

DELIVERING THE GOODS

CREATING VICTORIAN JOBS

Victorian Freight Plan



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MINISTERIAL FOREWORD

Message from the Minister for Public Transport and Minister for Major Projects, the Minister for Roads and Road Safety and the Minister for Ports.

Victoria is growing faster than any other state. This growth brings economic prosperity and productivity. High-quality, reliable freight transport and logistics services are essential to our connectedness and liveability, for the success of Victorian businesses and primary producers and job creation across all parts of our economy.

That's why we are pleased to present *Delivering the Goods – Victorian Freight Plan*. It is a state-wide plan for freight which builds on the foundations of previous freight strategies. The plan identifies future challenges and opportunities that freight and logistics businesses, their employees, and local government have raised and the initiatives needed to address these.

Victoria needs to move more for less. We need to eliminate or reduce the costs associated with delays, congestion, excessive regulation and infrastructure that is not fit-for-purpose.

We need to help industry embrace the technologies that will allow us to better use the existing capacity on our transport networks. We have the potential to increase our gross state product by \$40 billion by 2040. This is achievable if we maintain and invest in our freight rail network, develop a new interstate freight terminal and new freight precinct adjacent to the Port of Melbourne and allow more high productivity freight vehicles to use our roads.

The Victorian Government has significantly invested in projects across Victoria to support the efficient movement of freight, including the Murray Basin Rail Project, the Freight-Passenger Rail Separation Project, the M80 Upgrade, the West Gate Tunnel, the Port Rail Shuttle Network, bridge strengthening and regional freight route upgrades.

Delivering the Goods will build on this work – it considers what needs to be done now to safeguard our freight networks for the future. Our plan is to achieve an efficient, safe and sustainable freight and logistics system that enhances Victoria's economic prosperity and liveability.

The establishment of Freight Victoria will lead and drive the coordinated delivery of this plan and will provide a one-stop-shop for the primary producers, the freight and logistics industry and local government to contact for information and assistance.

We look forward to continuing to work with industry and all tiers of government to deliver a robust freight network to support Victoria's future.



Hon Jacinta Allan MP
Minister for Public Transport
Minister for Major Projects



Hon Luke Donnellan MP
Minister for Ports
Minister for Roads and Road Safety



1. INTRODUCTION

Delivering the Goods sets out short, medium and long-term priorities to support our freight and logistics system through a period of unprecedented growth in freight volumes and rapid change in the broader environment, while allowing us to embrace new opportunities in the future.

Moving goods to, from and around Victoria is vital to our economy and enhances our standard of living. *Delivering the Goods* builds on our work of the last decade in a way that enhances Victoria's economic prosperity and liveability.

Our population is growing rapidly with the latest Census data showing Victoria had the highest increase in population of all Australian states and territories. Our population is projected to grow to more than 10 million by 2051. With population growth comes growth in demand for goods and services.

Victoria is only 3 per cent of Australia's total land mass, but accounts for almost a quarter of Australia's total food and fibre exports.

The value of all goods we export each year is \$26 billion.

Freight volumes are predicted to increase from around 360 million tonnes in 2014 to nearly 900 million tonnes in 2051.

At the same time, our economy is being shaped by global and domestic mega-trends such as fast-paced technological change and disruption. These emerging factors underpin *Delivering the Goods* and explain some of the differences in this freight plan from those that have come before it.

The current environment demands that we are flexible and agile. *Delivering the Goods* outlines the initiatives we will take, either on our own, or with industry, other tiers of government and the community, over the next five years to improve how we move Victorian goods to their local, interstate and overseas markets.

It also sets out our longer-term directions for the freight network in a way that enables Victoria to respond to the pace of change and adapt to circumstances as they arise.

To ensure that the Plan is delivered and to coordinate access to the many government agencies with some responsibility for freight, we will establish Freight Victoria. Freight Victoria will be responsible for the development and delivery of government policy, planning, programs and resources to Victoria's freight and supply chain system.

It will provide a central point for industry, local government and other stakeholders on freight and logistics matters.

2. WHY ARE FREIGHT AND LOGISTICS VITAL TO VICTORIA?

Few Victorians think about the freight and logistics system that lies behind their everyday purchases. We expect our supermarkets to be fully stocked and our online purchases to be delivered quickly to our door.

We take for granted that these products travel hundreds or thousands of kilometres on our road, rail, sea or air transport networks. And that moving them involves dozens of different occupations, individuals and companies.

Our economy can only operate and grow if we are able to move goods from primary producers, manufacturers, wholesalers and importers to the consumer – wherever they are. Dairy, beef and grain farmers in regional Victoria can only thrive if they export to markets in China, the Middle East and elsewhere.

Victoria's freight and logistics sector is made up of thousands of Victorian businesses, large and small. These businesses and their employees move these goods, coordinate their movements and distribute goods from warehouses where they are stored, ready for delivery to their destinations.

The sector depends for its success on Victoria's road and rail networks, our sea ports and airports and the long-term planning by governments for our freight needs.

The freight and logistics sector contributes \$21 billion to Victoria's economy and employs about 260,000 Victorians.

But the true value of the freight and logistics sector is more than just those who are directly employed in the industry. The movement of freight underpins the success of virtually all other industries and businesses.

The cost of moving goods is a substantial component of the overall cost of production for many industries in Victoria – accounting for up to 30 per cent.

To ensure Victoria's competitiveness and the sustainability of our industry, our freight network must:

- be fit for purpose
- facilitate efficient movement of domestic and international freight
- not inflate supply chain costs because of inefficiency or capacity constraints.

The freight and logistics sector is a key employer in Victoria. It directly employs 260,000 people, making it one of the largest industries in the state.

Across the sector, women make up 16 per cent of the workforce. Only two industries – construction and mining – have a lower representation of women.

In particular, women make up just 3 per cent of the truck-driving workforce, representing one of the greatest gender imbalances of any occupation.

Truck drivers are also older than the workforce average. The average age of a truck driver is 49, up from 43 just two years ago.

One-in-five working drivers is at retirement age, and less than one-in-five is aged under 30.

To encourage younger people to the workforce and to draw on a wider pool of workers, the Victorian Government has introduced a scheme to encourage more women to take up careers in the freight and logistics industry.

The Women in Transport program is a \$1.1 million package of 15 initiatives which aims to increase the number of female employees in the transport sector from 16 to 25 percent between 2017 and 2020.

Program initiatives are aimed at attracting and retaining women in the transport sector and cover different stages of their career lifecycle; from influencing young women in their choice of career through to women returning from maternity leave or transitioning to retirement.

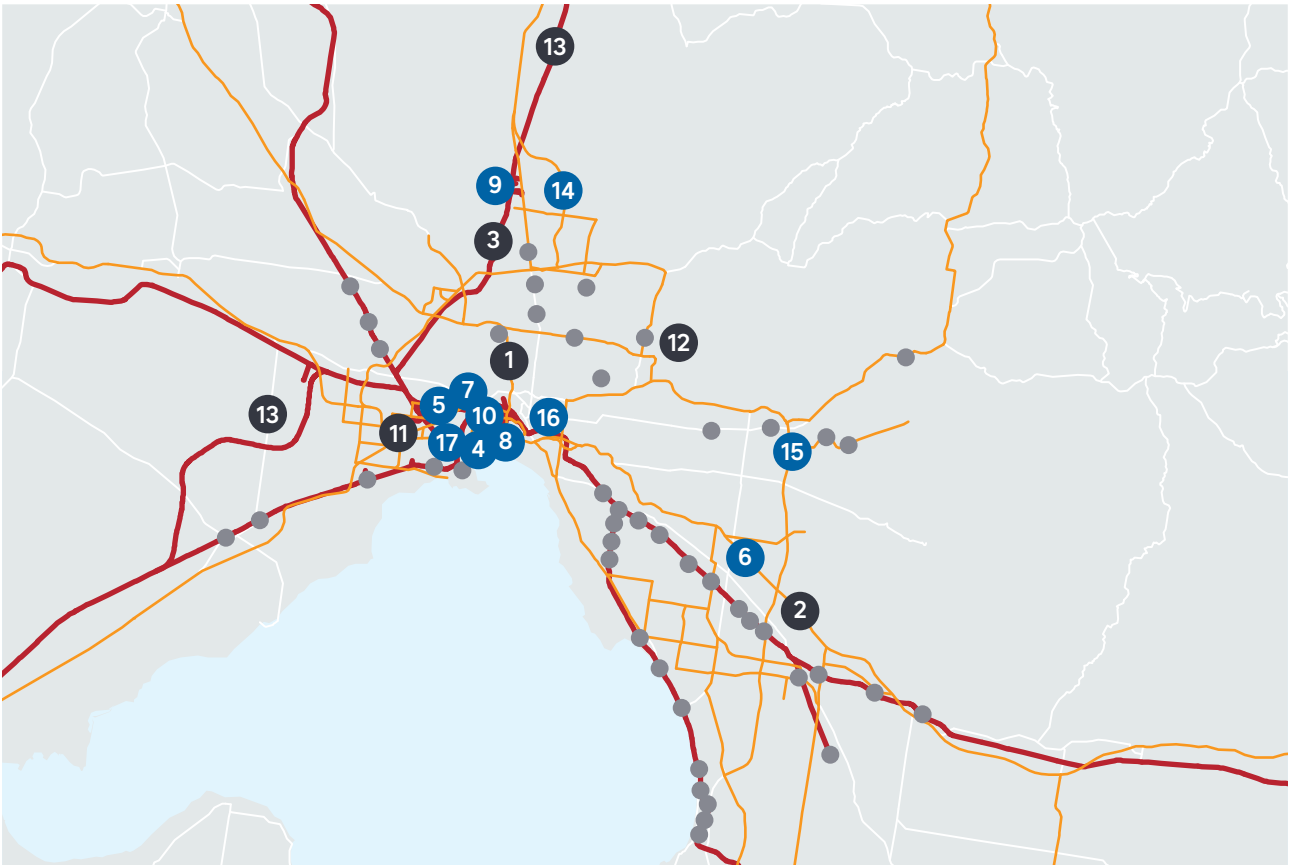
The program comprises

- scholarships for women to enter transport-related university degrees
- a focus on increasing the number of women graduates, apprentices, trainees and cadets across transport
- gender-ethical procurement policy for major transport contracts including organisations, suppliers and agencies.

The program aims to break down barriers and engage more women in transport by supporting them at different stages in their career.

3. CURRENT FREIGHT INVESTMENTS

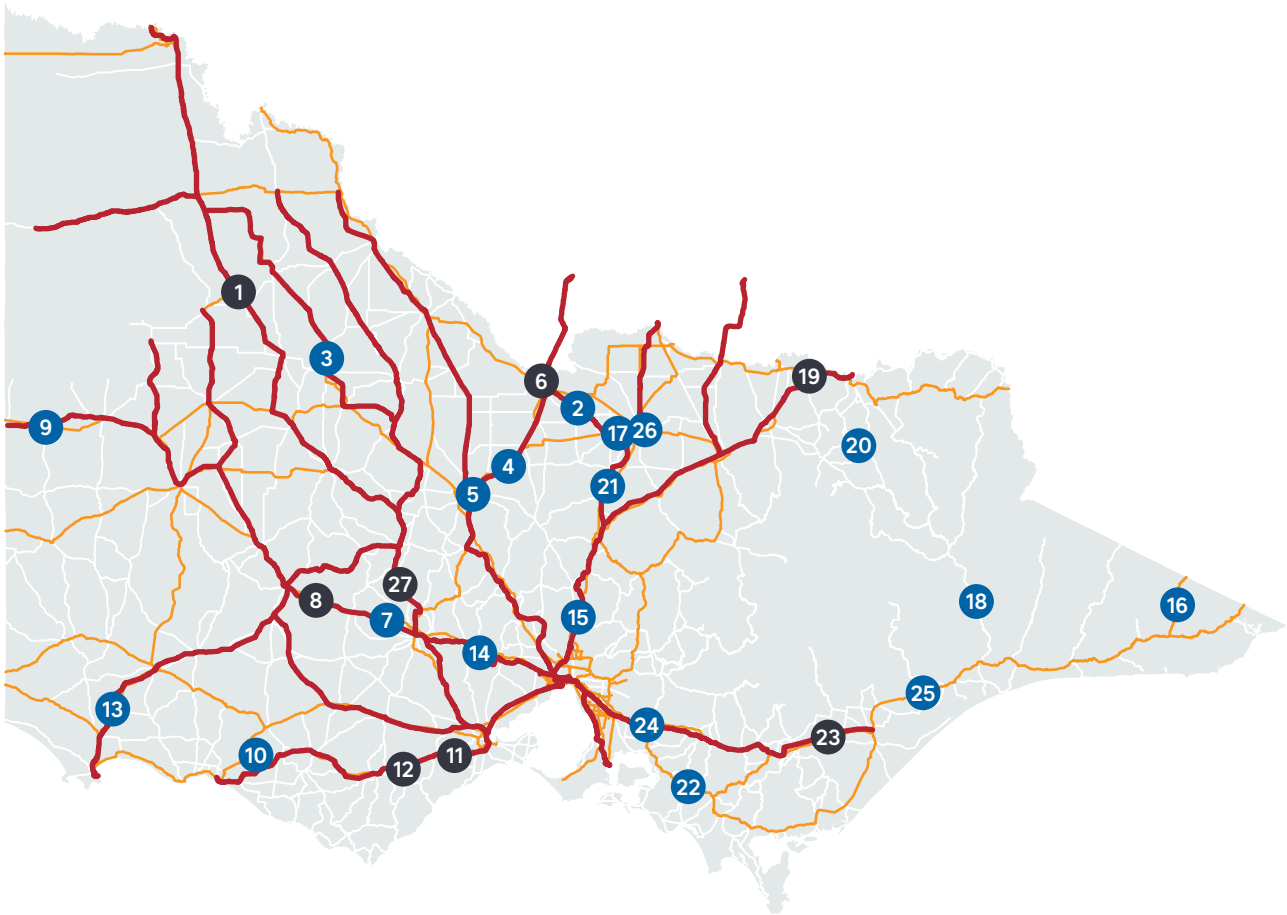
Victoria has already completed or committed to a number of projects that will boost freight efficiency.



LEGEND

- Major Investment (over \$100 million)
- Significant investment
- Level Crossing removal
- Principal Freight Network – Rail
- Principal Freight Network – Road
- Major Roads

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> 1 CityLink Widening 2 M1 Widening Stage 1 EastLink-Clyde Rd 3 M80 Upgrade (including bridge strengthening for HPFV) 4 Webb Dock access improvements 5 Bridge strengthening for HPFV – Shepherd Bridge 6 Bridge strengthening for HPFV – M1 | <ul style="list-style-type: none"> 7 Pavement strengthening for HPFV – Footscray Rd 8 Port Rail Shuttle Network 9 Steel handling terminal 10 Dynon Terminal upgrade 11 West Gate Tunnel 12 North East Link 13 Proposed interstate freight terminals | <ul style="list-style-type: none"> 14 O’Herns Road interchange 15 Bridge rehabilitation – Dandenong Creek, Wantirna 16 Bridge rehabilitation – Yarra River, Richmond 17 Port of Melbourne Lease |
|---|--|---|



LEGEND

- Major Investment (over \$100 million)
- Significant investment
- Principal Freight Network – Rail
- Principal Freight Network – Road
- Major Roads

- | | | |
|---|--|--|
| <p>1 Murray Basin Rail Project</p> <p>2 Murray Valley Hwy upgrade</p> <p>3 Calder Hwy upgrade Bendigo-Mildura</p> <p>4 Midland Hwy/Napier St duplication</p> <p>5 Calder Hwy Ravenswood interchange</p> <p>6 Echuca-Moama bridge</p> <p>7 Ballarat West Employment Zone</p> <p>8 Western Highway duplication – Ballarat to Stawell</p> <p>9 Western Highway upgrade – Stawell to South Australian border</p> | <p>10 Princes Hwy upgrade – Colac to SA border</p> <p>11 Princes Hwy duplication – Waurin Ponds-Winchelsea</p> <p>12 Princes Hwy duplication – Winchelsea-Colac</p> <p>13 Henty Hwy upgrade Portland-Hamilton</p> <p>14 Bridge strengthening for HPFV – Western Hwy (4 bridges)</p> <p>15 Bridge strengthening for HPFV – Hume Hwy (10 bridges)</p> <p>16 Monaro Hwy upgrade</p> <p>17 Shepparton Alternative Route</p> <p>18 Great Alpine Rd upgrade</p> | <p>19 Rutherglen Heavy Truck Route</p> <p>20 Kiewa Valley Hwy upgrade</p> <p>21 Bridge strengthening for HPFV – Goulburn Valley Hwy (7 bridges)</p> <p>22 South Gippsland Hwy upgrade – Koonwarra</p> <p>23 Princes Highway duplication Traralgon-Sale</p> <p>24 Sand Road interchange</p> <p>25 Princes Hwy upgrade east of Sale</p> <p>26 Shepparton Freight Network Planning</p> <p>27 Freight-Passenger Rail Separation Project</p> |
|---|--|--|

Murray Basin Rail Project

The Murray Basin region is a nationally important producer of grain, mineral sands, fruit, vegetables, wine and other products. Much of this product is exported via the ports of Portland, Geelong and Melbourne and is transported using the region's road and rail network. Grain and mineral sands are the largest bulk freight products for the state and this region.

The \$440 million Murray Basin Rail Project will fully standardise and upgrade the entire Murray Basin freight rail network which will boost efficiency and make businesses more competitive.

The project will make supply chains more efficient, reduce costs of moving freight, give businesses a greater choice of ports to export their commodities and sustain and create jobs in agriculture and construction.

By standardising and improving the rail network, the freight industry in the Murray Basin region will be able to deliver exports to Victoria's ports in a more efficient and cost-competitive way. An increased axle loading will allow higher volumes of product to be safely freighted across the network. This will allow trains to carry up to 500,000 more tonnes of grain each year.

Following the upgrade, rail freight transportation is forecast to capture approximately 20,000 journeys currently undertaken by trucks. This will provide producers with an attractive alternative to road freight and improvements to local amenity. The project will also ensure the ongoing integrity of the rail track and improve safety on the lines.

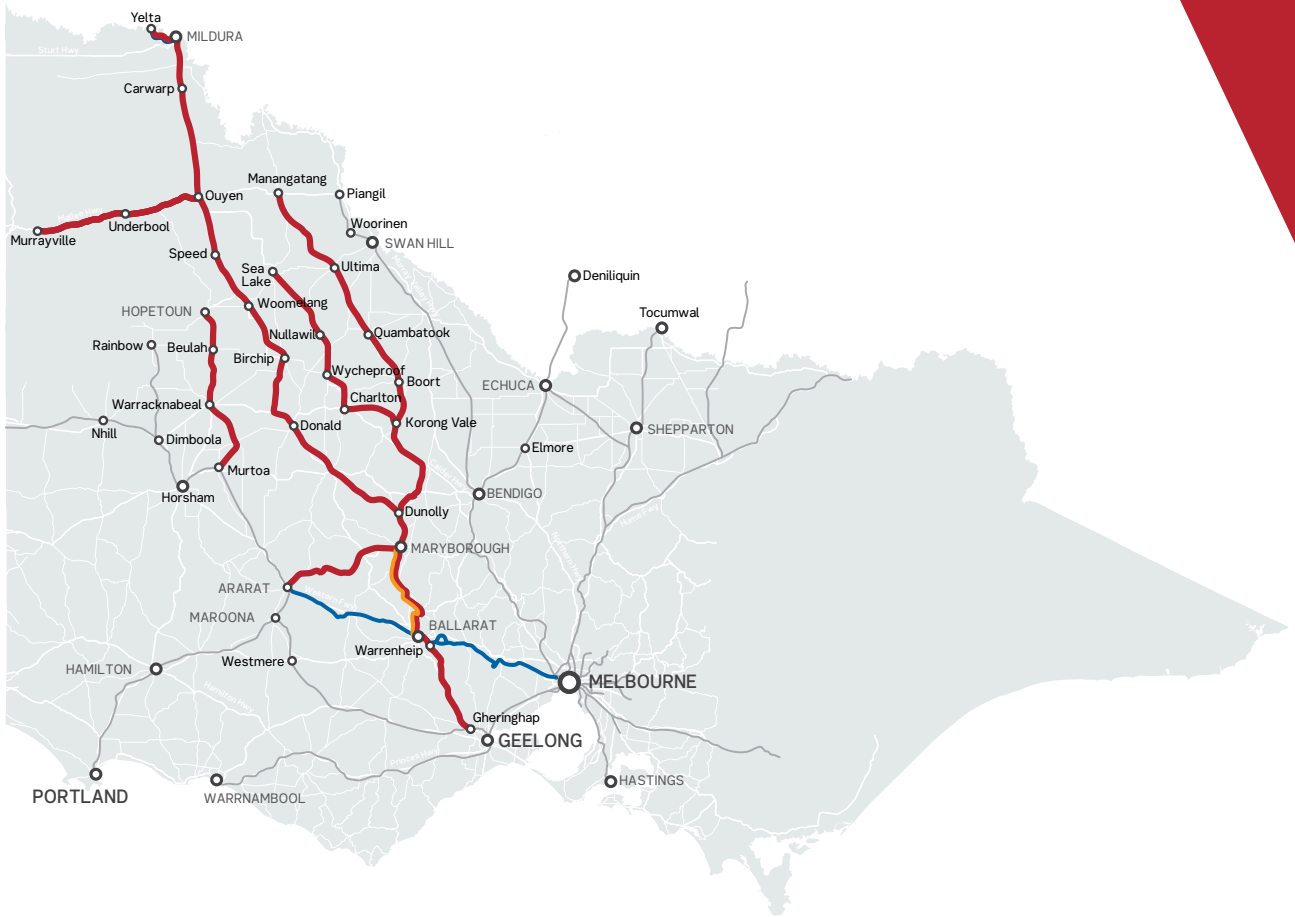
Freight-Passenger Rail Separation Project

The Freight-Passenger Rail Separation Project will deliver a number of track and signalling improvements which maximises the benefits of both the Murray Basin Rail Project and Ballarat Line Upgrade and optimises freight and passenger rail operations now and into the future.

The project will separate freight and passenger trains in and around the Ballarat rail network, delivering separated standard gauge track through the Ballarat precinct, providing faster and more reliable freight paths from the Murray Basin region to the ports and reducing interfaces with passenger trains.

Both projects include funding contributions from the Victorian and Commonwealth governments.

The Victorian Government will continue to work with stakeholders to maximise the benefits of the upgraded network.



LEGEND

- Murray Basin Rail Project
 - Freight-Passenger Rail Separation Project
 - Ballarat Line Upgrade
- Victorian Railway lines
 - Major Roads

4. CONSULTATION

Delivering the Goods is the product of extensive industry consultation.

Industry consultation

Consultations were held across the freight and logistics sector including companies involved in transport, agriculture, forestry, construction, waste management, manufacturing and mining and petroleum as well as general merchandise exporters, importers and the retail sector.

A Ministerial Freight Reference Group was also convened as an advisory body to develop the new freight plan for Victoria.

Chaired by the Chief Executive Officer of Wettenhalls, Mike Lean, the 21-member group comprised representatives from a range of businesses and industry associations engaged in the freight and logistics sector. Its role was to assist us to identify current and emerging trends, issues, barriers and innovations affecting the performance of the freight and logistics sector.

The Group met with the Minister for Public Transport and the Minister for Roads and Road Safety and Minister for Ports to discuss the freight plan through 2017.



Ministerial Freight Reference Group, 14 September 2017.



90 companies engaged in one-to-one conversations



21 from the food and fibre sector



16 from the building, construction and waste management sector; retail sector; manufacturing sector; and mining, petroleum and chemical sector



39 from the transport sector



6 government regulators and agencies



8 national or statewide advocacy organisations that provide services across a number of industry sectors



34 submissions received

The issues raised by industry and the Ministerial Freight Reference Group were consistent.

The key points raised were:

- Set a long-term direction for freight in Victoria
- Use the Planning System to protect existing freight places (such as ports, intermodal terminals, bulk receival sites) and corridors from inappropriate adjacent future land uses, and use buffers to avoid curfews.
- Identify sites for metropolitan and regional intermodal terminals where there are gaps in the network and ensure these are given planning protection.
- Ensure our road, rail and port infrastructure can continue to reliably cater for larger and heavier freight transport vehicles and vessels.
- Extend road network access for High Productivity Freight Vehicles (HPFV).
- Assist local government to remove or reduce impediments to the efficient movement of freight through their municipalities.
- Promote a greater role for freight rail in Victoria through operational changes, regular maintenance and new investment.
- Reduce the impact of congestion on supply chain costs in metropolitan Melbourne.
- Act in relation to high road tolls for heavy vehicles and new stevedore infrastructure charges.
- Undertake major road safety reforms for heavy vehicles.
- Help industry to attract more and skilled truck drivers.
- Stay ahead of the curve in terms of new technologies.
- Proactively influence the national freight agenda.

A number of specific national issues were raised by Victorian stakeholders in the course of developing this Plan:

- support for, but concern at the slow progress made in achieving heavy vehicle road pricing reform
- concern with the Federal Interstate Registration Scheme (FIRS)
- need to accelerate momentum on achievement of nationally consistent heavy vehicle regulations
- need to extend customs and biosecurity clearance facilities at intermodal terminals and airports
- need to extend the reach of national heavy vehicle legislation related to driver fatigue to vehicles down to 4.5 tonnes.

Local government

The Municipal Association of Victoria helped us to survey all Victorian local governments. The 79 councils are significant stakeholders in the freight and logistics system, representing local communities and businesses.

Most freight movements in Victoria begin and end on roads managed by local governments. Access to local roads – known as ‘the first and last mile’ – is one of the most significant impediments to efficient end-to-end freight movements in Victoria.

Other studies indicate that restrictions on freight access to local roads are often due to:

- infrastructure capacity constraints
- funding constraints for the maintenance or upgrade of local roads
- concerns about amenity
- insufficient support for councils to manage the complexity of Heavy Vehicle National Law and vehicle standards, and network access for over-dimensional vehicles.

Loading zones and delivery docks around our cities are disappearing and valuable road space is used more and more for on-street parking.

Local government was asked in the survey about the types of freight issues they dealt with, how regularly they dealt with them and if they felt appropriately informed or supported to deal with freight issues. We used the results of the survey to draw up initiatives for this plan.

Freight plans developed in recent years by regional groupings of councils were also reviewed. The issues and impediments identified in these plans were similar to those identified from other sources.

5. VICTORIAN FREIGHT PLAN FRAMEWORK

A range of existing state government policies, along with Commonwealth government initiatives have informed the development of *Delivering the Goods*.

Infrastructure

- Victorian Infrastructure Plan (2017)
- Infrastructure Victoria's advice on securing Victoria's ports capacity (2017)



Economic & Industry

- Victoria's Trade Statement (2017)
- Regional Development Statement (2015)
- Priority industry sector strategies (2016)



Transport

- Transport for Victoria's strategic approach to policy, planning and delivery
- Regional Network Development Plan



Victorian Freight Plan 2018–2050

Climate Change

- Victoria's Climate Change Framework (2016)



Land Use Planning

- Plan Melbourne 2017–2050
- Regional Growth Plans



Building on other plans and strategies

Previous Victorian freight plans – *Freight Futures (2008)* and *Victoria: The Freight State (2013)* – were reviewed. Many of the broad directions identified in these plans remain the same – but the changed circumstances demanded new approaches.

For example, the two previous freight plans recognised the importance of protecting freight operations, precincts and corridors from urban residential encroachment. More than 10 years ago, the Principal Freight Network (PFN) was developed to provide this protection. However, it does not include many significant freight places and corridors in regional Victoria and metropolitan Melbourne that have been developed since then. Additionally, the way the PFN is referenced in our planning policies does not adequately inform and guide decision makers.

The PFN needs to be revisited to capture more recent changes. It also needs to be strengthened to better achieve its original objectives. This is one of the five priority areas in this plan.

Delivering the Goods also builds on the recommendations and directions of existing policies, plans and strategies across land-use planning, transport, infrastructure, climate change, economic development and trade.

The PFN needs to be revisited to capture more recent changes.

The Commonwealth's role in creating a stronger Victorian freight network

While the Victorian Government has been developing *Delivering the Goods*, the Commonwealth has developed and released the report of the Inquiry into National Freight and Supply Chain Priorities. The Inquiry was conducted by a four member expert panel.

The Council of Australian Governments' Transport and Infrastructure Council recently agreed to develop a 20 year national freight and Supply Chain Strategy building on the outcomes and recommendations of the Inquiry.

Victoria has recommended that a national strategy clearly articulate the roles of respective levels of government in relation to freight. For example, the Commonwealth is responsible for funding and investing in nationally significant freight infrastructure such as the Inland Rail project, upgrading axle loads on the ARTC-leased Portland-Maroon line and interstate freight terminals, as well as regulating the freight industry in terms of safety, biosecurity and environmental approvals.

The Commonwealth also has an important role in helping Victorian industry capitalise on international trade opportunities by unlocking increased market access via new and enhanced trade agreements. While the state is responsible for planning and building infrastructure to support the broader domestic freight task, the Commonwealth can help increase the international competitiveness of Victorian businesses by investing in export supply chains including intermodal terminals, rail lines and roads that connect to export gateways.

6. THE FUTURE OF FREIGHT

A continually growing freight task

Population

Victoria's population is growing rapidly, driven by natural growth, interstate migration and overseas migration. This has underpinned Victoria's strong economic growth and has created unprecedented demand for goods and services.

Population growth and globalisation suggest that Victoria's freight task will continue to grow rapidly for the foreseeable future.

Freight volumes are predicted to increase from about 360 million tonnes a year in 2014 to nearly 900 million tonnes in 2051 (Table 1).

International trade forecasts

Part of the overall freight task is international imports and exports which move through our commercial ports. This trade includes containers, dry and liquid bulk, cars and other products.

Victoria is already a successful exporter, with annual goods exports of more than \$26 billion across a diverse range of industries, including many from regional areas. Maintaining connections with traditional markets while also expanding into new markets allows businesses to grow and our economy to be more resilient.

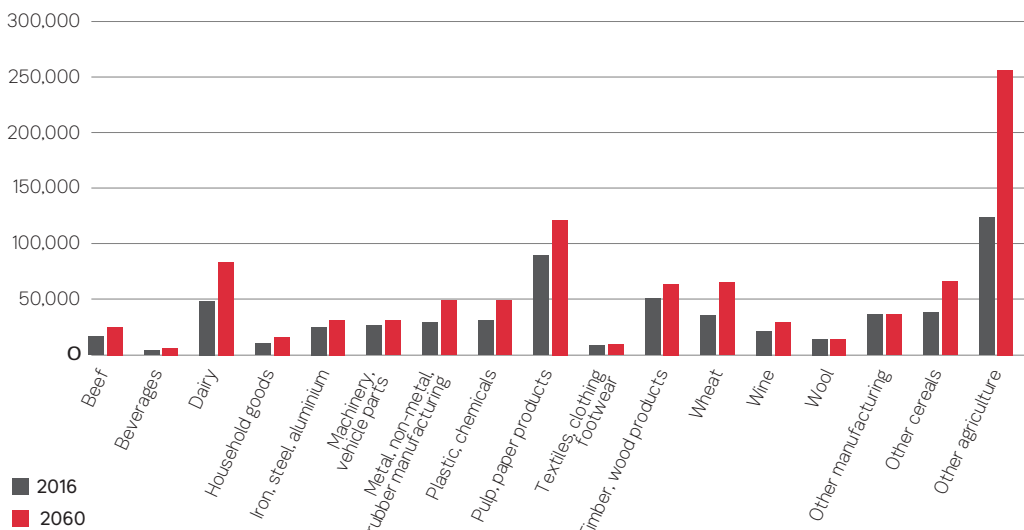
Victoria's overall trade environment remains positive and exports will continue to grow. Asia's rapid industrialisation and urbanisation, including increased demand for high-value consumer goods, are creating significant opportunities for Victorian businesses able to access and supply markets in this region and beyond.

Table 1: Total Victorian freight task (million tonnes per annum)

Where freight generated	2014	2021	2031	2046	2051
Regional Victoria	40	43	51	64	70
Metropolitan Melbourne	227	274	357	525	597
Unallocated*	94	111	142	205	231
Total tonnage	361	429	551	794	898

* Waste, quarry products and some port-related freight which is unable to be allocated to a specific region.
Source: Deloitte, 2015.

Figure 1: Forecast commodity exports through Port of Melbourne



Source: Infrastructure Victoria 2017

Australia's comprehensive network of free trade arrangements also gives Victoria a competitive edge in some key markets. For instance, Victoria's food and fibre exports to China, Hong Kong and Taiwan are forecast to increase by over 70 per cent, and by 30 per cent to both South East Asia and North Asia by 2026.

Forecast commodity movements at the Port of Melbourne suggest that dairy, wheat, cereal and other agricultural products will almost double by 2060 (Figure 1). This will have significant impact on regional Victoria and will require a higher capacity and efficient freight and logistics network.

Our growing population will also lead to increased demand for imports. Imports currently account for about 50 per cent of containerised trade through the Port of Melbourne. Most of these import containers are delivered to destinations in metropolitan Melbourne.

Growth in urban freight

Most of the growth in freight volumes will take place in metropolitan Melbourne. Freight volumes in regional Victoria are forecast to grow at an annual average rate of 1.5 per cent each year between 2014 and 2051. Metropolitan freight is expected to grow at an average annual rate of 2.6 per cent over the same period. This rapid growth in urban freight is the result of two main factors: urbanisation and e-commerce.

Opportunities

Population growth means Victoria needs to use its existing freight and logistics assets more efficiently in the future. We need to recognise that with a larger population and more freight moving around our state, the potential for conflict between road users and between trucks and residents will increase. Together, government, industry and communities need to plan and find innovative solutions that enable us to manage this growth.

Efficient supply chains between regional Victoria and our air and sea ports (export gateways) will be critical in ensuring we capitalise on strong growth in Asia.

The more containers we can move throughout metropolitan Melbourne on rail port rail shuttles, the less impact these movements will have on the existing congested road network. Port rail shuttles also provide amenity and safety benefits to Victorians.

A changing freight task

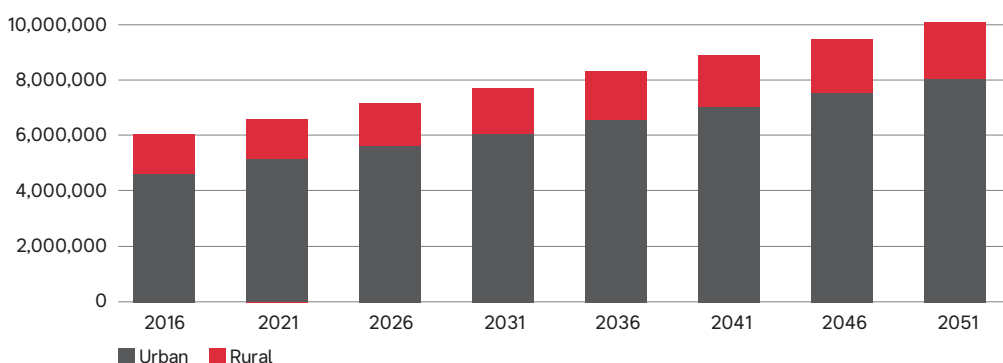
Urbanisation

Victoria in Future forecasts that 4 million additional people will live in Victoria in the next 35 years (to 2050). And 3.4 million of those will live in Greater Melbourne.

This will see Melbourne's population grow by 73 per cent. The population in Victoria's regional areas is projected to grow by 45 per cent (0.6 million) over the same period (Figure 2).

Urbanisation will result in larger volumes of freight being transported on congested networks (especially roads) in urban areas.

Figure 2: Share of urban and rural population growth



Source: *Victoria in Future 2016*



E-commerce and growing service expectations

E-commerce changes mean that consumers expect greater levels of service and faster delivery of products. The reliability, speed and cost of delivery are critical for online retailers and often a point of difference.

Consumer expectations are already having a major impact. For example, Australia Post saw a 5.6 per cent rise in domestic parcels in 2016-17.

This trend is also reflected in Victoria's vehicle registration data, where the growth in LCV or 'small white vans' has outstripped the growth in other freight vehicles in recent years, as Table 2 shows.

Opportunities

Significant growth in urban freight volumes will generate further increases in the demand for first and last mile delivery, which is already a large proportion of the overall cost of delivering a parcel.

This will drive innovations in automation to reduce costs in both urban and rural areas. The trend towards faster, lighter and smaller freight is also likely to favour air freight operators.

If we do nothing, freight costs will present a challenge to Victoria's competitiveness. Higher freight volumes, congestion on our transport network, and pressure on local governments and communities to accommodate first and last mile access could become major issues.

Emerging technologies have the potential to assist us to make better use of existing network capacity.

In the future, Victoria will need to work closely with all levels of government to coordinate efforts and target investments. We will need to harness technologies on a scale not previously considered to address our key transport challenges.

Table 2: Victorian road vehicle fleet 2007-2017

	2007	2012	2016	2017	% change
LCVs	490,513	580,727	652,020	675,606	+38%
Rigid Trucks	93,131	104,781	110,815	114,500	+23%
Articulated Trucks	22,254	25,265	26,779	27,472	+23%
Total	605,898	710,773	789,614	817,578	+35%

Source: ABS Survey of Motor Vehicle Use (9208.0).

Air freight

Melbourne Airport handles around 28 per cent of Australia's international air freight. Goods moved by air include:

- time-critical items such as medical tissues, organs, fresh produce, critical spare parts for manufacturing industries, post and parcels
- live animals
- high-value items such as electronics.


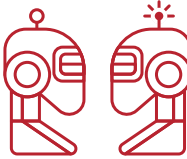

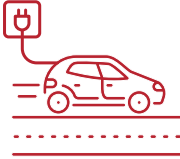
The bulk of freight is carried in the belly of the 2,300 weekly passenger services, with a smaller number of dedicated freight carriers operating from Melbourne Airport.

There has been a strong increase in air freight volumes through all major Australian airports over the last decade. International air freight exports in particular are increasing steadily thanks to growth in Asian markets.

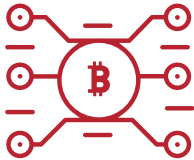
Avalon Airport is also poised for growth in the air freight market. Currently operating a small number of dedicated freight services, Avalon has recently secured its first international airline service (Air Asia) and has potential as a significant freight and logistics hub in future.

New technologies and big data

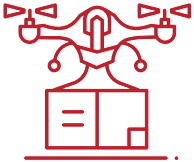
Technology is changing every aspect of how transport and logistics companies operate. These technologies provide vast opportunities to improve performance and serve customers better. However, the rapid pace of technological change makes government investment and planning more difficult.

Technology	Implications for freight
Additive manufacturing (3D printing)	Transmitting designs for new objects around the globe will enable the manufacture of customised products closer to the customer. While this will change the specific elements of the supply chain, it will mean that first and last mile challenges continue until the point where 3D printing is available in transit and/or in homes. The raw materials still need to be imported in bulk or produced locally.
	
Artificial intelligence /machine learning	Artificial intelligence supports infrastructure for everything from automated vehicles to robotics. It will also help make sense of 'big data' by converting it from 'just' data into models that can predict consumer demand and the resulting logistics tasks, and network user behaviour.
	
Autonomous or automated vehicles (AVs)	Driverless vehicles (trucks and trains) will reduce (or change) the need for labour, enable automated delivery networks and improve safety and efficiency on our transport networks.
	
Alternative fuel vehicles	Several electric and hydrogen powered vehicles have been commercially developed by vehicle manufacturers and are becoming increasingly popular in Asia and Europe. These fuel sources provide a cheaper, lower emission and quieter alternative to petroleum vehicles. Enabling infrastructure (such as charging stations) is needed to effectively implement this technology.
	

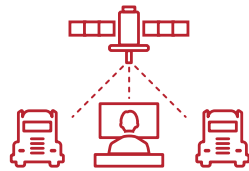
Technology**Implications for freight**

Blockchain

Blockchain will enable the real-time exchange of supply chain transactions and documents through digital infrastructure. This will help reduce or eliminate paperwork, fraud and errors. It will also minimise the time products spend in the transit and shipping process.

Drones

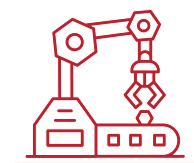
Drones are likely to be implemented in the longer term and help with first and last mile access for freight without the need to use the road-network.

Telematics

Telematics is an enabler of other technologies, such as intelligent transportation systems, reduced paperwork for drivers (such as logbooks) and automated scheduling. This offers greater visibility and more efficient data collection.

Truck platooning

Truck platooning allows a number of trucks to closely follow one another equipped with state-of-the-art driving support systems – one closely following the other. Platooning can improve traffic safety, saves costs and reduces congestion.

Robotics and automation

Robotics and automation will reduce costs in ports and warehousing and allow for 24/7 operations. This will provide opportunities for retraining and upskilling of the workforce.

Opportunities

Government and industry have a key role to play in advancing the gains from technology and ensuring positive outcomes for the community, the private sector and the state economy.

Hybrid trucks

Taxes on fuel, increased environmental consciousness and a focus on reducing greenhouse gas emissions have led to vehicle manufacturers exploring alternative-fueled freight vehicles.

Hybrid technology has been available on medium-duty trucks for over a decade, though their take-up in Australia has been limited. Hybrid powered and – increasingly – fully electric trucks present opportunities to overcome first and last mile restrictions on access for diesel powered vehicles. The use of low emission vehicles has eliminated the need for curfews in some European cities.

Webb Dock Automation

The Victoria International Container Terminal located at the Port of Melbourne's Webb Dock East is the first container terminal in the world to offer fully automated operations from the gate to the quayside. This facility provides a capacity of approximately 1 million twenty foot equivalent units per annum.

Collaboration and consolidation

Supply chains once consisted, almost exclusively, of internal systems and processes. The increasing use of networks and internet tools will open the door for true collaboration between supply chain participants. There are substantial benefits in more collaboration, or even consolidation.

There are already notable examples of market players operating collaboratively. Companies such as Australia Post have been partnering with other companies for many years. With new technology, collaboration can become much more dynamic.

Consolidation is also taking place in freight-related industries. A report by the Australian Competition and Consumer Commission in 2017 noted that the number of major container shipping alliances has recently reduced from four to three. These three alliances now cover almost three-quarters of the global container shipping market and move more than 95 per cent of world cargo.

Consolidation may lead to a potential reduction in competition. There may also be pressure on margins as stevedores compete for fewer and lower margin contracts. And the deployment of larger container ships to Australian ports may mean stevedores (and others) need to invest in additional capacity as less frequent visits mean higher peak cargo transfers.

According to Ferrier Hodgson's *Transport 2050* report, further consolidation in the road transport industry 'appears almost inevitable as customers favour the large operators more and more while the mid-tier struggle to remain competitive'. The road freight industry is undergoing massive structural change. This is due to challenges such as:

- the cost impact of technological advancements
- rising fuel costs and increasing difficulty passing on fuel levies in a competitive market
- a changing regulatory landscape with increasing compliance workloads and associated cost
- a continually ageing workforce and ongoing difficulty attracting quality labour to the industry.

Larger operators are investing heavily in safety and technology, presenting these as a competitive advantage. Smaller operators with less scale and financial strength tend to be slow adopters given the costs involved, and will become progressively challenged.

Opportunities

Given the ongoing consolidation and increasing collaboration between participants in the freight sector, in future Victoria will need to plan for not just more vehicles (and more drivers) but larger vehicles on our freight network and in and out of our freight precincts, as well as fewer but larger vessels. In the case of the Port of Melbourne and associated land-side transport, we also need to plan for higher peaks in the transfer of containers.

Although 24/7 operations are already part of Victoria's rail, air and sea port operations, this may become the new normal throughout the freight and logistics sector as participants seek to avoid costly congestion related delays and to better use available assets.

Automated vehicles in Victoria

Automated vehicles offer the possibility of fundamentally changing transport and society by improving road safety, mobility, freight productivity and by reducing road congestion.

The Victorian Government is working with other jurisdictions and the National Transport Commission (NTC) on an Australia-wide regulatory framework that embraces innovation but ensures automated vehicles are safe.

In November 2016, Australian transport ministers agreed to a phased reform program so that conditionally automated vehicles can operate safely and legally on our roads before 2020, and highly and fully automated vehicles from 2020.

This phased approach will ensure that the reform agenda remains sufficiently flexible to address evolving technologies and market developments.

The Victorian Government is working with the Australian Road Research Board, Latrobe University and ConnectEast to test cars with driver-assistance technology (adaptive cruise control, lane keep assist and auto braking) on EastLink. The trial will test technological compatibility with current infrastructure and assess safety features.

The Victorian Parliament recently passed the *Road Safety Amendment (Automated Vehicles) Bill 2017* which establishes a permit scheme to authorise trials of automated vehicles on Victorian roads.

7. VICTORIA IN 2050

What do these trends and technologies mean for Victoria in 2050?
How will Victoria's freight and logistics system develop over the next 30 years to respond to these challenges?

Below are some hypothetical scenarios for Victoria's freight future which are based on current available evidence.

Statewide

- 24/7 freight operations
- Use of drones for last mile deliveries on some non-metropolitan corridors
- Much greater use of e-commerce and paperless supply chain transactions
- Data sharing, real time tracking and visibility of freight movements

Air freight

- Melbourne Airport's 24/7 curfew-free status has been maintained.
- A significant freight precinct has developed at the 24/7 curfew free Avalon airport.
- Regional airports perform roles as freight hubs, using areas of available adjacent land for freight operators and allied businesses.
- Agricultural production centres link to airports through efficient landside connections to allow fresh produce to be exported.

Urban freight

- Urban freight networks consist of intermodal terminals and freight consolidation centres (FCC) and dedicated transport links that are integrated with open and shared logistics services.
- Urban FCCs are located around the CBD and other major population centres. Each FCC is located within 3 kilometres of the CBD.
- Many city-based residential towers support their own micro consolidation centre with secure storage located on site. These spaces are key locked or geo-fenced but allow access for carriers.

- Planning permits for new buildings reflect requirements for the delivery of freight.
- Pick-up and drop-off points, located at local stores (such as supermarkets) and public transport hubs, are commonplace.

Road freight

- The regulation of heavy vehicles in Australia is fully harmonised.
- The monitoring and management of traffic flow on all major Melbourne roads has been possible due to significant technology investments. This has led to the resolution of key congestion points and enables freight vehicles to re-route in real-time to improve the efficiency and certainty of their task.
- Vehicle-to-vehicle and vehicle-to-infrastructure technologies are used to achieve heavy vehicle safety, travel time reliability and efficiency outcomes.
- Trucks are quieter, cleaner and safer. Remotely piloted trucks operate in controlled areas.
- The HPFV network is extensive and provides end-to-end access through integrated interstate, state and local road connections.



Regional freight rail network

- Through infrastructure upgrades and operational enhancements, Victoria's regional rail network is operating in a way that allows Victoria's primary producers, and others in the region who export, to get their products to market efficiently, reliably and cost effectively so their products are competitive in their interstate and international markets.
- Freight precincts sit alongside intermodal terminals in or around regional Victorian towns. Grain receipt facilities are also located at a number of these precincts. The surrounding roads enable access for HPFV to move to/from these precincts 24/7.
- Through the use of automatic train control systems, and other mechanisms, the operation of the freight and passenger networks are integrated to improve the efficiency and reliability of freight trains.

Interstate freight rail

- The Western Interstate Freight Terminal (WIFT) at Truganina and the Beveridge Interstate Freight Terminal (BIFT) are operating with both terminals connected to the Inland Rail. Both terminals are also connected to Victoria's container ports, and to suburban intermodal terminals located around Melbourne, where rail shuttles are transferring import and export containers.
- Both WIFT and BIFT are major freight hubs which are home to a range of other businesses which benefit from being co-located with these major terminals including distribution centres and warehousing. Businesses within the precinct are linked through the latest technology, offering huge efficiency benefits to many supply chains.
- Road access to the terminals supports HPFV 24/7. Inside the precinct, automated internal transfer vehicles move freight between businesses and precincts, including to/from the intermodal terminals.

Sea ports

- The ports of Melbourne, Geelong, Portland and Hastings are still the backbone of Victoria's commercial port network.
- Land and transport corridors have been reserved, and all relevant approvals obtained, to enable the commencement of the development of a second container port for Victoria at Bay West, timed for completion when the Port of Melbourne reaches capacity;
- With excellent road, rail and sea connections, the Port of Melbourne continues to handle the highest volume of containers in Australia. Its operations are increasingly automated. It is the port of choice for exporters from southern New South Wales and parts of South Australia.
- Truck turnaround times at the port and movements to and from the port precinct are efficiently scheduled with no waiting times. These vehicles meet high environmental and safety standards.
- Residents from surrounding areas and industry meet regularly to find satisfactory solutions to emerging problems. There is respect that each party has a legitimate role and they work collaboratively to ensure freight moves as efficiently and safely as possible.
- The South Dynon precinct, which consists of the land between Footscray and Dynon roads, serves three main purposes – as a facility for truck marshalling and handling of empty containers, a precinct which includes warehousing and distribution centres for port related freight, and as an urban freight precinct servicing Melbourne's CBD.

8. FIVE PRIORITIES TO DELIVER THE GOODS

Our ambition is to achieve an efficient, safe and sustainable freight and logistics system that enhances Victoria's economic prosperity and liveability.

We will tackle five priority areas and their actions over the next five years to improve freight efficiency, capacity and amenity and to prepare the state for the growth, challenges and changes that lie ahead. They are:

- Manage existing and proposed freight corridors and places in conjunction with urban form changes
- Reduce the impact of congestion on supply chain costs and communities
- Better use of our rail freight assets
- Plan for Victoria's future port capacity
- Stay ahead of the technology curve

Each initiative responds to *Delivering the Goods* four key objectives:

- Reducing the cost of doing business
- Improving the efficiency of moving freight while minimising adverse impacts
- Better connecting Victorian businesses with their local, interstate and export markets
- Providing sufficient future capacity.



PRIORITY 1: **Manage existing and proposed freight corridors and places in conjunction with urban form changes**

Review and enhance the PFN

What industry told us

“With Victoria’s growing population, the protection of existing freight places and corridors from urban encroachment, and the reservation of land for freight purposes for the future, is one of the highest priorities.”

“Victoria needs to identify sites for future metropolitan and regional intermodal terminals where there are gaps in the network.”

“Better long-term planning for freight is necessary to ensure, wherever possible, that residential areas are separated or buffered from concentrated freight corridors and places.”

Why it’s important

The PFN was created in Victoria more than 10 years ago and designates those parts of the transport network where the movement of high volumes of freight are either concentrated or of strategic value. The PFN was intended to guide land use planning and development applications around these corridors and precincts to ensure that the movement of heavy freight is not compromised by new development.

After 10 years of operation there are clear signs that the PFN is in need of a review. Freight-related operations and places such as air and sea ports, container parks, industrial precincts and intermodal terminals are under increasing pressure to make way for cleaner and quieter land uses (such as residential developments).

This “pressure” takes the form of restricted access or the relocation of operations to sites further afield, which adds cost and time to supply chains.

According to a recent report by Infrastructure Australia (2017), there are major economic and social benefits from early action by governments to protect transport corridors and acquire land in advance.

We need to expand the PFN to make sure it includes the significant freight places and routes that have developed over the intervening period, ensure land is reserved for future freight operations and examine the mechanisms used in our planning policy and planning schemes to give effect to the PFN.

The WIFT and the BIFT will be the future location for interstate freight in Melbourne as they will allow long (up to 3,600m), double stacked trains to operate in and out of Victoria on the east coast interstate network. The Victorian Government believes the WIFT should be developed first. Independent studies have confirmed WIFT as an optimal location as Truganina is close to around 50 percent of the existing interstate freight rail customers, with good road access to other parts of Melbourne. It is also large enough to include a significant precinct for co-located freight and logistics activities which would likely use the rail terminal. The WIFT site also has the space to accommodate demand for rail freight well beyond 2050. The timeline for the development of WIFT will align with the planned completion of Inland Rail in 2025.

Urban encroachment at the Port of Melbourne

The Port of Melbourne has been operating for more than 140 years and plays a central role in Victoria's and Australia's economy. Despite this, the port spends a great deal of time and resources challenging development applications and decisions for incompatible land uses on its borders. For example:

- Residential dwellings on the border of Webb Dock, with frontages to Todd Road and Williamstown Road, (designated HPFV routes) have been approved by local government.
- A residential tower immediately west of the Bolte Bridge has been proposed. The frontage is on Lorimer Street (a designated HPFV route) and it is close to a port cement facility and an existing reservation for the Webb Dock Rail Link.
- A café was approved by local government 200 metres from the Coode Island Precinct and inside the Worksafe Advisory Area.

Investment in planning and protection of key infrastructure for the long term – including provision for appropriate buffers – is essential if we are to avert these problems in future.

Logic (Wodonga)

The intermodal terminal and freight precinct at Wodonga, called Logic, was the vision of the City of Wodonga, the Victorian Government and the anchor tenant Woolworths. Land was first reserved in the early 2000s.

The Victorian Government contributed \$2 million to the project. This leveraged millions of dollars of private investment. The investment brought 563 ongoing full-time jobs to the region.

In addition to the Woolworths DC, Logic tenants now include Border Express and COPE Sensitive Freight.

In 2016, SCT Logistics began an intermodal rail service which now services Victoria, Western Australia, South Australia and Queensland. It also offers services to the Port of Melbourne by rail and import and export container-handling. Over the next 20-30 years, Logic aims to house large-scale industry and generate even more significant employment for the region.

Actions

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
<p>Review and update the existing PFN to include significant freight places, shipping channels and over-dimensional routes.</p> <p>Strengthen the protection of the PFN in the relevant planning schemes.</p>	Review and update the PFN	
Assess the long term metropolitan industrial land needs and designate appropriate areas for the future.	As the city grows, continue to make appropriate provision for industrial and freight precincts with buffers in metropolitan Melbourne.	
<p>Recognise the existing and planned regional intermodal terminals in the PFN.</p> <p>With local councils, review existing, and identify and reserve sites for new freight terminals/ precincts.</p>	Support development of additional regional intermodal terminals.	
<p>Reserve land for the locations of Victoria's new interstate intermodal terminals – the WIFT at Truganina and the BIFT, and their connecting transport corridors. Include these land reservations in the new PFN.</p> <p>Prepare a business case for the development of WIFT. Subject to the business case outcome, develop WIFT.</p>	Develop the WIFT	Develop the BIFT
Collaborate with the agricultural sector and Regional Partnerships to identify medium and long-term air freight needs.	Capture opportunities for direct and immediate delivery of Australia premium produce into Asian and other overseas markets.	
Protect Webb Dock and the existing and new transport corridor connections to the port under the new PFN.	Develop new road and rail (or electrified driverless road) access to Webb Dock.	

Expand the HPFV network

What industry told us

“Substantial route limitations continue to exist for HPFV due to mass limits on bridges or the road geometry not being suitable for these vehicles.”

“Much of the network infrastructure is ageing and built to a lower standard than that required by modern-day truck fleets. The issue of ageing infrastructure is particularly significant for bridges built and maintained by local governments.”

“The HPFV network should be developed on the road corridors to and from major freight and industrial precincts, such as intermodal and grain receival sites in regional Victoria.”

“The long delays in processing HPFV permits in Victoria are a source of great frustration.”

Why it's important

Heavy vehicles will have a significant ongoing role in delivering the freight task, despite rail having the potential to carry more freight. One way of reducing overall truck movements is to increase the volume of freight carried per trip.

To date, investment has focused on developing the HPFV network on main arterial roads and key corridors in regional Victoria. By broadly identifying the PFN, the HPFV network can also be developed on the road corridors to and from major freight and industrial precincts, such as intermodal and grain receival sites.

Permits are required where a freight route is not yet part of the HPFV network. The timely and efficient issuing of permits is critical to reducing the cost of moving goods.

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
Complete West Gate Tunnel Project	Complete North East Link	
	Progress the development of the Outer Metropolitan Ring corridor	Develop Outer Metropolitan Ring corridor
Continue to invest in the expansion of the existing Victorian HPFV network, principally by strengthening and upgrading bridges and intersections on regional and metropolitan road networks.		
Consider rail in the freight task when assessing the requirements for upgrading the HPFV network.		
Reflect the HPFV network in the PFN.		
Streamline heavy vehicle permit applications to reduce the average number of days taken to approve permits in Victoria to less than five days.		
Conduct a national heavy vehicle charging pilot		
Continue harmonisation of heavy vehicle regulation		
Identify uses of on-board mass monitoring systems to improve heavy vehicle access to restricted infrastructure.	Continue to encourage the use of new technologies to improve freight efficiency and productivity and to allow government to better manage freight on the road network.	

Plan for bigger vehicles and vessels

What industry told us

“Road vehicles, freight trains and container ships are all getting larger, longer and heavier to achieve higher payload capacity and productivity improvements. We must prepare our infrastructure for this.”

“Labour shortages in the road transport industry have been biting for years and are likely to intensify with the growing road freight task.”

“Road accidents involving heavy vehicles are still unacceptably high. But other road users also need to take some responsibility.”

Why it's important

It is not always possible to anticipate future transport changes sufficiently in advance to influence the design of infrastructure. Retrofitting, strengthening and upgrading infrastructure are costly as the current project to standardise the freight rail network in the Murray Basin illustrates. Victoria's freight rail network has two separate gauges thanks to decisions made over 150 years ago – a legacy that continues to cost Victoria dearly.

Similarly, more efficient double stacked container trains have been unable to access the Port of Melbourne as a result of height restrictions in the Bunbury Street tunnel in Footscray built in the 1920s. As international shipping lines move toward more and more 40 foot containers, larger vehicles are required to move them, which impacts on future infrastructure design.

The standards by which we design new roads, rail and port infrastructure must, as far as possible, take account of the size requirements of future vehicles and vessels.

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
Reach agreement with industry on a desired 'future state' for road and rail vehicles. Develop minimum design standards, based on the desired future state, to apply for future transport infrastructure projects.	Commit to the progressive upgrade of the PFN to achieve the required future state for the road and rail networks.	
Conduct a review of the training and licensing of heavy vehicle drivers in Victoria.	Continue to work with industry to raise the standards and competencies of freight professionals to meet changing industry demands.	
Educate the driving community on sharing the road with trucks.	Continue implementation of road and rail safety initiatives.	
Progressively introduce more stringent heavy vehicle safety requirements to lower the road toll.		



The massive 'superload' on the move in Victoria, February 2018.

Work with local government to remove or reduce first and last mile impediments

What industry told us

“After hours curfews and unsuitable local infrastructure are seriously impeding ‘last mile’ delivery.”

“Too many councils refuse to issue permits for HPFV to access local roads or impose unacceptable delays.”

Why it’s important

Changes in consumer behaviour, new technologies and the continued growth in freight, will continue to put greater pressure on first and last mile freight movements. Roads managed by local councils provide these essential first and last mile links – links between state-managed highways and freight origins and destinations, such as farms, silos, sale yards, rail heads, distribution centres, industrial parks, factories, depots and end consumers.

When the Heavy Vehicle National Law came into force in 2014, local governments had to consider permits for HPFV to use local roads. The Municipal Association of Victoria and Victorian municipalities have spent the last four years working with VicRoads to improve assessment and approval processes and build capability.

A survey of local government conducted to inform this plan indicated that the issue of heavy vehicle access to local roads continues to be a major impost on local government.

These access restrictions and/or poorly suited local infrastructure also create additional costs for industry and add to the cost of goods to the consumer. For example, one large supermarket chain said that access restrictions apply to 50 per cent of their metropolitan stores.

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
Support a trial to remove and monitor restrictions on after hour freight deliveries. Implement the findings of the trial.	Continue to remove regulatory impediments or find appropriate alternatives to ensure efficient freight delivery.	
Establish a Freight infrastructure fund to provide grants to local councils to upgrade priority local roads and bridges to accommodate heavier vehicles, establish or upgrade intermodal terminals or other critical freight infrastructure.		
Convene an annual industry-government road freight forum to identify and resolve road freight issues and promote greater integration and coordination.	Continue to work with local government to remove impediments to efficient freight movements and minimise amenity impacts.	



PRIORITY 2: **Reduce the impact of congestion on supply chain costs and communities**

Prioritise the use of technology to improve the management of network congestion on the road network

What industry told us

“Congestion in metropolitan Melbourne has grown significantly and has a major impact on the cost of doing business. Local deliveries that once took one hour, now take 3 hours.”

“Time critical freight, such as milk and milk products cannot always avoid the peaks. Major freeways such as the Monash and Tullamarine are a nightmare for freight during the peaks.”

“Congestion adds to costs in many ways – additional cost of labour for drivers sitting in traffic; penalties when trucks miss timeslots into distribution centres; flow on labour costs when vehicles are late back to depots, or when planes are missed and additional services are required.”

Why it's important

The combination of growing volumes of freight, population growth and urban consolidation pose significant challenges for our city and transport planners. It is projected there will be 18 per cent more car trips a day in Melbourne by 2026. Maintaining the network's current level of performance will require its physical capacity to increase by 24 per cent over the next five years. If nothing is done, road speeds will slow by 8-9 per cent. The existing congestion problem already costs the economy \$1.3 billion. By 2020, this could potentially double to \$4.6 billion. By 2030 this could potentially rise to \$10.2 billion.

Increasing network capacity will need more innovative approaches such as the allocation of road space to more efficient forms of transport and the use of technology to increase the throughput of the road network. This needs to be done in a way that minimises undesirable environmental effects. A significant investment in intelligent transport systems technologies has the potential to increase the capacity of the arterial road network, reduce congestion and lower the impact of delays on supply chains. Over the next few years this type of technology is likely to involve expanded use of sensor networks, active management of traffic lights to aid traffic flow and better information for users.

Telematics, is already offering road transport companies opportunities to improve freight management through greater access to load limited infrastructure and access to real time information to aid journey planning, avoid congestion and optimise delivery time slots. There is great potential to use the de-identified information from telematics in heavy vehicles to target measures to keep our road freight moving. For example, telematics can provide detailed information not currently available to road managers on the routes, times of day and types of freight vehicles moving on our networks. Such technologies can unleash significant additional capacity on our roads. Telematics is also an enabler of initiatives such as mass/ distance/location-based (or road user) charging – a long overdue and welcome national initiative.

Heavy vehicle road reform

Victoria supports the significant momentum behind the national heavy vehicle road reform (HVRR) agenda. The reform agenda seeks to unlock productivity and improve transparency between revenue and expenditure. Work is underway to explore the costs and benefits of independent price regulation and how a forward-looking cost base can strengthen the link between investment needs and revenue. In the medium-term, reform is expected to help transition away from the current fuel excise and registration charges towards direct user charging.

To this end, the Commonwealth also announced a two-year National Heavy Vehicle Charging Pilot starting in 2018-19. The pilot will explore the merits of direct charging technologies, and location-specific heavy vehicle charging schemes. The Victorian Government is working with industry, and local and Commonwealth governments to prepare a business case for one of these pilots in the 'Green Triangle' region of south west Victoria.

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
Incentivise the early uptake of telematics for all heavy vehicles registered in Victoria.	Monitor uptake and work with TCA to access de-identified information to improve the management of freight on the road network.	
Apply transport-related technologies and systems to the metro road network to better manage congestion and support efficient freight movement as the city grows	Continue to fund and apply transport-related technologies and systems to the metropolitan road network to better manage congestion and support efficient freight movements as the city grows.	
Work in conjunction with the iMove CRC to develop a project to use predictive modelling to forecast pressure points on the network and inform a network management response in real time.	Continue to fund and apply transport related technologies and systems to the metropolitan road network to better manage congestion and support efficient freight movements as the city grows.	

Improve landside efficiency around the POM

What industry told us

“Victoria’s international trade is being disadvantaged by poor co-ordination and high costs for port related landside movements.”

“Empty container movements are a basic part of our import and export trade, not something that can be pushed to one side. Imports will continue to expand, so empty container park demand will continue to grow.”

“Stevedore infrastructure charges (on land transport operators) are unfair and excessive and, in a global marketplace we cannot pass them on or we will become uncompetitive. Government needs to strengthen control over pricing.”

Although a booking system exists, road carriers frequently report waiting for three or more hours at the port.

Why it’s important

Every day, about 5,000–7,000 containers move in and out and around the port. Full export containers arrive at the Port to be loaded onto visiting ships, and full import containers are collected from the port to begin the land leg of their journey to storage or their end user. In addition, the movement of empty containers constitutes around 21 per cent of all shipments through the Port.

More than 90 per cent of these full and empty containers are moved by road. Heavy vehicles can carry one or two containers at a time. As a result, the roads around the port and inner western suburbs experience a very large number of truck movements.

Adding to the congestion is the management of truck access and egress to Swanson Dock. This is operated by two stevedores—DP World and Patrick. The stevedores plan their operations to unload and load visiting ships quickly and to store containers portside for the shortest time possible. They do not always consider efficiency from the point of view of the transport operators. Stevedores view their core business (and obligations) as being to the shipping lines. Although a booking system exists, road carriers frequently report waiting for three or more hours at the port. If the Port of Melbourne is to grow, inefficiencies like these need to be eliminated.

In the absence of these improvements, the significant additional charges on containers introduced by the stevedores in 2017 and 2018 are viewed as unjustified by industry.

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
<p>Develop the former Melbourne Market site for use for truck marshalling associated with the Port of Melbourne and for improvements in empty container management.</p> <p>Undertake the necessary land use and transport network planning and protect the former Melbourne Market and South Dynon precincts for port and urban freight related uses for the long term.</p>	<p>Plan for the development of the former Melbourne Market/South Dynon precincts for port and urban freight related uses.</p>	<p>Make the South Dynon precinct available for port and urban freight related uses.</p>
<p>Support port rail shuttles and the Port's efforts to develop on-dock rail terminals for Swanson Dock stevedores.</p>	<p>Continue to support the growth of port rail shuttles in the efficient movement of containers to and from the Port of Melbourne, including Webb Dock.</p>	
<p>Investigate options for the future role of government in regulating pricing/charges, and access to and from the port.</p> <p>Monitor the landside performance of all participants (including stevedores) in the road and rail-based container supply chain.</p>	<p>Continue to monitor (along with ACCC) competition, pricing and the performance of import and export container movements and identify and implement improvements in container supply chain.</p>	
	<p>Capture opportunities in regional Victoria to enable new and existing industries to benefit from the increased port and rail competition.</p>	



Develop more freight friendly solutions for Melbourne’s CBD

What industry told us

“It has become increasingly difficult to make deliveries in CBD areas. The larger our cities grow, the larger the freight task gets. Accordingly, if we wish to grow our cities and ensure their continuing functionality and amenity, we must adopt policies which can support that increasing freight task.”

“The use of consolidation centres to improve access to Melbourne’s CBD for deliveries are inevitable. Many firms are already forced to transfer freight to smaller vehicles to access the CBD and the limited on-street loading zones available.”

“The technologies exist now to better coordinate and allocate limited road space and delivery docks in the CBD – but government needs to take a leadership role.”

“Melbourne is not freight friendly. Apartment blocks and retail precincts, particularly in inner Melbourne, are often constructed without sufficient attention to the needs of freight deliveries and waste collection.”

“There is a growing shortage of on-street loading zones for freight vehicles. This results in freight vehicles wasting time and money circling city and suburban retail precincts to find a suitable park close to the delivery destination.”

Why it’s important

Melbourne’s CBD is a major retail and freight destination, attracting some 46,000 vehicles and up to almost 12,000 bicycles during the morning peak and around 10,300 service delivery vehicles on an average weekday. Competition for available road space, parking, loading zones and delivery docks is extraordinarily high and growing, with predictable impacts on the reliability and efficiency of freight transport deliveries.

The City of Melbourne released its *Last Kilometre Freight Plan in 2016* and committed to plan for and encourage more innovative ways for CBD deliveries. The Freight Consolidation Centre (FCC) model has been successfully implemented in a number of overseas cities when combined with new building and planning guidelines. New technologies and materials are available to reduce unnecessary freight vehicle movements and with them, noise and congestion.



Source: VicRoads

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
Facilitate and fund a trial of the FCC model for Melbourne’s CBD.	Implement trial outcomes.	
Ensure urban areas and new buildings are equipped to meet the requirements for receiving and dispensing goods, including loading bays for waste collection.	Work with local government on reservation systems for accessing on-street loading zones as well as off-street loading docks at major activity hubs.	
Ensure that all new buildings make use of new technologies and infrastructure to minimise freight-related noise and improve the safety and efficiency of deliveries.		

Align future toll road contracts with Government’s freight efficiency and congestion management objectives

What industry told us

“Heavy vehicle operators need a viable alternative to toll roads in order to access the Port of Melbourne. Transport companies may make multiple trips to the port each day. Tolls are now the second highest cost to our business after labour.”

“High tolls force many drivers to avoid toll roads and to use arterial and local roads instead.”

“As an exporter, we had to absorb the recent toll increases. It makes it hard to compete in a global market.”

Why it’s important

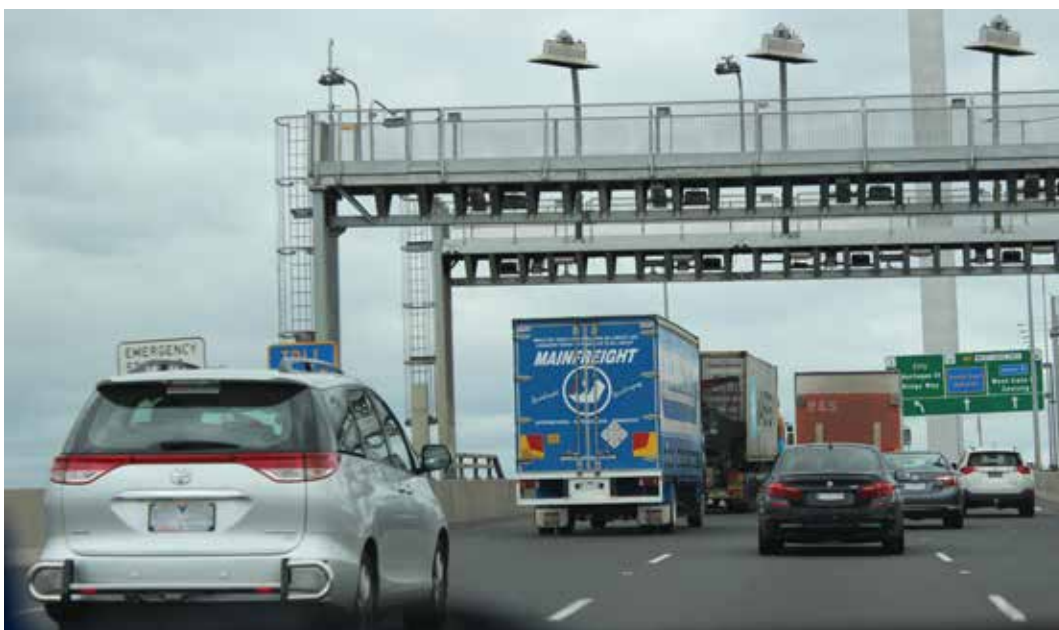
Ideally, heavy vehicles should use those parts of the road network that are best suited to the requirements of their vehicles and enable the fastest, safest and most efficient route to their destination.

Tolls not only add to supply chain costs but can encourage heavy vehicles to use local roads. These outcomes are not consistent with our need to plan for the growth of freight and minimise the impact on local communities.

We need better information on the impact of tolls on the supply chain costs of critical Victorian industries and the extent to which toll rises can lead to avoidance. Decisions on future toll roads should ensure objectives for efficient freight movements and promoting a shift to off-peak deliveries can be better aligned.

The tolling regime for the West Gate Tunnel is an example of this where trip caps and night time discounts are being implemented to make using this route more cost-effective for trucks.

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
<p>Investigate how to structure future toll regime contracts to optimise efficient freight movements and minimise congestion.</p> <p>Implement outcomes in future toll road contracts.</p>	<p>Implement outcomes in any future toll road contracts.</p> <p>Review toll road pricing approach for freight vehicles in light of impending introduction of national heavy vehicle road pricing reform.</p>	



PRIORITY 3: Better use of our rail freight assets

Improve the efficiency and reduce the cost of rail access to the Port of Melbourne

What industry told us

“Rail has a far greater role to play in moving freight in Victoria in the future. Road and rail will need to play complementary roles to meet the growing freight task.”

“The lack of direct on-dock rail access at the port is the key issue limiting the use of rail for containerised product to and from the Port of Melbourne.”

Why it's important

The share of freight on rail in Victoria has not changed significantly for almost two decades, and in some markets has gone backwards. This is despite the fact that successive Victorian governments have implemented positive policies to increase the share of freight moved by rail.

With a growing freight task and urban congestion, increasing the volume of freight carried on rail is more important than ever.

At the moment, containers are transferred between the rail terminal near the Port and the stevedoring terminal via road, costing up to \$100 for each container. Direct on-dock rail, where rail is integrated into the stevedoring terminal, will remove the majority of this cost from the supply chain. This will need to be addressed for rail users to get the full benefit from port rail shuttles and to make regional exports through the Port more cost competitive.

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
Support port rail shuttles and the Port's efforts to develop on-dock rail terminals for Swanson Dock stevedores by 2022.	Continue to support the growth of port rail shuttles in the efficient movement of containers to and from the Port of Melbourne, including Webb Dock.	
Extend the Mode Shift Incentive Scheme (MSIS) for 12 months to 30 June 2019 to minimise the cost impact of the additional road leg at Swanson Dock.		



Double stacked freight trains will run on the new Melbourne–Brisbane line.

Manage the regional below-rail infrastructure and operating rules for the benefit of all users – freight and passenger

What industry told us

“The operating rules for freight rail need to be reviewed. Even with priority to passenger services there is so much more that can be improved to make freight rail more efficient.”

“Most of freight rail in Victoria operates on century old infrastructure. You can’t run a modern economy on an ageing freight system.”

Why it’s important

The Victorian regional freight rail task has two different service level requirements:

- high speed, reliable and regular services for containerised exports to the Port of Melbourne.
- heavier, lower speed and seasonal services (with certainty of arrival time once scheduled) for products such as bulk grain.

Work completed by Deloitte (2015) found that investments in the regional (intra state) rail network – including upgrading axle loads, increasing speeds, modernising network operations, standardising key lines and maintaining the network to the rated standard – would lead to improved running times and productivity and in turn draw more freight to rail.

Under Deloitte’s analysis, the principal freight growth would be in grain, but containerised and other bulk products would also be attracted to rail as a result of the improved performance of the network.

Selective standardisation and modernisation of network operating rules, modernisation of signalling, and improved pathing certainty would all lift the performance of freight rail services.

A rail network maintained to enable 21-tonne axle loads and 115 kilometres per hour speeds will allow intermodal rail services to the Port of Melbourne to compete with road services. For bulk products, a higher axle load (23 tonnes) at a lower speed (40-80 kmh depending on the line configuration) delivers better value for customers.

Inland Rail

The Victorian Government was the first State to sign up to Inland Rail and it is now working with the Commonwealth to facilitate delivery of the project. Victoria’s negotiation of an intergovernmental agreement with the Commonwealth helps give greater certainty to the Victorian freight industry and its customers about the future shape of the national supply chain network. Inland Rail was recommended as a priority by Infrastructure Victoria in its 30-year strategy.

The project is being delivered for the Commonwealth Government through the Australian Rail Track Corporation (ARTC) in partnership with the private sector. The Commonwealth committed \$8.4 billion to the project in its 2017-18 budget.

Inland Rail is a combination of 1,700 kilometres of new and upgraded lines. Work started in 2017 and the first train is expected to operate in 2024-25.

The track will initially enable the use of double-stacked, 1800 metre-long trains with a 21 tonne axle load at a maximum speed of 115 kilometres per hour. Each train could carry the equivalent freight volume of 110 B-double trucks.

Inland Rail cannot operate without the construction of a new interstate freight terminal capable of receiving and dispatching double-stacked trains to replace the existing South Dynon terminal.

The Victorian Government will commence a full business case for a Western Interstate Freight Terminal with \$2.24 million funding in the 2018-19 State Budget.

An early funding commitment by the Commonwealth is needed to support this terminal and give certainty to private sector freight operators and customers.

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
Complete a study considering the costs and benefits of upgrading and/or standardising further corridors on the regional rail network, noting that standardisation will ultimately need to be considered in the context of the passenger network on some lines as well.	Standardise and increase axle loads on other priority freight rail corridors.	
Review current freight rail operations and infrastructure to identify opportunities for improving the efficiency of the network for operators, and ultimately for primary producers and other users. Implement a series of short-term improvements arising from the review.	Progressively upgrade and modernise passing loops, signalling and operating rules, and improve pathing certainty for freight rail.	
Develop and publish an Asset Management Plan for the regional freight network which will form the basis of an annual major maintenance program for the network. The annual maintenance program will include an allowance for achieving the required 'future state' for the rail network by 2050.		
Advocate to the Commonwealth to invest in freight rail infrastructure in Victoria, starting with the Portland – Maroona line.	Advocate to the Commonwealth to invest in freight rail infrastructure in Victoria	
Capture opportunities in regional Victoria to enable new and existing industries to benefit from the increased port and rail competition.		
Complete the \$440m Murray Basin Rail Project and actively facilitate new user access and related investments on the corridor.	Actively facilitate new user access and related investments on the Murray Basin corridor.	
Complete the \$10m Shepparton Freight Rail Network Planning and identify infrastructure improvements to maintain and enhance freight capacity on this corridor. Implement improvements.	Actively facilitate new user access and related investments on the Shepparton corridor.	
Complete delivery of the Freight-Passenger Rail Separation Project in the Ballarat, Maryborough and Ararat area.		
Take advantage of opportunities presented by Inland Rail.		

PRIORITY 4: Plan for Victoria’s future port capacity

The initiatives in this section emerged from the Government’s review of advice provided by Infrastructure Victoria on the timing and location of Victoria’s second container port. The review did not include industry consultation as Infrastructure Victoria had undertaken considerable consultation as part of the process of formulating their original advice to government.

Prepare a Victorian ports strategy

Why it’s important

Ports are key gateways and an integral element of Victoria’s freight and logistics system. Efficient port operations, and linkages to the broader transport and distribution networks, allow Victorian businesses to trade freely and efficiently in the local and global marketplace. Victoria has four commercial ports – Melbourne, Geelong, Portland and Hastings.

We agree with Infrastructure Victoria’s advice that the capacity of Victoria’s existing commercial ports should be optimised before there is any investment in a new commercial port in the future.

However, the ability for Victoria’s commercial ports to handle the combined future trade of containers, automotive, bulk (liquid and dry) and other miscellaneous trades has not been fully assessed.

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
Prepare a comprehensive Victorian Ports Strategy that will outline how Victoria’s future exports and imports could be handled across current (and future) commercial ports in Victoria.		



Port of Portland, 2018.

Develop the Port of Melbourne to its optimum capacity

Why it's important

Infrastructure Victoria's advice shows that the Port of Melbourne could be developed to a capacity of about 8 million TEU and that the Port could reach this threshold sometime between 2045 and 2065.

Exactly when this capacity will be reached will be determined by many factors including future container ship size and the rate of trade growth. These factors will need to be closely monitored and trigger points identified so that it is clear when decisions on future port investments need to be made.

Recommendation 1 in Infrastructure Victoria's advice provides an outline of the sort of indicators that should be developed.

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
Work in partnership with the Port of Melbourne to ensure that the port is able to achieve its optimum capacity.		
Actively monitor and report on key port related indicators which will inform future planning and investment decisions by Government, and the private sector, in relation to Victoria's commercial ports and their associated transport networks.		
Publish these port related indicators every five years		



Plan for Bay West as Victoria's second container port whilst retaining the Port of Hastings as an option in reserve

Why it's important

Bay West has some inherent advantages over the Port of Hastings such as its proximity to existing and future planned industrial land and growth areas, its easy access to major rail and road corridors, and its optimum location for most of Victoria's exports and imports.

Infrastructure Victoria's initial analysis also shows that Bay West has greater cost-effectiveness, environmental advantages and improved options for scalability when compared with the Port of Hastings. These will be confirmed by Government, subject to further investigations of Bay West.

For the Port of Hastings, there is limited spare capacity for freight movements on the Melbourne-Dandenong-Cranbourne rail corridor given current and future demand for passenger trains, while arterial road upgrades would be required to service the increase in heavy vehicle traffic to and from the port. The cost to provide additional rail and road capacity would be substantial, contributing to the higher overall development costs for a future Port at Hastings.

By contrast Bay West has relatively easy access to major transport corridors with capacity available for moving freight. From a road perspective, this includes the existing Princes Freeway, and potentially in the future, the planned Outer Metropolitan Ring Road. The existing interstate rail line provides access to the broader intrastate and interstate rail network with the potential for a rail link to the proposed Western Interstate Freight Terminal.

However, there are still some questions to be resolved about the development of a container port at Bay West, and the future needs for Victoria's container port capacity. These include:

- The need to determine the precise port location at Bay West, terminal and channel design and the road and rail connections from the Port to the broader transport network:
- Investigations into the potential environmental and social impacts of a Bay West development, the approvals pathways, and the potential impacts on surrounding infrastructure, as identified by Infrastructure Victoria.
- The need to gather, monitor and establish baseline environmental data for the Bay West port site including engagement of the community and stakeholders prior to further project definition and development of the concept design.
- Additional due diligence and monitoring of changes to the size of container vessels in the future, and the impact of capacity constraints at other Australian ports.

Recognising the preliminary nature of the work completed on the Bay West site to date, the Government will undertake further engineering, planning and environmental work over the next five years to confirm the preferred port site. Assessment of associated transport corridors and onshore land needs at Bay West will also inform the necessary land use and zoning changes.

Infrastructure Victoria also identified that the development of a project such as a second container port at Bay West could take up to fifteen years. The reservation and zoning of the land and transport corridors required at Bay West is the first step in the development process. The commencement of environmental baseline monitoring is another critical component of early work. It will be important that the development work is undertaken over time so as to inform future decisions and enable the additional container capacity to be delivered in a timely manner.

Until these questions about a second container port at Bay West are answered, we will retain the Port of Hastings as an option in reserve.

We recognise how valuable it is to provide certainty to industry and the community about the location and timing of a second container port. However, decisions such as these are of significant value and have major flow-on effects – economically, socially and environmentally. The potential adverse impacts on the Victorian economy of making a less than optimal decision are significant and outweigh the benefit of making an early decision.

It is important to remain flexible and able to adapt to future changes such as demand and supply drivers, technological possibilities, new knowledge about environmental and social impacts.

Short Term 1-5 Years	Medium Term 5-10 Years	Long Term 10+ Years
<p>Further investigate the feasibility of Bay West as a container port, including:</p> <ul style="list-style-type: none"> • Determining the location of the port site at Bay West; • Identifying preferred land transport corridors and the required land area; • Commence a baseline environmental program for the Bay West port site; • Monitor key indicators to inform future decisions such as the size of container vessels. 	<p>Subject to study outcomes, progressively plan, reserve land, and prepare for development of Bay West as a container port.</p> <p>Continue baseline studies.</p>	<p>Progressively plan and prepare for development of Bay West as a container port.</p> <p>Continue baseline studies.</p>



PRIORITY 5: Stay ahead of the technology curve

Give priority to new technologies which enhance safety on our roads and rail; optimise the metropolitan road network and better manage congestion; and reduce supply chain costs

What industry told us

“Technologies provide significant opportunities to improve freight system performance and better serve customers. We need government to play a role in providing the right policy and regulatory environment to encourage innovation through the use of new technologies.”

Why it's important

New technologies such as telematics and intelligent transport systems will improve safety, road transport productivity and operational efficiencies and drive optimisation of our transport networks.

Improving heavy vehicle safety is a key component of improving overall road safety.

Heavy vehicle movements are not constrained by borders, hence national cooperation is required to reduce road fatalities and injuries. Recognising this, the Transport and Infrastructure Council has recently approved a series of national initiatives focused on heavy vehicle safety with a strong technology focus. These include exploring further opportunities to improve heavy vehicle driver fatigue management and increasing and improving the uptake and capacity of telematics for business and/or regulatory purposes.

Victoria fully supports these initiatives and will work actively with jurisdictions, industry and other national bodies to improve road safety for both Victoria and all of Australia.

Other technologies already in existence will automate more and more parts of the supply chain (eg. warehousing), provide full visibility of products across the supply chain (eg. blockchain) and fully automate and connect freight vehicles.

Government assistance may be required to trial and pilot new technologies to improve understanding of how they interact with existing transport networks, infrastructure and communities, and the challenges or barriers to broader deployment. These trials can in turn inform the types of regulations, if any, needed to accompany the release of technology. Where the benefits of new technologies are demonstrated, government may elect to encourage their uptake.

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
Develop the regulatory framework for autonomous vehicles and trial applications.	Implement the regulatory framework and trial applications.	Allow use of autonomous/automatic freight vehicles in controlled areas.
Provide incentives for road and rail freight operators to take advantage of technologies that have a proven safety benefit such as automatic train control, automatic emergency braking systems, lane departure warning systems, and blind spot elimination technology.		
In collaboration with industry, trial and fund blockchain in one industry supply chain to determine its ability to reduce transaction and record-keeping costs, increase transactional speed and improve security of transactions for Victorian businesses.		

Invest in better, more reliable freight data

Why it's important

The freight and logistics system is complex. It comprises many parts and many different owners, operators and regulators. All parts of the system, along with the many thousands of individual supply chains in Victoria alone, must work seamlessly together and operate with adequate competitive pressure to drive innovation and efficiency. If one part of the supply chain is underperforming, it has flow on impacts for Victorian freight producers and consumers as well as the competitiveness of Victorian exports.

The absence of robust and reliable information on the freight and logistics sector has been identified as an impediment to improvements in the sector and in government infrastructure planning for at least the last two decades.

While individual companies use the latest technologies to monitor the performance of their own fleets and firms, they have not been willing to pass on data for the purposes of system wide insights and improvements. That situation is gradually changing, data capture is much more sophisticated and widespread and industry itself is advocating for better data to inform investments and reforms.

Understanding the needs of users, measuring the performance of the freight and logistics system and improving accountability for delivering changes are essential to developing a high performing freight and logistics system and planning for a more prosperous future.

Short Term 1-5 Years	Medium Term 5 – 10 Years	Long Term 10+ Years
Collect freight and logistic system user views as part of a review every two years of Victoria's freight and logistics performance.		
Measure, monitor and report on the performance of regional freight rail in Victoria including reliability, network availability, transit time, temporary speed restrictions, track condition and unit cost.		
Measure, monitor and report on container origins and destinations via a study every five years in conjunction with the Port of Melbourne.		
Measure, monitor and report on the land-side performance of all participants in the import/export container supply chain (see example performance indicators below).		
Update the freight data included in the Victorian Integrated Transport Model and ensure the capability and capacity exists in Transport for Victoria to understand the impacts on freight of proposed new or changed transport network infrastructure.		

Example performance indicators

Rail terminal utilisation	Road-to-Rail ratio	Truck queue time	Booking slot utilisation
Rail service reliability	Truck service reliability	Truck two-way loading ratio	Truck turnaround time
Rail service punctuality	Truck service punctuality	Truck utilisation	Container turnaround time

9. DELIVERING THE GOODS – NEXT STEPS

The Government will create Freight Victoria to coordinate the development of an efficient freight and logistics system for Victoria.

Located in Transport for Victoria, it will:

- Coordinate delivery of, and report on, the five year program of priorities and actions under *Delivering the Goods*, including growing the share of freight moved by rail;
- Actively engage with industry and provide a central point of contact (a one-stop shop) within the Victorian Government for information and assistance for industry, local government and others on freight and logistics matters;
- Coordinate existing industry engagement forums such as the Rail Freight Advisory Council; and
- Harness private and public sector investment in Victoria's freight network.

We recognise the importance of monitoring the progress we are making in implementing *Delivering the Goods* and in measuring the performance of the freight network in Victoria. Performance monitoring will help to ensure freight initiatives contribute to the plan's objectives. It will also ensure that the delivery actions of lead agencies are transparent and accountable.

Formal arrangements to monitor the implementation of the plan and measure freight performance will be established, including:

- establishing key performance indicators for the port, rail and road networks
- providing timely information on the delivery of infrastructure initiatives on the Transport for Victoria website
- reporting on the implementation of *Delivering the Goods* in the annual report of the Department of Economic Development, Jobs, Transport and Resources, which is tabled in the Victorian Parliament and published online.

In addition, an industry advisory panel will be established to advise Freight Victoria on the implementation of the plan.

Detailed decisions about the implementation and timing of actions, where not already specified in the plan, will be made in line with the normal government processes.

Partners

We recognise that the private sector, other levels of government and the community have central roles to play in how the freight and logistics system develops and we will continue to work in partnership with others towards a common freight ambition.

Our key partners in implementing *Delivering the Goods* include the freight and logistics industry and freight generators, as well as other tiers of government. We will continue to seek Commonwealth funding for infrastructure projects of national significance. An on-going partnership with local government is also critical and we will work with the Municipal Association of Victoria, individual councils and their transport and economic development committees to develop specific implementation plans.

Collaboration with the nine Regional Partnerships will ensure that the specific freight needs and priorities of each region are recognised. Each of the Partnerships has developed Regional Growth Plans which identify high-level opportunities for growth and development across residential, industrial, commercial and agricultural sectors. These plans will help to inform the work on future freight and intermodal precincts, identifying the key infrastructure and initiatives needed to support sectoral growth and productivity.

Those areas responsible for freight within the Victorian Government will use Data Vic to share freight data, studies and reports with industry, universities and the public to inform and improve freight knowledge and planning in future.

We will work with our partners to ensure the safe and sustainable delivery of goods, and deliver value for money improvements where they are needed most.



**DO NOT
OVERTAKE
TURNING VEHICLE**





**Please
DRIVE SAFELY**

