of the metropolitan area, by acquiring a suitable site and commencing investment in base infrastructure

**Initiating Stage 1 of the MFTN**

The Department of Transport (DOT) will have overall portfolio responsibility for initiating processes to develop the MFTN, including the establishment of appropriate governance arrangements. (Refer to Direction 18 for further information).

DOT is already partnering with the Commonwealth Government (under AusLink 2) and the private sector to commence development of Stage 1 of the MFTN, which will involve enhancement of rail connectivity to the Somerton and Laverton/Altona intermodal terminals, the Port of Melbourne and a new Metropolitan Freight Terminal in the Dandenong area.
Figure 10 – The Metropolitan Freight Terminal Network vision

- Rail line
- Urban area
- Existing industrial areas
- Proposed major industrial areas

Stage 1 Terminals: Somerton, Altona, Dandenong

Future Freight Activity Centres

Interstate rail and Stage 2 terminal: Donnybrook/Beveridge

Melbourne International Freight Terminal

Potential Stage 2 terminals: West and South East

Rail connections: existing and planned

Concentrated freight flows - Port to terminals

Inter-terminal freight flows
Planning for Stage 2 of the MFTN

In the longer term, Stage 2 will involve the development of new purpose built terminals in strategic locations in Melbourne’s north, west and south east, as part of the MFTN.

Appropriate governance arrangements will need to be put in place to lead and manage this process, including site identification and acquisition.

To be successful, the MFTN will need to be supported and complemented by effective land use planning of the precincts that surround the terminals. The aim will be to group activities that are likely to use the network or provide relevant value add services, thereby creating viable freight volumes, promoting economies of scale and scope in freight operations, providing for efficient ‘last kilometre’ connections to the Principal Freight Network, and allowing for the establishment of effective buffering from adjacent sensitive uses.

In order to achieve this outcome, the Government will work in partnership with Local Government and the private sector to plan and establish appropriate zonings around the key MFTs in each of the major metropolitan industrial centres. ‘Amenity buffers’ to permit 24 hour freight and logistics operations while protecting residential areas will be a critical element in the planning of these zones.

Planning for a new Melbourne International Freight Terminal and integration of the Dynon precinct with the Port of Melbourne

The Dynon precinct, adjacent to the largest container stevedoring terminals in Australia at Swanson Dock, currently accommodates various freight handling activities that have no connection with international container handling. For example, the South Dynon rail terminal handles mainly interstate domestic freight and the Melbourne Wholesale Fruit and Vegetable and Wholesale Fish Markets cater for only local domestic business activity. The Swanson/Dynon area has the potential to accommodate a significant expansion in international freight-handling capacity within its existing land footprint through the rationalisation of the activities now occurring in the precinct.

A key component of the MFTN will be the development of a new Melbourne International Freight Terminal in the Dynon precinct to the north of Footscray Road, adjacent to the Port, as the central ‘hub’ of the MFTN. This terminal will handle only port related freight and initially be developed on the site occupied by the Melbourne Wholesale Fruit and Vegetable Market, which will, in the future, relocate to Epping.

The authority assigned responsibility for the MFTN will work closely with the Port of Melbourne Corporation to plan for and facilitate the development of this new terminal, including arranging for acquisition of the Market Site from the Melbourne Markets Authority (MMA) and establishing appropriate ownership, governance and operating arrangements, consistent with the broader requirements of the MFTN.

Close integration of this new terminal with the Port and the broader MFTN, including rail and road links on the Principal Freight Network will be critical to its success, as it will essentially form the central hub of the MFTN. To facilitate this integration and to ensure the Port has sufficient landside capacity to accommodate projected trade growth until around 2035, a ‘masterplan’ will be prepared for the Dynon precinct. This masterplan will guide coordinated development in the Port/Dynon precinct over the next 20 years, including the progressive decentralisation of non-port-related activities, and will effectively represent the finalisation of the Melbourne Port@L Strategy. The directions in Freight Futures effectively capture and build on the key concepts and directions put forward in the draft Melbourne Port@L Strategy.
Planning for the establishment of a new interstate rail terminal at Donnybrook/Beveridge

A 2006 survey of trucks entering and leaving the port/rail precinct on Dynon Road and Footscray Road (see Figure 11) found that only 31 per cent of trucks entering the precinct access the key port terminals, with the remainder entering the area for reasons often completely unrelated to the operation of the port. 10 per cent of remaining truck traffic is related to the operation of the Dynon rail terminals. The most significant part of the Dynon freight task relates to domestic interstate freight handling at the South Dynon rail terminal. There is no operational reason for non-port-related domestic freight to be handled immediately adjacent to the port.

A key initiative of Freight Futures is to plan for the relocation of domestic interstate rail freight handling from South Dynon to an alternate terminal site in the Donnybrook/Beveridge area, to the north Melbourne metropolitan area. The new terminal will enable interstate domestic freight (which currently travels through the metropolitan area to Dynon) to terminate at Donnybrook/Beveridge for distribution throughout Melbourne.

In accordance with the governance arrangements, the authority assigned responsibility for the development of the MFTN will plan and facilitate this initiative. This will include identifying and acquiring a suitable site, establishing appropriate zonings around the site, managing investment in base infrastructure at the site, negotiating commercial arrangements for the transfer of current operations from South Dynon, and establishing new management arrangements for an open access terminal at the Donnybrook/Beveridge site.

In the longer term the Donnybrook/Beveridge terminal will form a key element of the stage 2 MFTN servicing the Port of Melbourne and other metropolitan freight distribution tasks.

Figure 11 – Swanson/Dynon area truck flows (Total Truck Movements)

In accordance with the governance arrangements, the authority assigned responsibility for the development of the MFTN will plan and facilitate this initiative. This will include identifying and acquiring a suitable site, establishing appropriate zonings around the site, managing investment in base infrastructure at the site, negotiating commercial arrangements for the transfer of current operations from South Dynon, and establishing new management arrangements for an open access terminal at the Donnybrook/Beveridge site.

In the longer term the Donnybrook/Beveridge terminal will form a key element of the stage 2 MFTN servicing the Port of Melbourne and other metropolitan freight distribution tasks.
Rail mode share targets

The Eddington report recommended that "the Victorian Government should re-evaluate its 30/2010 rail target (which aims to move 30 per cent of freight from and to all Victorian ports by rail by 2010), given the clear finding by EWLNA that it cannot be met. The Government should create a new strategy and work with industry to develop and implement a detailed action plan for moving more freight by rail."

The Government remains committed to promoting increasing rail freight movements to and from our commercial sea ports. However the Government agrees with the Eddington report that the 30/2010 target cannot be met and needs to be re-evaluated. Through The Victorian Transport Plan and this direction of Freight Futures, the Government will move to establish a MFTN as a key plank in its strategy for moving increasing volumes of freight by rail between the Port of Melbourne and freight terminals sited in key industrial areas to the north, west and south-east of Melbourne.

Direction 4 – Actions

- In partnership with the Commonwealth Government, commence planning and implementation of a new Metropolitan Freight Terminal Network (MFTN) by:
  - Establishing new governance arrangements to co-ordinate and drive planning and implementation activities, including strategic and detailed business planning, establishment of key network design parameters and preparation for testing the market for interest in participating in the MFTN
  - Facilitating the development of a Stage 1 terminal network, based around existing sites and infrastructure in the Altona/Laverton, Somerton and Dandenong areas, by investing in facility and access infrastructure upgrades
  - Planning and protecting options for a longer term Stage 2 terminal network by identifying and, where appropriate, acquiring sites and/or establishing appropriate zonings in the statutory planning system
  - Undertaking detailed planning for the reconfiguration of the Dynon precinct to provide for the relocation of non-port-related activities to external sites, the establishment of the Melbourne International Freight Terminal on vacated land between Footscray and Dynon Roads and the effective integration of the precinct with the Port stevedoring terminals and the MFTN
  - Facilitating the relocation of the South Dynon Interstate rail terminal to a new location in the Donnybrook/Beveridge area in outer northern Melbourne by acquiring a suitable site and commencing investment in base infrastructure
**DIRECTION 5**

**Plan for growth in regional freight**

Across regional Victoria, strong growth is occurring in a number of existing and new commodity industries, including mineral sands, horticulture, dairy and timber. The critical freight actions for the Government in regional Victoria will be to continue regulatory reforms to ensure the efficient working of supply chains from farms and processing plants to trading ports and domestic markets and to plan and prioritise key infrastructure upgrades, including access to the ‘last kilometre’ of local road and bridge networks for heavy freight vehicles. Table 3 indicates a number of key commodities that are expecting significant growth in regional areas over the coming years.

**Table 3 – Drivers of regional commodity growth**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Region</th>
<th>Drivers of growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy</td>
<td>Gippsland</td>
<td>• Victoria accounts for 87 per cent of dairy exports from Australia (via the Port of Melbourne)</td>
</tr>
<tr>
<td></td>
<td>South West Victoria</td>
<td>• Victoria exports around $2.5 billion of dairy products each year, mostly to growing markets in Asia</td>
</tr>
<tr>
<td></td>
<td>Northern (Goulburn Murray irrigation district)</td>
<td>• SW Victoria and Gippsland have reliable water supply (rainfall); SW Victoria also has available land</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Shift to larger farm units and new sources of investment (e.g. superannuation funds)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Committed and potential investment in new/upgraded processing plants especially in Gippsland, SW Victoria and the Goulburn Valley</td>
</tr>
<tr>
<td>Horticulture</td>
<td>Goulburn Valley</td>
<td>• Victoria accounts for 39 per cent of Australia’s horticultural exports</td>
</tr>
<tr>
<td></td>
<td>Riverina (NSW)</td>
<td>• 85 per cent of canned fruit produced occurs in the Food Bowl region of Shepparton and the Riverina in NSW</td>
</tr>
<tr>
<td></td>
<td>Mildura/Sunraysia</td>
<td>• Significant new plantation investment in almond and olive production in northern Victoria, with freight volumes expected to grow tenfold by 2015</td>
</tr>
<tr>
<td></td>
<td>Northern Victoria (Swan Hill/Kerang/Robinvale)</td>
<td>• Horticultural production in the Swan Hill region doubled in the past decade and is expected to reach $1 billion by 2020</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Goods from wider NSW border region and Murrumbidgee Irrigation Area also move into Victoria for packaging and export</td>
</tr>
<tr>
<td>Energy/Resources</td>
<td>Latrobe Valley</td>
<td>• Victorian/New South Wales Murray Basin has $13 billion of mineral sands product to be mined and processed over the next 50 years</td>
</tr>
<tr>
<td>Coal</td>
<td>Murray Basin</td>
<td>• Research is underway to establish large-scale coal conversion facilities in the Latrobe Valley that will enable the production for export and domestic markets of liquefied gas for aviation and other purposes, including synthetic fuels and fertiliser. Longer-term research is also underway into clean coal technology that could result in brown coal exports from the Latrobe Valley</td>
</tr>
<tr>
<td>Mineral sands</td>
<td></td>
<td>• Significant investment is occurring in new oil and gas fields in Bass Strait and off Port Campbell. New gas fired electricity stations are being built at Orford and Mortlake and a new coal fired station in the Latrobe Valley</td>
</tr>
<tr>
<td>Oil</td>
<td></td>
<td>• Significant investment is occurring in new wind farms in Gippsland, central Victoria and south-west Victoria, including the largest wind farm in Australia, under construction at MacArthur.</td>
</tr>
<tr>
<td>Natural gas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sector</td>
<td>Region</td>
<td>Drivers of growth</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Plantation Timber</td>
<td>SW Victoria – ‘Green Triangle’</td>
<td>• Significant growth in blue gum woodchips occurring in ‘Green Triangle’ region in SW Victoria and SE South Australia</td>
</tr>
<tr>
<td></td>
<td>SE South Australia</td>
<td>• By 2020, it is expected there will be 400,000 Ha in timber production, a 60 per cent increase on 2006 volumes</td>
</tr>
<tr>
<td></td>
<td>Northern Victoria</td>
<td>• Significant harvest underway from 2009</td>
</tr>
<tr>
<td></td>
<td>Gippsland</td>
<td>• Timber from border regions in SA and NSW is sent to Victoria for processing and exports</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processed Foods</td>
<td>Riverina (NSW)</td>
<td>• Victoria accounts for 37 per cent of Australia’s processed horticultural production</td>
</tr>
<tr>
<td></td>
<td>Shepparton, Ballarat, Bendigo, Echuca,</td>
<td>• Food industry in Victoria has an annual turnover of $21 billion and exports worth almost $6 billion in 2006/07</td>
</tr>
<tr>
<td></td>
<td>Bairnsdale, Leongatha, Morwell, Warragul,</td>
<td>• Victoria accounts for 25 per cent of Australia’s total food exports</td>
</tr>
<tr>
<td></td>
<td>Mildura</td>
<td>• Rice will become increasingly important, with internationally harvested rice being milled at Victorian processing plants to capture the premium marketing brand of Australian products exported through the Port of Melbourne</td>
</tr>
<tr>
<td>Grains</td>
<td>Wimmera Mallee</td>
<td>• Victoria accounts for 20 per cent of Australia’s grain production</td>
</tr>
<tr>
<td></td>
<td>Western District</td>
<td>• Victoria is well placed to meet demand for food products in China and India and capture high food prices for food in a post-drought environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cropping land use activity in north-west and western Victoria is moving southwards, reflecting rainfall patterns</td>
</tr>
<tr>
<td>Livestock</td>
<td>South West Victoria</td>
<td>• Victoria accounts for 20 per cent of Australia’s export beef production and 40 per cent of Australia’s lamb production</td>
</tr>
<tr>
<td></td>
<td>Gippsland</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Northern Victoria</td>
<td></td>
</tr>
<tr>
<td>Wine</td>
<td>Sunraysia</td>
<td>• Victoria has significant wine exports from the Sunraysia, Riverina (in southern NSW), north and north eastern Victoria, Mornington Peninsula and Yarra Valley regions</td>
</tr>
<tr>
<td></td>
<td>Riverina (NSW)</td>
<td>• Exports include bottled, cask and tetra-pack wine moved by road and rail to the Port of Melbourne</td>
</tr>
<tr>
<td></td>
<td>North and North Eastern Victoria</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yarra Valley Region</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mornington Peninsula</td>
<td></td>
</tr>
<tr>
<td>General Freight</td>
<td>Outer metropolitan and peri-urban areas;</td>
<td>• Victoria is experiencing strong population growth and new residential development in:</td>
</tr>
<tr>
<td></td>
<td>regional cities</td>
<td>– outer growth suburbs of Melbourne, including Casey-Cardinia, Wyndham, Melton, Whittlesea, and Hume,</td>
</tr>
<tr>
<td></td>
<td>Towns and cities along the coast, and in</td>
<td>– peri-urban regions, including Drouin, Warragul, Sunbury, Gisborne, Ballan and Bannockburn</td>
</tr>
<tr>
<td></td>
<td>central and northern Victoria</td>
<td>– major regional centres including Bendigo, Ballarat, Latrobe Valley, Shepparton, Mildura and Warrnambool</td>
</tr>
</tbody>
</table>

Source: DoT, DPI (Various sources 2008)
In order to maximise the ability of key regional areas to respond to commodity growth, the Government will support the development of Freight Action Plans for regions that are facing particular freight challenges. These plans will map out a series of actions for maximising the positive benefits of the anticipated significant growth in a number of key commodities in regional Victoria.

As a first example of this new approach, a Freight Action Plan is now being finalised for the Green Triangle region of Victoria/South Australia. The plan will detail the actions necessary to enable the efficient movement of timber plantation products and other commodities that are forecast to experience strong growth over the coming years, including mineral sands.

The Green Triangle Freight Action Plan will do this by identifying and mapping:

- optimal use of the road, rail and port network
- priority infrastructure improvements to the transport network
- optimal deployment of next generation HPFVs that are being trialled in the region
- land use and social amenity issues

The development of the plan is being guided by:

- existing regional transport plans undertaken since 2005 by State Governments, regional councils and ports
- advice from plantation companies on forecast yields, freight flows and preferred production methods (in-field chipping versus static systems)
- the proposed location of chip and pulp mills
- infrastructure capacity planning at the Port of Portland
- national reforms in the regulation of HPFVs, including Performance Based Standards and incremental pricing trials

The plan is being developed in the context of the overall freight task in the Green Triangle region, taking account of existing and forecast freight volumes in commodities, including grain, timber products, mineral sands, livestock, resources and other products.

The plan also aligns with the Timber Industry Strategy being developed by the Victorian Government to provide a 20 year framework for resource security in the timber industry.

Regulatory and infrastructure initiatives recommended by the Green Triangle Freight Action Plan will also assist in the delivery of the Commonwealth Government’s reform objectives under its National Transport Plan, including:

- improved supply chain management
- network access for a trial of next generation HPFVs
- the deployment of new technology for improved freight efficiency and safety

A Steering Committee will make recommendations in relation to the plan to the Victorian Minister for Roads and Ports and the South Australian Minister for Transport. The Steering Committee comprises senior officials of the Victorian Department of Transport, the South Australian Department for Transport, Energy and Infrastructure, Glenelg/Moyne/Southern Grampians Councils and the South East Local Government Association. This first Freight Action Plan is due to be completed shortly.

In consultation with regional councils, the Victorian Government will review the outcomes of this first plan and assess opportunities for the development of similar plans in other regions. For example, a Freight Action Plan may be beneficial in Gippsland to support predicted strong export growth potential of products derived from brown coal in over the next five to ten years. The Government has already commenced analysis of this potential freight task to identify possible infrastructure improvements in Gippsland.

**Direction 5 – Actions**

- Develop a comprehensive Freight Action Plan for the Green Triangle region in south west Victoria/south east South Australia in partnership with the Commonwealth
- Assess the applicability of the Freight Action Plan model for use in other regions of Victoria and support the preparation of plans as appropriate in partnership with Local Government and industry to support growth of key commodity sectors
- Undertake initial planning in conjunction with the Department of Primary Industries for new and upgraded freight transport infrastructure to service potential future trades based on development of the major brown coal resource in Gippsland
DIRECTION 6

Improve planning for the ‘last kilometre’ of freight journeys

Local last kilometre issues

Local governments and communities are often exposed to the issues associated with the last segments of heavy freight journeys off the Principal Freight Network, particularly in urban locations where freight journeys may encounter narrower local roads and a lower level of free flowing movements through residential and community areas. The Government is committed to working with industry and Local Government to address community concerns and achieve efficient and sustainable outcomes for the last kilometre of heavy freight journeys.

Significant studies have been undertaken in Europe over the past 6 years which have produced a range of best practice strategies for dealing with last kilometre urban freight problems such as noise, after-hours delivery, freight delivery in high density urban areas and regulation of access. A trial of after-hours deliveries and quiet vehicles in the City of Wyndham is intended to demonstrate improved ways of delivering goods to commercial and retail outlets.

Through Freight Futures a best practice manual for ‘last kilometre’ freight delivery solutions, specific to the needs of Victoria, will be developed.

A range of strategies will be assessed as a part of developing the new ‘last kilometre’ manual for their suitability for Melbourne metropolitan and major provincial Councils.

Light Commercial Vehicle delivery problems

Currently, Victoria has around 490,000 Light Commercial Vehicles (LCVs). Many of these vehicles are used as a tool of trade by professions such as electricians, plumbers, builders and cleaners. These operators deliver services, as distinct from the ‘hire and reward’ operators (such as couriers) that deliver actual goods. Generally, the ‘for hire’ operators undertake a significantly higher number of ‘pick-ups, stops and drops’ on their routes than the non-delivery type of LCVs (such as plumbers or electricians). For this reason, considering how multiple deliveries are undertaken in LCVs is especially important at the local level. Planning and assessing the best practice benefits of street unloading and delivery platforms in local areas, off-street parking area for delivery vehicles and the development and use of delivery zones has been the focus of scrutiny in many large European cities.

The Government will examine the potential of these international best practice developments for adoption in both Melbourne and Victoria’s major regional cities.

Acceptable urban trucks

Extending some after hours operations can alleviate congestion and reduce a percentage of urban morning deliveries. In several European countries, ‘quiet delivery’ vehicles are being used following monitored trials. These generally rigid vehicles have proven to be highly beneficial to community amenity, while still performing their delivery functions. These very quiet vehicles can perform retail and warehouse delivery after hours and thus avoid the need for costly curfews, noise walls or local restriction on deliveries. The noise level for these vehicles is around 60 decibels, compared to more common vehicle noise operations of above 80 decibels.

There is also increasing experience supporting the viability of both hybrid and electric freight vehicles in urban environments. The Government is committed to supporting introduction of quiet, low emission freight vehicles where they are commercially viable. The Government will support undertaking trials of electric and hybrid urban freight vehicles in partnership with Local Government within selected major Local Government areas to assess the applicability of electric vehicles for the urban and last kilometre distribution task across a range of times of day.

Direction 6 – Actions

• In conjunction with the Municipal Association of Victoria, VicRoads, the Victorian Transport Association and the Transport Workers Union, develop a Victorian ‘best practice’ manual for ‘last kilometre’ freight delivery solutions, which also involves the use of quiet vehicle technology

• Support trialling of environmentally sustainable electric or hybrid freight vehicles to assess the suitability of this technology for the last kilometre delivery task in major retail precincts such as the City of Melbourne and some regional provincial centres

• Seek ongoing Commonwealth Government funding of local road upgrades to address productivity and economic development issues (e.g. through the AusLink Strategic Regional Program)
Building Victoria’s freight network in partnership – AusLink and Infrastructure Australia

AusLink is a major Commonwealth Government program designed to improve planning, decision-making and funding for national land transport infrastructure. AusLink is based upon long-term planning, encouraging the best ideas and solutions, and targeting investment to achieve the best transport outcomes for the community, the national economy and regions. Working in partnership with the AusLink program is a crucial component of building and maintaining freight network infrastructure across Victoria.

To further develop infrastructure of national significance, the Commonwealth Government has established a new statutory advisory body, Infrastructure Australia, which will develop a strategic blueprint for Australia’s future infrastructure needs and implement this blueprint in partnership with the States, Territories, Local Government and the private sector. Currently, Infrastructure Australia is assessing proposals for delivering the next stage of key national infrastructure projects beyond AusLink 2. Infrastructure Australia funding will be a critical component in delivering key elements of Freight Futures.

AusLink

Through AusLink, Victoria is working in partnership with the Commonwealth Government to deliver nationally significant projects in key transport corridors and to undertake strategic improvements to regional transport infrastructure, local road upgrades and Accident Black Spots.

Completed AusLink projects include:

- Hume Highway – Albury-Wodonga Bypass
- Hume Highway – Craigieburn Bypass
- Goulburn Valley Highway – Murchison East Deviation
- Princes Highway East – Pakenham Bypass
- Goulburn Valley Highway – Arcadia Duplication

AusLink projects currently under construction include:

- Calder Highway – Kyneton to Ravenswood Duplication
- Western Highway – Deer Park Bypass
- Princes Highway – Geelong Ring Road (Stages1-3)
- Hume Highway – Donnybrook Road
- Dynon Port Rail Link
- Geelong – Ballarat – Mildura line upgrade
- North-East Rail Revitalisation Project – additional standard gauge rail track and Wodonga bypass

AusLink 2

National Transport Links – Growing Victoria’s Economy is the Victorian Government’s strategy to upgrade the state’s transport network under AusLink 2 for the future growth and prosperity of Victoria and Australia. The strategy proposes ‘30 priority projects’ across the state to deliver a significant upgrade of key transport links on Victoria’s road, rail and port networks between 2009 and 2014.

These projects would:

- Address capacity constraints in key transport corridors
- Enhance the efficient operation of Victoria’s transport network for industry growth, regional development and export activity
- Make roads safer for truck drivers and Victorian motorists and deliver significant travel time savings
- Reduce transport costs
- Improve the international competitiveness of Australian industries
- Make our rail system more competitive and efficient for freight companies
- Provide faster and enhanced connections to our trading ports for the export of Australian manufactured goods and agricultural products.

The Commonwealth Government has committed to deliver more than $4 billion under AusLink 2 projects, in partnership with the Victorian Government.

These projects include:

- Completing the Geelong Ring Road to the Princes Highway West, near Waurn Ponds
- Duplicating the Princes Highway West from Waurn Ponds to Winchelsea
- Upgrading the Western Highway from Bacchus Marsh to the SA border
- Nagambie Bypass on the Goulburn Valley Highway
- Commencing the duplication of the Princes Highway East from Traralgon to Sale
- Interchange at Kings Road on the Calder Freeway
- Capacity improvements and widening the Western Ring Road
- Strengthening the West Gate Bridge
Building and maintaining the freight network

- Rail upgrades at Port of Geelong and on the Melbourne-Adelaide line
- Upgrading the Colac-Lavers Hill Road
- Springvale Road – Rail Grade Separation
- Maintaining the AusLink network, keeping Victorian roads safe and productive
- ARTC projects to increase rail freight capacity to the Port of Melbourne – Dynon to Tottenham missing link
- Intermodal freight terminal development in Melbourne and regional Victoria

The Victorian Government is committed to progressing these AusLink projects on a cooperative basis with the Commonwealth Government. This commitment includes making a 25 per cent contribution to the total cost of Victoria’s AusLink 2 package.

Infrastructure Australia – developing an Infrastructure Priority List

Infrastructure Australia has commenced work to finalise a national Infrastructure Priority List, which will inform the Commonwealth Government’s consideration of projects for funding beyond the AusLink 2 program. The Victorian Transport Plan details a significant program of transport projects to be progressed in partnership with the Commonwealth Government through the Infrastructure Australia Priority List. Many of these projects are of critical importance to the key freight and logistics sector components of Freight Futures.

Victoria is putting forward five packages for consideration by Infrastructure Australia as it finalises its Priority List. Support for these packages outlined below is critical to the delivery of the Freight Futures vision.

Melbourne Metro Package
1. Regional Rail Express
2. Rail Tunnel – Stage 1
3. Melton Rail Extension

West Gate Alternative and Truck Action Plan Package
1. Truck Action Plan (Stage 1) – Hyde Street
2. Alternative to West Gate – Tunnel

National Ports and Rail Connection Package
1. Port of Melbourne terminal and rail connections
2. Donnybrook/Beveridge Interstate Rail Freight Terminal
3. Port of Hastings Development

Regional Development Package
1. Green Triangle – HPFV Network and Rail/Port Connections
2. Regional Broadband – VicFibreLINKS
3. Geelong Urban Growth Package
4. Gippsland Coal Industries

Melbourne Orbital Road Package
1. Peninsula Link
2. Grade Separations
3. North-East Link
Building and maintaining the freight network

One of the most visible roles of the Victorian Government in the freight network is building and maintaining key physical infrastructure, including port facilities, roads and rail lines. As the freight task grows, spare capacity in the existing freight network is quickly being consumed. Capacity constraints lead to reduced efficiency of freight movements and increasing costs due to delays and travel time uncertainty. As capacity constraints develop, the Government recognises that it must play its part in delivering appropriate infrastructure that supports and drives efficient freight movements.

Road transport remains the most practical mode for the majority of freight in metropolitan areas because of the short distances and dispersed origins and destinations involved. However, road congestion in Melbourne directly affects freight costs and reduces productivity.

While freight efficiency can be enhanced by managing demand, providing for priority uses and improving public transport to free-up space for freight and commercial vehicles, the Government also provides appropriate new road and rail infrastructure for freight when required. At the same time, the Government must ensure that the existing Principal Freight Network is maintained to a standard that optimises its availability for the various users of the network.

While recognising that some parts of the freight network are privately owned and operated, the Government will continue to play the lead role in ensuring that core freight network infrastructure is available and cost effective to use. New road and rail capacity will need to be provided to accommodate key flows, especially in the outer metropolitan areas. Improved cross city and orbital connections, and connections between regional and interstate centres, are vital. Improving links to and from the commercial sea ports will also be a key focus.

The Government will also continue to work in close partnership with the Commonwealth Government to deliver new freight network capacity across Victoria (Victoria’s AusLink initiatives are outlined in Insert 1).

Introduction of measures to alleviate the impact of heavy truck traffic in Melbourne’s inner west is also a critical measure under this Direction.

An efficient freight network requires that the physical network infrastructure be well supported by a ‘virtual network’ over which information can be transmitted and shared. Accordingly, Information and Communications Technology (ICT) is a key part of the infrastructure of the Principal Freight Network. While industry needs to drive efficiency and productivity through the development and use of business-to-business ICT, Freight Futures includes a new initiative that will create the environment for a larger part of the freight and logistics industry to capitalise on developments in this important area.

**DIRECTION 7**
**Invest in the Principal Freight Network - Road**

The Victorian Government is committed to improving the metropolitan road network and addressing congestion in Melbourne. Congestion is being tackled through several projects, including the $1.4 billion improvement of the Monash-CityLink-West Gate Freeway corridor, delivery of the $2.5 billion EastLink project and various upgrades to key metropolitan arterial roads to address the growth in commuter and freight traffic. The Government is also delivering targeted improvements to key bus and tram routes, and supporting pedestrian and cycling initiatives.

Currently, the metropolitan freight task is carried almost exclusively by road. Even with the development over time of an efficient metropolitan rail freight system, as proposed in Freight Futures (see Direction 4), road will remain the predominant mode for freight movements in Melbourne.

In relation to future road freight capacity needs, a number of future freight corridors are identified under Direction 3 of Freight Futures. New road capacity on these corridors in future years will be essential to the efficient movement of freight through metropolitan Melbourne beyond 2035.

A network of roads that allows freight to be efficiently transported around Melbourne will be vital to the ongoing economic success and liveability of the city. While various demand management measures and improvements to public transport will play a key role in freeing up road space for road freight, the provision of additional road capacity that is suitable for handling larger and heavier freight vehicles will still be required. In addition, more rail grade separation projects may be required, where increased train services involve longer level crossing closures, delaying freight traffic and other road users.
Trucks operate most efficiently when they can maintain constant speeds on relatively straight, flat roads. *Freight Futures* is based around achieving a linked-up freeway network that is suitable for large freight vehicles. In addition to significant efficiency benefits, this will help to reduce the number of larger vehicles travelling on other arterial roads.

In the recently released *Victorian Transport Plan*, the Government announced support for a major program of metropolitan road projects. A significant portion of the funding required for this critical program will be pursued through Victoria’s submission to Infrastructure Australia. These projects respond to recommendations outlined in the Eddington report relating to road improvements that will assist in moving freight effectively from east to west across Melbourne by providing additional capacity to supplement the critical cross-city function of the Monash – West Gate corridor. The Government has also recognised the critical need to improve orbital links around Melbourne.

The *Victorian Transport Plan* includes Government support for an alternative to the West Gate Freeway, commencing with Stage 1 delivery of a new short road tunnel linking Geelong Road to the Port of Melbourne. Subject to Commonwealth Government funding, the Victorian Government will undertake delivery of the ‘Missing Link’ to complete Melbourne’s metropolitan ring road and a Peninsula Link to connect metropolitan Melbourne with the Mornington Peninsula.

As the freight task grows and key parts of the Principal Freight Network become available, a trial of next generation HPFVs will play an important role in identifying opportunities to reduce growth in the number of trucks.

**The Principal Freight Network – Regional roads**

As regional Victoria continues to develop and grow, regional roads will need ongoing upgrading. Regional Victoria plays a vital role in the economies of Victoria and Australia, particularly in the areas of manufacturing, agriculture and tourism. Victoria’s regional roads will continue to carry a high proportion of the state’s freight task into the future and are also heavily used by increasing numbers of tourists and for private travel. Key regional road projects, such as the Geelong Ring Road (a freeway-standard road extending 25 kilometres along Geelong’s western outskirts), are already underway.

The Victorian Government’s ongoing investment in the regional arterial road network is vital to improving overall road safety and freight efficiency, as well as supporting regional economic and population growth.

By 2036, regional Victoria is projected to grow by almost 500,000 people – more than the current combined populations of Geelong, Ballarat, Bendigo and Latrobe Valley. Regional Victoria is also enjoying a high rate of jobs growth, almost comparable to Melbourne’s. This growth is generally occurring in major regional centres. Continued improvement of regional road network connections to Melbourne and between regional centres is critical to supporting this growth and ensuring that regional Victoria takes advantage of global opportunities.

Through *The Victorian Transport Plan*, the Government will assist local industry with support for the expansion of the Local Roads to Markets program. This is a partnership with local councils to improve the links between local industries, including grain, dairy, livestock, horticultural, seafood and timber sectors, to grow local employment.

While continuing its program of investment in the regional arterial road network, the Victorian Government will also continue to liaise closely with the Commonwealth Government to secure future BAP funding for investment in Victoria’s regional roads.

Upgrades to selected roads and bridges will be funded on the defined Principal Freight Network, beginning with a priority stage 1 trial of a new generation HPFV network in the Green Triangle region.

A trial of next generation HPFVs in the Green Triangle region to move primary produce and other commodities will be important in regional development.
Direction 7 – Actions

- Commence a program of investment in metropolitan freight routes based on the Principal Freight Network and prioritised according to key capacity, efficiency and sustainability criteria, including:
  - Calder Freeway safety and capacity improvements
  - Kings Road Interchange
  - Western Ring Road capacity enhancements
- Commence a program of investment in regional freight routes based on the Principal Freight Network and prioritised according to key capacity, efficiency and sustainability criteria, including:
  - Goulburn Valley Highway – Nagambie Bypass
  - Princes Highway East duplication – Traralgon to Sale
  - Princes Highway West duplication – Warrnambool to Winchelsea
  - Geelong Ring Road
  - Western Highway realignment – Melton to Bacchus Marsh (Anthony’s Cutting)
  - Western Highway duplication – Ballarat to Stawell
- Work in partnership with the Commonwealth Government to deliver upgrades for the Principal Freight Network through the new Infrastructure Australia process, including:
  - West Gate Alternative and Truck Action Plan Package
  - Alternative to West Gate – Tunnel
  - Truck Action Plan (Stage 1) – Hyde Street
  - Melbourne Orbital Road Package
  - Grade Separations
  - North-East Link – completing the Metropolitan Ring Road
  - Peninsula Link – connecting Melbourne to the Peninsula

DIRECTION 8
Invest in the network and trial next generation HPFVs

Victoria has for many years been the national leader in projects and programs that support improved heavy vehicle productivity outcomes. Victoria has implemented an ongoing bridge monitoring and strengthening program that has resulted in over 99 per cent of the Victorian arterial road network now being open for use by B-Double HPFVs.

Freight Futures recognises the important benefits of HPFVs, such as B-Doubles, from economic, efficiency, safety, environmental and amenity perspectives.

Under a PBS regulatory framework, which is an alternative to the existing prescriptive framework, the design and operation of heavy vehicles are regulated in terms of performance (e.g. swept path, which is the area of road covered by the vehicle when turning), rather than prescriptive standards (e.g. length and internal dimensions).

This gives industry the ability to be more innovative in vehicle design, delivering greater productivity while providing road authorities and the community with assurances of vehicle performance (in terms of safety, infrastructure and environment protection outcomes).

Importantly, heavy vehicles designed under PBS are matched to roads that are suitable to their level of performance. The PBS approach recognises that ‘one size does not fit all’ and that greater productivity may be possible from the best roads (such as freeways), while next generation HPFVs will not be suitable for many arterial roads and most smaller local roads.

In Victoria, benefits from the implementation of PBS are expected to accrue in a number of ways. Examples already designed include an Australia Post rigid vehicle and fuel distribution vehicles (including innovative truck and dog trailers and a quad-axle semi-trailer). Larger vehicles designed for line-haul, such as longer, more efficient B-Doubles (see Figure 12), are capable of safety and efficiently transferring more units of freight per trip. Longer B-Doubles transferring containers between the Port of Melbourne and metropolitan freight terminals will help to reduce the number of freight vehicles needing to access the port and form a key part of strategy to shift a significant amount of containerised freight onto the PFN at night.
The implementation of PBS, including a trial of next generation HPFVs, will see the number of articulated truck trips decline for a given freight task. According to work done for the NTC, a reduction of 25 per cent of line-haul vehicle trips is possible. Historically, the rapid uptake of B-Doubles (see Figure 13) has resulted in significant freight efficiency benefits and has substantially dampened the growth in the number of articulated vehicles. Victoria has been a major beneficiary of these developments. In 2005, 41 per cent of national B-Double registrations were based in Victoria.

Victoria has also been a national leader in implementing innovative vehicle combinations. In 1994, the world’s first long B-Double HPFVs (capable of carrying two heavy 40 foot containers) became operational within the Port of Melbourne. Newer and more efficient axle designs, allowing very low radius turning circles, have recently been developed and allow even greater productivity. Victoria has also piloted the operation of B-Triple HPFVs, with B-Triples operating safely under permit between the Ford Motor Company plants in Geelong and Broadmeadows for the last ten years.

Through Freight Futures, the Government is formalising its commitment to the progressive implementation in Victoria of the national PBS initiative endorsed by the ATC and COAG by:

- Confirming general access to the Victorian road network for PBS Level 1 vehicles, which are similar to existing general access vehicles (such as semi-trailers and rigid trucks) in terms of size and weight, but have additional productivity and safety benefits
- Confirming access to the great majority of the Victorian arterial road network for PBS Level 2a vehicles
- Facilitating access for next generation PBS Level 2b vehicles to selected sections of the PFN as a trial in the first instance, which will be especially useful for port-related container transfers and many other applications, including some regional commodities
Figures 14 and 15 above identify potential long term networks for next generation HPFVs in Metropolitan and regional Victoria. These networks are notional only at this stage and will be developed and approved progressively subject to detailed assessment and consultation with Local Government.
Figure 15 – Notional Long Term Regional HPFV Network
The Government recognises that there are some concerns in the community about the introduction of next-generation HPFVs on the network but believes that, with a trial on selected parts of the network, they could produce benefits for both industry and the community.

The Government will conduct a next-generation HPFV community awareness campaign in partnership with relevant stakeholders, including the Victorian Transport Association (VTA) and the Transport Workers Union (TWU). This campaign will promote community awareness about the trial of next generation HPFVs, their potential benefits and their role in the Principal Freight Network.

During the trial, next generation HPFVs will be required to participate in the Intelligent Access Program (IAP), a GPS tracking system through a certified IAP service provider, which will provide the Government and community with a high degree of confidence in compliance with operating conditions, especially route compliance. They will also be required to have front, rear and side under-run protection, use road friendly suspension systems and be fitted with anti-lock breaking systems (ABS). The prime mover will be required to operate to a Euro IV emissions standard.

Upgrades to selected roads and bridges will be funded on the Principal Freight Network, beginning with a priority stage trial of a next-generation HPFV network in the Green Triangle region targeting roads connecting to the Port of Portland to support movement of timber from plantations to chip mills and for export. These upgrades are expected to demonstrate the productivity benefits derived from next-generation HPFV use, as well as the best practice arrangements for managing social amenity issues.

A trial of the next generation of HPFVs also will be undertaken on limited key metropolitan freeways to link the Port of Melbourne with major industrial areas: the West Gate Freeway – Western Ring Road – Hume Freeway. These vehicles will be restricted to operating outside of peak traffic periods.

The only vehicles being extended in this trial will be longer B-Doubles; there is no plan to extend the trial to include B-Triples.

**Direction 8 - Actions**

- Formalise the Government’s commitment to the progressive implementation in Victoria of the national PBS initiative endorsed by the Australian Transport Council (ATC) and the Council of Australian Governments (COAG) by:
  - Confirming general access to the road network for PBS Level 1 vehicles
  - Confirming access to the majority of the arterial road network for PBS Level 2a vehicles (e.g. B-Doubles)
  - Facilitating access for next generation PBS Level 2b vehicles (e.g. more efficient, longer B-Doubles) to selected sections of the PFN

- **Trial next generation HPFVs:**
  - In the Green Triangle region targeting expanded exports through the Port of Portland, particularly timber products
  - On limited key metropolitan freeways to link the Port of Melbourne with major industrial areas: the West Gate Freeway – Western Ring Road – Hume Freeway

- Work with industry and Local Government to identify and upgrade priority routes within Freight Activity Centres and for short connection property access
**HPFVs – a key tool in dampening the increase in vehicles numbers and emissions**

As of 2006, Australia was operating around 69,600 articulated trucks. Approximately 58,200 were articulated combinations and a further 11,400 B-Double combinations. Had Australia not introduced the B-Double HPFVs in 1986, by the end of 2006 there would have been, under conservative assumptions, 6,700 additional six axle semi trailer combinations operating across the country.

In 2004, the Truck Industry Council estimated that although B-Doubles had delivered a significant efficiency benefit in handling Australia’s freight task, this benefit was reaching a plateau. By 2020, even with the B-Double task continuing to grow, Australia will require another quantum leap in truck technology and efficiency. If no new initiative commences by 2020, Australia’s population of articulated vehicles will grow by between 27,700 and 37,300. This will increase the total population of articulated vehicles from 69,600 in 2006 to between 97,300 to 106,900 by 2020. The adoption of Performance Based Standards technology, with next generation HPFVs, can significantly arrest this growth.

**Table 5**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Savings</strong></td>
<td>784</td>
<td>1939</td>
<td>2577</td>
<td>3250</td>
<td>3411</td>
<td>3861</td>
<td>4675</td>
<td>5932</td>
<td>6196</td>
<td>6724</td>
</tr>
<tr>
<td><strong>BDs</strong></td>
<td>1265</td>
<td>3130</td>
<td>4161</td>
<td>5247</td>
<td>5507</td>
<td>6233</td>
<td>7548</td>
<td>9578</td>
<td>10004</td>
<td>11400</td>
</tr>
<tr>
<td><strong>Single artics</strong></td>
<td>54198</td>
<td>56615</td>
<td>56732</td>
<td>55567</td>
<td>55229</td>
<td>55863</td>
<td>54814</td>
<td>54903</td>
<td>58605</td>
<td>58200</td>
</tr>
</tbody>
</table>

Fuel savings for 2006 alone are 380 million litres of diesel, a saving of 11.0 per cent on the total consumption for the year of 3,417 million litres. Given that greenhouse gas emissions are broadly related to the quantity of fuel burnt, the savings in fuel also represents reductions in GHG emissions. For the period 1996 to 2006 inclusive, the diesel fuel saving was 2.4 billion litres of diesel.
DIRECTION 9
Revitalise the Principal Freight Network - Rail

The Government recognises the important role rail can play in meeting the challenge of an increasing freight task at both a state and national level. Through investment in infrastructure and actively working with stakeholders the Victorian Government will seek to create an environment which supports a growing role for rail in the distribution of freight.

In May 2007, the Government ‘bought back’ the lease of the Victorian intrastate rail network for $133.8 million. In June 2007, the Government commissioned the Victorian Rail Freight Network Review (VRFNR) to develop recommendations for a sustainable operation of Victoria’s rail freight network. It also commenced discussions with stakeholders to revive a number of stalled rail investment projects. These included a $73 million upgrade of the Mildura rail line, a $33.4 investment to improve rail access to the Port of Geelong and the $501 million standardisation of the North East rail line and a rail bypass of Wodonga.

The VRFNR provided its report to the Government in December 2007. Its recommendations addressed access pricing, infrastructure investment, and a number of regulatory and institutional issues. On receiving the report the Government immediately began implementing its recommendations. The Government announced a $21.4 million support package to assist industry transition of freight.

In May 2007, the Government ‘bought back’ the lease of the Victorian intrastate rail network for $133.8 million. In June 2007, the Government commissioned the Victorian Rail Freight Network Review (VRFNR) to develop recommendations for a sustainable operation of Victoria’s rail freight network. It also commenced discussions with stakeholders to revive a number of stalled rail investment projects. These included a $73 million upgrade of the Mildura rail line, a $33.4 investment to improve rail access to the Port of Geelong and the $501 million standardisation of the North East rail line and a rail bypass of Wodonga.

The Victorian Government has entered into a new lease of the Victorian intrastate rail network lease, undertaking key rail projects in co-operation with the Commonwealth Government and the Australian Rail Track Corporation (ARTC) and the implementation of the VRFNR recommendations, over $1 billion has been spent on the Victorian interstate and intrastate rail freight network – the biggest investment in the state’s rail freight network for more than a century.

Interstate rail freight

The Victorian Government has entered into a new lease of the interstate network to ARTC until 2059. This will facilitate the substantial capital investment necessary to increase rail capacity, reduce transit times and improve reliability in the interstate corridors.

The Melbourne to Sydney freight corridor is the most significant inter-capital freight corridor in the nation and significantly larger than any other corridor to and from Melbourne. While it will be important to ensure that all interstate corridors operate effectively into the future, the efficiency of the Melbourne to Sydney corridor is crucial to the Victorian economy.

Currently, rail’s average share of freight traffic in this corridor is around 7 – 8 per cent, with approximately 92 per cent of tonnage being carried on road. Annually, 11 million tonnes of freight are handled on the corridor. The future freight task on this corridor is expected to grow to more than 18 million tonnes per year by 2020.

In order to increase rail capacity in this corridor, the Victorian Government has widened the ARTC interstate lease to include the North East broad gauge line between Seymour and Albury. This line which runs parallel to the existing standard gauge line will be standardised and upgraded by ARTC to provide a dual standard gauge track in this section of the corridor. A bypass of Wodonga will be constructed and the ARTC will also build longer crossing loops South of Seymour. Over 70 per cent of the corridor between Melbourne and Sydney will be double track to create a ‘rail freight super highway’ between the two cities.

This North East Rail Revitalisation Project (NERRP) will enable more and longer trains to operate between Melbourne and Sydney/Brisbane. Trains up to 1800 metres long will have a transit time between Melbourne and Sydney terminals of just under eleven hours. The Victorian Government will be contributing $171 million to this $501 million project which is due for completion in 2010. The project will complement other works being undertaken by the ARTC and the Government to improve rail access between Tottenham, the Dynon rail terminals, and the Port of Melbourne.

In addition to the key Melbourne-Sydney route, the Victorian Government will continue to work with the Commonwealth Government, neighbouring states and ARTC to secure investment in the interstate main line corridors that enables efficient rail service to be provided. The Victorian Government will also work closely with the Commonwealth Government in its study into the feasibility for new Melbourne to Brisbane rail connections.

Efficient intermodal terminals are critical for viable rail freight services. The Victorian Government will continue to work with stakeholders to improve access to rail in the Altona/Laverton area and also commence planning for a major new interstate rail terminal in the Donnybrook/Beveridge area to replace the existing South Dynon terminal as the main interstate rail freight handling site. These projects provide an opportunity to develop efficient terminals to handle interstate freight away from the Dynon/port precinct, freeing up road and rail capacity in that precinct for port related freight.
Intrastate rail freight

The rail freight task in regional Victoria consists of three discrete segments: bulk grains, primarily for export through Victorian commercial ports; container movements to and from the Port of Melbourne and general industrial transport including logs, quarry materials, cement and, potentially, mineral sands.

The future of the intrastate rail freight was threatened by the poor condition of the rail infrastructure and the inability of train operators to provide competitive services. The VRFNR provided a template for the revival of rail freight. Two of the VRFNR’s primary recommendations were:

- to invest in rehabilitation of the network based on a hierarchy of ‘platinum’, ‘gold’, ‘silver’ and ‘bronze’ lines as illustrated in Figure 16
- to reduce access fees in order to improve the viability of above rail operations and to provide an incentive for industry to commit to rail

The Government has adopted key recommendations for rehabilitation of lines as follows:

- **Platinum** (the base network) – This track will be maintained by virtue of being part of the V/Line passenger network, the ARTC interstate network or the declared AusLink network (which includes the Mildura line)
- **Gold** – These line sections are the first priority for rehabilitation and restoration to original track standard; in addition, the ARTC will restore the Maroona to Portland line, which it has leased from the Victorian Government
- **Silver** – Based on undertakings from the grain industry to secure train capacity and improve silo loading facilities, the Government will upgrade silver lines including standardisation of the Benalla – Oaklands line
- **Bronze** – The Victorian Transport Plan announces that as part of the Green Triangle Freight Action Plan, selected bronze lines will be rehabilitated

**Figure 16 – Regional Rail Network**
The Victorian Transport Plan committed further funding to provide ongoing maintenance of the network once rehabilitation work is complete.

Many of the recommendations made by VRFNR relating to infrastructure investment have been addressed by the Government. The key infrastructure investments have been announced including standardisation of the North East and Benalla-Oaklands lines. Further investment in the network will be based on a case by case basis assessed against a sound social and business need. Further standardisation will similarly be assessed as opportunities arise, as recommended by the VRFNR.

The Government is also committed to working with local councils and the Commonwealth Government for the development of regional intermodal terminals at Shepparton, Dooen, West Warrnambool and Gippsland. The level of access charges and support for intermodal terminal operators has been addressed with the two year, $21.4 million freight support package. A review of the access regime will be undertaken to determine what improvements are appropriate.

The Department of Transport will maintain ongoing discussions with stakeholders regarding a number of the regulatory and institutional issues raised in the VRFNR in order to improve planning for rail freight, reduce barriers to efficient train operations and encourage increased use of rail.

Metropolitan rail freight

Although almost no metropolitan freight is currently carried by rail, the potential exists for rail to play a role in transporting containers between the Port of Melbourne and the Metropolitan Freight Terminals from where it would be distributed locally.

With the high capital cost of rolling stock and equipment, the additional handling inherent in the use of rail and the short distances involved, an effective metropolitan rail freight system requires co-ordination, good rail access to the port, Metropolitan Freight Terminals, efficient handling at both ends and large volumes of freight.

The Government envisages that with effective co-ordination through specific governance arrangements and responsibilities, improvements to rail access, investment in Metropolitan Freight Terminals and the growth in freight volumes, rail, in the future, can play an important role in metropolitan freight.

The Government is removing existing track bottlenecks at the Port of Melbourne. Rail access to the Port of Melbourne is currently limited to a single, dual gauge track crossing at Footscray Road, which gives priority to road traffic. The Dynon Port Rail Link due for completion in 2009 will provide an uninterrupted rail link into the Port of Melbourne.

The $50 million Port of Melbourne Rail Access Improvement Project funded jointly by the ARTC, Commonwealth and Victorian Governments provides additional infrastructure improvements in the port precinct, including the ‘W’ track and the ‘missing link’ projects. Both projects improve the ability to transport containers to and from the port by rail. Missing link will duplicate the existing dual gauge line into the Port of Melbourne between Dock Link Road and Footscray Road. ‘W’ Track will provide dual gauge access between the Dynon/North Dynon rail terminals and the port precinct to facilitate container transfers by rail between the terminals and the port. It will also give freight trains from the east of Melbourne direct access to the port, rather than having to go to Tottenham rail yards to shunt and return to the port.

As discussed in Direction 4, development of a Metropolitan Freight Terminal Network with rail access will provide the necessary terminal infrastructure to support metropolitan rail freight. To the extent that these Terminals handle interstate freight they will also free up rail capacity in the port precinct for metropolitan trains.

The Government has also announced its support for significant new metropolitan rail infrastructure in The Victorian Transport Plan. While these projects are generally related to increasing public transport capacity, they also have clear benefits for enabling increased freight movements in the future. The proposed projects include new rail lines from Werribee South to Southern Cross station via Tarneit, electrification of the Sunbury rail line and the first stage of construction of a new underground rail tunnel between Caulfield and Footscray. In particular, the new rail tunnel will greatly enhance the capacity of the metropolitan rail network to accommodate rail freight services to and from Melbourne’s south east, including the industrial areas around Dandenong, Gippsland and, in the longer term, the Port of Hastings.
Direction 9 – Actions

- Fund essential rehabilitation and maintenance of the Victorian regional rail freight network
- Rehabilitate nominated prioritised sections of the regional rail freight network to maintain operating speeds where a sustainable commercial or economic benefit will result
- Work in partnership with the Commonwealth Government and Local Government to enhance Victoria’s regional rail freight network, including:
  - Facilitating the development of new intermodal terminals at Greater Shepparton and Dooen (Horsham)
  - Undertaking upgrade works at the West Warrnambool and Gippsland intermodal terminals
- Where a sound business case exists for a new rail freight service, consider targeted investment to expand capacity in the regional rail freight network
- Work with the Commonwealth Government, neighbouring states and the ARTC to enhance:  
  - Improvement works in the inner west corridor (Tottenham, ‘W’ track and ‘missing link’)
  - Works essential to improving rail access to Metropolitan Freight Terminals at Altona/Laverton, Somerton and Dandenong

Direction 10
Enhance commercial port efficiency, capacity and integration

Commercial sea ports are critical elements in the freight network, connecting Victoria to the global marketplace and forming the gateways for the great majority of international trade. Victoria has a mixed system of ownership of key port infrastructure: while the Port of Melbourne and the Port of Hastings are Government owned, the landside assets of the Port of Geelong and Port of Portland are owned and operated by private companies.

The two privately owned regional ports play a key role in the State and regional economies and act as focal points for their regional freight networks. These ports are facing significant growth pressures that are presenting many unique challenges. The Victorian Government appreciates that, while it is not directly involved in the management of these private ports, it has a key role to play in ensuring they are effectively connected to the broader freight network.

The Government understands the challenges faced by these regional ports and is committed to assisting them (and their regions) to benefit from the expected significant growth in key commodities.

The Victorian Government has committed significant funding to a number of important projects which have been progressed in recent years at the Ports of Geelong and Portland. These include the Cliff Street Overpass in Portland (completed in 2006), which separates non-port traffic from the roads leading into the Port, and the recently commenced Geelong Rail Access Improvement Project (GRAIP), designed to improve the connection of Geelong Port facilities to the standard gauge rail network (due for completion in 2009). The Government will actively consider further projects which demonstrably enhance the ability of the Ports of Portland and Geelong to efficiently handle growing trade volumes in the future.

At the Ports of Melbourne and Hastings, the Government has a more direct role in planning and facilitating the delivery of key infrastructure.

The Port of Melbourne Corporation (PoMC) is currently delivering the $969 million Channel Deepening Project, to allow larger deeper 14 metre draught vessels to access the port at all tides. This essential project, towards which the Government has directly contributed $150 million (including $50 million for complementary infrastructure), will ensure that the Port of Melbourne remains Australia’s leading container port by accommodating larger, more efficient ships which will result in lower freight costs to users.
The PoMC has forecast the need for over $3 billion of investment in port infrastructure over the period to 2035. This investment is required to ensure that the port maintains and improves its efficiency on the land side to cater for the larger ships and the significantly increased volumes of trade which are predicted and will need to be transferred quickly and efficiently through the port, to and from points of origin and destination. The Government is committed to continuing to work with the PoMC and the private sector to ensure the necessary investments are made to deliver on the long term vision for the Port.

Increasingly the Port of Melbourne and the other commercial sea ports will need to look to their broader role in the international supply chain, beyond the port gate. There is little point in achieving efficiency across the wharf if it is not possible to move cargo with equal speed and reliability out of the port gate and to its next destination in freight network. Through Freight Futures, the Government will encourage and facilitate this direction through its Metropolitan Freight Terminal Network planning initiatives (refer Direction 4) and related review of governance arrangements (Direction 17).

An early example of PoMC’s progression into this area of activity is its current development of a truck rest stop facility near the Port to service the drivers of port related trucks and other trucks utilising the precinct. The Government supports this initiative and expects continued involvement will be required in this and similar developments around the port precinct as the freight task increases.

**Provision of additional container stevedoring capacity at the Port of Melbourne**

In July 2007, the Victorian Government commissioned the Essential Services Commission (ESC) to undertake a Review of Port Planning in order to consider the potential impacts of current port planning frameworks and policy settings on competition in service provision in Victorian ports, particularly the provision of stevedoring services in the ports of Melbourne and Hastings. This review was required as part of Victoria’s commitments under the Competition and Infrastructure Reform Agreement (CIRA), signed by the Victorian Government and other jurisdictions in February 2006.

The ESC made the following recommendations:

- There should, in general, be less reliance on the precise sequence of port development and more reliance on assessing the relative merits of market opportunities as they arise

- The legislation governing statutory port corporations should be amended to provide greater clarity in relation to how competition objectives translate into specific port management responsibilities

- The legislation governing commercial trading ports should be amended to provide greater clarity in relation to their obligations to prepare strategic land use plans

The Government has committed to implementing these recommendations and will progress legislative amendments to the Port Services Act 1995 (PSA) during 2008-09 to put into effect the last two of the above recommendations.

In relation to the first recommendation, the Government intends to progress a process to test the market to secure additional container stevedoring capacity at the Port of Melbourne over the next 12 months. More information about this initiative will be provided with the release of Port Futures, which will provide a detailed update of the Government’s agenda for ports, during the first half of 2009 (see also Direction 17).

**Direction 10 – Actions**

- Through the Port of Melbourne Corporation:
  - complete the Port of Melbourne Channel Deepening Project to allow 14m draught vessels to access the Port at all tides
  - undertake detailed planning and design work in preparation for the establishment of additional container handling capacity within the Port

- Develop and announce, in conjunction with the release of Port Futures, details of a process for testing the market for the provision of additional container handling capacity at the Port of Melbourne

- Identify and undertake priority projects to improve freight transport connectivity to regional ports, including completion of the Geelong Rail Access Improvement Project (GRAIP) at the Port of Geelong.
DIRECTION 11
Alleviate the impact of truck movements in the inner west

The Government recognises the significant impact freight operations have on amenity and liveability in Melbourne’s inner west, particularly in the suburbs of Yarraville, Seddon and Footscray. Most of the large number of truck movements in and through the Inner West are due to industrial land use in the area, including container parks, transport depots, petrochemical industries, the operation of the Port of Melbourne, the wholesale produce markets and the Dynon rail yards.

However, there are also a significant number of truck movements using key arterials in the inner west, including Williamstown Road, Francis Street, Somerville Road, Buckley Street and Whitehall Street, because they provide shorter and more direct routes from origin to destination than the West Gate Freeway and/or CityLink (Bolte Bridge). This is particularly the case for truck trips with an origin or destination to the east of the Western Ring Road. Some drivers and operators use routes through the inner west to avoid delays due to congestion on the freeways and steep grades on CityLink and the West Gate Bridge. Avoiding tolls may also be a factor.

Some 17,000 to 20,000 vehicles per day use Francis Street east of Williamstown Road, of which around 6,000 are trucks. It is estimated that about one third of these trucks are through traffic, another third are Port/Dynon precinct related and the balance have local origins/destinations.

Truck use of Francis Street has remained static or has reduced marginally over the last five years, largely due to measures implemented by the Government and industry to reduce the impact of truck traffic on this road. These measures have included night time and weekend truck curfews on Francis Street and Somerville Road, agreements with local petrochemical companies to reduce truck traffic on Francis Street, and an education campaign to encourage the use of the West Gate Freeway and Bolte Bridge for journeys to the Port of Melbourne and the Dynon rail yards. Traffic signals, cameras to monitor curfew compliance and ‘low noise’ asphalt have also been installed to help to reduce truck-related amenity impacts.

Despite the effectiveness of the measures taken in Yarraville (and Francis Street and Somerville Road in particular), the Government acknowledges that more needs to be done. If no further action is taken, the number of heavy vehicles in the inner west could increase by more than 50 per cent by 2030.

A number of the Strategic Directions in Freight Futures which aim to improve freight efficiency will also result in some improvement in the amenity of the inner west. These include initiatives related to the establishment and operation of the Metropolitan Freight Terminal Network, the progressive movement of interstate rail freight operations to a new terminal to the north of Melbourne and the increasing use of next generation HPFVs to transfer containers.

However, without direct intervention, the continuing growth of the freight task will generate increasing pressure on residential and community amenity in the inner west.

The Government is committed to delivering a comprehensive package of initiatives to improve liveability in the inner west. In the short term, this will involve further review and refinement of existing road management arrangements targeting, in particular, reductions in the number of trucks which are simply transiting the area, with no pick up or delivery to make in the inner west or Port/Dynon precinct. Measures may include extended truck ‘curfews’ and possibly targeted bans, but such initiatives will need to be carefully planned and implemented in close consultation with industry to ensure that they are fair and produce the desired outcomes.

More substantially, however, the Government will move to deliver a major Truck Action Plan for the inner west (see Figure 17), as announced in The Victorian Transport Plan in response to proposals in the Eddington report. The major initiative will be delivered in partnership with the Commonwealth Government and will require significant funding support through the Building Australia Fund.

The first stage of the Truck Action Plan will connect the West Gate Freeway and the Port of Melbourne via a new road linking the West Gate Freeway to Hyde Street and Whitehall Street. This will allow for some further restrictions on truck movements through the inner west. However, it will be necessary to complete subsequent stages before more substantive restrictions can be applied, noting that trucks making deliveries to addresses in the inner west will always need to be exempted.

In the medium term, the second stage of the plan will involve upgrades to Sunshine Road, Dempster Street and Paramount Road, which will link a new road tunnel connecting Geelong Road with the Port under the Footscray business district.

Once all of these elements are in place, it will be possible to introduce substantial additional restrictions on trucks using Francis Street and Somerville Road.
Figure 17 – Truck Action Plan

Road Tunnel Geelong Road to Port of Melbourne
Hyde Street connection to West Gate Freeway

Legend

- Major road
- Railway
- Railway station
- Truck Curfew
- Road Tunnel - Geelong Road to Port of Melbourne
- Road tunnel surface connection/treatment under investigation
- Road upgrade/alignment options under investigation
- Hyde Street connection to West Gate Freeway

Legend

- Major road
- Railway
- Railway station
- Truck Curfew
- Road Tunnel - Geelong Road to Port of Melbourne
- Road tunnel surface connection/treatment under investigation
- Road upgrade/alignment options under investigation
- Hyde Street connection to West Gate Freeway
The Truck Action Plan will greatly enhance urban amenity in the Inner West and will also help to secure the long term sustainability of the Port of Melbourne in its current location, as its freight task continues to grow.

Direction 11 - Actions

- Implement a practical two–stage Truck Action Plan to provide better access to the Port of Melbourne for heavy freight vehicles and remove thousands of trucks from residential areas of the inner west, particularly along Francis Street and Somerville Road
- Stage 1 will involve construction of new links connecting the Westgate Freeway directly to Hyde Street (facing west on the Westgate Freeway)
- In the medium term, Stage 2 will include upgrades to Sunshine Road, Dempster Street and Paramount Road which will link with a new road tunnel under Footscray
- Implementation of the Truck Action Plan will be complemented by extension of truck curfews in the inner west and improved enforcement on roads in Flemington and Kensington

**DIRECTION 12**

**Support increased take-up of information and communications technology (ICT)**

**Improving the capacity and efficiency of the Principal Freight Network through ICT**

The Victorian Government recognises the importance of innovative ICT applications for the freight and logistics industry as a means of improving the capacity and efficiency of the physical freight network.

Traditional business transaction systems generate large volumes of paper-based documentation and incur substantial administrative inefficiencies for all users, affecting customers and resulting in higher costs across the economy. Very substantial efficiencies can be achieved through improved management of business documentation, eliminating inefficient practices such as manual data entry, document handling and processing, triplication of forms, multiple faxes of documentation and follow-up phone calls to confirm receipt.

All of these processes can be handled more efficiently and effectively using ICT virtual technology. However, the freight and logistics industry’s generally low rate of ICT take-up for logistics software, especially from small sized enterprises, imposes substantial costs and inefficiencies on both the freight and logistics sector and, ultimately, the Victorian economy.

To encourage greater take-up of ICT across the sector, the Government will create a new Freight Futures ICT Innovation Program, in partnership with industry, to support the development of innovative ICT solutions that are designed to improve freight efficiency in Victoria. More details of this new program will be developed and released during 2009.

**Connect Freight – Bringing ICT to the Port of Melbourne supply chain**

The Victorian Government is already investing in supporting innovative ICT applications for the freight and logistics industry linked with the operation of the Port of Melbourne, including funding of $4 million for the Connect Freight project. Connect Freight is running as a pilot project and is now being delivered in partnership with the Port of Melbourne Corporation.

The funding for Connect Freight has supported various initiatives, including the development of the Port of Melbourne Supply Chain Model and an Electronic Document and Information Transfer (eDIT) pilot that allows participants in the Port of Melbourne supply chain to access and share port information.
An industry wide freight and logistics portal

A ‘Portal’ is a web based gateway through which information and shared applications and systems can be accessed. While Connect Freight will make significant progress in improving the use of ICT applications in the port related supply chain, the Government is also committed to supporting investigation of the development of a common-user Victorian Freight and Logistics (VF&L) Portal that will host a broader set of ICT applications for the wider freight and logistics industry.

The new VF&L Portal will attract logistics software providers wishing to have their products hosted on the common-user platform and industry participants who wish to conduct transactions electronically using web-based technology in conjunction with existing applications. Examples of existing applications include on-line booking, vehicle routing and scheduling, electronic purchasing, web-based inventory management, accounting and on-line auctions, and Intelligent Transport System (ITS) applications. Such systems can deliver significant cost reductions for the operators.

Access to the VF&L Portal will be available to the industry and its customers on a subscription fee-for-service and/or tiered transaction fee basis, avoiding the often prohibitive costs of buying these applications outright and paying ongoing maintenance and licensing fees. This initiative mirrors similar international logistic portal developments that have delivered large benefits for their user communities.

The eDIT application developed as a part of the Connect Freight project is an example of a stand alone web-based application that could also be accessed through the VF&L Portal.

As a first step in establishing the VF&L Portal, the Government will, in consultation with industry, undertake a feasibility study for the development of a new common-user VF&L Portal that provides access to ICT business software on a subscription fee-for-service basis. As part of this work, the Government will also consider arrangements for the management, operation and maintenance of the new VF&L Portal.

Direction 12 – Actions

- Establish a Freight Futures ICT Innovation program to encourage freight and ICT industry participants to develop and apply ICT applications and initiatives that will improve the efficient and sustainable utilisation of the Principal Freight Network.
- Undertake a feasibility study for the development of a web-based Victorian Freight and Logistics Portal to form a common user gateway to logistics sector ICT applications.

Managing and regulating the use of the freight network

As the owner, manager and regulator of key strategic components of the freight network, the Victorian Government can play a substantial role in enhancing integration of the freight network to optimise efficiency. In particular, the Government will use its responsibility for managing access and operating arrangements for the freight network to encourage greater integration between freight modes and places.

As Melbourne’s population increases, substantial growth is predicted in freight transport, as well as personal and business travel. While efficient freight transport underpins the growth of the economy, the by-products of freight transport (road congestion, pollution, noise and amenity impacts) can have an adverse effect on liveability.

In managing these impacts, a balance needs to be struck between essential mobility and improving the quality of the urban environment (air, noise, safety and amenity).

Through various regulatory interventions, such as requiring the use of more efficient, cleaner freight vehicles in certain zones and using price to encourage desired behaviours, the Government can contribute to mitigating the negative impacts of freight transport.

The arrangements that determine how access to road and rail infrastructure is managed also have a significant impact on freight outcomes. The freight network is shared with private passenger traffic in cars, trains, trams and buses, all of which have different access needs and usage patterns. As the manager of road and rail infrastructure networks, the Government must put in place access and operating arrangements that strike the right balance between these various users.

In particular, the significant growth in international container trade predicted at the Port of Melbourne presents a significant challenge. To deal with this growth, the Port of Melbourne needs to be better integrated with road and rail infrastructure and freight terminal facilities. This will ensure that freight can be moved quickly and efficiently with minimum adverse social and environmental impacts.
The Government recognises its responsibility for keeping the regulatory regime current and responsive to the changing requirements of the community and industry, in consultation with stakeholders. The Government is committed to ongoing regulatory reform in relation to freight transport, including a commitment to reducing the regulatory burden where policy outcomes can be achieved with streamlined or simplified regulation.

Through Freight Futures, the Government will manage and regulate the Principal Freight Network, including taking action to maximise use of the network, trial next generation HPFVs, and enhance the safety and security of freight transport in Victoria.

The Government will also take action to minimise amenity and environmental impacts of freight transport around the Port of Melbourne and support arrangements for the Port of Melbourne Corporation to have greater involvement in the planning and delivery of port/rail interface developments, including the Metropolitan Freight Terminal Network.

Recognising the critical importance to network planning of having access to accurate and current data about freight, the Government will implement a new freight data collection and analysis capability.

**DIRECTION 13**

**Maximise efficient use of the principal freight network**

**Utilisation of the Principal Freight Network – Road**

Melbourne is experiencing increasing road congestion during peak traffic periods in the morning and afternoon. Congestion is being addressed by the Victorian Government through a range of initiatives included within the recently released Keeping Melbourne Moving and the key directions, actions and projects identified in The Victorian Transport Plan.

Traffic counts indicate that freight traffic already tends to avoid unnecessary travel on Melbourne’s road network travel during peak congested periods. However, freight traffic will still travel during peak periods in the future. The Government is committed to taking steps to further encourage freight vehicles to avoid peak periods and make greater use of the significant spare network capacity available during the night. In certain specific situations, for example, approaching high volume FACs, it may also be appropriate for dedicated freight lanes or roads to be designated.

In addition to encouraging off-peak and night time operation of trucks, the PFN must be developed and managed in a way that delivers appropriate separation of light and heavy vehicles and, where possible, priority to the movement of freight. This will be achieved through a range of regulatory and road system management measures.

The Commonwealth Government and all State and Territory Governments are working together on a national heavy vehicle pricing reform agenda that will implement incremental pricing trials and develop a mass distance pricing scheme. Incremental pricing allows for an extra road use charge to be paid for the movement of heavier loads, while mass distance pricing allows the road use charge to reflect the mass and the distance travelled by a heavy vehicle. These pricing schemes will assist transport efficiency, and increase flexibility for operators and ensure that operators are paying the right amount for their use of the road network.

Victoria will continue to work with the Commonwealth and other State and Territory Governments to support national heavy vehicle road pricing reforms.
Many opportunities exist to improve the operation of the road system. It is becoming increasingly important (especially at peak times) to recognise the relative priority of certain types of traffic. In the same way as public transport vehicles, such as buses and trams, are given priority on the Principal Public Transport Network, it may be appropriate that trucks be given priority on the PFN, at certain times, especially in off-peak and inter-peak periods, through the proper signalling, signage and investment in roads carrying large volumes of freight traffic.

VicRoads, in partnership with Local Government, is currently developing Network Operating Plans across metropolitan Melbourne. As part of this process, Road Use Hierarchy maps are being developed to indicate agreed priorities for operating the arterial road network and some key local roads. Some roads will be nominated as priority bus or tram routes, sections of certain roads will provide for pedestrian priority, and others will be designated as preferred traffic routes. These preferred traffic routes will be developed with freight vehicle priority as a key consideration as one means of supporting the efficient operation of the Principal Freight Network.

Network Operating Plans also provide for priority to be assigned to different road users at different times of day. Some arterial roads will not be nominated for a particular user; on these roads, operations will be balanced across all users.

Performance of each road section will be assessed against the nominated priority/ies for that section and interventions developed to bring the road up to the desired performance level. These interventions will initially involve relatively low cost strategies such as traffic signal changes, access management, lane management, roadworks and incident management, parking management and traveller information. Where these measures are unable to provide the desired outcomes, more significant investment will be considered.

Utilisation of the Principal Freight Network – Rail

The metropolitan Melbourne rail network is experiencing increasing demand from both electric commuter trains and regional V/Line passenger trains accessing the CBD via the metropolitan network due to increased patronage. A comprehensive program of investments and timetable improvements is underway to address this capacity issue.

However, metropolitan Melbourne rail network demand is similar to demand for the road network. It is highly peaked, with considerable capacity potentially available outside the peak periods. The ability to use this capacity for the movement of metropolitan and regional freight depends upon effective train and network management, involving initiatives such as:

- scheduling freight trains into the metropolitan timetable so that predictable ‘slots’ are planned and available
- configuring freight trains to operate seamlessly within the operating pattern of the electric commuter services to minimise freight’s use of network capacity
- ensuring reliable operations by freight trains transiting the metropolitan network to avoid delays to commuter trains and ensure that freight trains may be admitted to the metropolitan network with confidence

The Government will work with all key stakeholders with an interest in the metropolitan rail network to ensure that the available rail capacity is used optimally to the benefit of all types of trains requiring access through the system.

A freight access charge

In order to encourage more efficient and sustainable utilisation of Victoria’s freight network infrastructure, the Government will give early consideration to introducing pricing measures on the network which focus, in the first instance, on freight access to the Port of Melbourne.

A new freight access charge will be applied to trucks accessing the Port precinct. The design of the Freight Access Charge’s differential pricing regime, will encourage and support:

- use of the Principal Freight Network for accessing the Port of Melbourne, including requiring HPFVs to have intelligent access technology to further prevent Port vehicles from using residential streets
- off-peak use of roads accessing the Port of Melbourne
- rail access to the Port from both regional Victoria and via the Metropolitan Freight Terminals Network
The Government acknowledges that the policy underpinnings and design of such a charging regime require careful consideration and full consultation with industry stakeholders during the development phase to ensure that the intended objectives are met and that unintended operational outcomes and distortions do not eventuate. In particular, the impact on smaller trucking businesses and owner/operators will need to be considered to ensure that their viability is maintained with the introduction of the charge. This may require a phasing in period to ensure that costs can be managed and adequate cash flows maintained.

However, the Government notes that such pricing measures have been applied with considerable success in other parts of the world, notably the PierPASS program at the Port of Los Angeles in the USA, where a differential charge has been applied for access to container terminals to encourage a shift to night time operations. It will be important to learn from this and other examples in developing a suitable access pricing regime for Melbourne.

**DIRECTION 14**

**Minimise the amenity, environmental and climate change impact of freight transport**

The efficiency of freight transport underpins Victoria’s and Melbourne’s liveability. However, freight transport has consequences that adversely affect liveability, such as increasing road congestion, pollution and noise. A balance must be struck between essential mobility and improving community amenity and the quality of the environment.

Through various interventions, such as providing infrastructure that encourages certain travel patterns, supporting use of quieter, more efficient and cleaner freight vehicles and using price to encourage desired behaviours, the Government can reduce the negative impacts of freight transport. Properly designed and implemented policies that aim to improve efficiency can also contribute to delivering improved environmental and amenity outcomes.

**Reducing greenhouse gas emissions and energy consumption**

A key element of many of the Strategic Directions in Freight Futures is to encourage consolidation of freight activities to enable operators to take advantage of the benefits of co-locating with related activities rather than spreading across the metropolitan area. This general theme throughout Freight Futures will have a potentially very significant positive impact in mitigating the environmental impact of freight activities and reducing greenhouse gas emissions in particular.

Preliminary modelling by the Department of Transport has indicated that significant reductions in fuel usage and associated emissions can be achieved if growth in freight activity can be effectively concentrated into a limited number of freight precincts around outer Melbourne such as the existing freight terminals at Altona/Laverton, Somerton and Dandenong.

This modelling indicates that reductions in kilometres travelled, fuel use and greenhouse gases across Melbourne’s total freight task in the order of 5-6 percent are potentially achievable by successfully encouraging growth of freight activities in a limited number of designated areas compared to a business as usual scenario.

Consolidation such as this would also support use of next generation HPFVs between these zones on a designated network and, as volumes between specific points grow, also support growth in metropolitan rail freight – in turn contributing to further reductions in fuel use and greenhouse gas emissions.
National regulation of diesel engine emissions

Work is underway at the national level to adopt international standards for exhaust emissions. This work will ensure that Australia progressively adopts the best and most demanding emissions standards. It will also ensure that Australian standards are internationally compatible. Victoria will continue to support the implementation of world’s best practice emissions standards and will encourage, in partnership with industry, the uptake of more environmentally friendly vehicles and good maintenance practices.

The Freight Futures Sustainability Partnership

The Government is committed to actively partnering with industry to achieve strong environmental outcomes through establishing the **Freight Futures Sustainability Partnership** program. The **Freight Futures Sustainability Partnership** will consist of a series of voluntary agreements entered into by key freight stakeholders, the Environment Protection Authority (EPA) and other agencies. These agreements could be formalised through the statutory mechanism of a sustainability covenant. Sustainability covenants are covered under the **Environment Protection Act 1970** and provide opportunities to focus on issues such as product design and broad ranging business, social and environmental considerations. A sustainability covenant is a voluntary agreement through which EPA and an organisation or group of organisations can explore innovative new ways of reducing the environmental impact and increasing the resource efficiency of their products and services.

*Freight Futures Sustainability Partnership* agreements would support all participants, including the Government, deliver against a range of commitments over time that have been expressly designed to achieve optimal outcomes in environmental performance through promoting best practice, efficient freight movements. Measures which provide incentives for industry to achieve outcomes, such as accreditation for the maintenance module of the National Heavy Vehicle Accreditation Scheme (NHVAS), could be included in a partnership agreement.

Many Partnership models with the freight industry exist internationally, with notable examples including the US SmartWay program, and the UK Department of Transport Freight Best Practice program. Most of these examples utilise an overarching framework and brand, within which a variety of tools and services are made available to industry. These include such diverse items as ecodriving information and training, linkage mechanisms between shippers and carriers, fleet audit and advisory services, introductory services for financing of energy efficiency measures, and many more. Remote sensing equipment set up in areas with high concentrations of freight traffic could be used to identify smoky vehicles and provide drivers with instantaneous feedback regarding their vehicle’s poor operating condition and need for maintenance.

It is proposed that the **Freight Futures Sustainability Partnership** utilise a similar approach by establishing a high-level agreement with industry, within which a range of value-added measures and commitments could be populated over time. The Victorian Government is well-positioned to support this approach, with a range of existing initiatives to draw upon, including EPA’s significant partnerships with Victorian Employers’ Chamber of Commerce and Industry (VECCI), implementation activities under the National Environment Protection Measure (Diesel), the Department of Sustainability and Environment’s development of a Truck Buyer’s Guide, and VicRoad’s agreement with the VTA for the development of an ecodriving package.

As well as larger companies operating large fleets of vehicles, the partnership will also be targeted at those operators using older, less fuel efficient vehicles that could achieve significant cost savings through reduced fuel usage. A range of suitable stakeholder groups, such as the Victorian Transport Association (VTA), the Transport Workers Union (TWU), the Victorian Freight and Logistics Council (VFLC), the Australasian Railways Association (ARA) and the Australian Road Transport Suppliers Association (ARTSA), could also achieve significant efficiency improvements for their membership through participation in the Partnership. The Government is keen to progress opportunities for the **Freight Futures Sustainability Partnership** in co-operation with these organisations and other stakeholders.
Environmental Freight Zones

Achieving the right balance between liveability, mobility and sustainability is a challenge for governments and especially freight planners. This challenge is especially difficult where there are large concentrations of freight activity. This concentration may be desirable from a land use planning and efficiency perspective, but has the effect of concentrating the environmental impact from the operation of large numbers of freight vehicles and associated equipment. The Government is committed to actively pursuing a means through which the needs of freight efficiency and local amenity can be best managed; providing certainty and clarity in relation to acceptable operating standards for noise and vehicle emissions for both industry and local communities.

The Government will designate large centres of freight activity as Environmental Freight Zones (EFZ) and particularly focus on working with industry operating within these zones through partnership arrangements established under the Freight Futures Sustainability Partnership program to support and encourage best practice operating standards within the EFZ.

In order to assess the impact of intense freight activity in consolidated areas, the Government is committed to putting in place an ongoing monitoring regime for EFZs to assess the general impact of the zones on ambient noise and air quality in surrounding areas and also assess the impact of specific events such as engine braking and backing related noise. Better understanding of the operational factors which have the greatest impact on the amenity of surrounding residents will support achievement of best practice performance within EFZs.

These measures for EFZs would complement existing enforcement of Victoria’s existing noise and emissions standards. Additional dedicated monitoring equipment such as smoke camera and noise detection equipment could be considered for installation in EFZs subject to the outcomes of the proposed partnerships. Other measures that may be considered within EFZs include requiring compulsory enrolment in an accredited heavy vehicle maintenance management scheme for more than one breach of emissions or noise regulations within EFZs. The potential for further initiatives such as this will be discussed with industry when establishing an EFZ.

The first EFZ will be the area around the Port of Melbourne and Dynon rail terminal precinct. Other EFZs will be progressively defined and declared. Before declaring the first EFZ at the Port of Melbourne and the Dynon Rail terminal precinct, the Government will engage stakeholders in detailed consultation to put in place agreed implementation and management arrangements for this new initiative. Subject to the establishment and outcomes of the Port of Melbourne/Dynon Rail Terminal EFZ, other areas of heavy freight activity will be assessed by Government for declaration as EFZs.

Reducing engine brake noise

Reducing the noise coming from trucks and trains remains a concern for many communities in Victoria. While it is particularly an issue in urban areas, where residential, business and recreational land uses abut transport corridors, it is also a major issue in rural areas and regional cities. Indeed, truck noise is an issue in many smaller towns in regional Victoria where major highways are also the town’s main street.

Considerable progress has been made in recent years to reduce the noise emanating from truck engines. While some newer trucks are much more powerful and in some cases larger, the adoption of new engine technology, exhaust technology and engine encapsulation has delivered significant reductions in noise. However, engine brake noise remains a problem that needs to be addressed.

Auxiliary brakes, including engine brakes, are important safety equipment in trucks. Effective auxiliary brakes are especially important to reduce the load on service brakes on a steep descent. Some engine brakes are noisy and the ‘bark’ characteristic of the noise is offensive, especially at night.

Australian Design Rule 83/00 regulates drive-by noise for new truck models manufactured after 2004 and any new vehicle from 2007/08. However, until recently, no regulation or associated enforcement technology has been available to eliminate the use of noisy engine brakes. To address the noise issue, Victoria has been proactive in promoting the responsible use of engine brakes and encouraging operators to adopt quieter engine brakes, or better muffling, to limit noise. Victoria has also actively contributed to work on national reforms that aim to find a regulatory solution to this issue.

National regulations have recently been developed and agreed by Australia’s Transport Ministers. Victoria will work with industry to adopt these model regulations and deploy the necessary equipment and resources to enforce them effectively. These regulatory and enforcement measures, combined with ongoing awareness efforts in partnership with industry, will seek to reduce the input of noisy truck engine brakes in communities.
Managing natural environmental impacts

Environmental impacts of freight are not limited to noise and emissions. As noted previously, the management and improvement of the freight network can have implications for the natural environment such as native vegetation. With extensive clearing of private land for development and agriculture, road reserves often represent the last remaining remnant native vegetation, particularly in regional Victoria.

The Victorian Government has a policy of net gain for native vegetation. In implementing Freight Futures the Government will ensure that the vegetation impact is avoided or minimised and any losses offset.

Direction 14 – Actions

- Through the EPA and other agencies, work with industry to establish the Freight Futures Sustainability Partnership program
- Define the precinct around the Port of Melbourne and Dynon rail terminals as the first of Victoria’s Environmental Freight Zones (EFZs) and put in place a monitoring regime as a basis for encouraging best practice environmental performance within EFZs
- Assess opportunities for installing emissions and noise monitoring technology in the EFZs
- Progressively implement nationally approved regulations to reduce the environmental impact of trucks
- Implement nationally approved regulations relating to engine brake noise, and deploy the necessary equipment and enforcement resources to reduce the incidence of unnecessarily noisy engine brakes
- Ensure that impact on native vegetation is avoided or minimised and any losses offset in the management and improvement of the Principal Freight Network

DIRECTION 15
Enhance the safety and security of freight transport

The Victorian Government recognises the paramount importance of a safe freight transport system and will give high priority to investment in road and rail safety and security across Victoria’s transport network.

Safety and security issues related to the Victorian freight network are principally a state responsibility, but are integrated nationally (recognising the national and international nature of transport and trade). The Victorian Government and its agencies will continue to take a leadership role in relation to national strategy and policy on transport safety and security through the Council of Australian Governments (COAG), the Australian Transport Council (ATC) and the National Transport Commission (NTC).

Road safety

In the first five decades of life, Victorians are more likely to die prematurely as the result of a road crash than from any other cause. Alongside this physical and emotional cost comes an economic cost, with road trauma costing Victoria around $3 billion every year.

Victoria is a world leader in road safety. The road toll in Victoria is now one-third of what it was in 1970, despite considerably more people driving, the increasing number of cars on the road and the growing volume of freight and commercial vehicles. The Victorian Government is making a $650 million investment to maintain Victoria’s leadership in road safety over the period 2006 to 2016, with a continuing commitment to 2030.

Victoria’s road safety strategy – arrive alive 2008–2017– aims to deliver a safer system for all road users and significantly reduce road trauma. One of the key road user groups identified in arrive alive 2008–2017 is heavy vehicle drivers. Each year, around 11 heavy vehicle drivers and 55 other road users are killed on Victorian roads from crashes involving trucks.

While the trend in the number of fatalities from crashes involving trucks is generally declining (despite a significant increase in the number of kilometres travelled), a range of actions will be needed to ensure that the increase in traffic does not result in a higher incidence of heavy vehicle crash casualties.
A package of new measures under <em>arrive alive</em> 2008 - 2017 will deliver major improvements in heavy vehicle safety and promote higher safety standards across the Victorian road freight industry. These measures include:

- Continuing to improve road and roadside infrastructure, including rest stops, to better accommodate trucks and the forecast increase in the freight task
- Undertaking education campaigns to increase awareness of risks for heavy vehicle drivers and all road users who interact with trucks
- Investigating changes to Australian Design Rules to improve the safety of trucks
- Targeting enforcement of speed, seat belt, Chain of Responsibility, drug/drink driving and Occupational Health and Safety laws
- Targeting enforcement of drug/drink driving within the heavy vehicle industry
- Encouraging the fitting of intelligent seat-belt reminder systems

Combating driver fatigue and improving road design and infrastructure will contribute to a reduction in road trauma among all road users, including heavy vehicle drivers. 

<em>Freight Futures</em> will complement <em>arrive alive</em> initiatives by seeking to reduce the incidence and severity of fatigue-related crashes through public education campaigns, improvements to road infrastructure, a greater research effort and enforcement targeted at heavy vehicle driver fatigue.

Availability of adequate truck rest areas is a critical component of reducing driver fatigue. Significant funding has already been allocated by the Government in 2008/09 for new or up-graded heavy vehicle rest area facilities on the Sturt, Goulburn Valley, Western, Hume, Midland and Henty Highways. A large new rest area, with separate parking for cars and heavy vehicles has also been constructed recently on the Calder Highway as part of the bypass works between Faraday and Ravenswood. The Government is also progressing plans for support of a new Heavy Vehicle Trailer Exchange, Decoupling and Rest Area Facility at Nhill on the Western Highway, a key national freight route that has experienced substantial increases in heavy vehicle traffic in recent years, to accommodate all trailer exchange operations. Proposals for further rest area facilities on the Calder and Princes Highways are also being developed.

### Rail safety

The Director, Public Transport Safety Victoria (PTSV) – an independent statutory officer – regulates train, tram and bus safety in Victoria. PTSV places strict regulatory requirements on all rail operators (passenger and freight) to maintain safe rail system and train operations. For example, should the condition of the network deteriorate, access providers are required to mitigate the risk to rail safety by imposing speed restrictions and other precautions.

PTSV encourages the adoption of upgraded and standardised safety hardware. For example, metropolitan electric trains have long been protected by safety systems that guard against trains passing signals showing a ‘stop’ indication. Such systems will be further extended to protect country passenger and freight trains entering the busy metropolitan Melbourne rail network.

Over the next five years, Victoria will continue to lead the way in contributing to new legislation aimed at delivering consistent rail safety outcomes across Australia. The Victorian <em>Rail Safety Act 2006</em> established robust risk management techniques, provided for renewed compliance tools and placed additional safety duties on operators, contractors and staff.

As a result of an increasing number of incidents between trains and road vehicles in recent years, the Government has committed substantial additional funding to improving safety at level crossings. There are more than 2,200 road level crossings across Victoria. While level crossing crashes represent about 1 per cent of all road crashes, crashes involving trains are generally severe in terms of loss of life, injury and damage to vehicles and infrastructure.

In 2007, to encourage improved road driver behaviour at level crossings, the Government introduced a new level crossing offence for speeding to beat a train, crossing tracks when lights and bells are operating or weaving in between boom-gates that are down.
Port safety

The waters and channels leading to and from Victoria’s commercial sea ports comprise critical elements of the Principal Freight Network. Ensuring the safe movement of vessels carrying cargo to and from these ports is critical to the efficiency of Victoria’s whole freight network.

With the growth in commercial and recreational shipping movements over recent years, there has been a corresponding increase in vessel safety incidents in Victorian waters, particularly in Port Philip Bay. While Victoria’s marine safety record is very good by national and international standards, the Government is committed to further strengthening the marine safety regulatory environment to ensure that safe operations remain paramount in an increasingly complex commercial environment.

The Government regulates marine safety through the Director of Marine Safety Victoria (MSV), a statutory officer with powers to oversee the efficient and safe operation of vessels on state waters, ensuring the safety of life, property and the marine environment. A number of significant reviews of marine safety legislation and regulation are currently underway or have recently been completed, including a major review of the overall legislative framework under the Marine Act 1988 (Marine Safety Legislative Review), the Marine Emergency Framework Review conducted by the Office of the Emergency Services Commissioner (OESC) and the Review of Arrangements for Marine Pilotage in Victoria.

The key recommendation in the Pilotage Review was that a contemporary ‘best practice’ model of safety regulations should be adopted which would include:

- Safety to be paramount in legislation and regulation
- An accreditation regime that requires industry participants to demonstrate their capacity to manage risk in accordance with appropriate risk management standards
- Clearly defined roles, supported in legislation, for both the Safety Regulator and accredited industry participants
- Promotion of a sustainable safety culture in all organisations having safety obligations
- All parties with waterway safety responsibilities being accountable to the regulator through regular audits of their safety management systems
- Supporting in legislation, the independence of the Director of Marine Safety from Government and industry

The Government is committed to implementing the recommendations of the Pilotage Review that can be put in place through the Marine Act 1988 and Regulations, while the remaining recommendations will be addressed through the Department of Transport’s current Marine Safety Legislative Review.

Security

In the current global environment, there is a risk that the freight network could be used as a target for criminal or terrorist activity, placing people, property, the environment and the economy at risk should vulnerabilities in the system be exploited.

The primary responsibility for securing freight rests with the owners and operators of each facility, vessel, vehicle or network component. The Victorian Government provides strategic direction and support consistent with the National Transport Security Strategy (NTSS) and regulates the various sectors through the following legislation:

- Maritime Transport and Offshore Facilities Security Act 2003 (Commonwealth), which governs the security of freight movements within all security regulated ships and port facilities in Australia
- Aviation Transport Security Act 2004 (Commonwealth), which governs the security of freight movements within all security regulated airports in Australia
- Rail Safety Act 2006 (Victoria), which governs rail movements in Victoria
- Terrorism (Community Protection) Act 2003 (Victoria), which requires all designated essential service operators, such as road system and rail freight operators, to have a Risk Management Plan for terrorism and to exercise this plan on an annual basis

In order to create resilient critical infrastructure and mitigate industry security risks, companies involved in freight transport will be supported by the Government to produce plans and strategies that are based on an ‘all hazards’ risk management approach, apply a range of security measures, balance the cost of security to maintaining viability and support staff education and training – all of which should be built on security preparedness.
Direction 15 – Actions

• Implement the heavy vehicle related initiatives in *arrive alive 2008 – 2017* (Victoria’s road safety strategy), including improvements to road and roadside infrastructure (including rest stops), education campaigns to increase awareness of risks for heavy vehicle drivers and all road users who interact with trucks, investigating changes to Australian Design Rules, targeting enforcement of speed, seat belt, Chain of Responsibility, drug/drink driving and Occupational, Health and Safety laws, and encouraging the fitting of intelligent seat-belt reminder systems.

• Implement the National Land Transport Safety Strategy in Victoria from 2010 and assist the National Transport Commission in its development.

• Progress plans for support of a new *Heavy Vehicle Trailer Exchange, Decoupling and Rest Area Facility at Nhill on the Western Highway*.

• Progressively strengthen the marine safety regulatory environment.

• Implement the National Transport Security Strategy in Victoria, in partnership with industry, and continue to work with the Federal Government and other jurisdictions to ensure the strategy is monitored and updated as the security situation changes.

• Provide advice to transport operators to assist them to develop and implement security plans and strategies.

**DIRECTION 16**

Undertake regulatory reform and reduce the regulatory burden

Freight transport is a vitally important economic activity and must be regulated effectively to protect the community and the environment from risks and impacts, while allowing freight to be moved speedily and efficiently. Effective regulation of freight transport requires continual reform due to changes to economic and business conditions. Effective regulation is also an important driver of productivity growth in the state and national economies.

**National transport regulatory reform**

The national level has seen a number of ‘waves’ of reform, including the reforms in the early 1980s (especially the floating of the dollar, deregulation of financial markets and the effective end of tariff barriers) and the reforms in the mid-1990s centred around the implementation of National Competition Policy (NCP).

In addition to the NCP, which had a significant freight transport component, the National Road Transport Commission (which became the National Transport Commission) was formed in the early 1990s to develop and deliver a national transport regulatory reform agenda. The NRTC/NTC reform agenda has included three Heavy Vehicle Reform Packages, which have introduced important reforms around registration and licensing, heavy vehicle charges, road safety, compliance, vehicle standards and Higher Mass Limits. Victoria has been proactive in shaping the reform agenda and assisting the Commission to develop reform projects. Victoria also has a strong track record of leadership in implementing agreed national reforms.

Victoria is committed to working towards delivering approved national transport reforms, consistent with agreements made by COAG to deliver a National Reform Agenda that encompasses competition and regulatory reform in areas including transport. These reforms are also consistent with the Government’s *A Third Wave of National Reform initiative* (August 2005), which aims to build on NCP reforms and drive greater productivity through economic infrastructure reform, including in the transport sector.
In addition to delivering regulatory reform projects already underway, the Government will contribute to national efforts to develop a single national system for heavy vehicle registration and heavy vehicle driver licensing. The Government will support reforms directed towards the adoption of road safety technology, such as in-vehicle and at-roadside technology using global positioning systems and other potential solutions.

The Government will support the ongoing implementation of the Intelligent Access Program (IAP) in Victoria, through Transport Certification Australia and certified IAP service providers. Under the IAP, heavy vehicle route compliance will be monitored using GPS technology, with route non-compliance reported to VicRoads. The IAP will be an operating condition for heavy vehicles that represent a risk to infrastructure or road safety if they do not comply with approved routes. IAP will help to ‘unlock’ access for some heavy vehicles and reduce the manual compliance burden for others. IAP will be a condition of operating next generation HPFVs in Victoria.

Alignment of inter-state cross-border regulations

The alignment of interstate regulations in the freight and logistics sector reduces the regulatory burden on industries operating interstate and increases the sector’s productivity and competitiveness, especially in cross-border regions. The Victorian Government is working collaboratively with other jurisdictions to achieve greater inter-state cross-border regulatory alignment in the freight and logistics sector.

The annual NSW-Victoria Cross-Border Issues meeting seeks to harmonise regulations and remove any anomalies between NSW and Victoria relating to freight and logistics issues that impact on cross-border businesses and communities, such as the movement of heavy machinery, load restraints and the transportation of hay and livestock.

As well, the Victorian and South Australian governments have been working closely together to resolve regulatory issues in the Green Triangle Region, through the formation of a Regulatory Efficiencies Taskforce, as part of the Green Triangle Freight Action Plan. The Taskforce is:

- developing a Timber Load Restraint Guide
- harmonising cross border regulations for truck/trailer combinations
- developing a Performance Based Standard application flowchart and collaborative assessment process
- drafting a Freight Industry Code of Conduct
- developing an Access Management Framework for Coupes

At the national level Victoria is closely involved in Australian Transport Council initiatives for the national regulation of the heavy vehicle industry, involving the:

- establishment of a single regulation entity by July 2009
- implementation of a single national heavy vehicle registration scheme in 2010
- adoption of a consistent approach to heavy vehicle driver competency and testing standards and heavy vehicle driver training school recognition in 2010
- delivery of a single physical national heavy vehicle driver licence in 2010

The Government will continue to seek opportunities to achieve greater inter-state cross-border regulatory alignment in the freight and logistics sector.
Reviewing the administrative and compliance regulatory burden in freight transport

In addition to being committed to national transport reform, the Victorian Government is committed to reducing the burdens of regulation. Through its Reducing the Regulatory Burden initiative, the Government has committed to cutting the administrative burden of regulation, ensuring the burden of new regulation is met by an ‘offsetting simplification’ in the same or related area and undertaking reviews to identify opportunities to reduce compliance burdens by simplifying and streamlining regulation.

Transport regulation is becoming increasingly sophisticated and flexible. Innovations in heavy vehicle design are driving more and more exemptions from rules and regulations and the need for specific operating conditions for certain vehicles.

Notwithstanding the benefits of regulatory reform, it is important to ensure that the regulatory burden on the freight transport industry is actively monitored and managed. Consistent with its Reducing the Regulatory Burden initiative, the Victorian Government is committed to progressively reviewing the administrative and compliance burden of regulation of the freight transport industry and implementing improvements to simplify and streamline regulation.

Direction 16 – Actions

• Continue to support the national transport regulatory reform agenda and take a leadership position in relation to the development and implementation of reform initiatives
• Continue to seek opportunities to achieve greater inter-state cross-border regulatory alignment in the freight and logistics sector
• Progressively review the administrative and compliance regulatory burden in freight transport and, where opportunities are identified, reduce the burden for individuals, groups and businesses

Direction 17

Implement improved governance arrangements for ports

The statutory arrangements for Victoria’s commercial trading ports are established through the Port Services Act 1996 (PSA). The settings in the PSA were amended in 2003-04 in response to the recommendations of the Russell Review: The Next Wave of Port Reform (December 2001). Subsequently, also in response to the Russell Review’s findings, the Victorian Ports Strategic Framework (VPSF) was released in 2004, setting out the Government’s policy in relation to the long term development of Victoria’s commercial trading ports.

The VPSF sets out a 30 year vision for Victoria’s ports based around three directions that guide Government decision-making:

• Building on existing capabilities and competitive strengths
• Anticipating and planning for future land, access and infrastructure needs
• Providing the right regulatory and institutional settings for a sustainable port system

The current institutional, policy and planning settings embodied in the PSA and the VPSF have served Victoria’s port system well over the past five years, providing a sound governance foundation and the necessary clarity of direction to enable all participants in the port system to plan their short to medium term operations and investment strategies with confidence. However, in the Government’s view, it is now appropriate to review aspects of the current policy and planning frameworks to confirm existing settings, where appropriate, and make adjustments necessary to respond to new pressures and challenges which have emerged over the intervening period.

In 2009, the Government will release Port Futures, which will update and elaborate a number of aspects of the existing settings in the VPSF, particularly in relation to the broad timing and sequencing of port development and proposals for the next stage of development in the Port of Melbourne.

Port Futures will also detail a number of changes to port governance settings designed to improve the integration of Victoria’s port system and its ability to coordinate effectively with related freight network infrastructure servicing key international supply chains.
Moving towards integration of the Ports of Melbourne and Hastings

The two key Government owned ports in the Victorian ports system, Melbourne and Hastings, are currently managed as separate corporations with their own Boards and staffing. While this model has worked effectively to date, as trade grows through Melbourne and the need to plan actively for the growth of trade through Hastings intensifies, particularly displaced and overflow trade from Melbourne, the interlinkages of planning and development between the two ports will become increasingly marked.

To maximise planning and development efficiencies and reduce the risk of infrastructure duplication, the Government is currently considering options for the closer integration of the management of these two ports. More detail about proposals to effect this closer integration will be provided with the release of Port Futures.

Beyond the port gate

As trade volumes have grown, the need to improve the integration of the Port of Melbourne with the PFN and freight terminals and activity centres in the metropolitan area and regional Victoria has become increasingly obvious.

The Government is in the process of reviewing the existing legislative powers and functions of the Port of Melbourne Corporation (PoMC), which are currently extremely limited beyond the ‘port gate’. As the central hub in the international freight and logistics supply chain, the Port is extremely well placed to influence efficient and productive outcomes along the full length of the international supply chain. In particular, as set out in Strategic Direction 4, the PoMC will have an important role to play in the planning and development of the new Metropolitan Freight Terminal Network, including the closer integration of the Dynon rail precinct with the Port and the establishment of a new Melbourne International Freight Terminal on the current Wholesale Fruit and Vegetable Market site.

It is likely that amendments to the Port Services Act 1995 will be required to provide PoMC with the ability to influence and participate actively in these important developments. Again, further detail of the Governments proposals in this regard will be provided in Port Futures.

Review of Port Planning

As discussed in Direction 10, the Government has also committed to progressing amendments to the Port Services Act 1995 to implement two key recommendations of the Essential Services Commission’s Review of Port Planning, to:

- Provide greater clarity in relation to how competition objectives translate into specific port management responsibilities
- Require all commercial trading ports to prepare and regularly update long term strategic plans

Direction 17 – Actions

- In conjunction with the development and release of Port Futures:
  - Develop proposals and a timeframe for the integration of the management of the Ports of Melbourne and Hastings
  - Develop proposals to extend the responsibilities and powers of the PoMC beyond the ‘port gate’ to enable it influence and participate effectively in the efficient operation of the broader international supply chain
  - Progress amendments to the Port Services Act 1995 to implement the recommendations of the ESC Review of Port Planning in relation to competition and port strategic planning obligations
DIRECTION 18
Establish governance arrangements for the Metropolitan Freight Terminals Network

As noted in Direction 4, appropriate governance arrangements will need to be established to drive and manage the planning and implementation of the MFTN. This will involve the early identification of an appropriate body to assume the role of lead or responsible authority for the MFTN.

The current roles, charters and capabilities of relevant existing statutory corporations will be reviewed in this process, noting that a key early task will be to instigate planning for the establishment of the new interstate rail terminal at Donnybrook/Beveridge and the Melbourne International Freight Terminal at Dynon.

In developing governance arrangements, consideration will also be given to establishing a high level advisory structure, including the Chief Executives of key agencies such as PoMC, VicTrack and VicRoads, to ensure close alignment of directions across the transport portfolio. The Government will consider these matters in early 2009.

Direction 18 - Actions

• Consider effective governance arrangements for development and management of the Metropolitan Freight Terminals Network, including responsibility for planning and establishment of a new interstate rail terminal at Donnybrook/Beveridge and the Melbourne International Freight Terminal at Dynon.

DIRECTION 19
Actively manage access for vehicles carrying over-dimensional loads

In addition to more common freight vehicles, such as rigid trucks, semi-trailers and HPFVs, the Victorian transport network must be able to accommodate Special Purpose Vehicles (SPVs), such as mobile cranes and vehicles carrying over-dimensional loads, such as earthmoving machinery, water tanks and large prefabricated building components. Some industries, including primary production, also have special needs, including the movement of large tractors, grain harvesters and spraying equipment.

Through VicRoads, the Government will continue to balance the requirements of industry for larger and heavier equipment with the need to minimise road safety risk and the risk of damage or excessive wear to infrastructure, such as bridges, road side furniture and road pavements. This balance will be achieved by continually assessing industry needs and issuing permits (with specific operating conditions where necessary). An area requiring particular attention is facilitating the local movement of agricultural machinery and specialist equipment.

SPVs and vehicles with over-dimensional loads place special demands on road infrastructure. In particular, over-dimensional loads require larger than normal clearances, including extra lane width, large height clearances and space to allow turning movements. To meet these needs, Over-dimensional Routes are required along roads that have wide pavements, limited or well set back road furniture (including signs, traffic signals and street lights), well set back roadside vegetation and minimal overhead obstructions (such as bridges, overhead signs and wires). These characteristics are not always available on the Principal Freight Network. Consequently, some Over-dimensional Routes are local roads parallel to more heavily trafficked arterial roads, including those on the Principal Freight Network.

While the movement of over-dimensional loads is relatively infrequent compared to the movement of all trucks, these loads are often of high economic value. Loads include building materials, large prefabricated building components and machinery. They also vary in size and weight, including loads that weigh hundreds of tonnes, such as imported power station turbines and transformers.
Figure 18 – Overdimensional routes in Melbourne

For further information please phone VicRoads on 13 11 71 or visit www.vicroads.vic.gov.au.

Please note that overdimensional routes are correct at December 2006. Please contact VicRoads for current overdimensional route information.
Current Over-dimensional Routes exist by agreement between VicRoads and local councils. However, as development pressure increases as Melbourne grows, and sensitivity about amenity issues rises, Over-dimensional Routes will require greater protection as important state assets. While ‘last kilometre’ issues (access to individual properties and sites) will be addressed on a case-by-case basis, there is a broader need to protect and where necessary develop a strategic network of Over-dimensional Routes. This will be achieved by implementing the necessary planning and regulatory tools, in consultation with Local Government.

The current designated (and signed) Over-dimensional Route network in Melbourne is shown in Figure 18. Similar Over-dimensional Route networks are defined across Victoria and through regional cities and towns.

**Direction 19 – Actions**

- Continually assess industry needs and issue permits, where necessary with specific operating conditions, for the local movement of specialist equipment. An area of special attention in this regard will be the facilitation of the local movement of agricultural machinery and equipment.
- Implement the necessary planning and regulatory tools to ensure that the existing system of over-dimensional routes in Victoria is protected.
- In consultation with Local Government, develop an Over-dimensional Route network as required over time which integrates as far as practicable with the Principal Freight Network.

**Direction 20 – Actions**

**Implement a new freight data collection and analysis capability**

Better understanding the size and nature of freight movements is becoming increasingly important as the size of the task grows, along with the need to better manage and shape how freight is moved around the freight network.

Much of the freight data currently collected does not adequately assist policy development and planning, as it is generally focused on average distances and non-commodity specific tonnages rather than origins, destinations or the impact of any given specific task on the environment through which it is travelling. To properly plan for the future, more data is required, including from specific surveys and automatic recording devices, such as the VicRoads weigh-in-motion (Culway) network.

As HPFVs are being operated in various places in Australia, it is important to measure the productivity benefits of these vehicles. Specific performance statistics should be collected so that road freight productivity benefits can be measured.

Air freight dispersion into Melbourne’s local areas and from local areas to Melbourne Airport requires further data analysis to support initiatives to promote efficiencies in airfreight movement.

Therefore, in order to build on the business benefit that the State’s curfew free airport can continue to bring to Victoria, a major origin-destination study will be undertaken, in conjunction with key industry stakeholders, to develop a full understanding of air freight flows.

**Direction 20 – Actions**

- Establish a new freight network data collection and analysis capability within the Department of Transport dedicated to improving understanding of all aspects of Victoria’s freight task.
- Develop an improved set of freight performance measures, including road freight exposure indicators, to monitor and review the delivery of Freight Futures as well as contributing to future freight initiatives.
- Enhance the VicRoads weigh-in-motion network to collect truck movement data at strategic locations on the Principal Freight Network.
- Support the undertaking of an origin-destination and commodity study of air freight being delivered to Melbourne Airport for uplift and freight despatched from Melbourne Airport for distribution into metropolitan and regional areas.
Freight Futures is a comprehensive plan of action. The Victorian Government will put in place formal arrangements to monitor its implementation and to measure the performance of the freight network in Victoria. This will include regular reporting on the delivery of initiatives and reviews of Freight Futures to align with reporting and review processes for The Victorian Transport Plan.

As a part of this reporting and review process, performance measures will be developed and monitored. The Government recognises that to achieve the full potential of Freight Futures, industry must play an active role in delivering the Strategic Directions. Direct engagement with the freight and logistics industry and its customers will be critical to ensuring the success of Freight Futures.

Implementing Freight Futures in partnership with freight stakeholders

The Government will establish a forum bringing together senior executives from the freight industry and customers groups, such as manufacturing, agriculture, dairy, retailing and wholesaling, to enable key stakeholders to convey their suggestions and requirements in relation to monitoring and implementing Freight Futures.

In addition, the Government will establish a process of more structured and regular contact with key industry sectors and stakeholders to gauge the impact and performance of Freight Futures. This will involve working closely with many key stakeholders and groups, including Local Government, the Victorian Freight and Logistics Council (VFLC), the Victorian Transport Association (VTA), the Transport Workers Union (TUWJ), the Victorian Employers’ Chamber of Commerce and Industry (VECCI), the Australian Industry Group (AIG), the Victorian Farmers Federation (VFF), the Australian Retailers’ Association, the Royal Automobile Club of Victoria (RACV), the Victorian Automobile Chamber of Commerce (VACC), the Australasian Railway Association (ARA), the Australian Shipowners Association (ASA) and the Alliance of Councils for Rail Freight Development and relevant community based groups. The key points of contact for this activity within the Government will be the Freight, Logistics and Marine Division of the Department of Transport and VicRoads.

The Victorian Government values its partnership with the freight and logistics industry and is a strong supporter of consultative and advisory mechanisms, such as the Victorian Freight and Logistics Council (VFLC) and the Transport and Logistics Industry Round Table (which is facilitated by the Department of Innovation, Industry and Regional Development). The Government also acknowledges the important role played by national groups, such as the Australian Logistics Council and Infrastructure Australia, as well as other national stakeholder groups, and will continue to engage these organisations on issues of national significance.

To strengthen existing consultation arrangements, the Government will seek the integration of the Victorian Airfreight Council with the Victorian Freight and Logistics Council (VFLC). This will establish one representative body for all freight transport modes and ensure that available resources can be concentrated on addressing the most important issues from a Principal Freight Network perspective.

Actions

- The Government will complement existing consultative and advisory mechanisms in Victoria by convening an Industry Supply Chain Executives’ Forum with relevant Ministers. This Forum will meet every six months to discuss opportunities to enhance Victoria’s freight network and the implementation of Freight Futures.
Working with the Commonwealth Government

The Commonwealth Government has announced a new, national approach to planning, funding and delivering the nation’s future infrastructure requirements and confirmed that it is committed to developing a strategic blueprint to ensure that future projects are prioritised according to economic, social and environmental needs.

To plan this agenda, the Commonwealth Government has established a new statutory advisory body, Infrastructure Australia, which will develop a strategic blueprint for Australia’s future infrastructure needs and implement this blueprint in partnership with the States, Territories, Local Government and the private sector.

Infrastructure Australia will provide advice on nationally significant infrastructure, including transport, energy, communications and water infrastructure, where further investment will improve national productivity. Its role will be to advise governments, investors and owners of infrastructure on:

- Nationally significant infrastructure priorities
- Policy and regulatory reforms desirable to improve the efficient utilisation of national infrastructure networks
- Options to address impediments to the development and provision of efficient national infrastructure
- The needs of infrastructure users
- Possible financing mechanisms

Infrastructure Australia will conduct regular audits to determine the adequacy, capacity and condition of nationally significant infrastructure, taking into account forecast growth and the adequacy of the infrastructure to meet that growth. From analysis of this information, Infrastructure Australia will develop a national infrastructure priority list for the Infrastructure Working Group of the Council of Australian Governments (COAG) to consider.

Nationally significant infrastructure investment will be monitored and reported to COAG.

Infrastructure Australia’s other functions will include:

- Evaluating the business case for new infrastructure, when commissioned to do so
- Reviewing and providing advice on measures that will improve the harmonisation of policy and regulatory regimes that facilitate infrastructure development and investment
- Identifying barriers or disincentives to investing in nationally significant infrastructure

Infrastructure Australia will also review the extent to which governments can facilitate infrastructure investment, including improving guidelines for Public Private Partnerships (PPPs), project appraisal techniques and planning and approval processes.

Infrastructure Australia’s first national infrastructure audit will be completed by the end of 2008 and will inform the development of the first infrastructure priority list.

In addition to supporting reform of infrastructure investment, the Victorian Government will continue to deliver the approved national transport reform agenda. This is consistent with agreements made by the Council of Australian Governments around a National Reform Agenda that covers competition and regulatory reform in a range of areas, including transport.

Consistent with maintaining its leadership position in delivering current national regulatory reform projects, the Victorian Government will work with the Commonwealth Government and other jurisdictions to develop a new national transport policy and regulatory reform agenda.

In delivering Freight Futures, the Victorian Government is strongly committed to working closely with the Commonwealth Government to deliver the new national infrastructure agenda and to actively contribute to the work of Infrastructure Australia. The Government is committed to continuing its leadership role in the development and delivery of national transport policy and regulatory reform projects.

**Actions**

- Actively engage with the Commonwealth Government to deliver the new national infrastructure agenda
- Actively contribute to the work being undertaken by Infrastructure Australia
- Work with the Commonwealth Government to fund and deliver significant infrastructure projects that materially improve national productivity and contribute to economic growth
- Continue to support the national transport regulatory reform agenda and take a leadership position in relation to the development and implementation of reform initiatives
Currently, approximately 60 per cent of Victoria’s freight tonnage begins its journey within the metropolitan Melbourne area. The metropolitan freight task, which is expected to grow at 3 per cent per annum from around 12 billion tonne kilometres (BTKms) today to approximately 17 BTKms in 2020, is currently carried almost exclusively on road.

Each year, 38 billion kilometres are travelled by all vehicles on Melbourne’s roads, with 84 per cent of this total travelled by private cars, followed by LCVs (11 per cent), rigid trucks (3 per cent) and articulated trucks (1 per cent). It is worth noting that, despite the large size of the metropolitan freight task, only 15 per cent of the vehicles on Melbourne’s roads are involved in freight activities.

Generally, LCV journeys are dissimilar to those made by trucks. LCVs pick up and drop off goods and services in all parts of metropolitan Melbourne and, in most cases they are a tool of trade for their drivers, such as plumbers, electricians and couriers.

There is no predictable form or pattern to the majority of LCV journeys. They move in large numbers in similar patterns to private cars, whereas most heavy freight vehicle journeys follow far more concentrated and predictable paths. This characteristic means that the most benefit to LCV efficiency gains will come from measures that improve general traffic flows.

In comparison to LCVs, commercial vehicle movements (vehicles larger than 3.5 tonnes) follow a far more predictable pattern, as shown in Figure 19. They travel primarily on Melbourne’s key radial freeway and highway networks, through the centre of Melbourne to and from key outer urban freight activity centres, and beyond to regional and interstate destinations. The Monash – West Gate Freeway corridor is particularly important as a freight route for heavy trucks across metropolitan Melbourne.
Currently, there are an estimated 170,000 truck movements around metropolitan Melbourne every day. In addition, a further 40,000 trucks enter and leave Melbourne every day. Of the 170,000 truck movements, approximately 8 per cent involve trips generated from the Melbourne Local Government Area (LGA), not including the CBD, reflecting the presence of the Port of Melbourne, the Dynon rail precinct and the Melbourne Wholesale Fruit and Vegetable Market in this area. As a component of movements to the Melbourne LGA, direct movements to and from the Port of Melbourne alone account for 5 per cent of all metropolitan truck movements; of these movements, approximately 3.6 per cent relate directly to the movement of containers by road to and from the port.

In addition to the freight vehicles travelling through inner Melbourne to and from the CBD, the Port of Melbourne, the Dynon rail yards, the Melbourne Wholesale Fruit and Vegetable Market and other locations, many freight movements converge on Melbourne’s centre that do not have origins or destinations in the area. These journeys involve vehicles that have no business in the central city area and that are travelling through inner Melbourne between origins and destinations in industrial areas around the city’s urban fringe.

These movements occur due to the radial nature of Melbourne’s arterial road network, which has excellent links into and out of the central city but fewer options for moving completely around the centre. Given the degree of traffic congestion already being observed around Melbourne’s inner suburbs, the sustainability of large numbers of freight vehicles continuing to move through the inner city, especially when they may not have business in the area, is a key challenge.

To better understand movements of freight vehicles around metropolitan Melbourne and how the pattern of these movements might be improved, it is vital to understand where freight is moving to and from. As shown in Figure 20, a significant proportion of Melbourne’s freight flows are generated from five dominant areas:

- South East, including Greater Dandenong, Kingston (Braeside) and Monash
- Inner and outer west, including Braybrook, Derrimut, Sunshine, Brimbank and Altona
- Northern, including Tullamarine, Somerton and Whittlesea in the Hume corridor
- East, including Ringwood, Knox, Bayswater and Scoresby
- Central Melbourne, including the CBD, the Port of Melbourne and Dynon freight precincts

It is noteworthy that three of these regions of high freight activity also enjoyed significant employment growth between 2001 and 2006. In particular, employment in Brimbank rose by 19 per cent, Hume by 12 per cent and Greater Dandenong by 11 per cent over this period. This growth in employment is further driving the growth in freight movements to these areas.

Of particular note:

- Freight from the Melbourne LGA and CBD to other metropolitan areas accounts for 10 per cent of all truck movements. Moving this significant amount of freight will continue to require good freight connections to the inner city area.
- Truck movements from the Greater Dandenong area generate 7 per cent of all metropolitan truck movements, while the Kingston and Monash areas (also in the South East) generate 12 per cent of heavy freight movements.
- Greater Dandenong area accounts for over 9 per cent of all metropolitan truck receivals, while the Kingston and Monash areas account for 14 per cent of heavy freight receivals.
- Whitehorse and Knox in the East generate 9 per cent of truck movements.
- The Western regions of Wyndham, Brimbank, Maribyrnong and Hobsons Bay generate 13 per cent of truck movements.
- Hume in the North, including Somerton, Tullamarine and Whittlesea, generates 10 per cent of movements.

The five dominant truck movement patterns listed above account for 60 per cent of metropolitan freight movements and demonstrate the importance of these areas to Melbourne’s and Victoria’s freight network.

It is also noteworthy that movements within Local Government Areas account for 16 per cent of all metropolitan truck movements, indicating that around 84 per cent truck trips exit from their LGAs to undertake longer journeys to other parts of Melbourne.
Figure 20 – Major freight flows – Metropolitan

Source: DOT 2007
Figure 21 – Heavy truck traffic volumes AM peak (7am – 9am), Melbourne 2030

Source: DoT 2007
Looking forward, significant and ongoing growth is expected in the volume of traffic moving around metropolitan Melbourne, with particularly strong growth expected in the movement of freight. The Bureau of Infrastructure, Transport and Regional Economics (BITRE) has forecast that the kilometres travelled by freight vehicles will grow by nearly 80 per cent between today and 2020. While private car kilometres travelled will also grow, this growth is expected to be at a more modest rate of approximately 22 per cent. These developments will lead to freight traffic growing from its current level of around 15 per cent of kilometres travelled to just over 20 per cent of all vehicle kilometres travelled in metropolitan Melbourne.

As part of developing Freight Futures, significant modelling of metropolitan traffic movements has been undertaken. This modelling provides a picture of Melbourne’s freight and general traffic flows beyond the 2020 BITRE forecasts, up to 2030. A forecast of heavy commercial vehicle traffic during morning peak hour in 2030 is shown in Figure 21. The difference between this forecast and the volumes of freight traffic today as shown in Figure 19 is significant, with large growth in freight movements evident across metropolitan Melbourne, especially on the freeway network.

Forecast strong growth in freight and private car journeys means that, without any significant intervention, by 2020 much of Melbourne’s core arterial network will be congested during peak hours. Looking further ahead to 2030, and again assuming no significant interventions, the modelling indicates that most major arterials will be congested, not only during the peaks but throughout most of the day as the peaks spread and inter-peak capacity is consumed. This will result in significant numbers of freight vehicles switching to alternative routes, such as minor arterials, leading to increasingly inefficient and unreliable freight movements.

Increasing levels of traffic and associated congestion across urban areas is a common challenge being faced by large cities around the world. Increasing travel times, loss of amenity and environmental impacts can have a significant effect on the liveability of our cities and the efficiency of our economy.

Traffic congestion is a serious concern for all types of traffic, but particularly for freight. Congestion has a direct impact on the efficiency of freight movements and therefore on the cost of goods. Effectively managing the freight task within Melbourne to minimise the impact of traffic congestion is crucial to ensuring freight movements remain efficient and reliable. The Victorian Government has recognised the need to take action on congestion and is implementing a number of measures under the $112.7 million congestion plan, Keeping Melbourne Moving, which will assist efficient freight movements. However, the forecast growth in traffic volumes clearly indicates that effectively managing increasing congestion in metropolitan Melbourne will remain a key challenge into the future.
Regional Victoria is well serviced by an extensive road and rail network that effectively links key commodity producing regions to their marketplaces in Melbourne, interstate or overseas.

The number of truck kilometres travelled in regional Victoria has grown significantly over the last 16 years. Rigid truck kilometres have grown by 80 per cent and articulated truck kilometres by 111 per cent (as shown in Table 4). Growth in tonne-kilometres in the regional and interstate Victorian road task has increased 128 per cent from 1991 to 2007. (see Table 5) Regional Victoria is also responsible for 70 per cent of the total road tonne-kilometre task.

Table 4 – Victoria’s regional kilometre task

<table>
<thead>
<tr>
<th></th>
<th>1991</th>
<th>1998</th>
<th>2007</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rigid Truck</td>
<td>428</td>
<td>370</td>
<td>769</td>
<td>80%</td>
</tr>
<tr>
<td>Articulated Truck</td>
<td>898</td>
<td>1,090</td>
<td>1,897</td>
<td>111%</td>
</tr>
</tbody>
</table>

Source: ABS SMVU Cat 9208.0 (Various years)

Table 5 – Victoria’s road freight tonne-kilometre task

<table>
<thead>
<tr>
<th>Region</th>
<th>1991</th>
<th>1995</th>
<th>2007</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intra Melbourne</td>
<td>6.18</td>
<td>7.23</td>
<td>11.86</td>
<td>92%</td>
</tr>
<tr>
<td>Other Victoria</td>
<td>12.89</td>
<td>14.98</td>
<td>29.34</td>
<td>128%</td>
</tr>
<tr>
<td>Total</td>
<td>19.07</td>
<td>22.20</td>
<td>41.20</td>
<td>116%</td>
</tr>
</tbody>
</table>

Source: BTRE 2004, BTRE 2007, ABS SMVU Cat 9208.0 (Various years)

This growth emphasises the important role that the major state highways and Victoria’s national highways play in supporting freight movement. Current regional Victorian freight flows on road and rail are displayed in Figure 23 on the next page. Key regional commodities and the primary infrastructure used in their transport are shown in Table 6 on page 91.

In 2001, the ABS reported that Victorian inter-regional road freight accounted for 35 per cent of Victorian freight tonnage movements. In other words, 65 per cent of regional road tonnages remained within their Victorian statistical division. This is significantly different to Melbourne and indicates that short journeys on intra-regional state arterial roads are highly important to Victoria’s rural commodity movements. This means that planning for freight growth and the use of new road technologies, such as next generation HPFVs, must take into account major corridors and main intra-regional routes.

Only 7 per cent of Victoria’s road tonnages were received or dispatched interstate, with 38 per cent of this traffic being on the Hume corridor – making this easily Victoria’s most significant interstate freight corridor. While interstate tonnages are forecast to grow particularly strongly in the years ahead, regional road tonnages within Victoria will continue to grow to 2020 despite the effect of the current drought in many areas.

Victoria’s rail system also plays an important role in moving freight and in providing access to work and other services for Victorian residents and visitors.

Victoria’s intrastate rail task is dominated by grain and containerised primary produce (dairy, fruit, meat and wine), as well as some industrial products such as cement, quarry materials and logs.

In 2007, Victoria faced continuing drought conditions, with the result that there was no grain exported from Victoria’s three grain ports. However, the severity of these conditions is not expected to continue indefinitely, although the drought has continued to impact the agricultural sector in 2008. In an average year, Victoria’s total grain harvest is approximately 12 million tonnes (including approximately 5 million tonnes of wheat and barley), of which, on average, 2 million tonnes is exported in bulk through the Ports of Portland, Geelong and Melbourne. Approximately two thirds of this bulk export task is carried by rail. Intrastate rail in Victoria is subject to significant volatility because of the agricultural commodities carried, which can be affected by factors such as drought.

Unlike its intra-state counterpart, Victoria’s interstate rail task has been growing at 2.3 per cent per year since 1972. As improvements are made to Australian rail corridors, interstate rail will continue to be a viable alternative to interstate road transport.
Figure 22 – Major freight flows – Regional

Source: DOT 2008
Looking ahead, while the issues of congestion will not be as apparent on regional freight corridors as they will be in metropolitan Melbourne up to 2030, major transport corridors in regional Victoria will still experience tonnage growth slightly above 70 per cent (see Table 7).

Table 6 – Existing major Victorian commodity routes and regions

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Production areas</th>
<th>Infrastructure use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain</td>
<td>Mallee, Wimmera</td>
<td>Regional rail lines throughout the state to Ports of Portland, Geelong and Melbourne; Sunraysia Highway and Western Region arterials</td>
</tr>
<tr>
<td>Dairy</td>
<td>Gippsland, South West, North</td>
<td>Rail lines to Warnambool; Princes, Hume and Western Highways; Port of Melbourne</td>
</tr>
<tr>
<td>Steel Products</td>
<td>Hastings</td>
<td>Interstate standard gauge lines and broad gauge from Hastings to Melbourne</td>
</tr>
<tr>
<td>Petro-Chemicals, crude oil</td>
<td>Inbound through the Ports of Melbourne, Geelong and Hastings</td>
<td>Westernport-Altona-Geelong pipeline and all major highways</td>
</tr>
<tr>
<td>Timber, woodchip, softwood</td>
<td>Gippsland, South West</td>
<td>Princes and Henty Highways; rail lines to Bairnsdale, Warnambool and Ports of Portland and Geelong</td>
</tr>
<tr>
<td>Wine</td>
<td>Great Western, South West, Yarra Valley, Nagambie, Bendigo, Murray, King and Alpine Valleys/Rutherglen</td>
<td>Western, Henty, Calder, and Sunraysia Highways; rail lines to Shepparton and Mildura</td>
</tr>
<tr>
<td>Fresh fruit, canned fruit</td>
<td>Sunraysia, Shepparton</td>
<td>Goulburn, Hume, Sunraysia and Calder Highways; rail lines to Shepperton and Mildura</td>
</tr>
<tr>
<td>Livestock (Beef, Pork, Poultry)</td>
<td>South West, Gippsland, Central Victoria, Bonang Plains, radial around Melbourne</td>
<td>Princes, Henty, Calder, and Sunraysia and Hume Highways; regional rail lines</td>
</tr>
<tr>
<td>Aluminium/Alumina</td>
<td>Ports of Geelong and Portland inbound</td>
<td>Henty and Princes Highways to Melbourne (outbound), regional rail lines</td>
</tr>
</tbody>
</table>


Table 7 – Major regional corridor road activity – Forecasts 2020

<table>
<thead>
<tr>
<th>Region</th>
<th>Hume/Goulburn</th>
<th>Western</th>
<th>North West</th>
<th>South Western</th>
<th>Gippsland</th>
<th>Total</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>32</td>
<td>18</td>
<td>6</td>
<td>30</td>
<td>5</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>58</td>
<td>29</td>
<td>11</td>
<td>50</td>
<td>9</td>
<td>157</td>
<td>72.5%</td>
</tr>
</tbody>
</table>

Source: DOT 2002

Currently detailed regional freight strategies are being undertaken Northern Victoria. Six shires and VicRoads are involved in the development of the Northern Victorian Regional Transport Strategy being managed by the Greater Shepparton City Council. The Wodonga Rural City Council has also commissioned a Hume Corridor Transport Strategy, which will examine in detail the role and activity of freight transport in the North Eastern Victoria.

Regional Victoria will remain a key freight generator in the years ahead. Grain exports, wood products and the large potential growth in the state’s mining sector – particularly mineral sands and products derived from brown coal – will exert sustained pressure on Victoria’s regional road and bridge infrastructure in some areas, especially around the main regional ports (Portland, Geelong and Hastings) and their arterial road and rail links. Ensuring adequate network capacity for the efficient transport of the regional freight task into the future is a key challenge for Freight Futures.
## Appendix 3 - Freight facts and projections

<table>
<thead>
<tr>
<th>Freight today</th>
<th>Freight future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victoria’s total freight task has reached <strong>560 million tonnes</strong> across all modes.</td>
<td>By <strong>2020</strong> the Victorian freight task will total <strong>820 million tonnes</strong>, a <strong>47%</strong> increase from today. By <strong>2030</strong> the task will have grown to over <strong>1,100 million tonnes</strong>, a <strong>97%</strong> increase from today.</td>
</tr>
<tr>
<td>Approximately <strong>$14 billion</strong> in airfreight handled through Melbourne Airport per annum.</td>
<td>By <strong>2020</strong> the Air Freight Task value will approach <strong>$20 billion</strong>, an increase of <strong>42%</strong>.</td>
</tr>
<tr>
<td><strong>91 million tonnes</strong> of freight is carried on Victoria’s key regional freight corridors (Hume, South West, North West, Western, Gippsland).</td>
<td>By <strong>2020</strong> nearly <strong>160 million tonnes</strong> in freight will be carried on Victoria’s key regional freight corridors, an increase of over <strong>70%</strong>.</td>
</tr>
<tr>
<td>There is over <strong>12 billion tonne kilometres</strong> of freight moving within metropolitan Melbourne per annum.</td>
<td><strong>17 billion tonne kilometres</strong> of freight will be moving within metropolitan Melbourne by <strong>2020</strong>, an increase of over <strong>40%</strong>.</td>
</tr>
<tr>
<td>The economic cost of congestion in metropolitan Melbourne to all network users is estimated to be between <strong>$1.3 – $2.6 billion pa.</strong></td>
<td>By <strong>2020</strong>, with no substantial intervention, cost of congestion will have <strong>doubled</strong> to at least <strong>$2.6 – $5.2 billion annually.</strong></td>
</tr>
<tr>
<td>There are <strong>31.5 billion kilometres travelled</strong> per annum within metropolitan Melbourne by private cars.</td>
<td>In <strong>2020</strong>, there will be <strong>38.5 billion kilometres travelled</strong> by private cars, an increase of <strong>22%</strong>.</td>
</tr>
<tr>
<td>There are <strong>5.5 billion kilometres travelled</strong> per annum within metropolitan Melbourne by freight vehicles.</td>
<td>By <strong>2020</strong> total kilometres travelled by freight vehicles is forecast to have grown to <strong>9.7 billion kilometres</strong>, an increase of <strong>77%</strong>.</td>
</tr>
<tr>
<td>Freight traffic accounts for <strong>15% of total vehicle kilometres travelled</strong> within metropolitan Melbourne.</td>
<td>By <strong>2020</strong> freight traffic kilometres will account for <strong>20% of total vehicle kilometres travelled</strong> within metropolitan Melbourne.</td>
</tr>
<tr>
<td>Melbourne’s metropolitan road freight task by weight around <strong>210 million tonnes</strong> per annum.</td>
<td>Metropolitan road task by weight will be <strong>425 million tonnes</strong> by <strong>2030</strong>, an increase of <strong>102%</strong>.</td>
</tr>
<tr>
<td>Approximately <strong>606,000 freight vehicles</strong> are registered in Victoria.</td>
<td>By <strong>2030</strong>, there will be approximately <strong>1.12 million freight vehicles</strong> registered in Victoria, an increase of <strong>85%</strong>.</td>
</tr>
<tr>
<td>Approximately <strong>490,000 Light Commercial Vehicles</strong> are registered in Victoria.</td>
<td>By <strong>2030</strong>, Victoria’s LCV population alone will be approaching <strong>one million vehicles</strong>, an increase of <strong>104%</strong>.</td>
</tr>
<tr>
<td>Approximately <strong>22,250 articulated trucks</strong> are registered in Victoria.</td>
<td>By <strong>2030</strong> there will be over <strong>40,000 articulated trucks</strong> registered in Victoria, an increase of <strong>80%</strong>.</td>
</tr>
<tr>
<td>Over <strong>2 million</strong> twenty foot equivalent containers (TEUs) move through the Port of Melbourne annually.</td>
<td>By <strong>2030</strong>, approximately <strong>6.8 million TEUs</strong> will be traded through the Port of Melbourne, a <strong>210%</strong> increase on today.</td>
</tr>
<tr>
<td>The average size of ships visiting the Port of Melbourne is approximately <strong>2,400 TEU.</strong></td>
<td>Average ship size through the Port of Melbourne in <strong>2030</strong> will be over <strong>4,500 TEU</strong>, an <strong>88%</strong> increase.</td>
</tr>
<tr>
<td>Approximately <strong>3,500 ships visit</strong> the Port of Melbourne per annum.</td>
<td>By <strong>2030</strong> there are forecast to be <strong>5,500 ship visits</strong> to the Port of Melbourne per annum, an increase of <strong>57%</strong>.</td>
</tr>
</tbody>
</table>

Environmental Freight Zone (EFZ)

An Environmental Freight Zone (EFZ) is a declared freight area which is exposed to one million or more truck movements per annum. Trucks operating within an EFZ will be encouraged initially to participate in partnership freight emissions minimisation schemes.

Freight Activity Centres (FAC)

The term Freight Activity Centre defines a key node where intense freight and logistics activity takes place. These centres may include ports, airports, rail yards, inter-modal terminals, manufacturing activity, warehouses and distribution centres. Freight Activity Centres are connected by the Principal Freight Network in the same way that Transit Cities are planned and connected by the Principal Public Transport Network.

High Productivity Freight Vehicle (HPFV)

High Productivity Freight Vehicles are vehicle configurations that are permitted to operate after gaining approvals through the national Performance-Based Standards (PBS) process. These vehicles must comply with approved safety and infrastructure protection performance measures. HPFVs can range from specialist rigid trucks, through to multi-combination articulated configurations.

‘Last kilometre’ freight access

The ‘last kilometre’ of a freight movement or supply chain refers to the final leg of delivery of goods to their destination. It can be a high cost leg, due to a number of factors, including customers not being open to take delivery, limited road space in cities, specific customer requirements and other practical or financial constraints.

Light Commercial Vehicles (LCVs)

The Light Commercial Vehicle Group is defined by the Australian Bureau of Statistics as, ‘Vehicles primarily constructed for the carriage of goods, and which are less than or equal to 3.5 tonnes GVM’. Included are utilities, panel vans, cab-chassis, and forward – control load carrying vehicles, whether four wheel drive or not.

Metropolitan Freight Terminals (MFT)

Metropolitan Freight Terminals in outer urban areas and adjacent to the Port of Melbourne will act as distribution points for each major industrial centre and collect freight for transport via high capacity rail and road transport links and over the Principal Freight Network. Metropolitan Freight Terminals will be common user (or open access) facilities; that is, they will be available to all freight users prepared to accept the Terminal’s pricing and other access conditions.

National Environmental Protection Measure (Diesel)

This measure is included within Commonwealth environment protection legislation and equivalent State and Territory legislation. The Australian Design Rule ADR80/01 prescribes the emission limits for heavy vehicles and the standard test methods for measuring those emissions. ADR80/01 will significantly lower emission levels of air pollutants from heavy vehicles and bring Australian standards in closer alignment with international standards set by the United Nations.

Principal Freight Network (PFN)

The Principal Freight Network is the part of the larger transport network over which the movement of heavy freight will be concentrated. This will be achieved by upgrading the capacity of the network to move freight and by ensuring that the network is managed to reduce freight travel time and increase the reliability of freight movement.

Principal Public Transport Network (PPTN)

A high-quality public transport network defined in Melbourne 2030 that connects Principal and Major Activity Centres and comprises the existing radial fixed-rail network, extensions to this radial network and new cross-town bus routes.
PBS 1-4 Vehicles

Performance-Based Standards (PBS) vehicles are classified in four levels, related to network access described in the Road Network Classifications.

<table>
<thead>
<tr>
<th>Vehicle Purpose Vehicle</th>
<th>Access Class A</th>
<th>Access Class B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>General Access ≤ 20 metres</td>
<td></td>
</tr>
<tr>
<td>Level 2</td>
<td>L ≤ 26</td>
<td>26 &lt; L ≤ 30</td>
</tr>
<tr>
<td>Level 3</td>
<td>L ≤ 36.5</td>
<td>36.5 &lt; L ≤ 42</td>
</tr>
<tr>
<td>Level 4</td>
<td>L ≤ 53.5</td>
<td>53.5 &lt; L ≤ 60</td>
</tr>
</tbody>
</table>

* (where L is the vehicle length)

Examples for PBS Vehicles 1 to 4:

**Level 1**: Rigid Trucks, Single Semi-trailers
**Level 2**: B-Doubles, Longer B-Doubles < 30 Metres
**Level 3**: B-Triples, double road trains
**Level 4**: Triple road trains, other longer vehicle configurations

Referral Authority

A Referral Authority is a person or body specified in a statutory planning scheme as a body or agency to which an application for a permit or a plan must be referred, or which must be satisfied that certain things have been done, before a planning permit can be granted.

Special Purpose Vehicle

A Special Purpose Vehicle is a motor vehicle built for a purpose other than carrying a load, except for water in the case of mobile concrete pump trucks and fire trucks. Examples of Special Purpose Vehicles include mobile cranes, travel towers, drilling rigs, concrete trucks and fire trucks. It does not include a tow truck or agricultural vehicle.