

National Freight and Supply Chain Strategy



A Closer Look How we got here

Setting the scene

In 2016, Infrastructure Australia recommended that governments and industry work together to develop a 'wholeof-network' strategy that examines Australia's freight and supply chains.

Previous reviews and strategies looked at specific elements of the freight industry – such as freight at ports or on rail and road – and did not deal with the supply chain in its totality. As such, some important issues identified in those strategies remain. These include a lack of corridor protection, diminishing landside access, a lack of integrated planning and coordinated freight governance across and within governments, and nationally consistent and available freight data.

The Commonwealth, state and territory governments, together with industry, agreed it would be in the national interest to have a long term freight strategy to extract the best value from investment and meet future challenges related to domestic and international growth.

The Inquiry into National Freight and Supply Chain Priorities

In March 2017, the Commonwealth Government initiated the Inquiry into National Freight and Supply Chain Priorities to identify priorities for Australia for the next 20 years to improve freight and supply chain efficiency and capacity, and manage the costs of transporting goods through our major national container ports, airports and intermodal terminals.

The Expert Panel which led the Inquiry was comprised of four members with significant freight industry experience. The Panel engaged in months of research and analytical work on all aspects of Australia's freight system, being assisted by the Department of Infrastructure, Transport, Cities and Regional Development. Many streams of work informed the Inquiry, as outlined below.

Supporting papers

The Department released six supporting papers that investigated different aspects of Australia's freight networks.



No.1 Air Freight provides an overview of the air freight sector in Australia today (which represents 21 per cent of our total international trade value, while being less than 0.1 per cent by volume), possible future trends and stakeholder priorities.



No.2 Maritime Freight examines the maritime freight market and impacts of international shipping patterns on Australia, along with the role of ports, types of shipping, future trends and stakeholder priorities.





No.3 Road and Rail Freight provides an overview of the road and rail freight sectors and the importance of intermodal terminals in enabling freight transfer. It lists current reforms underway, future technological trends and challenges, and stakeholder priorities.



No.4 Analysis of Capital City Key Freight Route Performance analysed key freight routes within each of Australia's five largest capital cities. The analyses provide an overview of the freight activity and other pressures on the transport network and examine road freight movements along the route, network capacity and performance, and key constraints.

The focus on key freight route connections to critical economic hubs within major cities reflects strong feedback received during the consultation process that the most significant constraints on the land transport network are occurring in capital cities.



No.5 Infrastructure Investment summarised the infrastructure project development life cycle and governance and legislative framework in place in Australia. It identifies investment reform measures as well as existing infrastructure investment programs.



No.6 Recent Policy Reviews of Relevance to Freight and Supply Chains in Australia examined key points from recent policy reviews conducted by Australian governments relevant to the performance of the freight and supply chain network and infrastructure over the previous five to six years.

A further two studies were conducted by the University of Sydney Business School on Australia's freight productivity and its effect on the national economy and opportunities for improvement; and Australia's freight and supply chain performance against international comparators.

Long term scenario planning

The Department commissioned the Centre for Supply Chain and Logistics, Deakin University, to conduct long-term scenario planning to identify what areas need reform now to place Australia in the best position to meet future.



The scenario planning project included:

- the identification and validation of potential drivers of change in freight and supply chains in Australia through a series of 52 one-on-one interviews and relevant literature reviews.
- the development and validation of four scenarios based on these drivers with a time horizon of 20 years
- the facilitation of their application in workshops, to inform the inquiry into Australia's national freight and supply chain priorities.

The project outcomes concluded the following:

• A technology-driven revolution is imminent, powered by automation data. Regulators should stay ahead of the technological changes that automation and data will bring, enabling the implementation of the most promising advances for the sake of greater competitiveness.

- The focus of education and training may need to change focus toward more numerical, technical and analytical subjects, as well as future focused courses on subjects such as robotics and optimisation.
- New generations of consumers embrace different values and have increased expectations, such as the direct delivery of their goods with few delays, and aligned with their views of social and environmental sustainability.
- A lack of coordination across levels of governments, combined with the effects of Australia's short political cycles, which may prevent the development of a harmonious regulatory framework and long-term plan for infrastructure development. There is some concern amongst industry about a lack of coordination.

In-depth analysis

Critical supply chains

The Inquiry was also informed by research projects on selected nationally significant supply chains undertaken by PricewaterhouseCoopers.

The studies examined the commodities and flows, participants, modes, infrastructure, comparable supply chains and regulation to identify areas that impede the efficient movement of this cargo in the following supply chains:

- Central Queensland coal chain network
- Riverina agricultural freight flows
- Sydney urban freight
- Hobart air freight

Technology impacts on critical industries

PricewaterhouseCoopers were also commissioned to examine the impacts of technology on supply chains for the critical industries of the resources sector (coal, iron ore and bauxite), agricultural sector (grain, cotton and livestock) and urban freight in major Australian cities.

These studies identified the typical supply chains serving each

industry by mode (road, rail, maritime, aviation), the underpinning infrastructure, key service characteristics and the costs of moving freight through the supply chain, including for first and last mile costs at a high level. The studies then presented a view on how technology, innovation and changing business practices may affect supply chains identified over the next 20 years, particularly in relation to infrastructure, service requirements and cost.

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The studies identified common themes and emerging technologies that could benefit the sectors, namely:

- robotics for the automation of elements of the supply chain
- data driven software and devices designed to optimise asset utilisation or freight movement
- tracking and traceability systems using technology that can monitor the movement within the various supply chains
- remote monitoring of supply chain asset condition (e.g. rail, road) to improve the effectiveness of maintenance.



Extensive consultation

All the research and papers produced for the Inquiry would not have been possible without extensive consultation with all levels of government and industry representatives.

The Inquiry conducted three stages of consultation:

- Stage one: Following the release of the Inquiry discussion paper on 26 May 2017, which received 127 submissions, consultations included meetings with over 28 peak bodies and 200 individuals representing a diverse cross section of the freight supply chain. These meetings canvassed the broad issues and formal submissions on the basis of the Inquiry Discussion Paper.
- Stage two: The Expert Panel met with key supply chain companies, urban planners, road and rail regulators and Commonwealth Government agencies to more deeply explore key issues identified for the Inquiry report. These consultations occurred during September through to December 2017.
- Stage three: The Expert Panel met with state and territory government ministers for infrastructure and planning in February 2018 to ensure the Expert Panel's draft priorities from the Inquiry took into account and supported existing state freight strategies, plans and policies.

The Department also conducted three focus groups with representatives from 11 organisations in February 2018 with key industry experts regarding the draft priorities from the Inquiry to 'test' whether they would drive productivity improvements to the national freight system over the next 20 years, and whether the priorities are implementable. The focus groups centred on technology and data, urban planning, and national road and rail regulation.

Conclusion of the Inquiry

The Expert Panel's key recommendation was that a nation-wide, consistent and integrated approach to freight and supply chain issues be put in place where freight modes and operators work together to enhance the efficiency of freight movement.

The Inquiry report, research and supporting papers were released on 18 May 2018 and are available at www.infrastructure.gov.au/transport/freight/freight-supply-chain-priorities







Developing the Strategy

Following the release of the Inquiry report in May 2018, the Commonwealth, state and territory governments committed to develop a National Freight and Supply Chain Strategy.

The Strategy builds on the advice of Infrastructure Australia and adopts a supply chain approach to help position Australia to meet the emerging freight task.

The Transport and Infrastructure Council realised that extensive consultation was required in the development of the Strategy to ensure that it resulted in a national, mode-neutral approach to Australia's freight task.

Further consultation

From June 2018, the Department met with jurisdictional counterparts and industry representatives to discuss potential action areas for inclusion in the Strategy and ensure stakeholder needs and expectations were understood and addressed.

The Department held ten focus groups to test key elements of the Strategy between 21 November and 4 December 2018. Meetings were held in Darwin, Sydney, Canberra, Melbourne, Launceston, Adelaide, Brisbane, Townsville, Perth and Albury. They were attended by 310 stakeholders evenly split between industry and Commonwealth, state and territory and local government stakeholders.

A further range of targeted consultations were held with industry including reference group meetings on data and air freight and a consultative forum on rail freight.

A second round of scenario planning

Building on the earlier work carried out for the Expert Panel-led Inquiry, a second round of scenario planning took place. This involved two stages:

- identifying potential blind spots in the Inquiry's findings
- 'acid-testing' the proposed National Action Plan and Commonwealth Implementation Plan in terms of their future-readiness.

Two main groups of long-term change drivers in freight and supply chains were identified:

- Environmental pressures, such as climate change, energy sources and usage, and the consumer-driven push for sustainability in supply chains.
- Automation technologies, such as automated transport and freight facilities, and the impact of advanced manufacturing (e.g. 3D printing).



National freight data requirements study

One of the recommendations from the Inquiry into National Freight and Supply Chain Priorities was the importance of improving freight data collection and sharing.

The Department coordinated a data reference group made up of key stakeholders from industry, government and data experts. The data reference group held a workshop in Melbourne in August 2018 to determine what freight data is needed by industry and government and how this data could be collected.

The Department then commissioned iMove Cooperative Research Centre (iMOVE CRC), a co-provision of expertise from the Australian Road Research Board, Deakin University, University of New South Wales and the University of Queensland, to identify the best national freight data collection and governance framework.



Through a series of surveys, interviews and focus groups, the project team engaged almost 200 individuals across small and large private firms, industry peak bodies and all levels of government.

iMove made 12 recommendations to governments, which are broadly centred around:

- Developing a national policy on freight data to address inconsistencies and inefficiencies, such as developing and implementing common data standards, open data principles and privacy and governance frameworks, with a focus on addressing the interest of the entire sector
- Establishing a Freight Data Coordination Office to act as a central coordination, aggregation and dissemination point for national level freight data sets
- Improving the availability and use of current data collections.

The Australian Government has taken steps to start implementing these recommendations having allocated \$8.5 million in the 2019-20 Budget to settle the design of a National Freight Data Hub which will help business and governments plan and make better operational and investment decisions, and establish a freight data exchange pilot.





A Strategy agreed by all Australian governments

All this work has culminated in the National Freight and Supply Chain Strategy and National Action Plan.

From the start of the Inquiry in March 2017 to the completion of the Strategy in August 2019, over 120 meetings with over 1370 industry and community organisation participants have taken place.

The Strategy and Action Plan outline shared priorities and commitments to action. The Strategy and Action Plan, for the first time:

- Integrate the different transport modes road, rail, air and maritime;
- · Coordinate actions across and between all levels of government; and
- Take a long term perspective 20 years with major reviews every five years.

The Australian, state and territory governments endorsed the Strategy at the Transport and Infrastructure Council meeting on 2 August 2019.

The Strategy and Action Plan are available at www.freightaustralia.gov.au

Where to from here?

The Strategy and Action Plan are the starting point to achieve the desired outcomes, not the end game.

Australian governments will report annually on their progress. The annual report will provide an opportunity to discuss freight performance, emerging issues and challenges for particular supply chains, modes or jurisdictions.

There will also be major reviews of the Strategy and Action Plan every five years. These reviews will ensure continuous improvement in supply chain performance, help identify gaps in government or industry actions and ratchet up efforts to meet Australia's freight challenge.



National Freight and Supply Chain Strategy

August 2019

Timeline: The road to a National Freight and Supply Chain Strategy

National Freight and Supply Chain Strategy and National Action Plan

