National Freight and Supply Chain Strategy

National Action Plan

August 2019
QR Code

For the benefit of the reader, a QR Code has been applied to this document. If you have a smart phone, you can scan the code with your camera and you will be directed to the National Freight and Supply Chain Strategy website. The Strategy recognises the supply chain efficiencies to be gained if a common standard could be used to identify, capture and share information about the movement of freight. We are pleased to be able to use this valid GS1 supplied global document type identifier to give you greater visibility of the Strategy and its progress.

Copyright
© Commonwealth of Australia 2019
ISBN 978-1-925843-11-8
August 2019 / INFRASTRUCTURE 4003

Ownership of intellectual property rights in this publication
Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to below as the Commonwealth).

Disclaimer
The material contained in this publication is made available on the understanding that the Commonwealth is not providing professional advice, and that users exercise their own skill and care with respect to its use, and seek independent advice if necessary.

The Commonwealth makes no representations or warranties as to the contents or accuracy of the information contained in this publication. To the extent permitted by law, the Commonwealth disclaims liability to any person or organisation in respect of anything done, or omitted to be done, in reliance upon information contained in this publication.

Creative Commons licence
With the exception of (a) the Coat of Arms; (b) the Department of Infrastructure, Transport, Cities and Regional Development photos and graphics; copyright in this publication is licensed under a Creative Commons Attribution 3.0 Australia Licence.

Creative Commons Attribution 3.0 Australia Licence is a standard form licence agreement that allows you to copy, communicate and adapt this publication provided that you attribute the work to the Commonwealth and abide by the other licence terms.

A summary of the licence terms is available from
www.creativecommons.org/licenses/by/3.0/au/deed.en.

The full licence terms are available from
www.creativecommons.org/licenses/by/3.0/au/legalcode.

This publication should be attributed in the following way: ©Commonwealth of Australia 2019

Use of the Coat of Arms
The Department of the Prime Minister and Cabinet sets the terms under which the Coat of Arms is used. Please refer to the Department’s Commonwealth Coat of Arms and Government Branding web page
www.dpmc.gov.au/pmc/about-pmc/core-priorities/guidelines-and-procedures-other-agencies and in particular, the Commonwealth Coat of Arms - Information and Guidelines publication.

Contact us
This publication is available in hard copy or PDF format. All other rights are reserved, including in relation to any Departmental logos or trade marks which may exist. For enquiries regarding the licence and any use of this publication, please contact:
Director - Publishing and Communications
Communications Branch
Department of Infrastructure, Transport, Cities and Regional Development
GPO Box 594
Canberra ACT 2601
Australia
Email: publishing@infrastructure.gov.au
Website: www.infrastructure.gov.au
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>1. Smarter and targeted infrastructure investment</td>
<td>6</td>
</tr>
<tr>
<td>2. Enable improved supply chain efficiency</td>
<td>11</td>
</tr>
<tr>
<td>3. Better planning, coordination and regulation</td>
<td>16</td>
</tr>
<tr>
<td>4. Better freight location and performance data</td>
<td>21</td>
</tr>
<tr>
<td>Summary of Actions</td>
<td>23</td>
</tr>
</tbody>
</table>
Introduction

The National Freight and Supply Chain Strategy sets an agenda for coordinated and well-planned government and industry action across all freight modes over the next 20 years and beyond. It sets a national vision for freight systems and supply chains to contribute to a strong and prosperous Australia.

The National Action Plan sits alongside the Strategy and details key actions to be delivered by government to achieve goals of the Strategy. The Action Plan will be informed by priorities identified in Commonwealth, state and territory freight plans and policies. The Strategy and Action Plan form the basis of ongoing consultation with and investment by industry.

The Action Plan outlines the critical action areas for the next five years. These are:

- Smarter and targeted investment
- Enable improved supply chain efficiency
- Better freight location and performance data
- Better planning, coordination and regulation

The Action Plan focuses on these critical action areas as they are key elements of nationally integrated and planned freight systems. The Action Plan identifies 13 actions that will deliver across these critical action areas at a national level. The success of the Strategy rests on how these actions are implemented and reviewed, and identifying new priorities.

The Action Plan is not a summary of all jurisdictions’ actions related to freight and supply chains. Jurisdictions will continue to take action through other plans and programs to address local freight and supply chain issues.
The actions provide coverage of a range of freight and supply chain related work across jurisdictions and seek to:

- deliver early action on immediate priorities
- lay the foundation for further reforms over the medium and long-term.

The Strategy and Action Plan will be reviewed every five years to maintain its currency and enable actions to be updated and new ones developed. Ongoing measurement and reporting on the freight systems’ performance over time will be critical to this process. The Transport and Infrastructure Council will agree the terms of reference of the five yearly reviews and respond to the reviews’ findings.
Critical Area 1
Smarter and targeted infrastructure investment

Problem
Australia's freight task is growing and changing. The volume of freight carried is expected to grow by over 35 per cent between 2018 and 2040, an increase of 270 billion tonnes (bringing the total volume moved to just over 1000 billion tonnes).

The growing demand for freight is straining existing infrastructure and affecting service levels along the supply chain. Australia’s widely dispersed population and climatic vulnerabilities exacerbate this challenge.

To accommodate expected growth of the freight task, Australia will need to build capacity through both infrastructure investment as well as the efficient use of existing assets across all modes.

Appropriate and improved access to trade gateways, improved access to the first and last mile of the freight task, enhanced digital infrastructure availability, and improved freight infrastructure provision is needed to ensure our infrastructure investments drive the efficiency and productivity gains we need to meet our growing freight task now and into the future.

Outcomes we want to achieve

- Develop new, well planned and located major freight gateways and hubs
- Improve landside access to major freight gateways
- Improve regional freight links
- Develop Northern Australia’s freight infrastructure
- Enable freight’s digital future
- Advance heavy vehicle road reform to facilitate efficient investment in infrastructure.

These outcomes will be achieved through four priority actions.

Actions

1.1: Ensure that domestic and international supply chains are serviced by resilient and efficient key freight corridors, precincts and assets

1.2: Provide regional and remote Australia with infrastructure capable of connecting regions and communities to major gateways, through land links, regional airports or coastal shipping

1.3: Identify and support digital infrastructure and communication services necessary for improved and innovative supply chains

1.4: Advance heavy vehicle road reform to facilitate efficient investment in infrastructure
**Action 1.1**

**Ensure that domestic and international supply chains are serviced by resilient and efficient key freight corridors, precincts and assets**

**Why we need action**

To meet our growing freight task, Australia needs to build capacity along key freight corridors, ensuring assets are used effectively and are resilient in the face of change.

**Where we want to be by 2024**

To develop new major freight gateways and hubs and improve landside access to existing gateways, we aim to:

- Progress towards a more strategic and networked approach to freight-related investment
- Develop a comprehensive infrastructure investment framework for freight that includes consideration of non-build options such as planning and adoption of new technologies
- Plan and construct freight infrastructure to meet capacity requirements
- Put in place strategies to make freight infrastructure and supply chains more resilient to disruption
- Continue public and private investment in freight related infrastructure.

<table>
<thead>
<tr>
<th>Between now and 2024 we will</th>
<th>Example actions we are taking or will take</th>
</tr>
</thead>
</table>
| a) Develop a national framework for freight-related infrastructure investment, including consideration of non-build solutions | • Major Project Business Case Fund (Cth)  
• State Infrastructure Strategies (all state and territory governments)  
• Smart motorways (NSW; Qld) |
| b) Develop new major freight gateways and hubs | • Western Sydney Airport and Western Sydney Infrastructure Plan, including investment in the M12 motorway (Cth; NSW)  
• Toowoomba Wellcamp and Cairns Airports Regional Export Distribution Centre Pilots (Qld)  
• Yamala Hub (Qld)  
• Moorebank Intermodal Terminal (Cth; NSW)  
• Inland Rail Terminal (Vic)  
• Kenwick Intermodal Terminal (WA)  
• Katherine Agribusiness and Logistics Hub (NT) |
| c) Improve landside access to major freight gateways | • North-South Corridor (Cth; SA)  
• North East Link (Vic)  
• West Gate Tunnel Project (Vic)  
• Port Botany Rail Line Duplication (Cth)  
• Melbourne Port Rail Shuttle (Cth; Vic)  
• Road upgrades around Sydney and Hobart Airports (Cth; NSW; Tas)  
• NorthLink WA (Cth; WA)  
• Replacement of the Fremantle Traffic Bridge (road and rail bridge; separation of passenger and freight rail traffic) (WA)  
• Burnie to Hobart Freight Corridor Strategy (Cth; Tas)  
• Bruce Highway, Warrego Highway, Gateway Motorway and Pacific Motorway upgrades (Cth; Qld) |
| d) Assess and improve the resiliency of key freight assets and supply chains | • Critical infrastructure strategies (all jurisdictions)  
• National Disaster Risk Reduction Framework – Freight Resilience Pilot Project (Cth) |
**Action 1.2**

*Provide regional and remote Australia with infrastructure capable of connecting regions and communities to major gateways, through land links, regional airports or coastal shipping*

**Why we need action**

Our supply chains rely on regional and remote transport infrastructure to facilitate the majority of movements of our key exports to international markets and to deliver essential goods and services to isolated communities.

Long distances between population centres, climatic disruptions, high maintenance and repair costs, and relatively low levels of infrastructure create challenges in securing connectivity and reliability of product distribution through supply chains.

**Where we want to be by 2024**

To improve regional and remote freight links, we aim for:

- Better linkages from major regional and remote producer areas to key freight corridors and trade gateways (ports and airports)
- Improved all weather access to export gateways, including in Northern Australia
- All levels of government to improve and upgrade infrastructure in regional and remote areas to lift regional freight productivity, access and safety across all modes and delivery of essential goods and services to isolated communities.

<table>
<thead>
<tr>
<th>Between now and 2024 we will</th>
<th>Example actions we are taking or will take</th>
</tr>
</thead>
</table>
| a) Develop regionally based investment frameworks for key freight corridors | • Lower Hunter Freight Corridor (NSW)  
• Regional Road Freight Corridor Fund (NSW)  
• Midland Highway 10 Year Action Plan (Cth; Tas)  
• Bruce Highway Action Plan (Qld)  
• Warrego Highway Upgrade Program (Qld)  
• Major route plans on major highways (WA)  
• Wheatbelt strategic secondary road freight network (WA)  
• Revitalising Agricultural Region Freight Strategy (WA) |
| b) Provide infrastructure to connect regions and remote areas to markets | • Inland Rail (Cth)  
• Roads of Strategic Importance (Cth)  
• Bruce Highway Upgrade (Cth; Qld)  
• Northern Australia Roads and Beef Roads Programs (Cth; Qld; WA; NT)  
• Murray Basin Rail Project (Vic)  
• Northern Australia Infrastructure Facility (Cth)  
• Regional Aviation Access Program (Cth)  
• State Aviation Strategy (WA)  
• $300m expansion program for Darwin/Tennant Creek/Alice Springs Airports (NT)  
• Development of Ship Lift at East Arm (NT) |
| c) Target infrastructure investment programs to improve regional and remote freight access and safety | • Bridges Renewal Program (Cth)  
• Heavy Vehicle Safety and Productivity Program (Cth)  
• Transport Infrastructure Development Scheme (Qld)  
• Bruce Highway Safety Package (Qld)  
• Heavy Vehicle Safety Action Plan (Qld) |
| d) Fund local governments to maintain and upgrade freight assets that support community sustainability | • Fund regional councils to improve road freight access (NSW)  
• Transport Infrastructure Development Scheme (Qld) |
Action 1.3
Identify and support digital infrastructure and communication services necessary for improved and innovative supply chains.

Why we need action
Adopting new and innovative technologies, including connected and automated vehicles, is vital to improving supply chain productivity, efficiency and safety. For their effective introduction, emerging technologies will rely on digital infrastructure, including data, positioning and telecommunications services.

Work to investigate our current and future needs will help governments and industry understand the digital infrastructure we need to facilitate the arrival of emerging freight technologies.

Linkages: Action 1.3 (provision of digital infrastructure) and Action 2.1 (standards development and adoption) together enable the trialing of new technologies under Action 2.3.

Where we want to be by 2024
To enable freight’s digital future, we aim for:

- New infrastructure to be future-proofed
- Improved mobile coverage along major freight corridors through initiatives such as the Mobile Black Spot Program
- Digital infrastructure deployed to support innovative operations and technology improvements.

Between now and 2024 we will
Example actions we are taking or will take

| a) Investigate digital infrastructure needs to support the deployment of innovative freight technologies | • Upgrade navigation and positioning infrastructure, including the Satellite-Based Augmentation System (Cth)  
• Identify barriers to Internet of Things and 5G uptake (Cth)  
• Explore opportunities to apply new technology to manage transport networks (all state and territory governments) |
|---|---|
| b) Improve telecommunications access to support freight operations | • Continue Mobile Black Spot Program (Cth)  
• Complete NBN rollout (Cth)  
• Access to spectrum (Cth)  
• Remote Telecommunications Co-investment Program (NT) |
| c) Ensure digital security in the freight system, including in the collection of data from innovative freight technologies | • Telecommunications Security Sector Reform (Cth)  
• Reforms to enable data collection from Cooperative Intelligent Transport Systems (Cth - NTC) |
Action 1.4
Advance heavy vehicle road reform to facilitate efficient investment in infrastructure

Why we need action
More closely linking infrastructure provision to its use through pricing and investment reforms will promote the use of the most appropriate mode for a given freight task. Creating strong competition within markets and between transport modes will improve efficiency and productivity.

Where we want to be by 2024
In advancing heavy vehicle road reform, we are aiming for:

• Stronger links between heavy vehicle road user charges and investments into road infrastructure services
• Increased transparency to road users regarding levels of service and investments
• Increased funding certainty for road managers, helping to deliver optimal road maintenance.

Between now and 2024 we will | Example actions we are taking or will take
--- | ---
a) Further develop Heavy Vehicle Road Reform | • Prepare detailed advice on options to progress Heavy Vehicle Road Reform, including advice on introducing independent price regulation and developing models to estimate costs based on future road network needs (all jurisdictions)
• Continue to improve road expenditure and investment plans and heavy vehicle asset registers, already being published as part of Heavy Vehicle Road Reform (all jurisdictions)
• Develop nationally consistent service level standards for roads (all jurisdictions)
b) Explore and trial options for alternative heavy vehicle charging mechanisms | • Undertake on-road heavy vehicle charging trials to test reform options (Cth)
c) Design heavy vehicle reform elements in a way that could be applied to broader road reforms in future, should governments decide to pursue them
Critical Area 2: Enable improved supply chain efficiency

Problem
Increasing global and domestic supply chain complexity can drive up transaction and coordination costs for freight operations and the economy as a whole. Managing this growing complexity, and the threat of disruption, is exacerbated by traditionally fragmented supply chains.

To address these costs, complexities, and secure ongoing participation in global supply chains, Australia needs to adopt compatible systems and platforms, standards and technologies. Harmonisation across the supply chain will reduce friction and information pinch points, facilitate smooth interactions with trading partners and position us to respond to new freight sector developments.

To support this, our freight sector will need to be sufficiently skilled, technology-aware and accepted.

We can realise needed efficiency gains through actions to improve interoperability and adopt global standards, develop an appropriately trained workforce, introduce productive freight technologies, and build community understanding of freight’s importance.

Outcomes we want to achieve
- Decreased transaction costs and other barriers to moving freight seamlessly along supply chains
- An appropriately-skilled freight workforce – now and in the future
- Technologies to improve freight outcomes
- Building community acceptance of freight.

These outcomes will be achieved through four priority actions.

Actions

2.1: Adopt and implement national and global standards, and support common platforms, to reduce transaction costs and support interoperability along supply chains
2.2: Promote training and re-skilling of industry and government workforces appropriate to current and future needs
2.3: Facilitate new and innovative technologies that improve freight outcomes and understand the deployment, skills and workforce requirements for operators and infrastructure
2.4: Build community acceptance of freight operations
Action 2.1
Adopt and implement national and global standards, and support common platforms, to reduce transaction costs and support interoperability along supply chains

Why we need action
Adoption of national and international standards will help Australian businesses integrate into global supply chains, driving interoperability and enabling adoption of new freight technologies. Research and pilots in Australia have shown that the adoption of global data standards demonstrate significant net economic benefits.\(^1\)

By encouraging businesses to adopt international standards and facilitating the development of collaborative supply chain platforms, we will reduce transaction costs to businesses and move towards interoperability within Australia and internationally.

Linkages: Action 1.3 (provision of digital infrastructure) and Action 2.1 (standards development and adoption) together enable the trialing of new technologies under Action 2.3.

Where we want to be by 2024
To achieve national interoperability and standards for moving freight along supply chains, we aim for:

- An agreed position on and adoption of global and national level data standards
- Increased rail standardisation and interoperability across Australia’s rail networks
- Increased freight flows through trade gateways by better coordinating operators in port and airport supply chains
- Increased harmonisation of Australian road vehicle safety standards with standards developed by the United Nations.

<table>
<thead>
<tr>
<th>Between now and 2024 we will</th>
<th>Example actions we are taking or will take</th>
</tr>
</thead>
</table>
| a) Encourage adoption of international standards | • Ongoing harmonisation of national vehicle safety standards for freight vehicles (Cth)  
• Promotion of global data standards (Cth) |
| b) Encourage the adoption of collaborative electronic platforms along supply chains | • Improve agricultural export systems to modernise agricultural trade (Cth)  
• Implement the International Maritime Organization’s mandate on electronic exchange of international maritime traffic information (Cth)  
• Investigate the adoption of new technologies that can improve the productivity of the Port Botany supply chain (NSW)  
• Heavy Vehicle Safety Action Plan 2019-21 (Qld) |
| c) Ensure standardisation and interoperability across rail networks | • National Rail Vision and Work Program (all jurisdictions) |

\(^1\) Austroads (2016), Investigating the Potential Benefits of Enhanced End to End Supply Chain Visibility (FS2000).
Action 2.2
Promote training and re-skilling of industry and government workforces appropriate to current and future needs

Why we need action
The Australian freight industry is experiencing shortages of skilled workers across its sectors. At the same time, automation and other technological changes are shifting workforce needs. From a government perspective, we need a public sector workforce sufficiently trained to appropriately plan and regulate freight activities and make informed decisions.

To address these issues, Australia needs a collaborative approach between government and industry to identify current shortages, ensure training programs address future skills needs, and enhanced workforce diversity to address short-term and long-term requirements of the freight sector.

Linkages: Workforce skilling needs to operate new technologies identified under Action 2.3 will translate into workforce-related actions under Action 2.2.

Where we want to be by 2024
To ensure a sustainable freight workforce that can meet our freight challenge, we aim for:

- Freight industry education and training programs that deliver a freight workforce with the right skills and capabilities to meet current and future workforce needs
- Enhanced capability of government planners and decision-makers to understand freight and supply chain benefits and needs and have the resources to make informed decisions related to freight.

<table>
<thead>
<tr>
<th>Between now and 2024 we will</th>
<th>Example actions we are taking or will take</th>
</tr>
</thead>
</table>
| a) Collaborate with industry to review the state of the freight sector workforce to identify current skills shortages and understand future long-term workforce needs and barriers, and options to address workforce challenges | • Transport Sector Skills Strategy (new Cth)  
• Establishment of a Freight Skills Taskforce (ACT)  
• Queensland Transport and Logistics Workforce Strategy and Action Plan 2018-2023 (Qld) |
| b) With industry involvement, work with the education and training sector to ensure that programs deliver future skills required by the freight sector | • Development of future-skills standards for the transport and logistics, aviation and maritime sectors (all jurisdictions)  
• Promoting opportunities in the freight and logistics industry to retrenched workers and other job seekers (Cth)  
• Attracting more women into aviation careers (Cth)  
• Heavy Vehicle Driver Employment Pathways Review (Vic) |
| c) Work with industry to build diversity in the freight sector to address short-term and long-term workforce needs | • Launch into Work Program (Cth)  
• Women in Transport Program (Vic)  
• Promoting greater diversity in the freight industry (NSW) |
| d) Ensure that regulation delivers desired workforce outcomes | • Review of the licensing of heavy vehicle drivers (Vic) |
Action 2.3
Facilitate new and innovative technologies that improve freight outcomes and understand deployment, skills and workforce requirements for operators and infrastructure

Why we need action
New technologies, including connected and automated vehicles, drones and distributed ledgers, can increase network efficiency, decrease risks to transport users, reduce fuel usage and emissions, and enhance traceability of supply chains.

While some work is underway in this area, we need a coordinated approach and to share learnings of the many technological advancements underway in the Australian context. Further research and trials are necessary to understand how these technologies can enhance freight performance.

Linkages: Action 2.3 relates to the adoption and use of technologies that are enabled by the digital infrastructure, standards and common platforms supplied under Actions 1.3 and 2.1. Workforce skilling needs to operate new technologies identified under Action 2.3 will be translated into workforce-related actions under Action 2.2.

Where we want to be by 2024
To ensure new and innovative technologies are made available and are adopted to improve freight outcomes, we aim for:

- A nationally coordinated approach between governments and industry to researching and trialling new freight technologies
- The right enabling regulatory environment, infrastructure, data streams and workforce skills to deploy emerging freight technologies
- Introduction of ready to deploy technologies to the Australian market in a manner that is technology neutral and maximises economic and social benefits while meeting community expectations of safety, security and privacy.

Between now and 2024 we will

<table>
<thead>
<tr>
<th>Example actions we are taking or will take</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Examining the infrastructure and skills needs and priorities of key freight stakeholders to facilitate the introduction of freight technologies</td>
</tr>
<tr>
<td>• Austroads Connected and Automated Vehicle Program (all jurisdictions)</td>
</tr>
<tr>
<td>• Undertake kick-start projects to scope the potential for building hydrogen refuelling stations in every state and territory (all jurisdictions)</td>
</tr>
<tr>
<td>• Drone Network Impact Analysis (Qld)</td>
</tr>
<tr>
<td>• Performance-Based Standards vehicle requirements/conditions associated with trials for larger Restricted Access Vehicles (WA)</td>
</tr>
<tr>
<td>b) Develop a national coordinated approach to researching and trialing new freight technologies, particularly cross-modal applications.</td>
</tr>
<tr>
<td>• Advanced Train Management System pilot (Cth)</td>
</tr>
<tr>
<td>• Driver fatigue detection and monitoring (Cth/NHVR)</td>
</tr>
<tr>
<td>• Facilitate trials of emerging technology to improve the efficiency and safety of freight activities (NSW)</td>
</tr>
<tr>
<td>• Cooperative Intelligent Transport Initiative trial (NSW)</td>
</tr>
<tr>
<td>• Freight signal priority trial (NSW)</td>
</tr>
<tr>
<td>c) Collaborate with industry to develop strategies to facilitate the introduction of ready to deploy technologies to market</td>
</tr>
<tr>
<td>• Implement the National Land Transport Technology Action Plan (all jurisdictions)</td>
</tr>
<tr>
<td>• Contribute to the hydrogen for transport stream in the development of a national hydrogen strategy (all jurisdictions)</td>
</tr>
<tr>
<td>• Strategies to enable wider deployment of low emissions vehicles (all jurisdictions)</td>
</tr>
<tr>
<td>• Smart Truck Rating pilot (Cth)</td>
</tr>
</tbody>
</table>
Action 2.4
Build community acceptance of freight operations

Why we need action
Residents’ concerns about noise, emissions and safety place pressure on local councils to deny access or introduce curfews on freight activity. These local first and last mile access or operating restrictions when aggregated reduce freight network efficiency and productivity.

A collaborative approach between governments, industry and communities that communicates the importance of freight to the economy and society, whilst addressing options to deal with negative freight impacts, will build acceptance of the sector to reduce inefficient restrictions on freight operations and movements.

Linkages: Initiatives to build community acceptance under Action 2.4 will help facilitate better land use planning and access under Actions 3.1, 3.2 and 3.3. Community acceptance is also dependent on having appropriate regulatory frameworks in place under Action 3.4.

Where we want to be by 2024
To build community acceptance of freight, we aim for:

- Implementation of communication and education programs for the importance of freight
- Forums that bring together representatives from the community, industry and governments for all key freight precincts, such as ports and intermodal terminals
- Implementation of programs to mitigate freight’s physical impacts on community amenity through planning or practices
- Increasing community awareness of the importance and benefits of freight.

<table>
<thead>
<tr>
<th>Between now and 2024 we will</th>
<th>Example actions we are taking or will take</th>
</tr>
</thead>
</table>
| a) Collaborate between governments, supply chain participants and communities to promote freight’s importance for the community and economy | • Integrate community engagement as part of freight-related projects (all jurisdictions)  
• Social Licence of Freight study (WA) |
| b) Identify options to deal with noise and other impacts that might otherwise continue to create community pressure for restrictions on freight | • Freight Noise Attenuation Program (NSW) |
| c) Work to develop solutions that reduce restrictions on freight movements | • Working with councils on access for after hours freight deliveries (Vic) |
| d) Build community acceptance of freight by educating and raising awareness among communities on how to safely and positively engage with freight | • Focus on Freight (NSW)  
• Cleaner Freight Initiative (Vic)  
• Trident Joint Taskforce (Cth; Vic)  
• Heavy Vehicle Safety Action Plan 2019-21 (Qld) |
Critical Area 3: Better planning, coordination and regulation

Problem
In the absence of a national strategy to date, the freight sector has suffered from inconsistent decision-making, lack of certainty and inconsistent rules across borders.

A lack of consistency in the consideration of freight in decision-making has compromised the ability of governments and industry to balance the economic benefits of moving freight efficiently with social and environmental outcomes. A lack of certainty inhibits the making of long-term investment decisions. A lack of consistent regulation across jurisdictions, such as for managing fatigue, drug and alcohol use in the rail sector, creates confusion and duplication, resulting in costs for operators.

Outcomes we want to achieve
• Improve planning for moving freight across the nation
• Improved heavy vehicle access
• Future-focused freight regulation (productivity, safety, security and sustainability)
• Planning for a resilient freight system.

These outcomes will be achieved through four priority actions.

Actions
3.1: Ensure freight demand is integrated in transport and land use planning across and between jurisdiction boundaries and freight modes
3.2: Strengthen the consideration of freight in all other government planning and decision-making
3.3: Investigate policy, planning and operational solutions to improve freight access and movement along domestic and international supply chains
3.4: Improve regulation to be more outcomes focused and risk-based to support innovation and reduce regulatory burden whilst maintaining safety, security and sustainability
### Action 3.1

Ensure freight demand is integrated in transport and land use planning across and between jurisdiction boundaries and freight modes

**Why we need action**

Planning frameworks lack a coordinated, network approach. Failure to consider needs across jurisdictions and freight users create additional and avoidable costs to the sector, community and governments, particularly from land use conflicts.

Developing coordinated, long-term and strategic planning documents will improve coordination, practices and governance. This network approach will assist in identifying and protecting key freight corridors and developing consistent and integrated decision-making across jurisdictions and modes, improving certainty for industry and decision-makers.

**Linkages:** Action 3.1 focuses on transport and land use planning between and across jurisdictions. Action 3.2 focuses on improving awareness of freight impacts from ‘business-as-usual’ government decision-making. Planning and strategy development actions under Action 3.1 inform investment actions under Actions 1.1 and 1.2.

**Where we want to be by 2024**

To improve planning for moving freight across the nation, we aim for:

- All levels of government to have coordinated, long-term strategic freight plans, strategies and initiatives that link to the National Strategy and relevant land use and transport planning documents
- The identification and protection of current and future freight corridors and precincts from incompatible urban development
- Coordinated and integrated planning for freight across jurisdictional boundaries, particularly in regional areas.

<table>
<thead>
<tr>
<th>Between now and 2024 we will</th>
<th>Example actions we are taking or will take</th>
</tr>
</thead>
</table>
| a) Develop coordinated, long-term strategic freight plans and initiatives that are linked to the National Strategy and relevant land use and transport planning documents | • Development of National Planning Principles (all jurisdictions)  
• Action Plan implementation arrangements (all jurisdictions) |
| b) Adopt supply chain or region-based approaches to freight planning | • City and Regional Deals (jurisdictions)  
• Princes and Newell Highway Corridor Strategies (Cth; Vic; NSW; SA)  
• Supply Chain Strategy for the North West Minerals Province (Qld)  
• Optimal location for a grain/minerals port on the Eyre Peninsula (SA) |
| c) Identify and protect key freight corridors and precincts from encroachment | • Inland Rail corridor preservation (Cth; Vic; NSW; Qld)  
• National Airports Safeguarding Framework (all jurisdictions)  
• Identify and protect freight and logistics land, corridors and precincts (NSW; Vic; WA)  
• Townsville Eastern Access Rail Corridor (Qld)  
• Port of Brisbane Rail Access Corridor Preservation (Qld) |
Action 3.2
Strengthen the consideration of freight in all other government planning and decision-making

Why we need action
Access restrictions from the pressure of urban encroachment are a major constraint on the efficient movement of freight. Research undertaken by Austroads supports industry views that it is critical for governments to consider freight impacts and implications in decision-making given freight’s contribution to economic activity and community wellbeing.

Linkages: Action 3.1 focuses on transport and land use planning between and across jurisdictions, while Action 3.2 focuses on improving awareness of the impacts on freight from ‘business-as-usual’ government decision-making.

Where we want to be by 2024
To improve planning for freight productivity, sustainability and resilience, we aim for:

- All levels of Australian government to become ‘freight aware’
- Freight considerations to form part of all relevant government decision-making
- Australia’s freight network operators and users are aware of their vulnerabilities and are developing strategies to manage their climate and disaster risks.

Between now and 2024 we will

<table>
<thead>
<tr>
<th>Example actions we are taking or will take</th>
</tr>
</thead>
</table>
| **a)** Consider the impact on the efficiency of existing freight operations as well as additional freight requirements when making decisions, at all tiers of government | • Liquid Fuel Security Review (Cth)  
• Reviewing and updating state and territory planning policies relating to freight (all state and territory governments)  
• Development of Australian Transport Assessment and Planning urban freight guidelines (all jurisdictions) |
| **b)** Ensure appropriate land use planning protections for existing freight related activities and sites for future freight purposes | • National urban freight planning forum (new Cth)  
• Review and enhance protection of the Principal Freight Network (Vic)  
• Dynon Freight Precinct Master Planning (Vic)  
• Protecting land for freight and logistics in metropolitan areas (all state and territory governments)  
• Volumes of the State Planning Strategy – Metropolitan Adelaide and Regional Plans (SA)  
• Partner with infrastructure partners to enable long-term investment (NSW) |
| **c)** Improve understanding of the optimal freight infrastructure needs around major terminals, such as ports and airports | • Ports Master Plans and Development Strategies (WA)  
• Victorian Ports Strategy (Vic)  
• Master Planning for Priority Ports (Qld)  
• Bundaberg State Development Area Development Scheme (Qld)  
• Westport: Ports and Environs Strategy (WA) |
| **d)** Provide the information and tools needed for freight businesses to assess their vulnerability and resilience to climate and disaster risks | • National Disaster Risk Reduction Framework – Freight Resilience Pilot Project (Cth)  
• Liquid Fuel Security Review (Cth) |
### Action 3.3

**Investigate policy, planning and operational solutions to improve freight access and movement along domestic and international supply chains**

#### Why we need action

Improving freight access, particularly across jurisdictional boundaries and access regimes, will boost use of freight-related infrastructure, and enhance network performance, critical to handling forecast freight growth.

Responsibility for planning and access to the road and rail freight network lies largely with local, state and territory governments. A lack of incentive, capability or resources to conduct timely and coordinated assessments of key road freight infrastructure reduces access on local government roads. By improving coordination, consistency and capability in decision-making for pathing and route approvals, we can optimise the use of freight infrastructure.

#### Where we want to be by 2024

To achieve improved freight access, we aim for:

- The length of the national road network approved for access-by-notice or as-of-right access for restricted access vehicles is increased as appropriate
- Increased consistency and predictability of access for supply chain operators, by reducing the administrative burden related to route approval processes
- Pricing and access to infrastructure encourages efficient movement of freight
- More reliable rail freight movement on mixed use networks, particularly in metropolitan areas.

<table>
<thead>
<tr>
<th>Between now and 2024 we will</th>
<th>Example actions we are taking or will take</th>
</tr>
</thead>
</table>
| a) Deliver greater harmonisation of access permit processes, including access-by-notice and as-of-right access to key freight routes for higher combination vehicles as appropriate | • A national framework for high productivity vehicles (new Cth)  
• Implementation of the independent Review of Oversize Overmass Access Arrangements recommendations (all jurisdictions)  
• Heavy Vehicle Access Policy Framework (NSW)  
• National Harmonisation Program (Cth - NHVR)  
• Delegations project (Cth - NHVR)  
• Reforming the Performance-Based Standards scheme (Cth - NTC) |
| b) Provide support to local road managers | • Build a road asset information collection, storage and sharing system (Cth - NVHR)  
• Fund infrastructure assessment and upgrades to increase heavy vehicle road access (all jurisdictions)  
• Improve training and education programs for local road managers regarding restricted access vehicle permit processes (all jurisdictions/Cth - NHVR)  
• Encourage adoption of the Restricted Access Vehicle Route Assessment Tool (all jurisdictions/Cth - NHVR) |
| c) Improve freight access through metropolitan areas | • Improve management and use of loading zones in key urban centres (all state and territory governments)  
• Investigate scheduling and operating procedures to improve rail freight access and flows (all state and territory governments)  
• Inland Rail intermodal terminals planning (Cth, NSW, Vic, Qld)  
• South East Queensland Urban Freight Strategy (Qld)  
• Port of Melbourne infrastructure pricing and access review (Vic)  
• Build local government road network asset management and maintenance capability (Cth - ARRB)  
• Streamline the heavy vehicle road access approval process (Cth - NHVR) |
Action 3.4
Improve regulation to be more outcomes focused and risk-based to support innovation and reduce regulatory burden whilst maintaining safety, security and sustainability

Why we need action
Regulation that is not proportionate to risk or is overly prescriptive can be unnecessarily onerous on users of the freight system, increase costs and not achieve the intended outcome.

By developing a risk-based and outcomes-focused approach, we can decrease the regulatory burden on businesses and communities, such as the costs associated with transport of dangerous goods and biosecurity enforcement, while still achieving the regulation’s intended outcome. Such an approach will encourage competition between freight modes and encourage technological innovation whilst maintaining safety, security and sustainability.

Where we want to be by 2024
To achieve future-focused freight regulation that supports productivity, safety, security and sustainability, we aim for:

- Inefficient regulations impacting on productivity to be amended to support efficient freight supply chains and facilitate adoption of new technology
- A strengthened national laws approach for road and rail and its extension to dangerous goods
- Regulatory reform to improve the viability of coastal shipping.

Between now and 2024 we will

<table>
<thead>
<tr>
<th>Example actions we are taking or will take</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Review and implement agreed recommendations from reviews of national transport reforms and heavy vehicle regulation</td>
</tr>
<tr>
<td>• Productivity Commission review into COAG agreed national transport reforms (Cth)</td>
</tr>
<tr>
<td>• Review of the Heavy Vehicle National Law (NTC)</td>
</tr>
<tr>
<td>• Review of Regulatory Telematics (NTC)</td>
</tr>
<tr>
<td>• Review of WA Heavy Vehicle accreditation scheme (WA)</td>
</tr>
<tr>
<td>b) Review regulatory frameworks relating to freight technologies and operations to ensure they are outcomes-based and do not hinder innovation and adoption</td>
</tr>
<tr>
<td>• Audit of existing freight and supply chain regulation and reviews to identify areas of focus for future regulatory reform (new Cth)</td>
</tr>
<tr>
<td>• Regulatory reforms to prepare for deployment of automated vehicles (all jurisdictions)</td>
</tr>
<tr>
<td>• Regulatory activity regarding drones (CASA)</td>
</tr>
<tr>
<td>• Road vehicle standards regulation reform (Cth)</td>
</tr>
<tr>
<td>c) Ensure border management, transport regulation, security and biosecurity regimes support freight productivity and Australia’s international competitiveness</td>
</tr>
<tr>
<td>• Trade modernisation agenda (Cth)</td>
</tr>
<tr>
<td>• Air Cargo Security Reforms (Cth)</td>
</tr>
<tr>
<td>• A smarter and stronger biosecurity system (Cth)</td>
</tr>
<tr>
<td>• Coastal trading reform (Cth)</td>
</tr>
<tr>
<td>• Legislative reform to ensure national harmonisation of laws (all jurisdictions)</td>
</tr>
<tr>
<td>• Review regulations relating to airports (Cth)</td>
</tr>
<tr>
<td>d) Ensure environmental regulation impacting on freight operations is fit-for-purpose</td>
</tr>
<tr>
<td>• Streamline environmental assessments (all jurisdictions)</td>
</tr>
</tbody>
</table>
**Critical Area 4: Better freight location and performance data**

**Problem**
There is a lack of available information and data to measure, monitor and evaluate supply chain performance. Insufficient information or visibility across the supply chain is exacerbated by data inconsistency across jurisdictions and an absence of appropriate data sharing frameworks.

Without resources to assess supply chain performance, governments and industry are unable to optimise decisions about infrastructure investment needs, freight operations, and community amenity.

By improving the availability, consistency and security of freight location and performance data, we can improve freight operations, make better investment decisions and monitor and evaluate freight performance.

**Outcomes we want to achieve**
- A national approach to data consistency across jurisdictions
- Freight performance benchmarks and indicators established
- Decision-makers having relevant information in a timely manner
- Information improves decision-making about infrastructure investment needs, areas of reform, freight operations and community amenity.

These outcomes will be achieved through one priority action.

**Action**

4.1: Develop an evidence-based view of key freight flows and supply chains and their comparative performance to drive improved government and industry decision-making, investment and operations.
Action 4.1

Develop an evidence-based view of key freight flows and supply chains and their comparative performance to drive improved government and industry decision-making, investment and operations

Why we need action
The measurement of supply chain and network performance is critical to monitoring domestic and global competitiveness over time. This information will identify areas where action is required to maintain and improve Strategy outcomes. Improving our capacity to collect, host, analyse and share freight data will drive improved forecasting and modelling, and improving freight planning, investment and operational decision-making.

Linkages: The success of Action 4.1 will be reliant on the adoption of global data standards in Action 2.1.

Where we want to be by 2024
To provide better freight location and performance data that enables decision-makers to have planning, investment, operations and reform information in a timely manner, we aim for:

- Improved freight data collection, sharing and analysis practices to enable industry and government freight sector participants to make better informed operational, planning and investment decisions
- Performance benchmarking of Australia’s key import and export supply chains against international competitors to identify best practices and areas requiring reform
- Appropriate and fit-for-purpose approaches to data collection and use by emerging transport technologies, including connected and automated vehicles
- Consistent and regular data is made available to enable forecasting of freight movements and demand with high degrees of certainty.

<table>
<thead>
<tr>
<th>Between now and 2024 we will</th>
<th>Example actions we are taking or will take</th>
</tr>
</thead>
</table>
| a) Develop freight performance benchmarks and indicators | • Benchmark key import and export supply chain performance against international competitors (Cth)  
• Regularly publishing performance measurement data (NSW) |
| b) Improve freight data collection, dissemination, analysis and hosting | • Transport Network Strategic Investment Tool (TraNSIT) (CSIRO)  
• Inland Rail Supply Chain Mapping Study (Cth; CSIRO)  
• Settle arrangements for the National Freight Data Hub (Cth)  
• Establish a freight data exchange pilot to allow industry to access freight data in real time (Cth)  
• Work with industry to maximise sharing, use and accuracy of data, including creating an online platform (NSW)  
• Open data portal (WA) |
| c) Build long-term forecasting and modelling capability for investment and reform purposes | • Inland Rail Freight Corridor Survey (Cwth)  
• Tasmanian Freight Survey (Tas)  
• Container Origin Destination Study (Vic)  
• Queensland Freight Model (Qld)  
• Strzelecki Track wider economic benefits study (SA)  
• GlobleLink planning and business case study (SA) |
| d) Investigate best approaches to data collection and use for emerging technologies | • National Infrastructure Collection and Dissemination Plan (all jurisdictions)  
• Research on road operator data for use by connected and automated vehicles (Austroads)  
• Frameworks for collection and use of C-ITS and automated vehicle data (NTC)  
• Compliance automation project (WA) |
# Summary of Actions

## Smarter and targeted investment

1.1: Ensure that domestic and international supply chains are serviced by resilient and efficient key freight corridors, precincts and assets
1.2: Provide regional and remote Australian with infrastructure capable of connecting regions and communities to major gateways, through land links, regional airports or coastal shipping
1.3: Identify and support digital infrastructure and communication services necessary for improved and innovative supply chains
1.4: Advance heavy vehicle road reform to facilitate efficient investment in infrastructure

## Enable improved supply chain efficiency

2.1: Adopt and implement national and global standards, and support common platforms, to reduce transaction costs and support interoperability along supply chains
2.2: Promote training and re-skilling of industry and government workforces appropriate to current and future needs
2.3: Facilitate new and innovative technologies that improve freight outcomes and understand the deployment, skills and workforce requirements for operators and infrastructure
2.4: Build community acceptance of freight operations

## Better planning, regulation and coordination

3.1: Ensure freight demand is integrated in transport and land use planning across and between jurisdiction boundaries and freight modes
3.2: Strengthen the consideration of freight in all other government planning and decision-making
3.3: Investigate policy, planning and operational solutions to improve freight access and movement along domestic and international supply chains
3.4: Improve regulation to be more outcomes focused and risk-based to support innovation and reduce regulatory burden whilst maintaining safety, security and sustainability

## Better freight location and performance data

4.1: Develop an evidence-based view of key freight flows and supply chains and their comparative performance to drive improved government and industry decision-making, investment and operations