



Queensland
Government

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Office of the
Director-General

Mr Marcus James
General Manager
Road Safety and Productivity Branch
Surface Transport Policy Division
Department of Infrastructure and Regional Development
GPO Box 594
CANBERRA ACT 2601

Department of
Transport and Main Roads

Dear Mr James

Marcus

Thank you for the opportunity to inform the Inquiry into National Freight Supply Chain Priorities. Enclosed is a submission for consideration into the Inquiry. It identifies Queensland's high-level key challenges and priorities for Australia's freight and supply chain.

The submission reflects the themes identified during the development of the draft Queensland Freight Strategy including:

- collaborative leadership – shared leadership approach delivering shared outcomes
- sustainability – creating a system that is well planned
- an agile system – connected, efficient, reliable and productive system
- innovation – harnessing the best innovations through technology's evolution
- intelligent investment – leverage investment frameworks to deliver better outcomes using evidence-based decisions.

The Department of Transport and Main Roads (TMR) looks forward to working with the Department of Infrastructure and Regional Development and other jurisdictions to continue to inform the development of a National Freight Supply Chain Strategy.

If you require further information, I encourage you to contact Ms Sally Noonan, Deputy Director-General (Policy, Planning and Investment), TMR, by email at sally.a.noonan@tmr.qld.gov.au or telephone on (07) 3066 7464. Ms Noonan is Queensland's representative on the working group.

Yours sincerely

Neil Scales

Neil Scales
Director-General
Department of Transport and Main Roads

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1. INTRODUCTION

Queensland welcomes the Department of Infrastructure and Regional Development (DIRD) *Inquiry into National Freight and Supply Chain Priorities* (the Inquiry) and the opportunity to provide a submission. The Inquiry will support the development of a *National Freight and Supply Chain Strategy* (the Strategy).

In May 2017 the Inquiry released a discussion paper titled *Inquiry into National Freight and Supply Chain Priorities - Discussion Paper* (the Discussion Paper). The Discussion Paper seeks the insight of those directly engaged in or affected by the operation of Australia's Freight Supply Chains. The Inquiry, and subsequent development of the Strategy, has the potential to provide significant and long term benefits to the nation.

The purpose of this submission is to provide details which may be relevant to the development of the Strategy regarding Queensland's current and future actions within the freight system. Queensland embraces its role on the working group convened to support the development of the Strategy. Additional information, including activities currently underway in Queensland to deliver freight improvements across freight policy, planning and investment will be provided through this mechanism, as required.

At 1.7 million square kilometres in geographic area and having a decentralised and growing population (currently 4.7 million with 1.5 million living in the regions¹) Queensland requires a capable and continuously evolving transport network to connect our people and industries to cities and regions across the state and the country, and to serve as the gateway to the world.

The public and private investments in Queensland's network of roads, rail, ports and airports have produced a major long term state and national social and economic asset that will continue to deliver increasingly significant net benefits for people and the economy over the coming decades.

The efficiency of our national freight transport supply chains will increasingly be influenced by population growth, diversifying goods, consumption patterns, technological innovation and the use of shared networks.

2. CONTEXT SETTING

2.1 Queensland Ministerial Freight Council

The Queensland Ministerial Freight Council (QMFC) is an advisory body established to facilitate communication and consultation between industry peak bodies and the Department of Transport and Main Roads (TMR).

The QMFC consists of representatives from more than 20 key industry associations and the Transport Workers Union.

The QMFC is a single multi-modal and multi-sectorial Council which focuses policy discussions on the growing demands of the freight task in Queensland.

2.2 Queensland Freight Strategy

TMR is currently undertaking a review of the current *Moving Freight* strategy. The QMFC has been informing and guiding this work. Following consultation with QMFC and key industry groups a draft *Queensland Freight Strategy (QFS) – Transporting the Economy* has been developed. In addition a rolling two-year Queensland Freight Action Plan (QFAP) is currently under development with consultation occurring across Queensland with industry and government.

The draft QFS is a high-level document providing policy direction for managing Queensland's freight system over the next ten years. It builds on its predecessor, *Moving Freight*, to ensure our freight supply chains remain adaptive and resilient. The QFS is being developed to address the changing freight environment, better align freight supply chain priorities with broader government priorities, and to support future economic growth.

¹ Department of Infrastructure, Local Government and Planning: State Infrastructure Plan, 2016, Page 14

2.3 State Infrastructure Plan

The State Infrastructure Plan (SIP, 2016) outlines the Queensland Government's approach to delivering infrastructure across government, including a consistent strategy and implementation program to underpin economic growth, support jobs and create economic opportunities for Queenslanders.

Freight access across Queensland's supply chains will continue to be a priority with a focus on improved safety, increased capacity, transport efficiency and route reliability. Increased movement of freight by sea will also require a focus on sustainable development and maintenance of shipping channels, berths and supporting port landside infrastructure, to ensure safe and efficient operation of ports.

The SIP addresses the infrastructure needs of Queensland by providing an approach for strategic planning, understanding the critical challenges facing the state and providing a range of responses that will address the fundamental problems. The newly released 2017 update of the SIP Part B program outlines progress over the past year, outlines the government's infrastructure investment program over the next four years, and highlights those projects that are in planning phases.

Strategic Corridor Plans

Economic zones are largely connected to or located along key transport corridors and connect key components within supply chains. These vital east-west and north-south corridors support resource and agricultural development, provide access to markets and connect communities.

Better infrastructure investment decisions can be made when the definition of the task is clear. Additionally, there is the potential for optimisation of corridors by co-locating other infrastructure classes. The review of regional plans across the state will consider the strategic importance of identifying and protecting corridors.

The SIP includes a commitment by the Queensland Government to improve infrastructure and land-use planning, coordination and integration – through coordinating strategic infrastructure corridor plans which are focused on the long-term transportation needs for:

- Queensland coast from Brisbane to Cairns.
- The Surat Basin.
- Mount Isa to Townsville.
- Central Queensland.
- South West Queensland.
- Key South East Queensland (SEQ) transport corridors.

2.4 Land Use Planning

State Planning Policy

The *Planning Act 2016* (the Planning Act) which establishes a new planning system for the state was passed by the Queensland Parliament on 12 May 2016 and commenced on 3 July 2017. The objectives of the planning reform agenda and the Planning Act are to deliver better planning for Queensland by:

- Enabling better strategic planning and high-quality development outcomes.
- Ensuring effective public participation and engagement in the planning system.
- Creating an open, transparent and accountable planning system that delivers investment and community confidence.
- Creating legislation that has a practical structure and clearly expresses how land use planning and development assessment will be done in Queensland.

- Supporting local government to adapt to and adopt the changes.

Under the Planning Act, the State Planning Policy (SPP) is a key component of Queensland's planning system. It seeks to facilitate development that will secure the ongoing liveability, sustainability and prosperity of Queensland communities. It identifies state interests in land use planning and development including the state interests of infrastructure integration, transport infrastructure, strategic airports and aviation facilities, and strategic ports. The state interest statements for these state interests are:

- Infrastructure integration - The benefits of past and ongoing investment in infrastructure and facilities are maximised through integrated land use planning.
- Transport infrastructure - The safe and efficient movement of people and goods is enabled, and land use patterns that encourage sustainable transport are supported.
- Strategic airports and aviation facilities - The operation of strategic airports and aviation facilities are protected, and the growth and development of Queensland's aviation industry is supported.
- Strategic ports - The operation of strategic ports and priority ports (Gladstone, Abbot Point, Townsville and Hay Point/Mackay) are protected and their growth and development is supported.

The SPP identifies that *"economic and social development in Queensland depends on a system of transport infrastructure that is safe, structurally sound, and reliable. Transport infrastructure provides access to employment, social services and recreational opportunities, shapes land use patterns and drives economic growth by supporting productive and successful businesses and industries."*

Policies for transport infrastructure include:

- (1) Transport infrastructure and existing and future transport corridors are reflected and supported through compatible land uses.
- (6) Development in areas surrounding state transport infrastructure, and existing and future state transport corridors, is compatible with, or support the most efficient use of, the infrastructure and transport network.

In relation to mining and extractive resources, the SPP recognises that *"the resources industry is a key driver of the Queensland economy and one of the state's largest export earners. It is a diverse industry that supports the needs of other industries and the community through the supply of valuable commodities including minerals, coal, petroleum and gas resources. Ongoing resource exploration and development is vital to the delivery of employment, infrastructure, skills and prosperity."*

Key Resource Areas (KRA) are protected through the policies of the SPP, including avoiding land uses along the transport route and transport route separation area of a KRA that are likely to compromise the ongoing use of the route for the haulage of extractive materials.

Regional Plans

Queensland's regional plans provide strategic direction through land use planning to achieve economic, social and environmental outcomes. Through the draft ShapingSEQ – South East Queensland Regional Plan and the forthcoming North Queensland Regional Plan, the Queensland Government is delivering a more integrated approach to planning for the future of regions. These regional plans identify region-shaping infrastructure required to service existing development and support growth. Region-shaping infrastructure is then highlighted in the State Infrastructure Plan.

Land use planning is critical to the development of the freight and supply chain sector, both in urban and regional areas, as land use planning can be both a facilitator and impediment in responding to the needs of industry. Growing urban encroachment, climate impacts and changes of community expectations will continue to be a substantial consideration while planning for the future of the national freight and supply chain sector.

2.5 Regional Transport Plans

A series of statewide Regional Transport Plans (RTPs) is currently being developed for all TMR districts across Queensland. The plans have been developed, and will be maintained, in partnership with local government along with Queensland Government and industry partners.

The RTPs play a critical role in defining the strategic direction of regional transport systems, guiding the planning of Queensland's transport network over the next 15 years. Consideration is given to all modes and aspects of transport that support the prosperity and liveability of each district.

2.6 City Deals

Under a memorandum of understanding signed in November 2016, the Queensland Government is committed to working with the Australian Government to cooperatively establish and implement City Deals in Queensland with relevant local governments. Queensland has been at the forefront of City Deals in Australia with the signing of Australia's first City Deal for Townsville and the recent 2017 Federal Budget commitment to the development of a SEQ City Deals Strategy.

City Deals can provide an innovative mechanism for all three levels of government to collaborate and work together to coordinate and leverage local, state and federal government investment into an agreed set of projects and agreed outcomes, including consideration of national freight and supply chain priorities. If established and delivered effectively, City Deals have the potential to provide greater certainty to government and industry while maximising economic outcomes.

For the Queensland Government, established City Deals can provide a critical connection and effective delivery mechanism between the Regional Plans for example spatial land use plans for SEQ and North Queensland, the SIP, RTPs and annual budget processes to ensure that the state is driving consistent economic outcomes alongside the Australian Government and local government.

2.7 Building Queensland

Building Queensland is an independent statutory body established by the *Building Queensland Act 2015*. Building Queensland leads the preparation of business cases for infrastructure proposals with a capital cost exceeding \$100 million or if the net present value of the proposed state financial commitment exceeds \$100 million or if directed by the Minister. In addition, Building Queensland assists in the preparation of business cases where an infrastructure proposal capital cost is between \$50 million and \$100 million or if the net present value of financial commitments entered into by the state is between \$50 million and \$100 million. Building Queensland's lead and assist roles apply to projects of Queensland Government state agencies and nominated government-owned corporations that trigger the Building Queensland thresholds.

In this context, Building Queensland's role in infrastructure business case development includes consideration of many of the priority issues identified in the Inquiry discussion paper. For example, consideration of transport supply chain performance, efficiency enhancements and end-to-end supply chain integration and regulation (to reduce cost or travel time, increase reliability, connectivity and productivity). In addition, consideration of international trends including globalisation pressures and opportunities, commodity market developments, technological trends and changes to international shipping (larger cruise and container vessels).

The Inquiry discussion paper highlights many of the relevant critical issues which require further policy discussion and development. Building Queensland also suggests the Inquiry also considers improvements to information and data collection, sharing and analysis to strengthen policy and investment decision-making processes.

3. CHALLENGES AND PRIORITIES

The key high-level challenges and priorities for Australia's freight and supply chains are identified below.

3.1. Megatrends

As the economy diversifies away from mining and bulk resources, the attributes of the freight task are changing. Over time, the economy is becoming more services-orientated and it is a well observed phenomenon that service-based economies require less freight for each unit of economic growth. In addition, technological improvements should improve freight efficiency, both from the perspective of goods being transported becoming lighter (i.e. steel structures have decreased in weight) and the efficiency of freight vehicles has improved over time.

It is likely the existing freight task will change over time, which may lead to an increase in containerisation and less bulk good movements. It is heartening that the Discussion Paper identifies changing volume by modality as an opportunity to address. It is important the Inquiry supports traditional well-established industries (coal, agriculture) and enable new, high-value industries, which may require a new type of freight or supply chain structure.

3.2. Sustainable, multi-modal transport network

A multi-modal network that sees the integration of road, rail, sea and air transport to move freight efficiently through the supply chain is vital to a connected and productive freight system. The opportunities to make better use of sea and air transport has the potential to unlock new or expanded export opportunities while also providing alternatives to reduce the demands placed on land based transport infrastructure.

The potential benefits that can be achieved through making better use of rail transport, where the freight characteristics are favourable (access, availability of rail service providers, volume, value, and distance) should be continued to be pursued. There are notable challenges for rail transport to overcome including:

- Ageing rail infrastructure and locomotives/rolling stock.
- Operating on a shared network where passenger transport has priority.
- Price structures of rail versus road transport.
- High financial barriers to entry to the rail service provider market.
- Rail operators use take or pay contracts for agriculture commodity exporters to mitigate their risk, however, agriculture exporters are reluctant to enter into take or pay arrangements due to the uncertainty of commodity prices, harvest and other economic vagaries.

These challenges lead to issues such as weight limitations, reliability and capacity, inability to align the service offering with customer requirements (schedules), increased transit times and limited competition. These concerns often result in the shift to greater use of road transport.

In some regions, road and rail compete for the freight task. Both industries have different requirements for cost recovery. The Inquiry should consider how to incentivise freight tasks, to ensure the best use of competing assets, to maximise economic outcomes.

3.3. A connected system

Improving the physical connectivity of transport infrastructure, supported by communication and collaborative work systems, is a key focus of a connected system. Achieving this will enable the co-ordinated planning and management of freight movements from origin to destination.

Queensland has a vast geographic area and a decentralised and growing population which presents challenges in terms of an expansive network and ageing infrastructure, impacted by annual severe weather events. Many of Queensland's regional rail lines connect key areas of agricultural production to our ports. There is a focus on continuing to improve regional rail performance such as the North Coast Line to increase rail freight movements.

Efficient port connections are required to support the export of freight to overseas markets and increase our global competitiveness. Rail and road infrastructure to facilitate productive and efficient access to ports is a priority and should be considered in the context of the availability of the right mode to suit the characteristics of the freight to be transported (volume, value, distance). Optimisation of the effectiveness and efficiency of port operations and services to transfer the freight from road/rail to vessel is also a critical part of the export supply chain.

3.4. Understanding key supply chains

It is important the Inquiry supports traditional well-established industries in addition to new/emerging, high-value industries. Specific commodity based supply chain investigations are required to provide an enhanced understanding of the limitations and constraints to the efficient and productive movement of freight from origin to destination.

A key priority for consideration of the Inquiry is the development of a National Agricultural Supply Chain Strategy. Agricultural freight is unique in terms of the seasonality of varying production across widely dispersed areas. This presents a challenge in providing a connected transport network between the various agriculture producing areas and sea and airports, the gateways to international markets. In addition, agriculture produce experiences constant changes in production volumes from season to season and is highly influenced by weather conditions such as rainfall levels and severe weather conditions. This fluctuation in freight volumes limits the ability for modal competition. Agriculture produce is mainly bulk commodities and therefore is naturally suited to rail transport given the significant volumes transported over vast distances. However given these challenges, there is a trend towards using road transport due to the inherent flexibility and responsiveness it can provide.

The investigations should seek to provide a better understanding of the key industries and identify freight and supply chain needs and infrastructure requirements. Also a better understanding of the cost competitiveness of various industries compared with international benchmarks, to understand the potential for changes in supply chain costs to unlock economic bottlenecks would be beneficial.

3.5. Breadth of markets supported

The opportunity to facilitate improved network and modal access to smaller or emerging freight generators presents a significant opportunity for the national economy. Access to common user facilities supporting the aggregation of freight into viable volumes should increase the use of the national freight supply chains and provide these smaller entities with opportunities to collectively negotiate improved haulage rates.

3.6. Urban freight

Urban freight vehicles (up to 4.5 tonnes) are continuing to grow. While the volume of freight carried by individual light commercial vehicles is relatively small, a significant number of these vehicles are operating on the Queensland road network. This growth has been due to population growth in urban centres but also in part to changing consumer behaviours such as on-line shopping requiring smaller and more frequent deliveries directly to households from a diversifying array of freight storage and distribution centres. With the increase in urban freight vehicles, there is a need to ensure safety and amenity aspects are managed. A greater understanding of the urban freight task is also required to better inform policy, planning and investment decisions. Limited data is available on urban freight movements and drivers. Investigations are proceeding into this policy area and further work into this issue may raise awareness about the drivers of demand for services and be a starting point for understanding future demands and changes to freight needs.

3.7. Data

The lack of available and accurate freight and supply chain data is a key long standing issue that is vital to the accurate identification of issues and therefore the development of policy responses to address issues. In part the lack of data correlates to more data being collected by industry rather than traditional data collection previously by government. Therefore issues relating to the commercially sensitive nature of the data and the competitive environment

between transport providers require collective solutions. In the absence of this data, high level models and estimates are used by government. The availability of high quality data, across all modes would enable government to better understand the current and future freight task and make informed decisions on planning and investment for the transport system.

Government and the transport and logistics industry need to work collaboratively to identify potential ways forward on the sharing of freight and supply chain data. The work being undertaken by CSIRO in developing its TraNSIT model based on industry supplied supply chain data and transport system information to model network demand and transport costs for an array of commodity supply chains is a good example of progress in this area.

3.8. Technology

New technology is testing the limits of how we plan for infrastructure, disrupting established methods of cost recovery and conventional sources of jobs. It is playing an increasing role in how we plan future infrastructure capacity, from electric cars to embedded sensors that report on asset condition. Technology is impacting the way we think about traditional 'hard' infrastructure, and what we now consider to be critical infrastructure in its own right. In the future, decisions between delivering new and replacement infrastructure may compete with technological responses.

Ensuring the government is well positioned to access and use the latest and most efficient technology is important to make the best use of available opportunities provided through this emerging/influencing trend. Technology advancements have the ability to assist in gathering and analysing travel and freight data, asset condition and to improve resilience, efficiency, safety and operation of Queensland transport networks.

Emerging technological trends likely to have the greatest impact on freight transport:

- automation and connected vehicles/infrastructure
- shared mobility/Demand-responsive transport
- digitisation and the "internet of things"
- 3D printing
- drones, both air and land-based
- big data
- alternative fuels (for example electrification, biofuels and hydrogen fuel cell technology)

3.9. Safety

Safety is the highest priority for the Queensland Government in managing the Queensland transport system. As passenger and freight vehicles operate on shared networks, safety impacts and risks need to be identified and addressed to ensure safe access to the transport network for all users.

3.10. Security

Safeguarding Queensland's transport system against security threats such as terrorism is a key issue given the current global environment.