Executive Summary

The vision for the Inland Queensland Road Network Strategy 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.

Background

Queensland is a decentralised state with its wealth-producing centres scattered widely along the coastal strip and throughout the interior – from major ports and airports through agriculture and mining to tourism and services. Queensland is also a critical supplier of resources, including perishable foods, to the major population centres in the south of our continent.

Historically, traffic volumes and investment have focussed on the Bruce Highway as a single coastal link with east-west ‘ribs’ serving the hinterlands. This approach has produced congestion on the coastal network and disruptions during extreme weather events. The coastal network is also not designed or appropriate for the operation of Freight Efficient Vehicles (FEV), which maximise the productivity of the freight task, but are not compatible with high volumes of passenger cars.

After initial work on this project to develop the Inland Queensland Roads Action Plan in 2016, the goals of improving productivity and safety on the inland Queensland road network, along with sustaining regional local governments and communities, has encouraged an on-going alliance of 28 local governments, five Regional Development Australia (RDA) Committees and Royal Automobile Club of Queensland Limited (RACQ) to collaborate as a working group to develop a bi-partisan approach to the prioritisation of funding and the development of inland Queensland roads. This strategic alliance has developed this strategy to identify the network and prioritise a program of works over fifteen years and beyond. Each of the partners has contributed financially to the project. Road data was provided by the Department of Transport and Main Roads (TMR).

Objectives

The strategy aims to strengthen the transport ‘backbone’ in the eastern zone of Queensland by providing quality inland links connecting northern Australia to Sydney, Melbourne and Adelaide. For the western zone, the strategy aims to prioritise the improvement of ‘ribs’ servicing the west’s industry and communities by improving access to the ‘backbone’.

The proposed strategy for network improvement builds on previous work of TMR, recent studies, and knowledge from local governments. It will improve connectivity to communities, wealth-generating regions and tourism destinations to the west of the Bruce Highway and outside South East Queensland.

Prioritised investment in the inland Queensland road network is necessary to enhance connectivity between communities in western and northern Queensland and address a range of challenges associated with the current condition of, and the changing demands on the network. It will also deliver benefit to industry and support Australian Government strategies to enhance the productivity of northern Australia, thus contributing to the Australian economy through providing improved and more direct connectivity to southern markets. For example, the beef industry is highly dependent on the transport network for the timely and efficient movement of stock but climatic extremes cause delays that directly impact productivity.

$154 billion of Gross State Product (GSP) is generated outside Greater Brisbane. That is equal to 49% of Queensland’s annual GSP and 9% of Australia’s Gross Domestic Product.

:id consulting pty ltd, National Economic Indicators 2015/16

Front Cover Image: Ootann Road, photo courtesy of Mareeba Shire Council
Methodology

Rather than taking a piecemeal approach through selecting only one or two types of roads for consideration, the Working Group and partners identified the 16,200 km of strategic freight routes of the inland Queensland road network that would generate regional economic benefits. The network consists of inland Queensland’s National Road Network together with Other State-Controlled Roads (OSCR), Local Roads of Regional Significance (LRRS) as well as local government roads (LG) that are key to development of this vast area. Together, these roads represent the core network of inland Queensland.

This strategy provides a strategic level analysis and prioritisation over an extensive network and a methodology that can be used to monitor the infrastructure gap and review priorities. It analyses existing data on road and bridge conditions against established TMR intervention and vision standards, and prioritises investment based on the following values:

- Economic value - Supports economic activity across all industries, and is able to carry heavy freight efficiently in most weather conditions;
- Strategic intent - Provides a stimulus to 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.

The needs and aspirations of road users were considered in the identification and prioritisation of works, which called for:

- a robust network of inland roads connecting to and providing viable alternative routes to the Bruce Highway, as well as servicing those seeking an inland route to southern states;
- roads to be built and maintained to ‘fit for purpose’ standards; and
- a prioritised program of works resulting in timely improvements, to meet industry development and operational needs, and continuity of work for dedicated local workforces.

This strategy provides stakeholders with a high-level assessment of the current road infrastructure in the region, a clear understanding of the future road transport priorities for inland Queensland, and a prioritised and staged approach to funding the required improvements.

Achievement of a realistic program of works based on this plan will improve transport links both within inland Queensland and to the rest of Australia, and it will also reduce heavy vehicle impacts on Queensland’s populous coastal strip.

The strategy has potential to be an ongoing initiative that will monitor progress and respond to new economic and community developments and needs. Future reviews of the strategy could see the network refined to ensure new links essential to community connectivity and economic development are included as further planning and updated data are considered.

This is the first review of the original Inland Queensland Roads Action Plan (March 2016). It has added several strategic links, has incorporated works completed and committed since then, has reprioritised the network using a revised multi-criteria assessment (MCA) incorporating additional criteria such as the Australian Road Assessment Program (AusRAP) safety data and CSIRO Transport Network Strategic Investment Tool (TraNSIT) report and updated the program accordingly.

Queensland exported $70 billion of goods in the year ending February 2017. Coal, minerals, meat and other food products produced in regional Queensland made up the bulk of these exports.

Queensland Government Statistician’s Office, Exports of Queensland Goods Overseas, February 2018
IQRNS proposed program of investment

The strategy recognises road projects that are funded in the current Queensland Roads and Transport Investment Program (QTRIP) and prioritises works beyond the forward program into the 4, 10, 15 and 15+ year program horizons as demonstrated in the table below.

The proposed program is not constrained by available funds, and hence provides a quantitative basis for funding submissions to realise essential improvements to the inland Queensland road network.

Achievement of a realistic program based on this work will prove the maxim that ‘What’s good for inland Queensland is good for Australia’.

The table below shows the IQRNS upgrades excluding those identified in other programs such as QTRIP. Note that these costs are all in $2018. No allowance for discounting of future costs has been made in these figures and all are indicative estimates subject to planning and design considerations.

The IQRNS map indicates the strategic freight routes, as identified by partner councils, in the area west of the Bruce Highway as per the scope of the project and the prioritisation of investment into 4, 10 and 15+ year program horizons to reach vision standards based on MCA. MCA Ratings 1, 2 and 3 indicate meeting vision standards in 4, 10 and 15+ year horizons respectively. This means some projects should be commenced and completed in four years, while others are recommended to start in coming years, but continue construction over several years to achieve vision standard over 10 - 15+ years, therefore making the best possible impact on local employment.

Recommendations

The Inland Queensland Roads Action Project (IQ-RAP) partners recommend:

- the Australian Government reference this strategy and the significant work completed to inform the roll out of the 10 year Roads of Strategic Importance (ROSI) initiative as announced in the 2018 Budget;
- the high priority projects in the strategy be considered in the next update of the QTRIP and other priorities continue to be rolled into future QTRIP programs and new funding opportunities;
- the strategy be referenced as an input to future Regional Transport Plans (RTPs) and economic development planning processes across Queensland;
- the strategy be referenced as an input to investment plans to implement the RTPs and provide longer term direction for future road investment and to bridge the gap between the four year QTRIP and the 15 year State Infrastructure Plan (SIP);
- the local governments in this project work with the Department of Transport and Main Roads to ensure priorities are included in regional plans;
- the Australian and Queensland governments consider the IQRNS as a new methodology for prioritising regional roads investment;
- the Australian and Queensland governments consider undertaking research projects that develop an improved methodology for assessing the economic and social benefits of investment into strategic regional road networks, better suited than the current benefit cost ratio model that is more relevant to urban projects; and
- the Queensland Government considers making long-term funding programs for regional roads.

Summary of proposed IQRNS investment

<table>
<thead>
<tr>
<th>RRTG</th>
<th>Strategic estimate $m</th>
<th>1-4yrs</th>
<th>5-10yrs</th>
<th>11-15yrs</th>
<th>15+yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowen Basin</td>
<td>1,252</td>
<td>82</td>
<td>500</td>
<td>670</td>
<td></td>
</tr>
<tr>
<td>Far North</td>
<td>862</td>
<td>46</td>
<td>254</td>
<td>374</td>
<td>188</td>
</tr>
<tr>
<td>Gladstone</td>
<td>61</td>
<td>17</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Queensland</td>
<td>334</td>
<td>32</td>
<td>140</td>
<td>162</td>
<td></td>
</tr>
<tr>
<td>East Zone sub-total</td>
<td>2,509</td>
<td>160</td>
<td>911</td>
<td>1,250</td>
<td>188</td>
</tr>
<tr>
<td>North West</td>
<td>1,008</td>
<td>93</td>
<td>369</td>
<td>423</td>
<td>123</td>
</tr>
<tr>
<td>Outback</td>
<td>797</td>
<td>69</td>
<td>281</td>
<td>404</td>
<td>43</td>
</tr>
<tr>
<td>South West</td>
<td>833</td>
<td>78</td>
<td>326</td>
<td>344</td>
<td>85</td>
</tr>
<tr>
<td>West Zone sub-total</td>
<td>2,638</td>
<td>240</td>
<td>976</td>
<td>1,171</td>
<td>251</td>
</tr>
<tr>
<td>Total Proposed Investment</td>
<td>5,147</td>
<td>400</td>
<td>1,887</td>
<td>2,421</td>
<td>439</td>
</tr>
</tbody>
</table>
The IQRNS has prioritised projects on key freight corridors and connectors to drive productivity, economic development and diversification, jobs, more resilient connectivity and better safety.

IQRNS priorities based on the multi-criteria assessment

The map indicates the strategic freight routes, as identified by partner councils, in the area west of the Bruce Highway as per the scope of the project and the prioritisation of investment into 4, 10 and 15+ year program horizons to reach vision standards based on MCA. MCA Ratings 1, 2 and 3 indicate meeting vision standards in 4, 10 and 15+ year horizons respectively. This means some projects should be commenced and completed in four years, while others are recommended to start in coming years, but continue construction over several years to achieve vision standard over 10 - 15+ years, therefore making the best possible impact on local employment.
The IQRNS makes a convincing economic and social case for investment

The IQRNS will deliver improved access to regional Queensland for freight, tourists and other road users, improved safety, reduced ongoing maintenance costs, improved community infrastructure, employment, training and business development opportunities for Indigenous and non-Indigenous people.

Based on expenditure of $2,287 million over 10 years, the following economic and job impacts can be achieved.

### Total impact over 10 years

<table>
<thead>
<tr>
<th></th>
<th>Output ($M)</th>
<th>GRP ($M)</th>
<th>Income ($M)</th>
<th>Employment (FTE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Impact</td>
<td>$2,287</td>
<td>$887</td>
<td>$275</td>
<td>2,782</td>
</tr>
<tr>
<td>Indirect Impact (Type I)</td>
<td>$1,339</td>
<td>$616</td>
<td>$367</td>
<td>4,213</td>
</tr>
<tr>
<td>Indirect Impact (Type II)</td>
<td>$1,903</td>
<td>$1,063</td>
<td>$482</td>
<td>6,773</td>
</tr>
<tr>
<td><strong>Total Impact</strong></td>
<td><strong>$5,529</strong></td>
<td><strong>$2,566</strong></td>
<td><strong>$1,124</strong></td>
<td><strong>13,768</strong></td>
</tr>
</tbody>
</table>

### Average annual impact

<table>
<thead>
<tr>
<th></th>
<th>Output ($M)</th>
<th>GRP ($M)</th>
<th>Income ($M)</th>
<th>Employment (FTE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Impact</td>
<td>$229</td>
<td>$89</td>
<td>$28</td>
<td>278</td>
</tr>
<tr>
<td>Indirect Impact (Type I)</td>
<td>$134</td>
<td>$62</td>
<td>$37</td>
<td>421</td>
</tr>
<tr>
<td>Indirect Impact (Type II)</td>
<td>$190</td>
<td>$106</td>
<td>$48</td>
<td>677</td>
</tr>
<tr>
<td><strong>Total Impact</strong></td>
<td><strong>$553</strong></td>
<td><strong>$257</strong></td>
<td><strong>$112</strong></td>
<td><strong>1,377</strong></td>
</tr>
</tbody>
</table>

Source: AEC Group, June, 2018

There is also a convincing road safety case for investment

Road deaths per 100,000 persons in major cities vs regional and remote Australia

---

1 Disclaimer: Whilst all care and diligence have been exercised in the preparation of this report, AEC Group Pty Ltd does not warrant the accuracy of the information contained within and accepts no liability for any loss or damage that may be suffered as a result of reliance on this information.

2 Bureau of Infrastructure, Transport and Regional Economics, 2015/16
The IQRNS compares favourably with other road projects to demonstrate value for money

<table>
<thead>
<tr>
<th>Project</th>
<th>Project Cost to the Aus Gov</th>
<th>Annual Gross Regional Product (GRP) within the local governments’ areas</th>
<th>Cost of project to Aus Gov over 10 yrs in % terms of GRP</th>
<th>Area km²</th>
<th>No. of local governments in the project area</th>
<th>Population</th>
<th>Indigenous population 2016</th>
<th>No. of people unemployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>IQRNS (Addressing priorities over first 10 years at a total cost of $2,287 million)</td>
<td>$1,830 million</td>
<td>$43,464 million</td>
<td>0.4%</td>
<td>1,260,080</td>
<td>28</td>
<td>462,000</td>
<td>32,200</td>
<td>16,100</td>
</tr>
<tr>
<td>Tasmanian Road Package (ROSI)</td>
<td>$400 million</td>
<td>$5,855 million</td>
<td>0.7%</td>
<td>12,794</td>
<td>8</td>
<td>191,800</td>
<td>10,288</td>
<td>6,385</td>
</tr>
<tr>
<td>Bindoon Bypass (ROSI)</td>
<td>$220 million</td>
<td>$307 million</td>
<td>7.2%</td>
<td>1,220</td>
<td>1</td>
<td>5,300</td>
<td>124</td>
<td>161</td>
</tr>
<tr>
<td>NSW/ACT Package (ROSI)</td>
<td>$100 million</td>
<td>$692 million</td>
<td>1.5%</td>
<td>4,247</td>
<td>5</td>
<td>233,200</td>
<td>3,679</td>
<td>6,473</td>
</tr>
<tr>
<td>Cape York Peninsula Development Road Package (2014–19 – total cost of $260.5 million)</td>
<td>$208.4 million</td>
<td>$220 million</td>
<td>18.9% over 5 year life of project</td>
<td>21,591</td>
<td>8</td>
<td>8,300</td>
<td>7,145</td>
<td>723</td>
</tr>
</tbody>
</table>

Over 10 years, IQRNS can be delivered at an average annual investment of $8.2 million per local government area. Based on current programs, this could ideally be funded on an 80% – 20% split, with the Australian Government contributing $6.6 million p.a.

Data for the above projects is based on the local government areas of the projects.

For example, IQRNS does not include the data for Cairns, Mackay and Rockhampton which have a combined GRP of $21,726 million. The ports and businesses in these areas would however benefit from investment into the inland road network. Doomadgee is not in IQRNS but would benefit from the local business and job opportunities that would arise from investment into IQRNS through projects such as the Savannah Way from Burketown to the Northern Territory.

In the case of the Cape York Peninsula Package, Weipa with an annual GRP of $216 million, is not included in the statistics but will benefit.

---

1. Australian and Queensland Government websites for the ROSI and CYPDRP:
   - https://www.tmr.qld.gov.au/Projects/Name/C/Cape-York-Region-Package-Peninsula-Developmental-Road
2. As above
3. Id consulting pty ltd, National economic Indicators by local government, 2015/16 (This does not include the GRP of surrounding areas that will also benefit from the investment.)
4. Australian Bureau of Statistics
5. Id consulting pty ltd, National economic Indicators by local government, 2015/16
6. Queensland Government Statistician’s Office for Queensland projects; Australian Bureau of Statistics for other projects
7. Queensland Government Statistician’s Office for Queensland projects; Australian Bureau of Statistics for other projects
8. ROSI – Australian Government Roads of Strategic Importance Initiative, a new 10 year regional roads program announced in May 2018
The IQRNS connects regions, states and their industries, exporters, markets, communities and tourists.