



Inland Queensland Roads Action Plan

*Driving Productivity
in Australia's Transport Network*

4 August, 2017

Freight and Supply Chain Priorities
Department of Infrastructure and Regional Development
GPO Box 594
CANBERRA CITY ACT 2601
E: freightstrategy@infrastructure.gov.au

Dear Madam/ Sir

Re: Inquiry into National Freight and Supply Chain Priorities

I refer to the above Inquiry and welcome the opportunity to make this submission to the Department of Infrastructure and Regional Development as the Chair of the Inland Queensland Roads Action Plan (IQ-RAP) project, representing 49 funding partners including 33 local governments, eight Regional Roads and Transport Groups, five Regional Development Australia committees and RACQ.

The objectives of our submission are to:

1. raise awareness of the IQ-RAP as a professionally developed planning tool for strategic freight and tourism routes in Queensland that can be used as a reference in developing the National Freight and Supply Chain Priorities as well as provide a methodology that can be transitioned to other jurisdictions (of relevance to Consolidated Question 2.1);
2. emphasise the need for investment in rural and regional infrastructure as the source of production for mining and agricultural freight (of relevance to Consolidated Question 2.1); and
3. emphasise the relevance of regional Queensland and its freight infrastructure for exports to Asia (of relevance to Consolidated Question 3.2, 3.2, 3.4).

1. Inland Queensland Roads Action Plan (IQ-RAP) – its relevance to the Inquiry

The vision for the Inland Queensland Roads Action Plan (IQ-RAP) is to increase the quality and accessibility of the road network to maximise the economic prosperity of inland Queensland, thereby contributing to Australia's productivity, quality of life, safety and equity outcomes.

The scope of the area covered by IQ-RAP is west of the Bruce Highway and outside South East Queensland, covering 1.4 million km² – that is, 82% of Queensland or more than 20 times the size of Tasmania.

The IQ-RAP provides a methodology that can be used to monitor the road and bridge infrastructure gaps and review priorities. It analyses existing data on bridge and road conditions against TMR intervention and vision standards, and prioritises investment based on:

- Economic value – Supports economic activity across all industries, and is able to carry heavy freight efficiently in most weather conditions with enhanced safety levels for all users;
- Strategic intent – Provides stimulus to future economic development;
- Safety – Carries traffic safely;
- Access – Ensures roads within the network are of a consistent and adequate quality with predictable travel conditions; and
- Social value – Connects communities for education, health, employment, business and recreation.

Multi Criteria Analysis (MCA) based on the above criteria ensured a robust and objective prioritisation process with resulting recommendations for works in three categories: MCA rating 1 – highest priority for delivery in 0-5 years, MCA rating 2 – priority for delivery in 6-10 years, MCA rating 3 – priority for delivery in 11-15+ years.

The MCA has identified that over 3,000 kilometres of road and more than 300 bridges require upgrades to meet ‘fit for purpose’ standards. An average investment of \$277 million per annum, approximately 0.2% of Queensland’s Gross State Product generated outside Brisbane, would address each of these priorities and deliver the desired outcomes including productivity improvements for all industries and business users of the road network e.g. mining, agriculture and logistics; safer roads with fewer accidents, fatalities and injuries; and more resilient connectivity of communities for delivery of services and goods and access in times of severe weather events and emergencies.

The methodology in the IQ-RAP could be applied to other regions. **IQ-RAP also reflects recommendations in the Australian Infrastructure Plan including recommendation 4.1.**¹ *“State and territory governments should deliver long-term regional infrastructure plans. These plans should: identify gaps in infrastructure networks and identify priorities to support productive regional industries; be developed with involvement from all levels of government to help coordinate investments and remove duplication; provide transparency for the private sector to allow for government funding to be leveraged and private investment to be maximised; and assess the potential for regions to ease pressure on our largest cities.”*

The IQ-RAP project also recognises the importance of rail and other inter-modal connectivity, however 100% of businesses rely on the road network either partially or fully in regard to their inputs to production or movement of products to markets. In much of regional Queensland, producers rely 100% on the road network. While increased use of rail is desirable, the future growth of freight movements will only be partially met by rail.

More detailed documentation is available at the following links. These documents will also be mailed.

Overview of IQ-RAP - June 2017

<http://rdanwq.org.au/files/queensland-roads/IQ-RAP%20OVERVIEW%20June%202017.PDF>

Inland Queensland Roads Action Plan (IQ-RAP) - March 2016

<http://rdanwq.org.au/files/queensland-roads/IQ-RAP%20Plan%20Web%20version%20170207.PDF>

Other background information including letters of support from industry peak bodies

www.rdanwq.org.au/iq-rap

¹ Australian Infrastructure Plan; Infrastructure Australia; February 2016; <http://infrastructureaustralia.gov.au/policy-publications/publications/Australian-Infrastructure-Plan.aspx>

2. The need for investment in rural and regional infrastructure as the source of production for mining and agricultural freight

Queensland's industry and business base is broadly distributed. 52%, that is, \$140 billion of Queensland's Gross State Product (GSP) is generated outside Brisbane.

Mining and Energy

The total economic impact of the minerals and energy sector in Queensland, taking into account direct and indirect impacts, in 2014/15 was \$64.8 billion, contributing 21.9% of GSP and employing 365,866 people accounting for 15.7% of the Queensland's employment. Approximately 40% of this industry activity is based outside South East Queensland. In regions like North West Queensland, the mining sector accounts for 56.2% of direct and indirect regional employment.

Major production areas and supply chains *within the scope of the IQ-RAP* include, but are not limited to:

Fitzroy Region, Bowen & Galilee Basins – coalfields in Central Queensland. Coal exports are generally transported from the mining operations via rail where they are then exported via the ports of Hay, Point, Abbot Point and Gladstone. Mining inputs arrive via the ports of Gladstone, Mackay and Townsville (and further afield) where they are generally transported via road to mine site. Key east-west road transport routes include the Peak Downs Highway, Flinders Highway and Capricorn Highway. In 2015-16, mines within the Fitzroy region contributed \$5.8 billion to Gross Regional Product.

North West Minerals Province (NWMP) – The North West Minerals Province is one of the world's most significant base and precious metals producers with 11 operating mines, two under development and a further 14 projects under development. Mount Isa is the hub of the mining activity and resources are transported, predominantly by rail but also by road, to the Port of Townsville for exports to international markets. Prior to the closure of Century Zinc, Karumba was also an important port for exports of zinc. Mine inputs also rely on the Port of Townsville and the national, state and regional roads such as the Flinders and Barkly Highways and several Developmental Roads. In 2015-16, mines within the NWMP contributed \$1.7 billion to Gross Regional Product.

Far North Queensland - Mareeba and Tablelands Shires – this area produces gold, copper and tungsten amongst other minerals. In 2015-16, mines within the region contributed \$371 million to Gross Regional Product in Mareeba and \$38 million to the Tablelands economy.

South West Queensland - Eromanga and Ballera - This area produces oil and gas. Access roads in the region include the Cooper and Bulloo Developmental Roads. In 2015-16, mines within the South West Queensland region contributed \$386 million to Gross Regional Product.

North Queensland - Charters Towers – Gold was discovered in the region in the late 19th century and continues to be mined to this day. Access to the Flinders Highway and Port of Townsville are critical. In 2015-16, mines within the Charters Towers local government area contributed \$56 million to Gross Regional Product.

Central Queensland - Maranoa, Surat Basin – this area produces coal seam methane gas and coal. Roma, Maranoa is located on the junction of the Warrego and Carnarvon Highways. Connectivity north-east to the Gladstone Port is critical for exports.

Diamantina Minerals Province - Geologists have unearthed evidence that suggests Queensland may be sitting on a treasure trove of rare minerals that underpin 21st century technologies and laying undiscovered in the remote North West of the state. The discovery, loosely being referred to as the Diamantina Minerals Province, covers an area from the copper, gold and platinum-rich Fifield in central New South Wales, through Queensland's north west country and up to the Merlin diamond mine in the Northern Territory, where one of Australia's largest diamonds was discovered. There is potential for this to become a major new production area for high value commodities, and downstream processing and exports. As most of the province is classified as very remote, with low investment

into economic infrastructure to date, there will need to be investment into road access to open up mines and transport product.

Agriculture

The agricultural industry contributes \$13.7 billion and 5% of GSP and employs 323,800 people accounting for 14% of Queensland's employment. Approximately 88% of these jobs are regionally-based. Significant new agricultural expansion is already planned in much of Queensland based on water resources associated with the major catchments.

According to Transport Network Strategic Investment Tool developed by CSIRO, the total cost of cattle transport across Australia is about \$490 million if return trips of empty trailers are considered. In addition to intra-state transport, there is also much inter-state transport occurring with flows between New South Wales and Queensland and from the Northern Territory to Queensland feedlots and abattoirs. Modelling in Queensland has demonstrated that savings of up to \$7.83 per head of cattle can be made with small investments in road infrastructure. Aggregate savings were calculated as up to \$739,000 per annum.

This work by CSIRO has demonstrated that small investments can make a significant difference to productivity. We highly recommend that smaller projects that can make such a difference to productivity as well as achieve other government objectives such as creating local jobs do not get overlooked.

According to Meat and Livestock Australia, in 2014/15 there were 27.4 million head of cattle in Australia, **11.3 million or 41.2% of which were in Queensland. 41 Queensland roads were assessed under the Northern Australia Beef Roads Programme, and 26 were funded. The data is available to inform a future round of this programme to capture productivity improvements in this industry worth \$14.3 billion per annum nationwide.**

Advantages of inland routes

For domestic freight movements, inland routes primarily pass through smaller population centres traditionally welcoming of road transport and benefit significantly from transport-related industries. The vast majority of inland roads are designated road train routes which allow for higher freight productivity and fewer heavy/light vehicle interactions. Efficient and effective inland routes reduce congestion on the populous coastal strip served by the Bruce Highway where coastal terrain, major rivers and more extreme climatic events require significantly higher levels of road infrastructure funding to achieve similar levels of operational efficiency. A trip from Cairns to Melbourne using an inland route saves 600 km and associated fuel, maintenance and labour costs.

Advance Cairns CEO Kevin Byrne notes the investments to seal the Hann Highway "will take 14 hours off the journey between Cairns and Melbourne opening up all sorts of economic opportunities for primary industry and tourism along the way....this is strategic infrastructure at its very best".

As a pastoralist in the cattle industry I note from personal experience that before the sealing of 77 km of the Boulia-Winton road back in early 1990's, live animals would lose 10% of their gross body weight during transport; after the road was sealed they only lost 4-5% gross body weight. In addition to this, in the tourism season a trip along the four metre single lane bitumen Boulia-Winton road averages 1 to 1.5 hours longer in duration, making a 4-5 hour trip 5-6.5 hours long with the associated impacts on costs and animal welfare. In regard to live exports and transport costs, Boulia producers deliver to a Mount Isa or Cloncurry depot at a cost of around \$20 per head; delivery to a processor on the East coast costs anywhere from \$100 - \$150 per head. The quality of transport infrastructure and industries' costs and competitiveness are inextricably linked.

The Queensland Transport and Logistics Council² reports in regard to the establishment of a Queensland Inland Highway: *"Further analysis of the economic benefits of an established QIH indicates that the potential productivity benefits (travel time and vehicle operating cost savings) in shifting heavy vehicle traffic to an inland highway would be approximately \$642 million over 30 years. Adding safety and environmental benefits, the total benefits over the 30 year period would be \$689 million.*

² A Focus on Freight on Queensland's Inland highway; Queensland Transport and Logistics Council; January 2015; http://www.qtlc.com.au/wp-content/uploads/2012/07/QTLC_FocusOnFreight_QldInlandHwy_web.pdf

During a flood event in central/north Queensland, a larger proportion of coastal traffic might be expected to use the inland route than would normally be the case. Based on the traffic figures used in this report, and making assumptions regarding the expected destination of these vehicles, the delay cost for a seven-day flood event where the Bruce Highway is closed entirely would be \$9.5 million. Were this event to occur annually, the benefit of diverting vehicles inland would be around \$196 million.”

Inland routes also offer the opportunity to trial new technologies away from highly populated centres. Autonomous and semi-autonomous vehicles, and especially platoons, could be trialled on key supply chains that are relying on road networks to connect with rail or ports.

3. Regional Queensland freight infrastructure is critical for the growth of exports, particularly to Asia

Queensland has more than 15 ports, 7 of which are vitally linked to the Inland Queensland Road network. Queensland exports \$49.5 billion of goods overseas each year. The major exports include; food and live animals worth \$7.6 billion, mineral fuels \$19.84 billion and non-ferrous metals \$4.25 billion. **A number of export industries have shown considerable growth in value over the past decade - agricultural exports have grown by 104% from 2004/5 to 2014/15 and coal and metal ore exports have increased by 93%.**

The fastest shipping route from Australia to Shanghai is from Townsville. Similarly other ports in Queensland are well placed to provide fast, efficient transport routes to the strongly growing export markets of China and India while servicing historically important markets like Japan and ports within South East Asia and the Pacific.

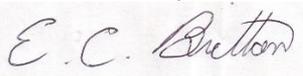
As per the above recommendation in the Australian Infrastructure Plan, there is a window of opportunity to address infrastructure needs in regional Queensland to enable the pressure to be taken off southern ports which are experiencing significant congestion and urban development.

Road connectivity to airports to access air freight operations is also increasingly important. With production of high value fresh produce, and potentially rare earth metals in the future, direct links from Queensland airports to markets, particularly in Asia, will be vital to capturing new markets and obtaining premium pricing.

The IQ-RAP Working Group is currently considering the updating of the plan to include reference to roads that have been upgraded or funded since data was collected in mid-2015. Should this occur we will forward the updated IQ-RAP 2 to the Department of Infrastructure and Regional Development.

I would be delighted to respond to any further questions you may have. I recommend contact through the IQ-RAP Secretariat which is managed by Ms Glenys Schuntner, CEO at Regional Development Australia Townsville and North West Queensland - on 07 4410 3655 or ceo@rdanwq.org.au.

Yours sincerely



Cr Eric (Rick) Britton

Chair

IQ-RAP Working Group

The following documents will accompany this letter in the mail:

- Inland Queensland Roads Action Plan (IQ-RAP)
- Overview of IQ-RAP
- Letters of Support – Queensland Farmers’ Federation; Queensland Resource Council
- Maps of Queensland’s Resource Industries and mineral, coal and petroleum operations and resources

Logos of IQ-RAP's Major Funding Partners

