

## NSW Freight and Ports Plan 2018-2023



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### Message from the Ministers

The freight industry is the lifeblood of the NSW economy – worth \$66 billion to our State economy. From big businesses to farmers, retailers to consumers, we all rely on our goods getting to us in a safe and efficient manner.

The NSW Freight and Ports Strategy released in 2013 was the first long-term freight vision to be produced for NSW, which drove targeted investment in both metropolitan and regional transport networks. All freight transport operators who use our roads, our rail networks, our ports or our airports have felt the benefits the 2013 strategy has delivered. Projects such as WestConnex, the Cargo Movement Coordination Centre and upgrades to the Pacific, Newell and Great Western Highways are all fine legacies of that strategy.

But with the NSW freight task set to grow by 28 per cent by 2036, a continued focus is required on the freight sector.

The NSW Freight and Ports Plan 2018-2023 is a call to action for government and industry to work together to make our freight system more efficient, more accessible, safer and more sustainable for the benefit of producers, operators, customers and communities across NSW. Over the next five years, we will:

## Drive economic growth and deliver capacity enhancements

 Invest in new and improved infrastructure, including new port infrastructure at Glebe Island, the Coffs Harbour Bypass and completion of the Pacific Highway; upgrades to Local and Regional Roads, Regional Rail Network improvements and improving the capacity of east-west movements over the Great Dividing Range.

- **Deliver** more than \$5 billion in committed key infrastructure projects for freight in NSW. These include \$543 million towards Fixing Country Roads, \$400 million towards Fixing Country Rail, \$15 million towards the Fixing Country Rail pilot, \$21.5 million towards the Main West rail line, \$500 million towards the Sydney Airport Road upgrade, \$400 million towards Port Botany Rail Line duplication, \$1171 million towards the Coffs Harbour Bypass and \$2.2-\$2.6 billion towards Sydney Gateway.
- We will harmonise regulation to make NSW a better place to do business and improve data sharing to assist industry decision making.
- Moving more with less, we will increase the road to rail share of rail freight at Port Botany to 28 per cent by 2021. We will increase the length of appropriate State Roads accessible by priority restricted access vehicles to further open up the NSW road freight network. By identifying, protecting and zoning land for intermodal terminals we will protect land needed for vital freight and logistics operations. Further, by assisting with necessary road and rail link extensions, we will achieve more effective local planning for freight.

We will work with industry to improve the efficiency of urban freight, including through the continued operation of the Goulburn St Courier Hub, which has the potential to reduce kerbside usage by 4,600 hours per year and reduce 26,000 vehicle kilometres travelled in the Eastern Harbour City CBD.

### Increase efficiency, connectivity and access

**Time is money** - acknowledging that every hour moving freight has a cost the Plan sets a target to ensure 90 per cent of peak travel on key road routes is on time. This will be achieved by delivering smart motorways helping to improve travel times and reliability through targeted congestion programs. We will support Port Botany technologies to improve productivity including a tracking system for containers using sensors with barcodes or licence plate recognition software and trials of drones to investigate reasons for delays in moving goods within the Port Botany precinct. We will also investigate major pipeline projects in Western Sydney, the Hunter and at Port Kembla to reduce the need for dangerous goods to be transported by road.

#### **Improve** safety and sustainability

Doing more together, by working closely with industry to facilitate greater sharing of data to provide benefits across supply chains. This will involve exploring new technology to make road and rail networks more efficient. We will assist local councils by providing information which helps to identify key freight corridors, assessing bridge and road capacity, understanding the safety features of Performance Based Standard (PBS) vehicles and their impact on reducing truck movements to help increase capacity on the network. We will improve rail efficiency by providing greater separation of passenger and freight movement on the rail network and new and improved intermodal terminals to increase the utilisation of the rail freight network. We will target a 30 per cent reduction in fatalities and serious injuries involving heavy or light trucks

(against a three year average 2008 to 2010 baseline) through the delivery of a new Heavy Vehicle Safety Strategy in line with our commitments in our Road Safety Plan 2021.

This Plan is the result of significant consultation, and brings together policy makers, producers, operators, regulators and Government to enable more co-ordinated and better freight planning. It includes firm targets to achieve faster, more efficient and higher capacity networks to remain competitive, support jobs and deliver economic growth across NSW.

Working together to implement this Plan, NSW can continue moving and be confident that we will meet the freight task of the future.



The Hon. John Barilaro MP
Deputy Premier, Minister for Regional
New South Wales, Minister for Skills, and
Minister for Small Business



**The Hon. Melinda Pavey MP**Minister for Roads, Maritime and Freight

## Executive SummaryA Plan For Action 2018-2023

This Freight and Ports Plan sets the NSW Government's priorities for the sector over the next five years

Everyone in NSW relies on the goods moved on our roads and rail, and through our pipelines, ports and airports. The sector that moves these goods contributes \$66 billion to the State's economy each year - allowing producers to get their goods to market, keeping businesses running and providing households with their everyday needs.

In 2013, the NSW Government developed the Freight and Ports Strategy – the first strategy of its kind in NSW. The NSW Freight and Ports Plan 2018-2023 (the Plan) provides industry with the continuity and certainty it needs to make the long-term investments that benefit not only their businesses – but the State's future growth and prosperity.

As a supporting plan to <u>Future Transport</u> <u>2056</u>, this Plan is central to the NSW Government's long-term vision for transport in NSW. It aligns with the NSW Government's statewide land use and infrastructure plans - the <u>NSW Regional Plans</u>, <u>Greater Sydney Commission District Plans</u> and the <u>State Infrastructure Strategy</u>.

In developing this Plan, we consulted widely with industry, local councils and other stakeholders from mid-2017 to early 2018. The priorities in the Plan reflect the outcomes of this consultation (see Appendix).

### What the Plan will achieve over the next five years

The Plan includes over **70 initiatives to be delivered by 2023** – ranging from
infrastructure investment to trials of new
technologies. These initiatives are focused
on achieving five key objectives:

- · Objective 1: Economic growth
- Objective 2: Efficiency, connectivity and access
- Objective 3: Capacity
- · Objective 4: Safety
- Objective 5: Sustainability

## Working across the supply chain

The success of the Plan relies on strong collaboration between the NSW Government, industry, the Australian Government, local councils and the community.

## Objective 1: Economic growth



Providing confidence and certainty that encourages continued investment in the freight industry to support economic growth

Freight infrastructure investments have long pay back periods – this means industry needs certainty about NSW Government priorities so that they can be confident in their long-term investments.

#### Key actions we will take

- Enhance productivity by investing in freight infrastructure, and delivering and improving key freight programs and projects, including the Restart NSW funding which has been made available for <u>Fixing Country Roads</u> (\$543 million) and <u>Fixing Country Rail</u> (\$400 million.)
- Make NSW a better place to do business
  by supporting continued reforms to
  ensure national harmonisation of laws and
  regulatory bodies, reviewing impediments
  to coastal shipping, and removing red
  tape for road and rail operators in NSW, to
  enhance productivity across the network.
- Assist industry planning and decision making by sharing data with industry, improving data on rail freight and supporting national freight data initiatives.

#### **Success means**

Deliver over \$5 billion of investment over five years, including Fixing Country Roads (\$543 million) and Fixing Country Rail (\$400 million) and other upgrades to road and rail infrastructure to boost freight capacity and efficiency.



## Objective 2: Efficiency, connectivity and access



Improving the efficiency of existing infrastructure and ensuring greater connectivity and access along key freight routes

Given the significant cost of new infrastructure, the NSW Government and industry need to boost the performance and utilisation of the State's existing roads, rail, ports, pipelines and airports.

#### Key actions we will take

- Improve safety and efficiency through trials of new technologies, such as drones, vehicle-to infrastructure (V2I) systems and rail technology.
- Improve travel times and reliability through targeted congestion programs including <u>Smart Motorways</u>.
- Boost the efficiency of the rail network and trade gateways by facilitating new technology and improved coordination of Port Botany freight movements, working with the Australian Government to trial an outcome based approach to managing noise emissions from freight aircraft operating in the Sydney Airport curfew period and trialling high productivity trains for bulk freight movements to Port Kembla and Newcastle.
- Increase use of safer and more productive vehicles through implementing the NSW Heavy Vehicle Access Policy Framework, which sets out networks for Performance Based Standards (PBS) vehicles across the whole of NSW (reducing the need for operators of PBS fleets to obtain permits) and assisting local councils to make access decisions.

- Manage growth and improve the efficiency of urban freight through encouraging deliveries outside peak periods and improving the planning of freight loading facilities in key urban centres, including off-street loading docks.
- Collaborate with the long-term lessees of the States' major ports to support efficiency, access and capacity enhancements.

#### Success means

#### We will:

- ensure 90 per cent of peak travel on key road routes is on time
- increase the share of rail freight at Port Botany to 28 per cent by 2021
- increase the length of appropriate
   State Roads accessible by priority
   restricted access vehicles
- maintain the train paths needed by freight within Greater Sydney's shared rail network.

## Objective 3: Capacity



# Maximising infrastructure investment and increasing infrastructure and land use capacity to accommodate growth

To address capacity constraints on the State's freight network, the NSW Government will address road congestion, rail freight capacity and protect land needed for vital freight and logistics operations.

#### Key actions we will take

- Make capacity boosting investments in the rail freight network by improving the capacity of east-west movements through targeted improvements to the NSW rail network and supporting the Inland Rail Project.
- Improve the road network through projects targeted at supporting freight precincts, terminals and key freight routes, including the Pacific, Newell and Golden highways.
- Protect land for freight and logistics
  by working with the Greater Sydney
  Commission and the Department of
  Planning and Environment to maintain,
  manage and plan employment lands
  across the Greater Sydney Region,
  helping local councils develop local
  strategic planning statements in response
  to District and Regional Plans, and
  implementing reforms to NSW planning
  policies and guidelines.
- Enable regional growth and the future operation of critical freight infrastructure such as the Western Sydney Airport through expansion of fuel pipelines.

#### Success means

We will achieve travel time reductions, reliability improvements and improved safety and environmental outcomes through delivering capacity building freight programs and more effective local planning for freight.



## Objective 4: Safety



Creating a safe freight supply chain, involving safe networks, safe transport, safe speeds and safe people

As the State's freight task grows, so too will the number of freight vehicles. The NSW Government will continue with actions that make the transport network safer for everyone.

#### Key actions we will take

- Reduce fatalities and serious injuries from crashes involving heavy vehicles or light trucks by implementing the <u>NSW</u> <u>Road Safety Plan 2021</u> and developing a rest stop framework to assist future decision making around the planning, provision and management of rest stops.
- Develop a Heavy Vehicle Safety Strategy in partnership with industry to improve safety, including by increasing the take up of safety technologies.

#### Success means

We will reduce fatalities and serious injuries from crashes involving a heavy vehicle or light truck by 30 per cent by 2021 (compared to average annual fatalities over 2008-2010).

This will support the **Towards Zero vision** of *Future Transport 2056*, which aims to have a NSW transport network with zero trauma by 2056.



## Objective 5: Sustainability



Developing a sustainable supply chain that delivers benefits to our environment and continued operations into the future

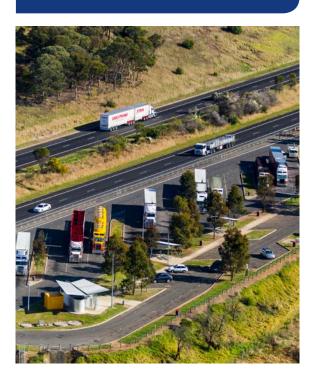
The freight sector can have a significant impact on the environment and communities through carbon emissions, air quality and noise. The NSW Government will work with industry to help manage these impacts and transition the sector to cleaner and quieter transport.

#### Key actions we will take

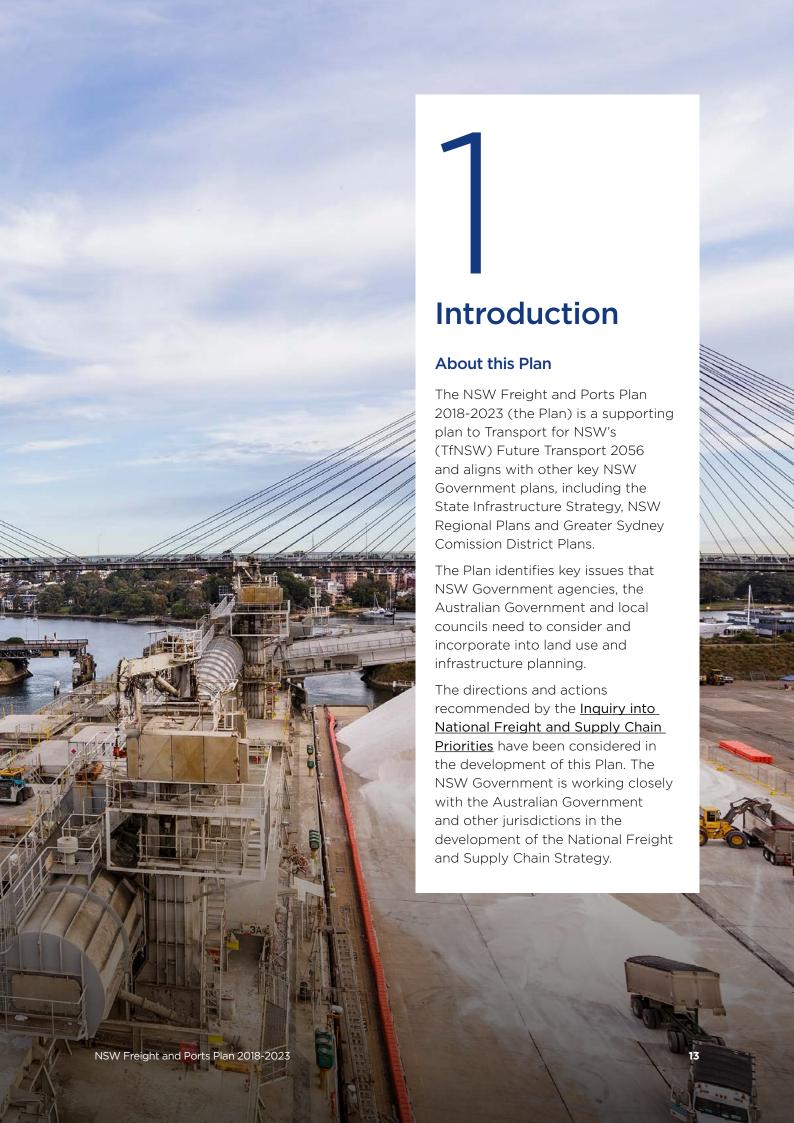
- Manage the noise impacts of rail freight by working with industry to deliver solutions to reduce noise from locomotives and wheel squeal, and continuing the treatment of affected houses under the <u>Freight Noise</u> <u>Attenuation Program</u>.
- Reduce emissions and health impacts of freight by supporting the use of electric vehicles, investigating options to improve accountability for environmental performance in the rail freight industry and advocating for stronger national vehicle emission standards. We will monitor and report on the average age of trucks registered in NSW as we implement initiatives to encourage safer, more productive and cleaner vehicles.

#### **Success means**

Supporting the NSW Government's commitment to an aspirational objective of achieving **net-zero emissions by 2050**.







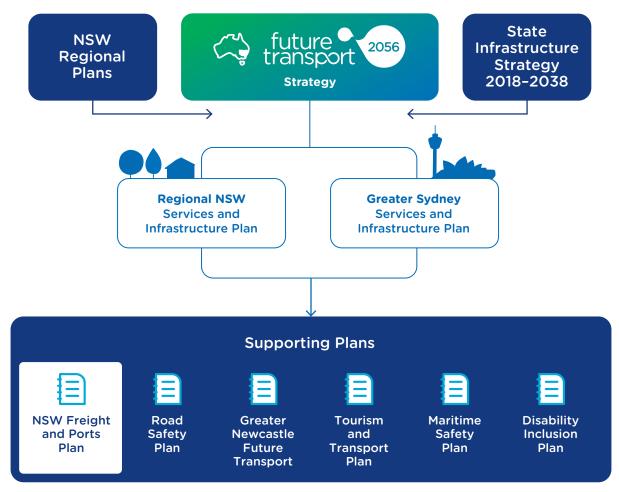


Figure 1. NSW plans working together for our State

#### Building on the 2013 Freight and Ports Strategy

The Plan builds on the successes of the 2013 NSW Freight and Ports Strategy, which was the first strategy of its kind for NSW.

The 2013 Strategy set key objectives and initiatives, and established the direction of freight planning in NSW. Achievements from this strategy include:

- improved efficiency of NSW ports by implementing long-term leases to enable critical freight infrastructure to be operated on a more commercial basis and to recycle capital for freight network improvements
- increased road and rail productivity by implementing major road and rail freight access improvement

programs and heavy vehicle mass concession schemes

- increased rail mode share of containers and reduced truck turn-around times at Port Botany as a result of establishing the <u>Cargo Movement Coordination</u> <u>Centre (CMCC)</u>
- reduced freight impacts on the community and protected key parts of the network by implementing the Freight Noise Attenuation Program
- reduced journey times, improved reliability and safety for road freight by implementing upgrades and improvements to key freight routes across NSW including the Pacific, Newell and Great Western highways.

#### How this report is structured

#### Part 2: Context: The state of freight

This chapter provides an overview of the State's freight movements and network, outlining the challenges and opportunities statewide, in Greater Sydney and in regional NSW.

#### Part 3: How we will respond to the challenges and opportunities

This chapter outlines goals, actions and performance targets for meeting each of the Plan's five objectives.

#### Part 4: Implementation plan

This chapter outlines the timeframes for delivering the actions presented in Part 3.

#### How consultation informed the Plan

Transport for NSW consulted widely with industry, local government and other stakeholders to support the development of the Plan from mid-2017 to early 2018. For more information see the Appendix.







#### Freight overview

#### Freight is vital to our economy

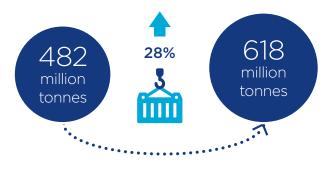


The New South Wales freight and ports network is fundamental to our future \$1.3 trillion economy



#### The freight task is growing

Freight that was moved within NSW in 2016



Freight forecast to be moved within NSW in 2036

#### Freight is an important employer





people are directly employed in the broader logistics industry

#### Figure 2. Significance of freight to the NSW economy

Sources:

- NSW Intergenerational Report 2016 states that the economy is expected to grow to over 2.5 times its current size in real terms; that is, from \$507 billion currently to just over \$1.3 trillion by 2055–56 (in 2013-14 dollars).
- Rest of data from Transport Performance and Analytics, TfNSW, based on Australian Bureau of Statistics data. Employment data for 2016.

#### **Growing freight volumes**

The largest growth in freight volumes in NSW will occur in Greater Sydney, which will see the freight task increase by almost 50 per cent by 2036. The major drivers of the huge increase in the overall freight task in the next 20 years will be:

- · population growth
- economic growth, resulting in increases in freight movements over and above the rate of population growth
- growth in global commodity demand.

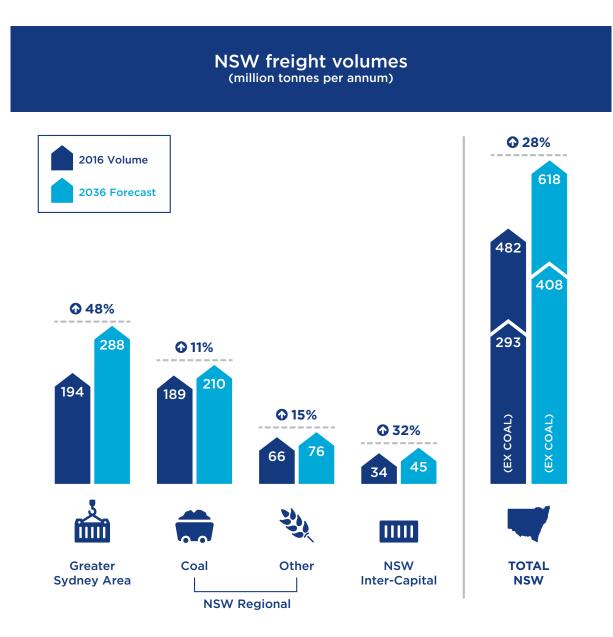


Figure 3. NSW Freight Volume (2016) and Forecast Volume (2036)

Source: Transport Performance and Analytics, TfNSW

#### **Growing demand from Asia**

Rising populations and incomes in Asia drive increased demand for premium agricultural products, which in turn provides increased opportunities for NSW producers to export their products. Freight network efficiency and connectivity is critical to realising these opportunities.

The NSW Government has set a target to contribute to achieving a 30 per cent growth in the value of NSW primary industries in NSW by 2020, with much of that growth being export focused.<sup>3</sup>

#### The State's major commodities for freight

Freight supply chains in NSW are currently dominated by the movement of a number of high volume commodities – this is expected to remain the case to 2036 and beyond. In Greater Sydney, the dominant commodities are manufactured goods, construction materials, consumer goods and waste. In regional NSW, the dominant commodities are coal, grain and steel, forestry and other agricultural produce.

Large numbers of smaller deliveries are equally important to the overall supply chain, such as deliveries between small businesses and consumers that are driven by e-commerce, which is expected to grow significantly.

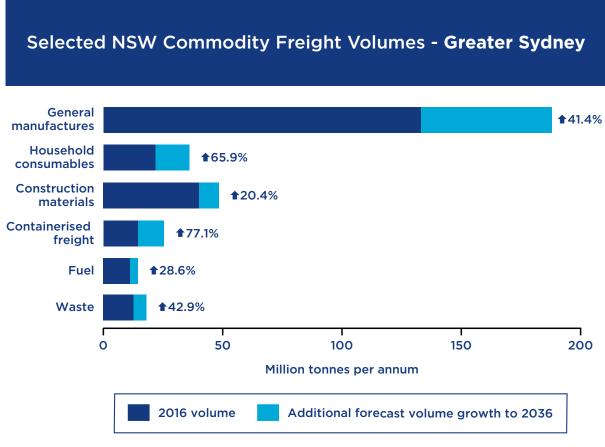


Figure 4. Selected NSW Commodity Freight Volumes (Greater Sydney and Regional)

Source: Transport Performance and Analytics, TfNSW

<sup>&</sup>lt;sup>3</sup> NSW Department of Primary Industries, International Engagement Strategy Working with Agribusiness p. 5

#### Selected NSW Commodity Freight Volumes - Regional NSW

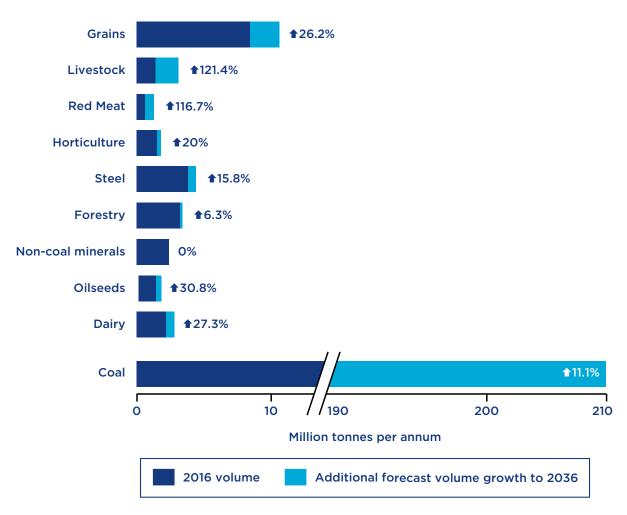


Figure 4. Selected NSW Commodity Freight Volumes (Greater Sydney and Regional)

Source: Transport Performance and Analytics, TfNSW

#### Overview of the freight network

The NSW freight network is made up of ports, shipping channels, airports, prescribed airspace, roads, rail lines, pipelines, intermodal terminals and freight-related precincts. As shown in Figure 5, the majority of freight is moved by road. The major exception is coal, which is generally transported by rail. In addition, almost half of NSW agricultural produce is moved by rail.

There are opportunities to improve freight efficiency by shifting some commodities away from road transport to:

- rail, which is well-suited for transporting containerised freight, such as agricultural exports and construction materials, over longer distances
- coastal shipping, which is well-suited for transporting construction materials and other bulk freight.

#### Mode share by commodity 2016

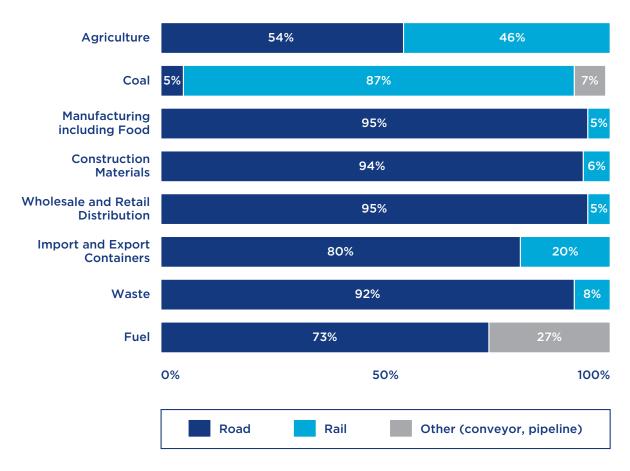


Figure 5. Mode share by selected commodities (2016)

Note: Freight is normally moved more than once so may be reflected in more than one mode Source: Transport Performance and Analytics, TfNSW

#### Roles and responsibilities in the freight and ports sector

There are a large number of government and industry stakeholders involved in the movement of freight across the NSW network.

While this Plan sets out the NSW Government's priorities for the freight network - many of the initiatives in this Plan depend upon collaboration with industry, local governments and the Australian Government.

At many points in the supply chain these stakeholders have a significant part to play - particularly at our ports and airports, and on our rail network, which involve high levels of coordination.

#### The many links in the freight supply chain

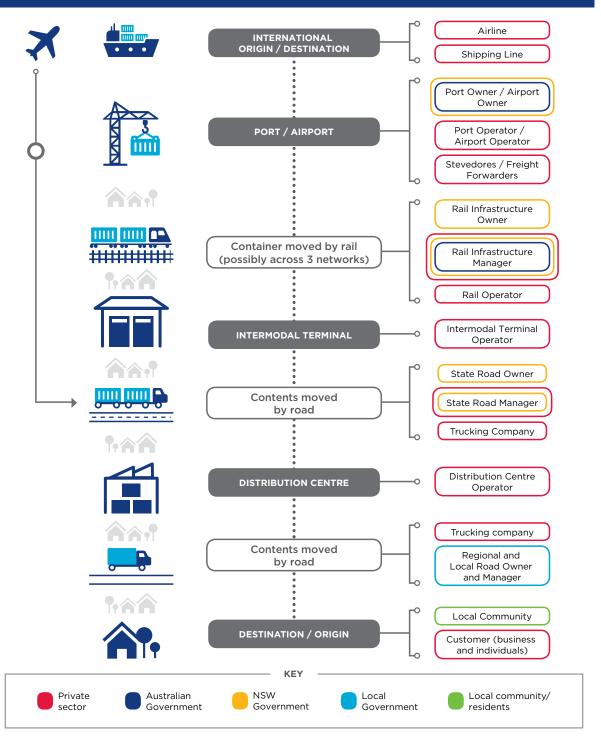


Figure 6. Indicative supply chain demonstrating the interfaces between government, industry and the community

#### Important shared responsibilities

#### Infrastructure ownership and management

Local councils, the Australian Government and industry, as well as the NSW Government, own and manage transport infrastructure.

The role of the government in relation to major infrastructure assets leased to and managed by private entities (such as rail networks, Port Botany, Port Kembla and Newcastle Port) is to ensure participants in the supply chain have access to them and to monitor pricing and compliance with lease agreements.

The NSW Government will continue to plan for and invest in new and improved freight networks.

### Embracing technology that improves efficiency and saves lives

Industry has embraced efficiency and safety enhancing technology such as higher productivity vehicles, in-vehicle telematics and automation in warehouses and at ports. It is also exploring the use of emerging technology, such as drones in freight deliveries and blockchain in supply chain monitoring and payment functions.

The NSW Government also has an important role to play in:

- adopting technological solutions to issues such as infrastructure capacity constraints (for example, Smart Motorway technology) or the need for better coordination of the various participants in the freight supply chain (for example, a mobile phone app displaying live cargo movements at Port Botany for truck operators and others)
- fostering an environment where technology is embraced, by bringing together technology companies, academia and the freight industry to co-create technological solutions to real-world problems in the freight network through, for example, the NSW Government's <u>Sydney Startup Hub</u>
- ensuring that regulation does not hamper innovation.





#### **Employment**

The freight industry, employers and government will need to work together to:

- grow jobs in the sector and assist those whose jobs are replaced by new technology to develop the necessary skills to fill the jobs of the future
- embrace greater representation of women, Aboriginal and Torres Strait Islander people and other underrepresented groups in the freight industry.

The Austroads review of the National Heavy Vehicle Driver Competency Framework published in May 2018 was undertaken in consultation with a range of stakeholders including the heavy vehicle industry. The review examined heavy vehicle licence progression, waiting periods, minimal driving experience and options to fast track heavy vehicle licence progression.

Austroads will assess the feasibility of the recommendations, including impacts on road safety, in consultation with road agencies with a view to developing a nationally consistent approach to deliver greater benefits to industry through improved licensing arrangements for heavy vehicle drivers.

#### Safety

Australia has established national regulators with responsibility for heavy vehicle, rail, shipping and commercial vessel safety.<sup>4</sup> The NSW Government and local councils are the managers of the NSW road network. The NSW Government has responsibility for road rules and other regulation of the road network, working with national bodies including the National Heavy Vehicle Regulator. It is also responsible for ensuring the safety of rail infrastructure and some aspects of maritime safety (including commercial vessel, recreational vessel and maritime infrastructure safety).

Participants in the freight supply chain have a significant role to play in adopting safe work practices, considering the safety of others and complying with safety laws, such as <u>Chain of Responsibility (COR)</u> requirements for road transport which place safety obligations on all parties involved in the movement of freight across supply chains.

<sup>&</sup>lt;sup>4</sup>The National Heavy Vehicle Regulator, the Office of the National Rail Safety Regulator and the Australian Maritime Safety Authority.

#### **Greater Sydney production and freight movements**

The Greater Sydney freight task is significant. Not only does the city's freight network support the demands of its growing population, it also plays a vital role in connecting the State and the rest of the country to international markets.

Freight volumes moving through the city each year are expected to increase by about 50 per cent by 2036.<sup>5</sup>



#### Changing freight demand in Greater Sydney

Greater Sydney's freight task is being transformed by population and economic growth, and changing consumption patterns. Figure 7 shows projected changes in commodity movements associated with population growth and increases in household consumption for each part of Greater Sydney. Some of the key trends behind these forecasts are described below.

### Construction materials moving over greater distances

To support Greater Sydney's growing population, there will continue to be strong demand for construction materials for new infrastructure, and residential and commercial development.

The distances over which construction materials need to be transported is growing as local resources are depleted, with increasing volumes now sourced from the South East and Tablelands (Southern Highlands), Central Coast and Illawarra-Shoalhaven regions.

#### Increasing consumer deliveries

Last year, online retail sales to Australians were valued at \$24.2 billion, 7.8 per cent of the traditional retail 'bricks and mortar' retail sector. The level of sales was 10.1 per cent higher in December 2017 than a year earlier.<sup>6</sup> The number of high value freight movements in Greater Sydney will continue to grow alongside the growth of e-commerce. It is estimated that every five years e-commerce sales will double.<sup>7</sup> This will add to urban congestion as delivery vehicles compete with other vehicles for finite road and kerbside space.

#### Managing growing volumes of waste

Greater Sydney's waste volumes will increase as the population grows. As the city's existing landfill capacity is depleted, waste will increasingly need to be transported to consolidation points within Greater Sydney before being transported further afield.

<sup>&</sup>lt;sup>5</sup> Transport Performance and Analytics, TfNSW

<sup>&</sup>lt;sup>6</sup> National Australia Bank, NAB Online Retail Sales Index: In-Depth Report - December 2017

<sup>&</sup>lt;sup>7</sup>Research undertaken by Siecap on behalf of Transport for NSW, 2017

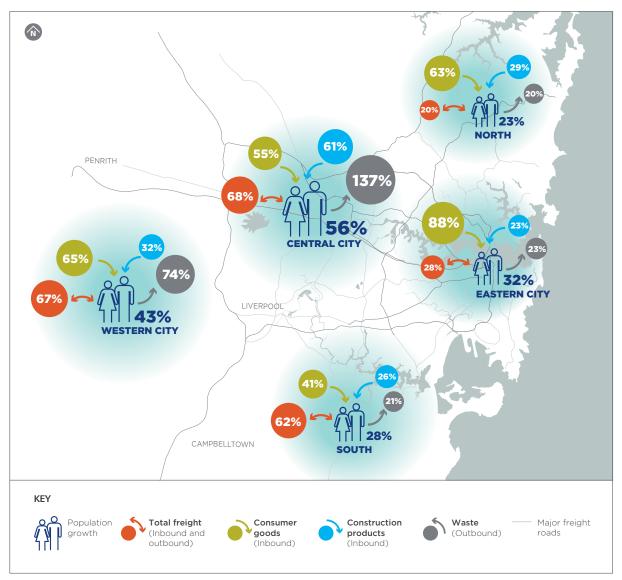


Figure 7. Greater Sydney population growth and changes in freight demand to 2036

Source: Transport Performance and Analytics, TfNSW

#### The Greater Sydney freight network

#### **Ports**

Sydney is home to Port Botany and the Port of Sydney Harbour which includes Glebe Island, White Bay and Gore Bay Terminal (see Figure 8).

Port Botany plays a major role in the NSW economy as a gateway for international trade. It is the primary container port and NSW's primary bulk liquid and gas port. Glebe Island and White Bay support the transport of construction materials into Sydney. The efficient operation of Sydney's ports relies on:

- strong coordination between port owners, stevedores, road and rail managers and service operators
- managing congestion on the connecting roads and rail infrastructure
- ensuring there is sufficient 'landside' capacity for freight, which is particularly important for Port Botany given population growth in the Eastern City and the other land uses in the precinct that also generate freight movements.

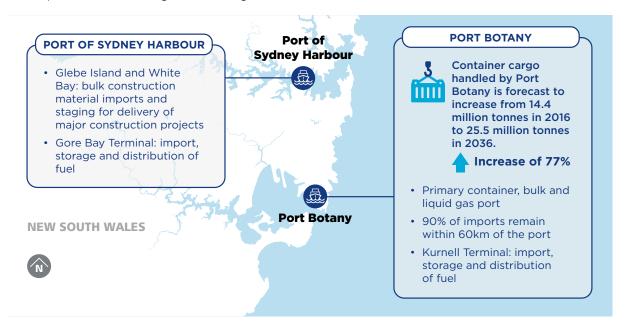


Figure 8. Metropolitan ports

Source: Transport Performance and Analytics, TfNSW

#### **Coastal Shipping**

Coastal shipping can be a viable alternative to road or rail for certain types of freight. The Glebe Island and White Bay precinct is uniquely placed to enable shipping of sand and aggregate to Sydney to service the needs of Greater Sydney's construction boom. This removes the need for trucks to travel into central Sydney with sand and aggregate from outside the area. Coastal shipping is also increasingly being looked at as an attractive alternative to rail for moving less time sensitive freight from NSW to other states.

#### **Airports**

Most air freight (about 80 per cent) is carried in the hold of passenger planes, with the remainder being transported by dedicated freight aircraft.<sup>8</sup>

To support the growth in air freight, a range of constraints will need to be addressed, including:

- congestion on the road network around Sydney Airport
- curfew restrictions which currently limit the type of aircraft permitted to operate overnight freight services to older and smaller aircraft (when larger more modern aircraft may meet desired noise standards). These restrictions do not exist in other airports, such as Melbourne, Perth, Brisbane and Canberra. This means that an entire payload may need to be unloaded and re-loaded onto a different aircraft to reach Sydney on an overnight flight, using a smaller, noisier and less efficient aircraft.

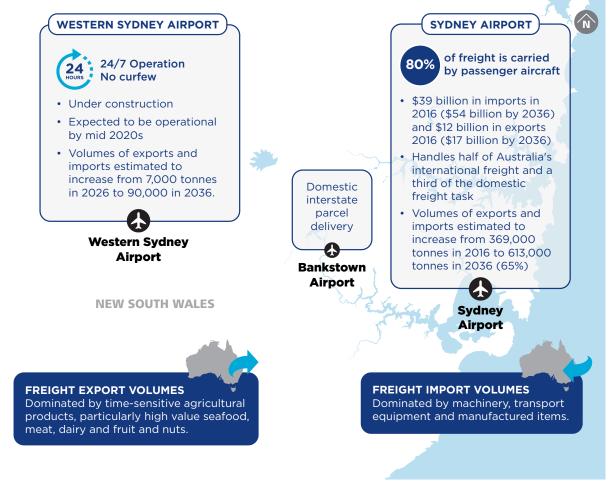


Figure 9. Sydney Airports

Source: Aurecon Australasia Pty Ltd, NSW Air freight projections, July 2018 and Transport Performance and Analytics, TfNSW

<sup>&</sup>lt;sup>8</sup> Sydney Airport Masterplan 2033 p52

#### Creating a freight precinct at Western Sydney Airport

The development of the <u>Western Sydney Airport</u> offers a great opportunity to create a state-of-the-art freight precinct, which will create new export opportunities such as premium agricultural produce from regional NSW.

The NSW Government is working to realise such opportunities by partnering with the Australian Government to attract transport and logistics industries to the area.

The <u>NSW Department of Primary Industries</u> is progressing the development of options for an agribusiness precinct at the new Western Sydney Airport, looking to address the policy, infrastructure, technology and user needs of the precinct. This precinct is aligned to a proposal put forward by NSW Farmers Association, together with KPMG, for a <u>fresh food precinct</u> close to the airport. This proposal highlighted the importance of integrating high value food production with new food processing technologies, to support the development of new agricultural export markets.



Artist impression of Western Sydney Airport and surrounds Source: Western Sydney Aerotropolis Investor Guide: Envisage the future, starting now, May 2018

#### **Greater Sydney roads**

About 80 per cent of the Greater Sydney freight task is undertaken by road.9

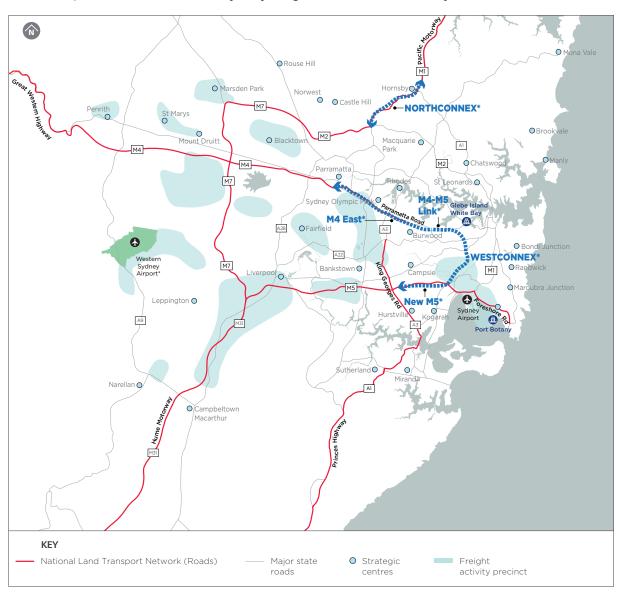


Figure 10. Key roads in Sydney's freight network

Note: \*Projects under construction

#### Greater Sydney's key freight corridors

- M1 Pacific Motorway
- Hume Motorway
- M4/Great Western Highway
- M5 East

- M5 West
- M7 Westlink
- Parramatta Road
- · Foreshore Road

WestConnex and NorthConnex will also become major parts of the freight network once completed.

<sup>&</sup>lt;sup>9</sup> Transport Performance and Analytics, TfNSW

#### Congestion driving up freight costs

Congestion contributes to the cost of moving freight. The Bureau of Infrastructure, Transport and Regional Economics (BITRE)<sup>10</sup> estimates that the cost of avoidable congestion in Sydney was \$6.1 billion in 2015 and projects this to increase to between \$9.5 billion and \$12.6 billion by 2030.

As traffic volumes increase, it will be necessary to manage congestion for key freight areas, particularly:

- around Port Botany and Sydney Airport, supporting the growth of international trade
- on the M5 West, which carries large volumes of both passenger and freight traffic

- on the **M4/Great Western Highway**, which carries freight from the Central West
- around major freight terminals and depots, including Enfield, Chullora, Moorebank, Yennora and the proposed Western City intermodal terminal
- on the M1 Pacific Motorway and A1, to support forecast increases in freight movements to the south.

Congestion will also need to be managed in high-density urban areas, whose roads are being used by increasing numbers of light vehicles delivering goods to homes and businesses. These light vehicles are facing growing competition for both road space and for kerbside parking to allow for pickups and deliveries.

#### Greater Sydney traffic by vehicle type

Traffic from cars accounts for the large majority of vehicles on Greater Sydney's roads. Heavy freight vehicles account for only around 9% of Greater Sydney's traffic.

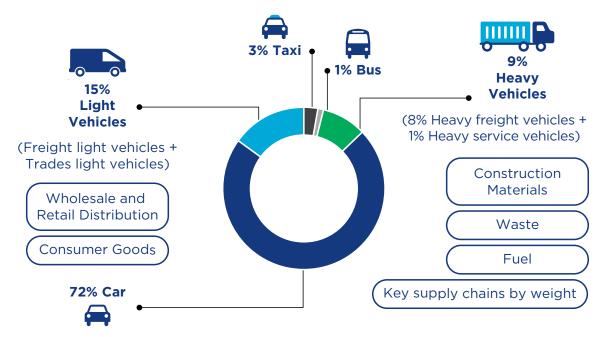


Figure 11. Greater Sydney traffic by vehicle type

Source: The 2014 Sydney Commercial Vehicle Video Surveyundertaken by the Bureau of Freight Statistics, TfNSW

<sup>10</sup> https://bitre.gov.au/publications/2015/is\_074.aspx

#### **Greater Sydney rail network**

Rail is generally used for transporting high volume commodities across larger distances. The main commodities transported by rail in Greater Sydney include:

- aggregates (sand and quarry material) to Sydney
- construction and household waste transported from transfer stations in Sydney
- **import and export containers** passing through Port Botany to and from intermodal terminals across NSW
- interstate and regional cargo (including coal and steel) moving to or through Sydney.

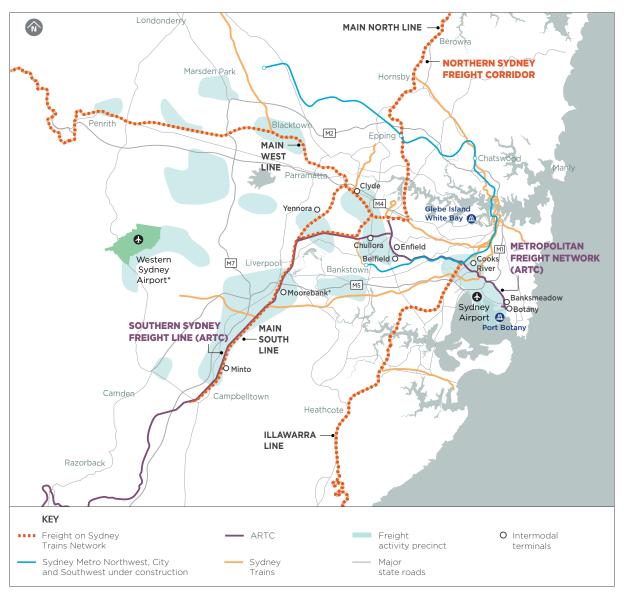


Figure 12. Sydney's freight and passenger rail network

Significant rail freight capacity upgrades in Sydney include:

- Port Botany Rail Line Duplication the last three kilometres of railway line to Port Botany
- Cabramatta Loop passing loop to support operations at Moorebank Intermodal Terminal
- Western Sydney Freight Line corridor protection for future rail connections to serve Western Sydney Airport, Western NSW and Port Botany.

#### Freight competing with passenger services on the rail network

On the Sydney Trains Network approximately five per cent of rail paths are allocated to freight, with another four per cent made available on an ad-hoc basis. NSW legislation requires that passenger trains are given reasonable priority.

Use of rail services across the greater metropolitan area has increased significantly in recent years, with patronage growing 6.9 per cent between 2015-16 and 2016-17, and 27.1 per cent over the five-year period before 2016-17. As the population and rail patronage continues to grow, so too will competition for access to the shared rail network.

Timetabling of freight and passenger services can involve negotiation between the three rail infrastructure managers and Transport for NSW. More efficient allocation of train paths can be achieved through more timely exchange of information and the inclusion of freight rail operators.

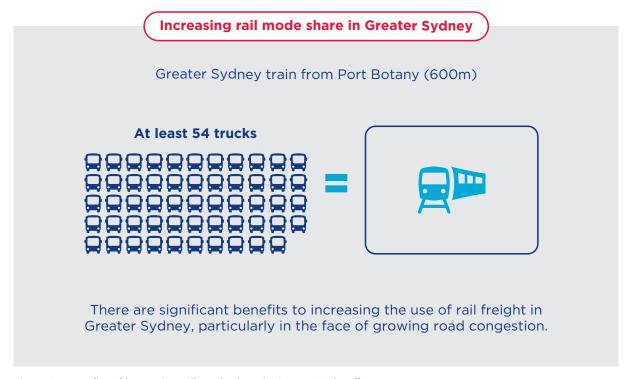


Figure 13. Benefits of increasing rail mode share in Greater Sydney<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> Transport Performance and Analytics, 2017

<sup>&</sup>lt;sup>12</sup> Freight Industry Branch, TfNSW, based on a 600m metropolitan port shuttle moving into and out of Port Botany and average port truck and train container densities.

#### Reducing avoidable rail freight delays

Freight trains miss their scheduled paths on the rail network due to various reasons including, network performance, infrastructure, weather and loading issues. Breakdowns and mechanical issues also prevent optimal operation - but only 10 per cent of these delays are avoidable.



#### Intermodals essential for increasing rail freight

Intermodal terminals within Greater Sydney are critical for increasing the utilisation of the rail freight network, particularly containers to and from Port Botany. There are a number of metropolitan intermodals under construction, including the Moorebank Intermodal Terminal.

While the NSW Government does not have a role in operating intermodal terminals, it can play a role in identifying, protecting and zoning land for intermodal terminals and assisting with access through necessary road and rail link extensions.



#### Regional NSW production and freight movements

Regional NSW accounts for 30 per cent of NSW's Gross State Product (GSP)<sup>13</sup> and 33 per cent of goods manufactured in NSW. Regional NSW's freight task is forecast to grow by around 12 per cent by 2036 – from 255 million to 286 million tonnes.<sup>14</sup> Figure 14 shows the projected changes in the largest freight volume commodities for each part of regional NSW.

#### Specialisation of the regions

Economic activity in regional NSW is becoming increasingly specialised, with the regions producing fewer types of goods and focusing on exporting outside of their region. Some key trends impacting on the major commodities referred to in Figure 14 are described below.

#### Coal

Movement of coal for export, local power generation and steel manufacturing makes up 74 per cent of the total regional freight task. Coal contributes approximately \$7.6 billion in regional NSW, with two thirds of this value (\$5 billion) coming from the Hunter Region. Coal freight volumes, however, are expected to grow less rapidly than other regional commodities over the next 20 years.

<sup>&</sup>lt;sup>13</sup> Regional Prospectus <a href="https://www.investregional.nsw.gov.au">https://www.investregional.nsw.gov.au</a>

<sup>&</sup>lt;sup>14</sup> Transport Performance and Analytics, TfNSW. Figures are estimates of demand

<sup>&</sup>lt;sup>15</sup> Transport Performance and Analytics, TfNSW, Australian Bureau of Statistics, 5220.0 Australian National Accounts: State Accounts Table 2; and "The contribution of mining to the New South Wales economy", Centre for International Economics (CIE) for NSW Minerals Taskforce, Table 1 page 2, Sept 2014.



### Agriculture and livestock

Export and domestic grain movements represent the second biggest freight task by volume in regional NSW after coal, at 4.2 per cent of the regional freight task. The major areas of production are the Riverina Murray, New England North West and Central West Orana.

Livestock production is also forecast to grow significantly at an average annual rate of around 4 per cent, or more than doubling volume over the next 20 years.<sup>17</sup> A similar major increase is therefore expected for transport movements of livestock and meat from the producing regions (Hunter, New England and Northwest, North Coast and Far West) to their markets, including both domestic and export consumers.

Other key agricultural commodities for regional NSW include forestry and timber products, horticulture, cotton, oil seeds, dairy products and wine.<sup>18</sup>



### Manufacturing

The Hunter and Central Coast regions have the most significant manufacturing activities outside of the Greater Sydney region. The Hunter also handles approximately 37 per cent of fuel in NSW, which includes fuel transported by pipeline from Port Botany to Newcastle for distribution.

<sup>&</sup>lt;sup>16</sup> Transport Performance and Analytics, TfNSW

<sup>&</sup>lt;sup>17</sup> Transport Performance and Analytics, TfNSW

<sup>&</sup>lt;sup>18</sup> Transport Performance and Analytics, TfNSW

#### **Construction materials**

Construction material demand is significant in Greater Sydney and will continue to grow. As nearby resources are exhausted or cannot be developed for other reasons, future supply of quarry materials will need to be sourced from regions further afield including the Hunter, Illawarra and Shoalhaven.

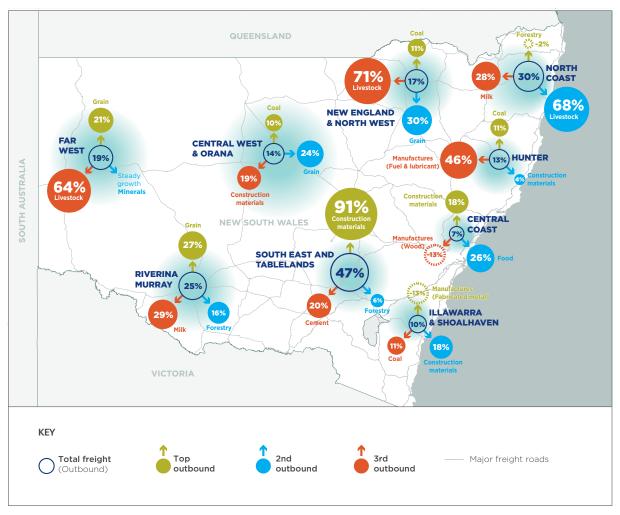


Figure 14. Map showing forecast growth in the three highest volume outbound freight commodities in each NSW Region to 2036

Source: Transport Performance and Analytics, TfNSW

### The regional freight network

#### **Ports**

Regional NSW is home to four commercial ports: Newcastle, Port Kembla, Eden and Yamba. Of these, Newcastle Port and Port Kembla are responsible for the greatest trade volumes.

#### **Newcastle Port**

Newcastle Port is Australia's largest terminal for coal exports. The coordination of activities of coal producers, rail service providers and terminal operators through the Hunter Valley Coal Chain has played a key part in growing exports through Newcastle Port.

The port's leasehold owners, the Port of Newcastle, are planning to diversify and expand the port's trade base. Medium to long-term constraints on this expansion include the pressures on the shared rail network in the Upper Hunter Valley and access via the New England and Golden highways.

#### Port Kembla

Port Kembla is NSW's largest terminal for vehicle imports and grain exports, and the second largest terminal for coal exports. Port Kembla has been identified as the location for the development of a future container terminal to augment capacity of Port Botany when required.

#### Interstate ports

Producers in southern NSW may also choose to transport goods to the Port of Melbourne whilst producers in northern NSW may transport produce to the Port of Brisbane.

The NSW Government supports the use of rail for the movement of freight. While there is sufficient rail capacity in the short to medium term, freight rail access to Port Kembla is recognised by Infrastructure Australia as an initiative of national priority.



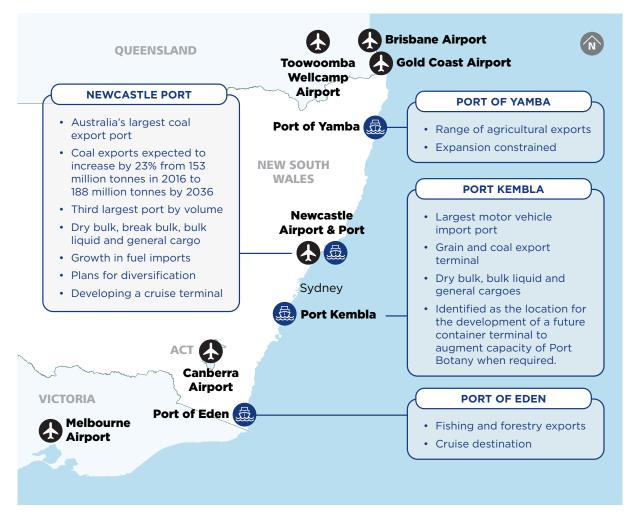


Figure 15. Regional ports and airports

Source: Data from Transport Performance Analytics, TfNSW

#### **Regional airports**

Regional airports play a relatively small role in the movement of freight but this may change in the future, particularly with the continued growth of e-commerce. In particular, regional airports with international services could provide opportunities for regional producers to reach overseas markets. Interstate airports such as Canberra Airport and Toowoomba Wellcamp Airport (in Queensland) are increasingly being used by NSW businesses for international air freight.

#### Regional NSW road network

With the exception of coal, most commodities in regional NSW are transported by road – the Hume and Pacific highways move the majority of the regional road freight task. Other important regional roads for freight include the Newell, Golden, Great Western, Sturt and New England highways. These routes will continue to experience growth over the next 20 years.

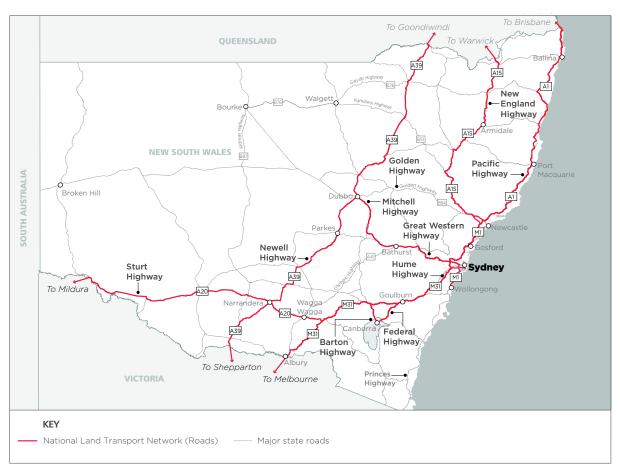


Figure 16. Regional NSW road network

### Making regional roads more efficient and safer

The efficient movement of freight to and from regional NSW will be supported by:

- improved east-west connections including improvements to the Great Western and Golden highways
- maintenance and capacity enhancements
  to make roads safer and more accessible
  for higher productivity vehicles, such as
  through improvements to road surfaces,
  lane and shoulder widths, intersections,
  level crossings and bridges and other
  safety infrastructure upgrades
- reducing the impact of flooding through better planning for roads through floodprone areas, such as the Newell Highway.

### Managing congestion around Gosford, Newcastle and Wollongong

The increasing number of freight distribution sites, together with growing populations, will result in more traffic around Gosford, Newcastle and Wollongong.

Roads with steep gradients, such as Mount Ousley near Wollongong, also pose challenges for heavy vehicles, although recent trials on this road have shown that high productivity vehicles (HPVs) are better able to handle these grades than existing vehicles.

### Regional NSW rail network

The regional rail network is used to transport coal and non-perishable agricultural products such as grain to ports and distribution centres. Rail is also increasingly used for bulk transport of construction materials and waste.<sup>19</sup>

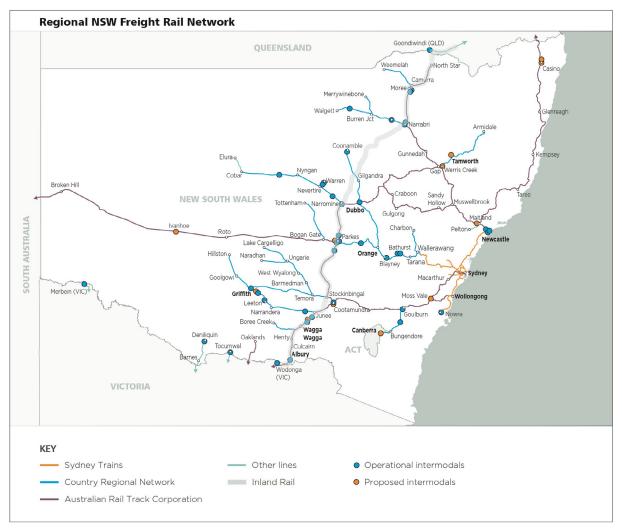


Figure 17. Regional NSW freight rail network

<sup>&</sup>lt;sup>19</sup> Transport Performance and Analytics, TfNSW

#### Improving the efficiency of freight rail

Issues that impact on the efficiency and capacity of the regional rail network include:

- **limits on train speeds and capacities** as a result of limits on axle weight capacity, track speed, and siding and passing loop lengths
- catering for the variability of agricultural produce, whose volumes change with the seasons and weather conditions with good harvest seasons placing pressure on main rail lines and poor harvests reducing the viability of connecting lines
- **pressure on shared networks** from increased urban expansion towards the Southern Highlands, Blue Mountains and Central West, and Hunter Valley
- increased pressure on the Hunter Valley rail corridor with coal extraction moving further north
- increased pressure on rail networks in the south (the Main South Line and Illawarra Line) with greater production in this area and increasing reliance on rail
- multiple network managers that rolling stock operators must deal with if transporting commodities across NSW by rail.

### Parkes to become a major freight hub through Inland Rail

The private sector is expected to invest in intermodal terminals along the Inland Rail corridor, with Parkes emerging as a major freight hub. Parkes is located within 12 hours by road or rail to 80 per cent of Australia's population and has the only intermodal terminals in NSW that facilitate double stacking of containers to Perth.

Investment in improved east-west rail freight networks and connectivity with NSW ports will be critical for maximising the benefits of Inland Rail for NSW.

Regional intermodal terminals are critical to support container exports (including containerised grain) and improve regional supply chains.







3

# How We Will Respond To The Challenges And Opportunities

### About this chapter

The chapter outlines key challenges and opportunities for the freight and port industry under each of the Plan's five objectives. Under each objective, we provide:

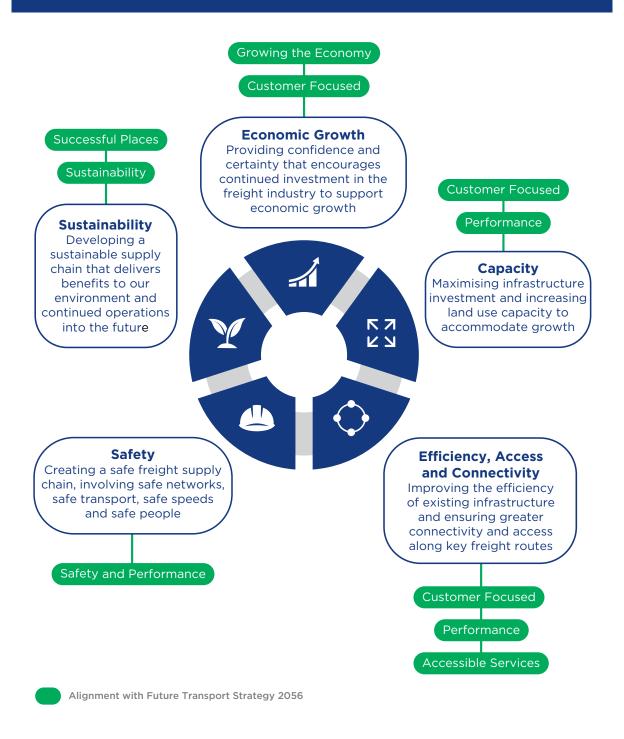
- the strategic target for measuring progress
- goals and supporting actions for reaching the strategic target.

### The five objectives

The Plan's five objectives were drawn from our analysis of the sector, together with:

- broader NSW Government objectives, including the <u>Premier's</u> <u>Priorities</u> and the <u>Road Safety Plan</u>
- · consultation with key stakeholders.

### Objectives of the NSW Freight and Ports Plan



# Objective 1: Economic growth



Providing confidence and certainty that encourages continued investment in the freight industry to support economic growth

### Strategic target for Objective 1

Progress will be measured against the delivery of key freight projects and programs on time and on budget, including over \$5 billion of infrastructure projects in the pipeline by 2023.<sup>20</sup>



<sup>&</sup>lt;sup>20</sup> Value of committed key freight projects as at July 2018

### Goal 1: Encourage investment by providing greater certainty regarding government priorities and funding

As investment in the freight industry – particularly for infrastructure – has long pay back periods, industry needs certainty regarding government priorities and future plans so that they can have confidence in their long-term investments.

To address this issue, the NSW Government will provide quality and timely information about planned investments in the freight sector. To complement this state-based information, the NSW Government will work with the Australian Government, together with other state and territory governments, to publish national road expenditure and investment plans for the next four years.

The NSW Government will also ensure there are sustainable funding sources to deliver freight network improvements. Sources of NSW Government funding for the freight sector include the <u>Restart NSW</u> fund and the NSW <u>Regional Growth Fund</u>.

As revenue from fuel excise may continue to decline (through increased fuel efficiency and use of electric vehicles), new funding sources or models are being considered at a national level. For example, the reforms to heavy vehicle road user charges being investigated by the Transport Infrastructure Council, as part of its <a href="Heavy Vehicle Road Reform">Heavy Vehicle Road Reform</a> program, might underpin increased investment in improving road access.

### NSW Government actions to support this goal

#### Deliver key freight programs and projects

The NSW Government will deliver and improve key freight programs and projects, including the Restart NSW funding committed from 2017/18 to 2022/23 for Fixing Country Roads (\$543 million) and Fixing Country Rail (\$400 million), which will involve greater consultation with infrastructure managers and the freight industry.

### Work closely with industry to enable long-term investment

The NSW Government will work in partnership with key infrastructure partners to enable long-term investment. In particular, it will:

 work with commercial infrastructure operators, including NSW Ports and Port of Newcastle, as they deliver their master plans

- support the Port of Newcastle to explore trade opportunities in new markets
- support the ARTC with its corridor strategies, including the <u>Hunter Valley</u> <u>Strategy</u> and <u>Sydney Metropolitan</u> <u>Freight Strategy</u>.

### Support national reforms to investment in the freight network

The NSW Government will:

- work closely with the Australian, state and territory, and local governments to support the delivery of the <u>Heavy</u> <u>Vehicle Road Reform</u> program
- support the work of the <u>Transport</u>
   <u>Infrastructure Council</u> to provide greater information to industry on road expenditure and investment plans.

### Goal 2: Simplify and harmonise regulation

Complex and varying regulation across state and territory boundaries can increase business costs. To address this issue, the NSW Government will continue to simplify and harmonise freight industry policies and regulation by supporting national regulatory reform and improvements to NSW legislation. This will be critical for achieving the State Priorities of making NSW the easiest state to start a business and to be the leading Australian state in business confidence.

Regulatory improvements will be critical for encouraging investment needed in the next generation of newer, safer and more productive vehicles to operate on key freight routes and corridors across NSW.

### NSW Government actions to support this goal

### Support reforms to transport laws and regulatory bodies

The NSW Government will support legislative reforms to ensure national harmonisation of laws and regulatory bodies governing the freight industry and reduce industry costs, including:

- the transfer of regulatory functions under the Heavy Vehicle National Law from Roads and Maritime and other state-based agencies to the National Heavy Vehicle Regulator
- the work of the Transport Infrastructure Council in reforming the Heavy Vehicle National Law through initiatives such as developing a national system for heavy vehicle registration and reviewing height and mass requirements
- advocating for Australian legislative amendments to facilitate the greater use of coastal shipping
- conducting ongoing reviews of NSW legislation and policies governing the freight industry to ensure that it does not impose unnecessary burdens upon industry or hamper innovation.

### Improve information and remove red tape for rail operators

The NSW Government will assess and deliver projects to improve information and remove red tape for rail operators, including investigating improvements to Rail Vehicle Accreditation, which could streamline approvals for rolling stock operators.

### Assess freight industry compliance costs

To support the above actions, the NSW Government will assess the cost to the freight industry of complying with key regulatory requirements and prioritise red tape reduction initiatives.

### Goal 3: Improve freight data

Data on the operation, performance and value of supply chains and the freight network is fragmented and not always shared.

Consistent with its <u>Open Data</u> Policy, the NSW Government has released the data used to prepare this Plan (provided on the <u>TfNSW website</u>). The NSW Government is committed to building on this evidence base and working with industry to improve the data available to guide investment in the network, support innovation and facilitate improvements for freight.

### NSW Government actions to support this goal

### Publish and update freight forecasts and performance measure data

The NSW Government will:

- work with industry to maximise the use and accuracy of data released with this Plan, and update it every 24 months
- regularly publish performance measure data, showing progress towards the targets set out in this Plan.

#### Enhance freight data

The NSW Government will:

- create a 'Freight Hub' on the TfNSW website that links multiple sources of data to support evidencedriven decisions
- consolidate rail freight data held by various government agencies and stakeholders into a single database with visualisation tools to assist in analysis.

### Improve data sharing

The NSW Government will:

- continue to work with the Australian Government to deliver key priorities in the National Infrastructure Data Collection and Dissemination Plan, including improvements to data on road freight and measures on the contribution of freight to the economy
- facilitate greater sharing of data where this will provide benefits across supply chains, such as in the movement of rail freight to ports and better understanding the evolving land use needs of the freight industry.

# Objective 2: Efficiency, connectivity and access



Improving the efficiency of existing infrastructure and ensuring greater connectivity and access along key freight routes

### Strategic target for Objective 2

Progress will be measured against the following targets that track the use, reliability and efficiency of NSW road and rail networks:

- 90 per cent of peak travel on key road routes is on time
- rail share for freight moved to and from Port Botany increased to 28 per cent or 930,000 Twenty-foot Equivalent Unit (TEU) by 2021 (against 2016 base of 17.5 per cent/388,552 TEU)
- increasing the length of the State Road network approved for appropriate access under priority restricted access vehicle networks
- maintaining the number of train paths required by freight within the shared metropolitan rail network.



### Goal 1: Support the use of technology to improve efficiency and productivity

New technology will play a significant role in improving the efficiency of existing infrastructure and transport. The NSW Government is already delivering a number of technology projects to improve the efficiency of freight networks including:

- the M4 Smart Motorway project
- the Cohda Wireless trial of connected technology on three key freight routes in Sydney, to determine how prioritising heavy vehicles through traffic lights might improve overall traffic conditions.

TfNSW's <u>Smart Innovation Centre</u>, <u>Future</u> <u>Transport Digital Accelerator</u> and Sydney Coordination Office (see case studies on pages 53 and 58-59) can provide opportunities for entrepreneurs in the freight industry to work with others, including incubators, technology partners and industry. Through these partnerships,

they can develop products and digital solutions that will improve the efficiency of the freight network.

"As it is not always feasible to build new assets, it is essential for NSW agencies to make the most of existing assets... The management and use of assets must become smarter, more productive and more efficient to avoid infrastructure spending increasing unsustainably."
The State Infrastructure Strategy



### Smart Innovation Centre (SIC) and the Future Transport Digital Accelerator

In 2016 TfNSW released the <u>Future</u> <u>Transport Technology Roadmap</u> to put NSW at the forefront in adopting technologies that will make our future transport networks safer and more productive. This roadmap led to the creation of the Smart Innovation Centre (SIC) and the Future Transport Digital Accelerator (FTDA.)

The FTDA involves a six to eight week customer-centred design process aimed at developing digital solutions to

transport problems. It is located within the NSW Government's Sydney Startup Hub, which was designed to provide startups with access to networks, skills, funding and leadership in one central startup precinct.

The SIC has a broad remit to facilitate collaboration between government, industry and the research sector to develop and trial innovative transport technology in NSW.

### NSW Government actions to support this goal

### Foster trials of emerging technology by industry

The NSW Government will continue to facilitate trials of emerging technology that can improve the efficiency and safety of freight activities in NSW, such as:

- heavy vehicle platooning on major freight corridors
- last-mile deliveries by aerial drones in suitable areas
- last-mile deliveries by land-based drones in urban areas
- vehicle-to-infrastructure (V2I) systems to optimise traffic signal timing and reduce travel times for freight vehicles along key freight corridors.

### Adopt new technologies to improve the efficiency of government infrastructure

The NSW Government will explore opportunities to apply new technology to manage its networks and will ensure the freight industry is provided with opportunities to provide input into major projects to improve network efficiency, including:

- the M4 Smart Motorway project and its possible expansion to other key motorways
- the <u>Intelligent Congestion</u>
   Management Program (ICMP)
- working with the ARTC to develop an interface between its Advanced Train Management System and the European Train Control System used in Sydney.

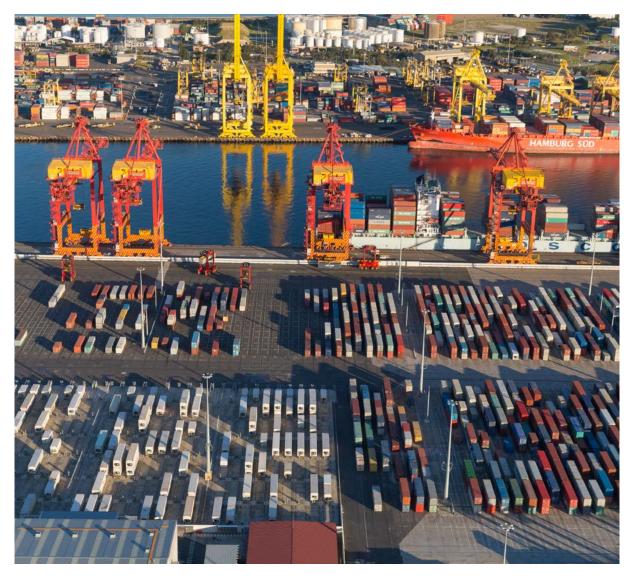
### Goal 2: Improve flow of freight through trade gateways

Recognising Port Botany's role as the primary container facility in NSW and plans for Port Kembla as the location for the development of a future container terminal, the efficient operation of Port Botany and Port Kembla requires the coordination of a wide range of stakeholders, including stevedores, road and rail freight operators and networks.

The Cargo Movement Coordination Centre (CMCC) was established in 2014 to better coordinate the activities of those involved in the supply chain at Port Botany and Port Kembla. The work of the CMCC will be particularly important to meet the increase in trade volumes at Port Botany.

The Port Botany Landside Improvement Strategy, which led to the development of the CMCC, has already achieved substantial improvements in truck turn-around times within the Port Botany precinct, from up to five hours to under 30 minutes. This was achieved through enforcement of mandatory standards for the activities of road carriers and stevedores under the Ports and Maritime Administration Regulation 2012.

As the Port Botany precinct is impacted by Sydney Kingsford Smith Airport, the NSW Government will also work with the Sydney Airport Corporation to explore ways to improve the efficiency of operations in and around the airport.



### NSW Government actions to support this goal

### Improve Port Botany rail window management

The NSW Government will improve the management of rail windows at Port Botany, through better coordination of stevedores, rail operators and rail infrastructure managers.

### Investigate productivity boosting technologies for Port Botany

The NSW Government will investigate the adoption of new technologies that can improve the productivity of the Port Botany supply chain, which may include:

- drones (to investigate reasons for delays in moving goods within the Port Botany precinct)
- a tracking system for containers using latest technology such as sensors with barcodes or licence plate recognition software
- a new Port Community System to remove repetitive entry of the same information, as well as offering better visibility to the NSW Government and stakeholders
- an Advanced Container Booking System to ensure certainty of collection and utilisation of unused booking slots
- a live performance data app relating to the movement of cargo from and to Port Botany by rail (building on the road freight app released in August 2017).

### Investigate second truck marshalling area in Port Botany

The NSW Government will investigate a second truck marshalling area in the Port Botany area to cater for additional growth, serve all stevedores and possibly offer specialised transport services (e.g. for dangerous goods vehicles).

### Improve movement and utilisation of empty containers

In collaboration with shipping lines, container terminal stevedores, intermodal terminals and empty container parks, the NSW Government will investigate how to improve both the movement of empty containers into and out of Port Botany (including the use of rail) and their utilisation.

### Explore 'upline' opportunities at Port Botany

Investigate 'upline' opportunities for improving Port Botany efficiency, for example greater use of Enfield Yard.

# Advocate for an outcomes-based approach to managing noise emissions from freight aircraft operating in the Sydney Airport curfew period

The NSW Government will encourage the Australian Government to work with industry and the community to trial an outcomes-based approach to specifying the maximum noise emissions for freight aircraft operating in the Sydney Airport curfew period, rather than the current approach requiring the use of a specified type of older aircraft.

### Goal 3: Improve road freight access

A number of more modern heavy vehicles that can carry greater loads (known as high productivity vehicles or HPVs) have restricted access to NSW freight routes, in particular level 2 and 3 modern Performance Based Standards (PBS) vehicles. These restrictions limit the efficiency of road freight and contribute to congestion because they result in a greater number of vehicles being required for the road freight task.

Expenditure is needed to further upgrade road infrastructure to accommodate safer and more productive higher productivity vehicles that may be longer and heavier. TfNSW has developed a Heavy Vehicle Access Policy Framework (HVAPF) that identifies key freight routes and the types of HPVs that should be permitted to operate on them. This will guide investment in road infrastructure, including the identification of network constraints and the prioritisation of network improvements on council and State Roads.

As local councils are the owners and managers of most of the NSW road network, they will play a vital role in ensuring that this policy delivers real productivity improvements by granting access to vehicles on identified freight routes where the infrastructure can support them and prioritising maintenance and network improvements to support access.

Local council support for schemes established to facilitate more efficient transport of particular commodities is also crucial. These schemes include the <u>Grain</u> Harvest Management Scheme, Sugar Cane Harvest Management Scheme, NSW Livestock Loading Scheme and Safety, Productivity and Environment Construction Transport Scheme (SPECTS).

In addition, there are restrictions on the ability to efficiently transport dangerous goods on the road network. Prohibitions on the use of tunnels, and additional restrictions imposed on the use of certain roads to transport dangerous goods, is placing added pressure on existing road corridors to move increasing volumes of dangerous goods. For example, restrictions imposed on the transport of dangerous goods in proximity to Port Botany have resulted in two roads (Foreshore Road and Denison Street) remaining to provide access for vehicles transporting dangerous goods.

### NSW Government actions to address this goal

### Implement the NSW Heavy Vehicle Access Policy Framework

The NSW Government will implement the NSW Heavy Vehicle Access Policy Framework (HVAPF) that establishes networks of specified roads that can be used by higher productivity vehicles across the whole of NSW, reducing the need for operators of PBS fleets to obtain permits on a case by case basis.

### Fund infrastructure improvements to increase HPV road access

The NSW Government will continue to provide funding to regional councils to improve road freight access on local and regional roads through the Fixing Country Roads program and to replace or upgrade bridges in key regional locations under the Bridges for the Bush program. The NSW Government will evaluate the productivity benefits resulting from funding made available under these schemes to ensure that benefits are realised.

The NSW Government will also continue to provide funding under the Regional Road Freight Corridor Fund to upgrade key regional highways, ensuring that investment targets freight productivity upgrades on key east-west routes linking the National Land Transport Network via a top-down strategic approach, supported by completed corridor strategies and business cases.

In addition, the NSW Government will investigate a program similar to Fixing Country Roads to fund improvements to allow greater mass and more productive vehicles on roads and bridges in identified freight links in metropolitan Sydney for key commodities such as construction materials.

### Assist local councils in making HPV access decisions

The NSW Government will assist local councils to make timely access decisions by providing information to assist in identifying key freight corridors, assessing bridge and pavement capacity, understanding the safety features of PBS vehicles and their impact on reducing truck movements. This will include:

- support for the continued use and development of the <u>Restricted Access</u> <u>Vehicle web-based Route Assessment</u> <u>Tool</u> by local councils
- education forums for local councils and their communities being conducted by Roads and Maritime.

### Expand the coverage and uptake of heavy vehicle mass concession schemes

The NSW Government will expand the coverage and uptake of existing heavy vehicle mass concession schemes and ensure they provide improved safety, environmental and productivity outcomes.

#### Review dangerous goods transport

The NSW Government will ensure that, where feasible, new tunnels include best practice design to provide greater flexibility for the movement of dangerous goods and identify options to improve the efficiency of vehicles carrying dangerous goods through the NSW Dangerous Goods Transport Working Group.

### Goal 4: Manage freight in key urban centres

A major part of the State's freight and servicing activity is concentrated in key business districts and employment centres such as the Sydney CBD, Macquarie Park and Parramatta. Freight vehicles in these areas face strong competition for limited road and kerbside space between 9am and 12pm on weekdays. As a result, freight vehicle drivers need to walk longer distances to delivery points and therefore dwell longer in kerbside loading zones, further restricting access.

E-commerce sales are also growing rapidly, which is generating more and more deliveries to homes, offices, parcel lockers or other drop-off locations. This is likely to drive an increased emphasis on the remodelling of supply chains.

At the same time, communities are putting a greater emphasis on improving the liveability of urban centres. Such community aspirations are often in conflict with the freight task, as improving liveability often means giving greater priority to pedestrian activity over vehicle movement.

To strike a balance between efficiency of freight and the liveability of our communities, the freight industry needs to consider other approaches to manage the urban freight task. These include:

- improved management of kerbside space
- retiming of freight and non-emergency servicing tasks
- use of alternative modes where practical
- establishment of urban consolidation centres (see Goulburn Street Courier Hub case study on page 59)
- better design and use of off-street facilities.

Within key urban centres, building managers, businesses and logistics companies can produce cost saving efficiencies by developing and implementing delivery service plans for buildings, precinct delivery models and agreements for the sharing of loading docks. As with other global cities, the high cost of land and developments will encourage developers to look for efficient logistics operations that can support their buildings and provide a high level of service to their tenants.

### **Retiming trials**

By retiming deliveries and collections, transport companies can take advantage of capacity in kerbside loading zone space, which exists before 7am, in the afternoon after 3pm, and overnight.

Transport for NSW's Sydney Coordination Office has conducted retiming trials with industry stakeholders. Benefits identified from these trials include:

 up to 50 per cent reduction in travel time to reach Sydney CBD from Western Sydney

- 15-45 per cent reduction in kilometres travelled and travel time within the CBD
- 30-50 per cent reduction in building servicing time
- 30-40 per cent improvement in operator capacity.

Partnerships within supply chains involving transporters, suppliers and their customers are critical to identifying retiming opportunities and maximising potential efficiency gains.

#### **Goulburn Street Courier Hub**

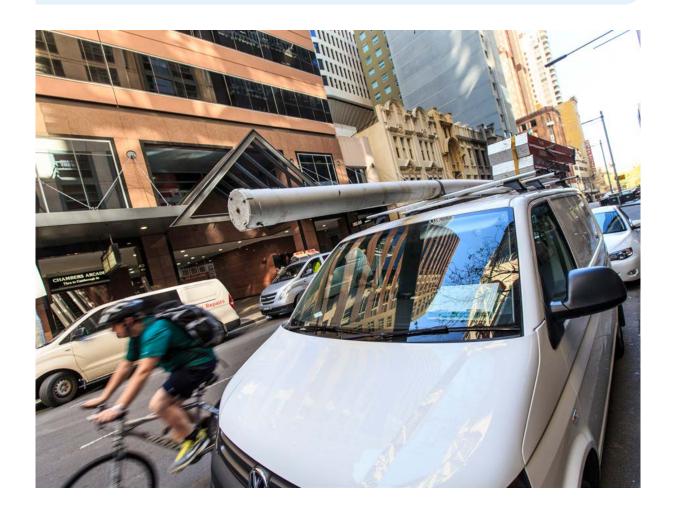
Transport for NSW, in partnership with the City of Sydney, established the Goulburn Street Courier Hub in a car park on the fringe of the Sydney CBD. This hub acts as a consolidation centre, enabling participating couriers to use off-street secure cage and locker facilities to interchange parcels and goods for last mile delivery (or first mile collection) by alternate modes.

Larger conventional vehicles drop off consolidated loads for distribution by bicycle, foot or smaller vehicle. Goods and parcels collected in the CBD can be consolidated into fewer shipments at the hub for delivery to other parts of the city. This cuts down on the number of commercial vehicles and trips required

for the freight task which, in turn, reduces traffic congestion and kerbside demand in the heart of the CBD.

In an assessment conducted by the Sydney Coordination Office in 2016, a conventional courier van and a bike courier were required to deliver 10 parcels from the Courier Hub to locations across the CBD. The bike courier was twice as fast as the van courier. Similar results are found in other cities around the world.

The Courier Hub is currently being used by multiple carriers more than 60 times per day in total. The overall potential for the hub is to reduce vehicle kilometres travelled in the CBD by 26,000 and reduce kerbside usage by 4,600 hours per year.



### NSW Government actions to address this goal

### Work with industry to improve the efficiency of urban freight

The NSW Government will deliver initiatives to improve the efficiency of urban freight, including by:

- continuing to operate the Goulburn Street Courier Hub and exploring opportunities to expand its use by logistics providers and businesses
- working with industry to implement measures to facilitate deliveries outside peak periods
- supporting initiatives for the trialling of alternative delivery modes for freight delivery in busy urban environments
- working with developers to highlight the importance and potential of providing good off-street loading dock facilities and possible precinct solutions that enhance the amenity of urban locations
- encouraging innovative approaches to using space for freight and servicing in the CBD and other key urban centres through concepts such as delivery service plans for individual buildings, precinct delivery models and shared loading docks.

### Improve planning for last mile deliveries

The NSW Government will support local councils to improve the amenity of key urban centres through good planning for freight and servicing in new developments. This will include providing guidelines to assist local councils to:

- understand the impacts of new developments on freight
- understand best practice in designing delivery vehicle access, parking and loading space, freight and parcel storage, and waste removal facilities
- promote the inclusion of logistics facilities in mixed use developments
- investigate ways to improve the management and use of loading zones, including use for overnight delivery and servicing activity
- identify the potential lifting of delivery curfews in highly congested areas, where noise impacts can be appropriately addressed.

### Goal 5: Improve rail freight access and flows

Rail freight offers a fast, reliable and safe alternative to roads. However, there are a number of constraints limiting the volumes of freight that can be moved by rail.

One of the key constraints is the increasing number of passenger rail services competing with rail freight services using the shared rail network. To address this issue, the NSW Government's long-term priority is to provide greater separation of passenger and freight movement on the rail network, which will increase freight capacity and improve safety.

Improving the efficiency of the existing network through smaller scale interventions is also critical, particularly in the short to medium term. This includes addressing:

- network limits on axle weight capacity
- short distances of track where train speed is reduced
- inadequate siding lengths and passing loops.

New and improved intermodal terminals can also increase the utilisation of the rail freight network. While government does not have a role in operating intermodal terminals, it can play a role in identifying, protecting and zoning land for intermodal terminals and assisting with necessary road and rail link extensions.

The Inland Rail project being funded by the Australian Government is likely to increase interstate movement of goods by rail, when it is completed around 2024/25. Transport for NSW is undertaking analysis of the benefits of Inland Rail to maximise outcomes for NSW.

### NSW Government actions to address this goal

### Investigate options for improving infrastructure efficiencies

The NSW Government will review the location of short distance permanent speed restrictions on the rail network and investigate the possibility of small scale interventions to achieve a more consistent speed profile and improved travel times.

### Work with freight operators and owners to increase rail freight efficiency

The NSW Government will work with rail freight operators to optimise freight train cycle times, with an initial focus on freight moving to trade gateways, which will achieve more efficient allocation and use of freight train paths. The NSW Government will also continue to work with network owners and freight train operators to:

- develop optimal freight paths, including the ongoing development of train schedules and timetables
- improve on time presentation of freight trains and address root causes of incidents
- trial higher productivity trains for bulk freight movements to Port Kembla and Newcastle

 consider introducing targets for increasing rail mode share on other rail corridors (in addition to the Port Botany rail corridor mode share target), where this could increase the productivity of the network and industry shares the required data.

### Investigate improvements to rail network booking and operating procedures

The NSW Government will investigate ways to improve the ease and speed of booking and operating on the three rail networks in NSW, including improved responsiveness to operator access requests.

#### Support the delivery of Inland Rail

The NSW Government will support the Australian Government's delivery of the Inland Rail, and:

- ensure the project optimises the movement of freight in regional NSW, and to ports and gateways
- strengthen governance, reporting and performance requirements across the entire NSW ARTC network.

# Objective 3: Capacity



Maximising infrastructure investment and increasing infrastructure and land use capacity to accommodate growth

### Strategic target for Objective 3

Progress will be measured through the realisation of travel time reductions, reliability improvements and improved safety and environmental outcomes through the delivery of key freight projects and programs, and more effective local planning for freight.



### Goal 1: Deliver new infrastructure to increase rail freight capacity

The transport of freight via the shared rail network is constrained by the needs of passenger transport, particularly during morning and afternoon passenger peaks. Urban growth in the Southern Highlands, Western Sydney, Blue Mountains and Hunter Valley will exacerbate this issue.

Transport of freight such as grain and coal to Port Kembla, and steel from Port Kembla will also put increasing pressure on the shared Illawarra Rail Line.

### NSW Government actions to address this goal

The NSW Government is investigating, or has committed to, a number of infrastructure projects that will focus on improving rail freight capacity in areas where it currently depends on the shared network through segregation of freight and passenger lines.

#### **Committed Initiatives:**

#### **Upgrades to Main West Line**

Upgrade the railway line between Orange and the Blue Mountains for freight and passengers (delivery underway, 0-2 years).

#### Port Botany Rail Line Duplication\*

Through Australian Government funding, duplicate the final three kilometres of Port Botany Rail Line, which will allow freight to be more reliably transported by rail to metropolitan intermodal terminals and from regional intermodal terminals to port (subject to Final Business Case, 3-5 years).

### Amplification of the Southern Sydney Freight Line\*

Construct a passing loop at Cabramatta to support operations at Moorebank Intermodal Terminal (subject to Final Business Case, 3-5 years).

### Network improvement projects as part of Fixing Country Rail (Round 1)

Junee to Griffith Line Upgrade, Narromine to Ulan Upgrade projects, Berry to Bomaderry Rail Line and the Omega Tunnels Track Upgrade, Moss Value to Unanderra Line Improvements (Delivery Mount Murray Passing Loop) (delivery underway, 0-2 years).

#### **Outer Sydney Orbital**

Freight rail line and motorway linking the North West and South West Growth Areas, connecting with the Western Sydney Airport Growth Area and future employment lands (10+ years, corridor identified).

#### Initiatives for investigation

### Northern Sydney Freight Corridor Stage 2

Additional freight capacity between Sydney and the Central Coast (5-10 years).

#### Western Sydney Freight Line

Freight rail connections to serve the Western Sydney Airport Growth Area; connect Port Botany to Western Sydney and Western NSW via the Southern Sydney Freight Line; and support the movement of container and bulk freight by rail across Greater Sydney (10+ years, corridor protection progressing now).

### Maldon-Dombarton Railway Line

Single track rail line between the Main South Line at Maldon in the Southern Highlands and Dombarton in the Illawarra (10+ years).

### **Lower Hunter Freight Corridor**

Freight rail line separating the majority of freight and passenger rail services on the congested area between Fassifern and Newcastle and improving amenity by removing most of the freight trains from within urban area (10+ years, planning progressing now and corridor protection planned).

#### **Southern Highlands Freight Capacity**

Greater separation of freight and passenger services particularly between Macarthur and Moss Vale, which is one of the busiest sections for rail freight in NSW outside of the Hunter Valley and is expected to support greater passenger services in response to regional population growth (5-10+ years).

<sup>\*</sup>Projects funded by the Australian Government

### Goal 2: Deliver new infrastructure to increase road freight capacity and improve safety

Sydney's Motorway network is already set to become more connected with the <u>WestConnex</u> and <u>NorthConnex</u> projects underway. The NSW Government is investigating the <u>Sydney Gateway</u> <u>Project</u>, which will provide additional road infrastructure to enhance the connectivity of WestConnex to the busy road freight precincts of Port Botany and Sydney Airport.

The NSW Government has already delivered significant improvements to the State's north-south connections that form an important part of the freight network, particularly the Pacific M1, Hume M31 and Newell A39 highways.

The NSW Government's road project investments will focus on improving east-west connectivity, including access across the Great Dividing Range from the agricultural industries in the west to the urban markets and ports in the east. These investments will be complemented by an investigation into other initiatives to improve this crossing.

The NSW Government also has a vision to deliver a motorway bypassing Greater Sydney, connecting the Central Coast, Western Parkland City and Illawarra.

### NSW Government actions to address this goal

#### **Committed Initiatives**

### **Sydney Airport Road Upgrades**

Upgrade roads around Sydney's Kingsford Smith Airport and remove General Holmes Drive level crossing by constructing a road underpass.

### Moorebank Intermodal Terminal Road Access Program

Construct road infrastructure to support the Moorebank Intermodal terminal, provide an alternative access route and address forecast increases in traffic (subject to Final Business Case and funding).

### **Sydney Gateway**

Develop a link between WestConnex at St Peters Interchange and the Sydney Airport and Port Botany precinct, improving freight connectivity between Port Botany and the strategic motorway network (subject to Final Business Case and funding).

### Pacific Highway Improvements

Complete the Coffs Harbour Bypass project on the Pacific Highway.

#### **Easing Sydney's Congestion**

Deliver projects to improve freight flows and increase capacity across the Sydney Metropolitan Network.

### NSW Government actions to address this goal (continued)

#### **Initiatives for Investigation**

Capacity Upgrade to Foreshore Road at Port Botany and investigation of truck-only lanes in the port precinct (0-10 years).

### **Golden Highway Upgrades**

Upgrades to the Golden Highway including lane widening, intersection upgrades, safety improvements, flood immunity works and maintenance (5-10 years, then ongoing).

#### **Newell Highway Upgrades**

Upgrades to the Newell Highway including safety infrastructure upgrades and capacity improvements and investigation of where PBS 3A vehicle access can be increased in the vicinity of the Newell Highway to support Inland Rail (5-10 years, then ongoing).

### M1, Hexham, Raymond Terrace Upgrades

Upgrade strategic freight routes connections between the New England Highway, M1 Pacific Motorway through to the Pacific Highway at Black Hill and Raymond Terrace (5-10 years).

### New England Highway Duplication and Upgrade

Duplicate and upgrade safety features on the New England Highway between Muswellbrook and Scone (5-10 years).

### **Appin and Picton Road Improvements**

Improvements to Appin and Picton roads to support additional freight, public transport and passenger journeys and improve liveability and safety (5-10 years).

#### **Bells Line of Road Improvements**

Safety and journey time improvements (5-10 years).

#### **Great Western Highway Improvements**

Capacity enhancements crossing the Blue Mountains, including bypasses of Blackheath and Mount Victoria, duplication of the Great Western Highway from Katoomba to Forty Bends (10+ years).

#### **Summerland Way Improvements**

Upgrade the Summerland Way, which operates as a key freight link for the timber, cattle farming and meat manufacturing industries, including lane widening, intersection upgrades, safety infrastructure upgrades improvements, flood immunity works and maintenance (10+ years).

### Goal 3: Deliver new pipelines to increase capacity

The movement of fuel is currently dominated by road, as road distribution is very well-suited to deliveries to the dispersed end users. Pipelines have proven to be very effective in transporting fuel from import terminals to inland depots. New pipeline corridors would reduce distances travelled by road tankers, particularly through some of the most congested parts of the Greater Sydney road network.

The NSW Government is planning major pipeline projects that will support projects such as the Western Sydney Airport, and reduce the need for fuel to be transported by road. To maximise the value of this

investment and reduce the need for dangerous goods to be moved by road, options for transporting other bulk liquids could also be considered including new or improved bulk distribution facilities.

The NSW Government has also classified a private sector proposal for a liquefied natural gas (LNG) terminal and pipeline from Port Kembla as Critical State Significant Infrastructure. The proposal involves the construction of a new berth at Port Kembla to accommodate LNG carriers, an LNG handling facility, wharf infrastructure and a pipeline to connect to the existing NSW east coast gas transport network nearby.

### NSW Government actions to address this goal

#### Initiatives for investigation

Western Sydney Fuel Pipeline from Port Botany to the Western Sydney Airport, including evaluating options for transporting other bulk liquids by pipeline to maximise the value of proposed the infrastructure (10+ years). **Hunter Orana Fuel Pipeline** from Port of Newcastle through the Hunter to the Central West (10+ years).

**Port Kembla Gas Terminal and Pipeline proposal** to be assessed as Critical State Significant Infrastructure.

### Goal 4: Protect land needed for freight and logistics uses and infrastructure

The State's growing freight task needs to be supported by effective long-term planning to:

- protect existing freight corridors, and industrial and urban services land for freight uses
- meet future requirements, including the future supply of land for freight uses
- minimise negative impacts on local communities.

Planning for freight is a shared responsibility between the Greater Sydney Commission, the <u>Department of Planning and Environment</u>, and local councils.

Transport for NSW also has a key role

to play in identifying and protecting key freight corridors and building transport infrastructure.

Reforms to the planning system and development of Regional and District Plans by the Department of Planning and Environment and the Greater Sydney Commission provide an opportunity for councils to consistently consider freight in the next major phase of planning at a local level.

In some areas, such as around Port Botany and Sydney Airport, demand for land for residential housing and other commercial uses has seen tracts of freight and logistics land converted into mixed-use residential/commercial zones. This has resulted in:

- a reduction in the amount of freight and logistics land available in these areas
- increased prices for the remaining freight and logistics land
- greater congestion
- the need for goods to be transported longer distances to warehouses relocating to Western Sydney.

For these reasons, it is critical to protect the remaining lands that are zoned for industrial use to ensure the efficiency of increasing freight activities.

The retention of Glebe Island and White Bay as a working port is critical, as it provides opportunities for increased use of coastal shipping to transport freight closer to the demand source, thereby reducing road congestion. The Port Authority of NSW is facilitating the construction and operation of a multi-user facility that will further support coastal shipping opportunities into Glebe Island.

In the Central City District, population is forecast to grow by 56 per cent by 2036, the highest growth of all Greater Sydney districts. This will drive strong growth in the movement of freight such as consumer goods and construction materials. Significant freight volumes also move through the district on key routes such as the M7, M4 and the Main West Line. It also contains a number of Greater Sydney's key freight precincts including warehouses and intermodal terminals at Rooty Hill, Huntingwood, Minchinbury and Yennora. Clyde Intermodal Precinct facilitates the movement of waste and cement to support Sydney's population. Urban

services and industrial lands at Silverwater, Clyde, Camellia and Rydalmere require effective freight routes for the transport of construction materials, liquid fuels and waste. The significance of these sites needs to be well understood to enable their efficient operation.

In other areas, there is an opportunity to reserve appropriate land for the growing freight task to support economic growth and employment. For example, supported by good planning, the Western Sydney Airport and Western Sydney Employment Area can become a nationally significant freight and logistics hub, with connections to national and regional transport networks.

Planning for freight should also ensure that protections are in place for local communities. Such protections are set out in various documents, including:

- the <u>National Airports Safeguarding</u>
   <u>Framework</u> (a national land use planning framework that aims to improve community amenity by minimising aircraft noise-sensitive developments near airports and improve safety outcomes)
- the Department of Planning and Environment's <u>Development Near</u> <u>Rail Corridors and Busy Roads</u>
   <u>Interim Guideline</u>
- the <u>State Environmental Planning</u>
   <u>Policy (Infrastructure) 2007 (SEPP)</u>,
   which assists the NSW Government,
   local councils and the communities they support by simplifying the process for providing infrastructure.

### Local planning for freight

Freight and logistics businesses need land that has good connections to key transport routes, ports, pipelines, airports and intermodal terminals – not just land that is zoned as 'industrial land'. It is also critical that freight and logistics land, and key corridors, are planned to avoid potential conflict with land uses that are incompatible with freight operations, some of which need to operate 24 hours a day, seven days per week.

Effective local planning for freight requires an understanding of a range of factors including:

- the future freight task (including trends in trade, consumer demand and logistics activities), operational and land size requirements
- transport corridors and freight precincts
- the needs of other adjacent land users

Councils will need to plan for freight and logistics land in their local strategic planning statements and local environment plans by:

- identifying existing freight corridors and networks and significant freight land uses
- considering future freight requirements, including new land uses, expansion or increased intensity of existing corridor and land uses and ensuring efficient connections
- balancing the needs of the freight industry and their customers with local communities by ensuring non-freight land uses are designed and constructed with appropriate mitigation measures to deal with issues such as noise and traffic impacts, including buffer zones.

Local councils are required to give effect to Regional Plans in their area in their local strategic planning statements, which in turn inform their local environment plans. The identification of freight requirements in District and Regional Plans prepared by the Greater Sydney Commission and the Department of Planning and Environment, informed by information provided by Transport for NSW, will provide guidance for local council planning.

### NSW Government actions to support this goal

### Ensuring planning for freight protects land needed for freight and logistics

The NSW Government will ensure that freight and logistics land and corridors are identified and protected from sensitive land uses, including land around important trade gateways such as Port Botany, Sydney Harbour, Sydney Airport, the Western Sydney Airport and Newcastle Port. For example, by developing and updating where necessary:

- regional and District Plans (including the Eastern City and Central City District Plans) which recognise the importance of existing industrial and urban services lands to support well-planned growth for greater productivity and liveability
- the Land Use and Infrastructure Implementation Plan for Western Sydney Airport Growth Area

- the masterplan for the **Bays Precinct**
- the Central West to Newcastle/Sydney/ Wollongong corridor study (a jointgovernment agency review focussing on all modes of transport connecting the Central West and Greater Sydney, Newcastle and Wollongong, and taking into account Inland Rail and Western Sydney Airport.)

### Assist local councils to plan for freight needs

The NSW Government will ensure local councils plan for current and future freight and logistics requirements in their LGA, and reflect priorities in their local strategic planning statements, including by providing assistance to:

- identify current and future freight and logistics requirements (TfNSW)
- promote, guide and inform appropriate local responses to freight and logistics planning issues in local strategic planning statements, local environmental plans and development control plans, developed in response to issues and priorities as set out in this plan or other government plans.

### Plan for bulk waste and recycling intermodal terminal

The NSW Government will identify, protect and reserve land for an intermodal terminal to handle bulk waste and recycling materials originating in Sydney, as landfill sites reach capacity.

# Ensure planning accommodates the growth of the freight task and protects community amenity

The NSW Government will:

- review and update State planning policies to address issues around freight and port noise, including issues related to residential and sensitive use development near these activities
- investigate options to amend the <u>State</u>
   <u>Environmental Planning Policy (Three</u>
   <u>Ports) 2013</u> to protect land around the
   ports, particularly land for port-related
   uses near Port Botany
- review and update the Development Near Rail Corridors and Busy Roads
   Interim Guideline to ensure it reflects the latest evidence and practices, and investigate the need for similar guidance for ports and intermodal terminals.

### Encourage coastal shipping through planning and other initiatives

The NSW Government will encourage coastal shipping by:

- appropriate planning to support the continued operation of the port at Glebe Island and White Bay
- investigating impediments to its use by industry.

# Objective 4: Safety



Creating a safe freight supply chain, involving safe networks, safe transport, safe speeds and safe people

### Strategic target for Objective 4

Progress against this objective will be measured against the target to reduce fatalities and serious injuries from crashes involving a heavy vehicle or light truck by 30 per cent by 2021 (compared to average annual fatalities over 2008-2010).



### Goal 1: Safer networks, transport, speeds and people

The role of heavy vehicles in moving freight across NSW is substantial, with the majority of interstate freight being transported by road. Light vehicles are also important for the transport of goods over shorter distances.

Although the number of fatalities and serious injuries arising from crashes involving all types of vehicles has declined since 2009, there has been:

- an increase in fatalities and serious injuries from crashes involving light trucks since 2013/14
- an increase in fatalities from crashes involving heavy vehicles since 2017.<sup>21</sup>

While crash data does not include any conclusions as to fault, it does record the 'key vehicle' whose movement appears to have largely contributed to the crash occurring. Heavy trucks were the 'key vehicle' in 39 per cent of fatal crashes in 2015 to 2017 and 59 per cent of serious injury crashes from 2014/15 to 2016/17.<sup>22</sup>

The NSW Government's Road Safety Plan 2021 aims to reduce road fatalities and serious injuries by 30 per cent by 2021 (compared to average annual fatalities over 2008–2010), and has a vision of achieving zero trauma on the transport system by 2056. The NSW Government is committed to the same targets for fatalities and serious injuries from crashes involving a heavy vehicle or light truck.

The National Transport Commission has recently recommended legislative reform to the Intelligent Access Program (IAP) and use of electronic work diaries. The NSW Government is supportive of this proposal and is also interested in technology solutions that can be rapidly implemented to improve safety.

Chain of responsibility legislation places obligations for managing safety on all parties in supply chains. This has been successful in broadening awareness of safety in the freight industry. Further legislative reforms will be needed to continue to move towards an outcomes-based, safe systems approach rather than prescriptive rules focused on individual parties.

In addition to actions outlined in this Plan, the NSW Government will take further actions arising from the <u>Staysafe</u> Inquiry- a Parliamentary Joint Standing Committee on Road Safety requested by the Minister for Roads, Maritime and Freight. This inquiry was initiated by the Minister in response to the increasing road toll involving heavy vehicles and emerging opportunities for technology to improve safety.

Road infrastructure improvements will also be an important aspect of improving safety. Safety barriers can reduce key crash types on country roads by up to 85 per cent, and are especially important on our main transport corridors.

The NSW Government will also continue to work with the Australian Government and industry to ensure the safety of sea, air and rail freight. Particular areas of focus of the NSW Government over the next five years will be:

- the safety of level crossings through the <u>Level Crossing</u> <u>Safety Improvement Program</u>
- the port safety responsibilities of the <u>Port Authority of NSW</u> under the Port Safety
   Operating Licence granted by the Minister for Roads, Maritime and Freight.

<sup>&</sup>lt;sup>21</sup> TfNSW, Centre for Road Safety

<sup>&</sup>lt;sup>22</sup> TfNSW, Centre for Road Safety. The data for 2017 for fatal crashes and for 2016/17 for heavy vehicle crashes is preliminary

### NSW Government actions to support this goal

### Develop a new heavy vehicle safety strategy

The NSW Government will develop a new heavy vehicle safety strategy, which will include initiatives to improve operational safety and increase the uptake of safety technologies. This will be informed by the priorities in the <u>Road Safety Plan 2021</u>, recommendations from the Stay Safe Inquiry and consultation with industry.

# Advocate for an outcomes - based approach to managing heavy vehicle safety

The NSW Government will advocate for the adoption of a safety duties approach to heavy vehicle regulation in the <u>Heavy Vehicle National Regulation</u> and in consideration of any regulatory proposals such as accreditation for transport companies.

#### Develop a rest stop framework

The NSW Government will develop a rest stop framework to assist future decision making around the planning, provision and management of rest stops, including for dangerous goods trucks travelling within Sydney to Port Botany.

### Trial a new approach to telematics

The NSW Government will trial a new approach to telematics using an innovative co-design approach with industry and other stakeholders.

#### **Enhance law enforcement**

The NSW Government will deliver actions to improve enforcement that are outlined in the NSW Road Safety Plan 2021, including:

- expanding the heavy vehicle average speed camera program to metropolitan areas to address risks associated with greater truck movements
- developing a new NSW Police enforcement strategy that will maximise the benefit of enforcement, and reduce deaths on country roads and serious injuries in urban areas
- continuing to make safety technology information available to industry
- assessing targeted use of weighbridges to improve mass compliance for heavy vehicles accessing landfill sites, quarries and other similar locations.

#### Improve safety on country roads

 The NSW Government will deliver a new <u>Saving Lives on Country Roads</u> program, involving \$640 million over five years. This will deliver safety upgrades on country roads, including flexible barriers to separate oncoming traffic and protect vehicles from roadside hazards. The total investment in reducing deaths and serious injuries on NSW roads over the next five years is \$1.9 billion.

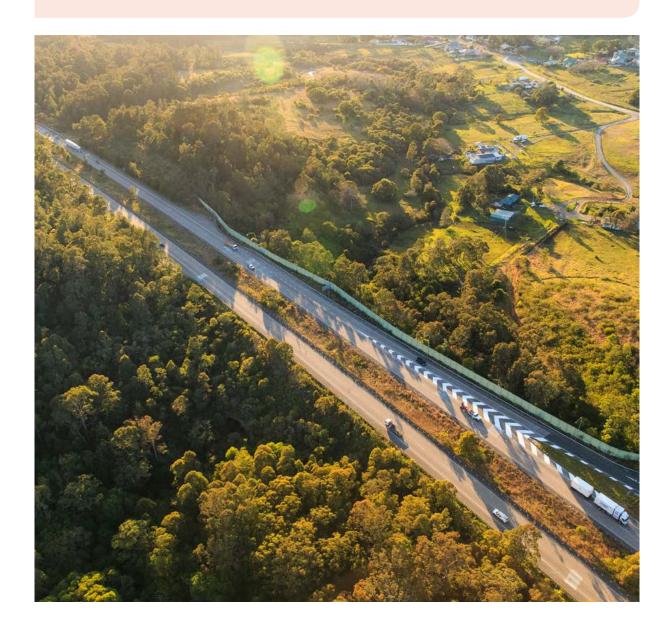
# Objective 5: Sustainability



Developing a sustainable supply chain that delivers benefits to our environment and continued operations into the future

# Strategic target for Objective 5

Progress against this target will be measured against net reductions in freight emissions and noise.



## Goal 1: Support initiatives to reduce freight emissions

The transport sector in Australia accounts for around 17 per cent of total greenhouse gas emissions.<sup>23</sup>

In 2012/13 road transport accounted for around 85 per cent of greenhouse gas emissions arising from transport within NSW. Domestic air and sea transport contributed less than 10 per cent. Around 60 per cent of road transport greenhouse gas emissions came from passenger vehicles, while the remaining 40 per cent came equally from light commercial vehicles and articulated and rigid trucks.<sup>24</sup>

The split between domestic transport within NSW and international transport to and from NSW was just under 40 per cent domestic transport and the remainder from international shipping and aviation in roughly equal amounts.<sup>25</sup>

Freight also has impacts on air quality. When compared to passenger vehicles, heavy duty and light duty diesel vehicles contribute disproportionally to particle and nitrogen oxide emissions.<sup>26</sup> This is due partly to the large amount of fuel they consume and also the age of many freight vehicles – older diesel light commercial vehicles and rigid trucks are high emitters of fine particles.

While road vehicles are subject to national emission standards, locomotives are not. Such standards apply in many countries around the world and clean technologies are available.

While the adoption of lower emissions vehicles and fuels will largely be led by industry, the NSW Government will encourage improved environmental performance of vehicles through a number of policies and programs. This includes initiatives aimed at reducing congestion and encouraging re-timing of deliveries (See Objective 2, Goal 4: Manage freight in key urban centres).

<sup>&</sup>lt;sup>23</sup> Australian Government, Department of the Environment and Energy, Australia's Emissions Projections 2017 <a href="http://www.environment.gov.au/climate-change/publications/emissions-projections-2017">http://www.environment.gov.au/climate-change/publications/emissions-projections-2017</a>

<sup>&</sup>lt;sup>24</sup> Centre for Transport Energy and Environment, New South Wales Transport Facts 2015. Note air transport contributed 7.6 per cent of greenhouse gas emissions from domestic transport and rail 4.9 per cent.

 $<sup>^{\</sup>rm 25}$  Centre for Transport Energy and Environment, New South Wales Transport Facts 2015

<sup>&</sup>lt;sup>26</sup> NSW Government, Vehicle Emissions, Clean Air for NSW, June 2017. It should be noted that there are many other human made sources of particle pollution, such as wood burning, quarrying and mining (NSW Government, Vehicle Emissions, Clean Air for NSW, June 2017). Domestic transport accounted for 7.8 per cent of particulate emissions. (Centre for Transport Energy and Environment, New South Wales Transport Facts 2015).

# Industry leadership in sustainability

Sections of the freight industry are demonstrating strong leadership in relation to sustainability. They recognise that demonstrating a commitment to sustainability has significance beyond its environmental benefits – it also shows their commitment to corporate social responsibility.

Ports have traditionally been leaders in this area, particularly in parts of Europe. Recognising the long-standing role that established ports often have in towns and cities, and the 'social licence' they operate under, many have implemented sustainability frameworks to actively manage the impacts they have on the environment and the community.

Within NSW, a number of freight-related companies are taking a proactive approach to reducing emissions.

Notable examples include:

- Dubbo-based bulk haulage operator
   Transforce's commitment to reducing greenhouse gas emissions from its road transport operations and was the first certified carbon neutral road transport company in Australia.
- NSW Ports' announcement of the introduction of an environmental incentive scheme to reward ships visiting Port Kembla and Port Botany that perform better than the levels required by current emissions standards, for commencement 1 January 2019.

The NSW Government will support industry-led sustainability initiatives including trials and the development and application of industry standards.

# NSW Government actions to support this goal

### Develop electric vehicle strategy

The NSW Government will develop a whole-of-government electric vehicles strategy to prepare for and support the transition to electric vehicles.

# Advocate for stronger national vehicle emission standards

The NSW Government will support the strengthening of national vehicle emission standards for both heavy and light

vehicles, and for a national approach to managing diesel emissions from non-road diesel equipment, under the <u>National</u> <u>Clean Air Agreement</u>.

# Investigate emissions controls for diesel locomotives

The NSW Government will investigate the adoption of emissions limits for diesel locomotives in collaboration with industry.

## Goal 2: Manage the noise impacts of freight

Industry and government have a responsibility to minimise noise impacts on communities from road, rail, port and air freight. This can be achieved through the following hierarchy of actions:

- land use planning policies to avoid new residential developments being built too close to freight activity
- planning controls to ensure developments are designed to minimise noise impacts
- applying noise policies and guidelines to assess and mitigate noise impacts from new and redeveloped freight infrastructure

- managing noise from activities undertaken on freight and ports infrastructure, through initiatives such as adoption of new technologies (including electric vehicles) or performance requirements
- programs to manage residual noise impacts such as the Freight Noise Attenuation Program
- providing homebuyers with sufficient information about freight operations when they are considering purchasing a property.

# NSW Government actions to support this goal

# Work with industry to reduce noise impacts of rail freight

The NSW Government will continue to work with industry and regulators to deliver value-for-money rolling stock-based solutions to reduce noise from locomotives and wheel squeal.

# Investigate environmental performance accountability improvements

The NSW Government will consider options to improve accountability for environmental performance in the freight industry, such as reforms to Environmental Protection Authority (EPA) licencing arrangements or industry standards.

# Support electric vehicles in high density areas

The NSW Government will support the use of electric vehicles for deliveries in built-up areas to reduce the noise and emissions impact of freight.

### Further research into noise impacts

The NSW Government will conduct further research into noise impacts of freight operations and effectiveness of mitigation measures to inform future initiatives.



# Appendix: Consultation to develop this plan

### Introduction

From mid-2017 to early 2018, extensive consultation was undertaken with the freight industry, local councils and other stakeholders to develop the NSW Freight and Ports Plan. Preliminary consultation prior to the release of the Draft NSW Freight and Ports Plan (Draft Plan) focused on priority issues, opportunities for partnerships, and possible actions and reforms. A second phase of more extensive consultation was undertaken in early 2018 with a focus on directions identified in the Draft Plan and targets and priority action areas for the final Plan. Consultation included:

- meetings with over 50 key stakeholders
- twelve roundtable sessions at locations across NSW including representatives from across industry and government
- over 110 formal submissions on the Draft Plan and comments on the online version of the Draft Plan (submissions where consent to publish has been provided on the <u>TfNSW website</u>.)

### Issues identified

While most stakeholders commented on specific modes, supply chains and locations, a number of strong and recurring themes were identified from the consultation process. These are shown below.

### Key issues identified during the consultation process:

Objective	Key issues consistently raised by stakeholders	Other issues raised
Economy	Investment needs to be supported by availability of data and transparency of network performance Improved coordination between different levels of government, particularly at local council level	Community attitudes to freight and its perceived lack of importance by the public impacting on investment and policy decisions made by Government  Need to provide industry greater certainty to support investment decisions  Need for focus on improving flows through NSW trade gateways
Efficiency, Connectivity, Access	Lack of consistency of heavy vehicle access across council areas and impacts on efficiency Inequity and inefficiency of road-based vehicle charging system Need to capitalise on and invest to support Inland Rail for the benefit of NSW	Lack of coordination and planning with movement of empty vehicles and containers resulting in inefficient movements of freight Lack of coordination and planning between rail network access holders impacting on efficiency
Capacity	Rezoning of industrial/employment lands in metro/inner Sydney for housing 'squeezing' freight-related activity to Western Sydney Interest in containerised freight terminal at Newcastle Port	Rail signaling and current speed restrictions limiting capacity of the rail network  Development of employment lands not adequately supported by investment in surrounding infrastructure
Safety	Concern over road safety and impacts on the industry, particularly around differing regulatory requirements and compliance standards	Need for increased land/facilities for rest stops for long distance truck drivers

Objective	Key issues consistently raised by stakeholders	Other issues raised
Sustainability	Noise and other environmental concerns caused by inappropriate co-location of freight and other land uses – impacting on operation	Existing marine/coastal infrastructure not well utilised for the movement of freight inter and intra-state  Staff and skills shortages are impacting upon the future of the industry - there is a declining perception of the freight and logistics industry as a potential career for school leavers

The table overleaf summarises the key issues gathered from stakeholder consultation and describes the response to these in the Plan.

# How the Plan responds to key issues

Key issue	How the Freight and Ports Plan responds	Specific goals, targets, measures and initiatives in Plan
Lack of data on freight	Goal 1.3 of the Plan is specifically focused on freight data and various initiatives will be implemented to improve the quality and accessibility of freight planning and performance data.  Key information from the evidence base for the Plan including freight forecasts, performance data and submissions from industry have been published with the Plan.	Goal 1-3: Improve freight data Initiatives Publish and update freight forecasts and performance measure data Enhance freight data Improve data sharing
More effective local planning for freight	The Plan includes comprehensive actions to improve local planning for freight, with a strong emphasis on working with other key NSW Government agencies such as the Greater Sydney Commission and Department of Planning and Environment to provide assistance to local councils to help them better plan for freight.	Goals  2-3: Improve road freight access  2-4: Manage freight in key urban centres  3-4: Protect land for freight and logistics uses and infrastructure  Initiatives  Assist local councils in making high productivity vehicle (HPV) access decisions  Work with industry to improve the efficiency of urban freight  Improve planning for last mile deliveries  Assist local councils to plan for freight needs  Ensure planning accommodates the growth of the freight task and protects community amenity
Need for improved heavy vehicle access and consistency in access arrangements	The Plan includes a goal to improve road freight access. The plan also includes a strategic target to increase access for HPVs and a performance measure for take-up of heavy vehicle productivity schemes.  Various initiatives will be implemented to improve heavy vehicle access, including implementing a Heavy Vehicle Access Policy framework to provide greater certainty to industry regarding future networks for HPVs.	Goal 2-3: Improve road freight access Strategic Freight Target: Increase the length of the state road network approved for appropriate access under each of the Restricted Access Vehicle Networks Initiatives: Implement NSW Heavy Vehicle Access Policy Framework Fund infrastructure improvements to increase HPV road access Assist local councils in making HPV access decisions Expand the coverage and uptake of heavy vehicle mass concession schemes

Key issue	How the Freight and Ports Plan responds	Specific goals, targets, measures and initiatives in Plan
Need for reforms to heavy vehicle road use charges	NSW will continue to support the Transport and Infrastructure Council Heavy Vehicle Road Reform program. The goal of this program is to turn the provision of heavy vehicle road infrastructure into an economic service that links the needs of heavy vehicle users with the level of service they receive, the charges they pay and the investment of those charges back into road services.	Goal 1-1: Encourage investment by providing greater certainty regarding government priorities and funding Initiatives Support national reforms to investment in the freight network
NSW support for the Inland Rail project	In May 2018 the NSW and Australian Governments signed a bilateral agreement to progress the Inland Rail project in NSW.  A key focus for NSW will be on improved east-west rail freight networks and connectivity with NSW ports, and supporting the development of intermodal terminals along the route including at Parkes.	Goal 2-5: Improve rail freight access and flows Initiatives Support delivery of Inland Rail

#### Key issue How the Freight and Ports Plan responds Specific goals, targets, measures and initiatives in Plan Land Use Capacity The Plan includes a specific goal (3.4) to Goals protect land needed for freight and logistics Constraints 3-1: Deliver new infrastructure to increase rail uses and infrastructure. Additionally, the freight capacity NSW Freight Dashboard includes a measure 3-2: Deliver new infrastructure to increase on the supply of land for industrial uses in road freight capacity and improve safety Greater Sydney, drawing on data from the 3-4: Protect land for freight and logistics Department of Planning and Environment to monitor the continued supply of land for uses and infrastructure industrial uses in Greater Sydney. Initiatives Various initiatives will be implemented Ensuring planning for freight protects land to improve planning for freight, including needed for freight and logistics providing practical information and Assist local councils to plan for freight needs assistance to local councils to develop Plan for bulk waste and recycling strategic planning statements in response intermodal terminal to Regional and District Plans prepared by Department of Planning and Environment Ensure planning accommodates the growth and Greater Sydney Commission. of the freight task and protects community amenity Need for The Plan recognises the interest of the Port Goals containerised freight of Newcastle in diversifying and expanding 1-1 Encourage investment by providing at Newcastle Port the port's trade base. An initiative has been greater certainty regarding government included in the Plan to support the Port of priorities and funding Newcastle as the commercial operator of the 3-4: Protect land for freight and logistics port, to explore other trade opportunities uses and infrastructure as they deliver their masterplan, such as examining landside capacity constraints that may need to be addressed beyond the Work closely with industry to enable longtimeframe of this Plan. term investment The NSW Government policy position Lower Hunter Freight Corridor is that Port Kembla has been identified Golden Highway Upgrades as the location for the development of Hexham, Raymond Terrace upgrades a future container terminal to augment capacity of Port Botany when required. New England Highway Duplication Current arrangements do not prohibit the and Upgrade development of a container terminal at Ensure planning for freight protects land the Port of Newcastle but rather allow for needed for freight and logistics the growth of container volumes through Newcastle that service the region. Actions to improve The Plan includes a specific goal to Goal improve the safety of networks, transport, road safety 4-1: Safer networks, transport, speeds and people expressly targeted at speeds and people

improving road safety and supporting the implementation of the NSW Road Safety Plan and the development of a Heavy Vehicle Safety Strategy.

The Plan also includes a strategic target for reducing fatalities and serious injuries from crashes involving a heavy vehicle and light trucks, in line with the aspirational goal of achieving zero fatalities by 2056.

# Strategic Freight Target

Reduce fatalities and serious injuries from crashes involving a heavy vehicle or light truck by 30% by 2021 (against a 3 year average 2008 to 2010 baseline)

### Initiatives

Develop a new heavy vehicle safety strategy Advocate for an outcomes-based approach to managing heavy vehicle safety Develop a rest stop framework Trial a new approach to telematics

Enhance law enforcement

Improve safety on country roads

Key issue	How the Freight and Ports Plan responds	Specific goals, targets, measures and initiatives in Plan
Noise concerns and community pressure	The Plan recognises the need to address the co-location and often incompatibility of freight uses with residential and other land use.  This is in response to concerns over the pressure imposed on freight operations due to noise and other environmental considerations.  The Plan includes initiatives to address these conflicting requirements including improving communication of current and future noise conditions around key freight precincts and freight-related infrastructure.	Goal 5-2: Manage the noise impacts of freight Initiatives Work with industry to reduce noise impacts of rail freight Investigate environmental performance accountability improvements Support electric vehicles in high density areas, for example by working with industry on trials Further research into noise impacts and mitigation measures

### Other issues raised by stakeholders during the consultation process

Other Issues	Response and relevant goal where applicable
Community attitudes to freight and its perceived lack of importance by the public impacting on investment and policy decisions made by Government	The 'Be Truck Aware' campaign is a current example of efforts by the NSW Government to educate the community about heavy vehicles. This is supported by active community engagement through engaging with schools and community groups.  The NSW Government will continue to prioritise resources on areas which promote safety and improved understanding of freight by local councils given the significant influence on the movement and efficiency of freight.  Where appropriate, the NSW Government will also support public outreach programs led by the industry to communicate the benefits of freight more generally. The recent 'Box that changed the world' exhibition sponsored by TfNSW on containerised freight, at the Australian Maritime Museum, provides an example of leadership from the industry to promote the role of freight.
Differing views regarding when infrastructure improvements will be required	Views on timeframes for infrastructure improvements were sought during the consultation process and industry feedback was also sought on underlying freight forecasts prepared by Transport for NSW.  Timing requirements for infrastructure and other projects will be subject to regular review in close consultation with industry as this Plan is implemented. Regular updates of freight forecasts will support this process.  Goal 1-3: Improve freight data

Differing views on policy relating to maintaining, managing and planning industrial and urban services lands The Greater Sydney Region Plan identifies three key principles for managing industrial and urban services lands:

- Retain and manage approach across the Eastern Harbour City, the North West Growth Area and industrial land in the established urban areas of the Western Parkland City, including the existing Western Sydney Employment Area.
- Review and manage in the established areas of Central City District, Hornsby, Liverpool and Fairfield.
- Plan and manage in the South West and Western Sydney Airport Growth Areas.

Consultation undertaken as part of preparing the Greater Sydney Region Plan, Future Transport 2056 and this Plan indicated strong general support from industry for this position. However, in some cases stakeholders perceived this approach as a moratorium on the use of industrial and urban services land for alternate purposes, such as residential development.

These key principles represent a broad framework for managing land use requirements for the freight industry and other uses of industrial and urban services land, rather than a 'ban' on use for other purposes.

The Greater Sydney Commission is now working with local councils and other key stakeholders to further define and implement these principles as they prepare local strategic planning statements to give effect to District and Regional Plans. This will continue to be done in close consultation with land developers, the freight operators and other sections of industry. Transport for NSW will work with government and industry stakeholders to better understand the evolving land use requirements of the freight industry.

**Goal 3-4** Protect land for freight and logistics uses and infrastructure

Goal 1-3 Improve freight data

Other Issues	Response and relevant goal where applicable
Need to provide industry greater certainty to support investment decisions	<b>Goal 1-1</b> Encourage investment by providing greater certainty about government priorities
Need for focus on improving flows through NSW trade gateways	Goal 2-2 Improve flow of freight through trade gateways
Lack of coordination and planning with movement of empty vehicles and containers resulting in inefficient movements of freight	Goal 2-2 Improve flow of freight through trade gateways
Lack of coordination and planning between rail network access holders impacting on efficiency	Goal 2-2 Improve flow of freight through trade gateways Goal 2-5 Improve rail freight access and flows
Rail signalling and current speed restrictions limiting capacity of the rail network	Goal 2-5 Improve rail freight access and flows
Development of employment lands not adequately supported by investment in surrounding infrastructure	Goal 2-4 Manage freight in key urban centres Goal 3-4 Protect land for freight and logistics uses and infrastructure
Need for increased land/facilities for rest stops for long distance truck drivers	Goal 4-1 Safer networks, transport, speeds and people
Existing marine/ coastal infrastructure not well utilised for the movement of freight inter and intra-state	Goal 1-2 Support reforms to transport laws and regulatory bodies (including by advocating for Australian legislative amendments to facilitate greater use of coastal shipping)  Goal 3-4 Encourage coastal shipping through planning and other initiatives

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