



Australian Government
Infrastructure Australia

Infrastructure priorities

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Topics

Infrastructure priorities for next 20 to 50 years, implementation & implications for the agri sector

1. General
2. Priorities
3. Implementation
4. Implications

Not views of the Australian Government or Infrastructure Australia Council



1. General

- Economic infrastructure: transport, energy, water, telecomms
 - transport: ports, freight, urban
- Structure-conduct-performance
 - importance of external governance
- Bold reform elements; get money to the right place
 - funding and financing
 - 'fiscal gap'
- Grains interest: ports and freight



1a. General: next 20 years

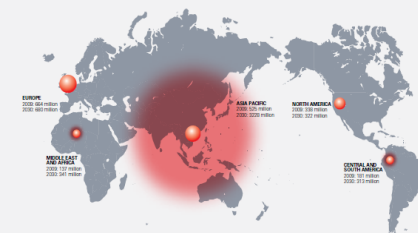
- Food a bigger international issue
- Settlement, environment and industrial activity
- Climate & weather shift
- Pressure on budgets
- Information management
- Australia relies more on exports?

LOOKING AHEAD TO 2050, GLOBAL FOOD IMPORTS BY ASIA WILL GROW BY US\$470 BILLION, INCREASING AUSTRALIAN AGRICULTURAL EXPORTS BY 140 PER CENT.

The Global Rise of Asia

By 2050, Asia will be the centre of global commerce, producing over half of global output.¹² The population of the Asia Pacific region will increase six-fold between 2009 and 2030. It will be the largest regional market in the world.¹³ Rapid urbanisation across Asia will support increasing living standards. The rate of urbanisation in China is 100 times the size and 10 times the speed of Britain's Industrial Revolution.¹⁴ By 2050, average Asian incomes will be equal to European incomes today.¹⁵

Figure 2: Growing consumer markets in Asia



Source: Australian Government 2012, *Australia in the Asian Century* – White Paper.

These changes have widespread implications for the Australian economy, and represent big opportunities for Australia to play a key role in the region. These opportunities are already upon us, with Australia chairing and hosting the Group of Twenty Finance Ministers and Central Bank Governors (G20) in 2014 and taking an active role in the Asia-Pacific Economic Cooperation (APEC), the primary organisation for promoting trade and economic cooperation within the region.

The G20 recognises the importance of infrastructure investment to help boost productivity, growth and jobs. It is considering ways to improve the international investment climate and work will likely be developed during Australia's G20 Presidency in 2014.

Strong Asian demand for our resources saw our mineral exports nearly triple in the decade to 2011.¹⁶ Education service exports doubled in value every five years to \$18 billion in 2009/10¹⁷, with our largest buyers being China, India and the Republic of Korea.¹⁸ Demand for Australia's resources is expected to continue to grow.

Looking ahead to 2050, global food imports by Asia will grow by US\$470 billion, increasing Australian agricultural exports by 140 per cent.¹⁹ Our tourism industry will benefit as more and more tourists visit from China, South Korea, Japan, Malaysia and Singapore.²⁰ Our service industries will grow, including in construction and utilities.²¹

To take best advantage of opportunities arising from the growing Asian middle class, Australia will need to refine its approach to financing and funding infrastructure.

Figure 3: Australian real Gross Domestic Product and industry composition



Source: Australian Government 2012, *Australia in the Asian Century* – White Paper.

International trade will contribute to an expected doubling of the road freight task, tripling of the shipping task and quadrupling of the rail and air freight task into the future.



2a. Priorities

- Long term plan – sequencing - projects
 - the right framework is the priority
- Preconceptions
 - long term plan to do everything now?
 - historical thread?
 - information overload / squeaky wheel?
 - advocacy or analysis?
 - data or hypothesis?

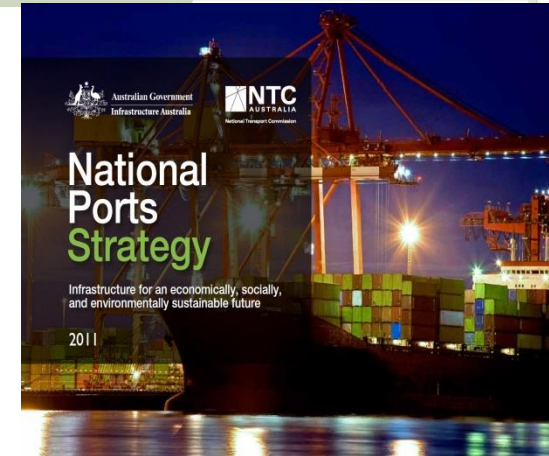


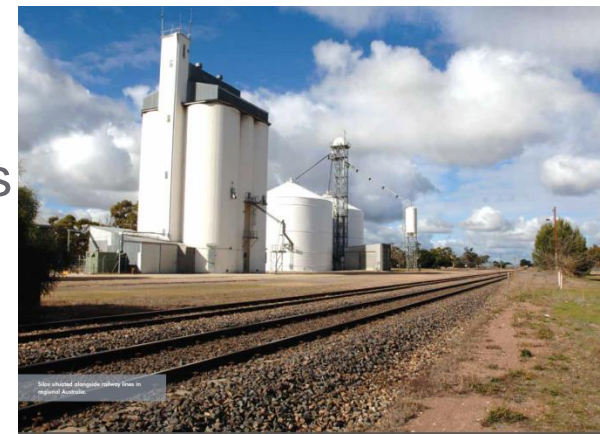
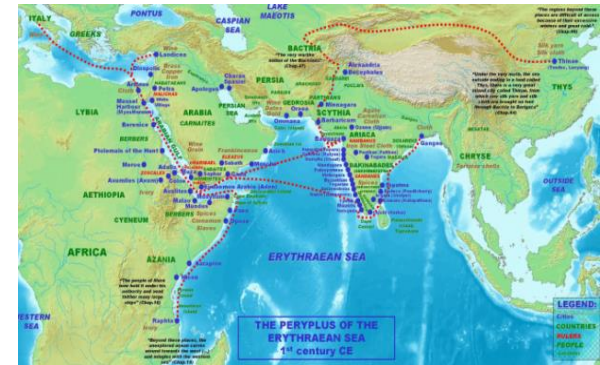
Figure 3 National land freight strategy: updated indicative map of a national land freight network





2b. The priority: ports & freight long term plan

- Starting point:
 - goods move along least financial cost pathway
- Implies:
 - lower unit cost near nodes
 - fairly stable hierarchy of nodes and routes
 - long term planning is possible
- **Goal: least economic cost pathway**
 - align financial and economic cost
 - assure minimum cost on established routes
 - competitive pathways to overseas markets





2c. Plan - issues

- High flow places: generally well known, long established;
 - certainty of capacity / possible encroachment
 - priority of use
- Other places: some old some new;
 - uncertainty about what is needed
- Connecting high and low flow places;
 - storage and system redundancy
- Infrastructure for economic gains;
 - exports
 - roads the big issue





2d. Plan: national freight network

Figure 7 – Capital city ports and Ports Australia ports with throughput over three million tonnes in 2010-11

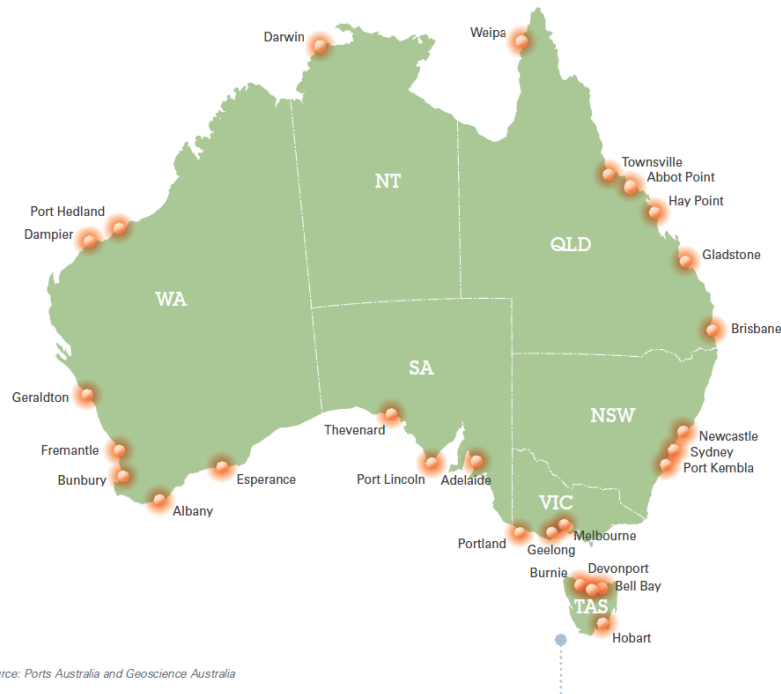


Figure 7: Indicative map of key national freight routes





2e. Plan for network

A place for freight?

- National level planning
- Streamlined approvals
- Vehicle interoperability
- Market principles
- Supporting governance
- Buy in: industry, community, governments

Achieving road reform?

- The roads story
- Local rural roads





3a. Implementation: proof of concept

■ Trials:

- Mount Isa -Townsville
- Chullora rail terminal / area
- Hume 'b triples'
- road asset manager

■ Obvious:

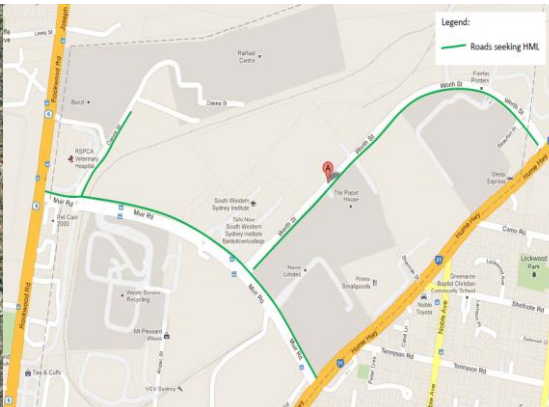
- network should join places
- best roads to railheads
- build from ports out
- people don't like trucks



- Mount Isa – Townsville: results

- Chullora: lessons to date

- goodwill exists, action inhibited by 'complexity'
- 'place for freight' is not understood





3c. Underway

- Hume 'b-triples': lessons to date
 - consultation is an iterative process
 - commercial and economic pathways are intricately linked
 - main road use can be a market like utilities
- Asset manager: lessons to date
 - some communities recognise pathways
 - asset data is critical, but 'achievable'
 - listening is more than hearing



A STRATEGIC APPROACH TO GRAIN LOGISTICS REFORM STARTS WITH LOCAL ROADS



Current local road management and funding is neither rational nor strategic. A national rural local road productivity fund, administered by an independent national road portfolio manager, has the potential to do far more than simply add to the quantum of funds available for local government roads. If established and used properly, such a reform can bring about highly strategic and sustainable reforms to some of the most vexing issues in rural freight infrastructure. The grain freight task in northern New South Wales is a good example of the potential of such a reform.

The east coast grain transport task – a complex and changing logistics challenge

In 2009, Australia's eastern states alone produced \$4.376 billion in wheat, oats, barley and sorghum²⁴. This logistics task is both complex and changing: in the post single-desk marketing environment, forward-trading opportunities in the global market for grain exports mean that Australian grain might be stored and sold long after harvest to take advantages of changes in market prices across the year. Those involved in this

handlers, road and rail transporters and port operators, need to make long-term and significant investments in grain storage sites, in railways and in port infrastructure. Ideally, such investments should be served by all-weather, year-round transport infrastructure. Combined with this more complex modern business cycle, some of the traditional grain branch railways in northern NSW that have carried much of this task in the past have fallen to disrepair, while at least one of its traditional export ports has also become less straightforward for future grain freight access, in part as a consequence of competition from a highly lucrative coal trade.




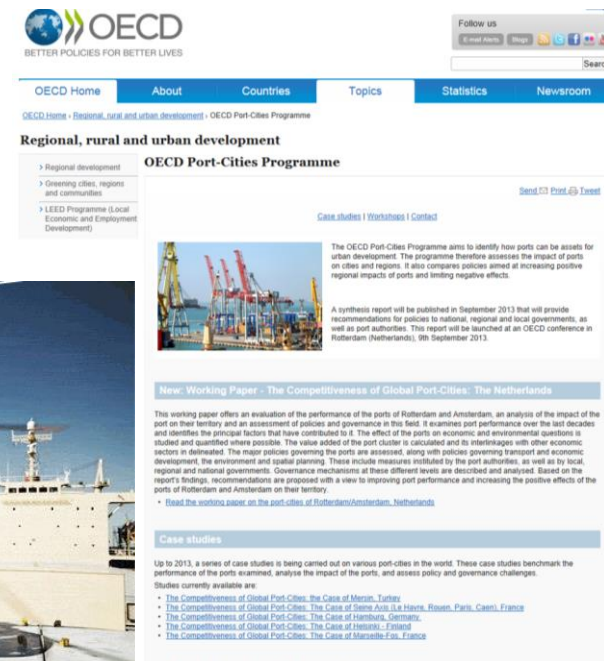
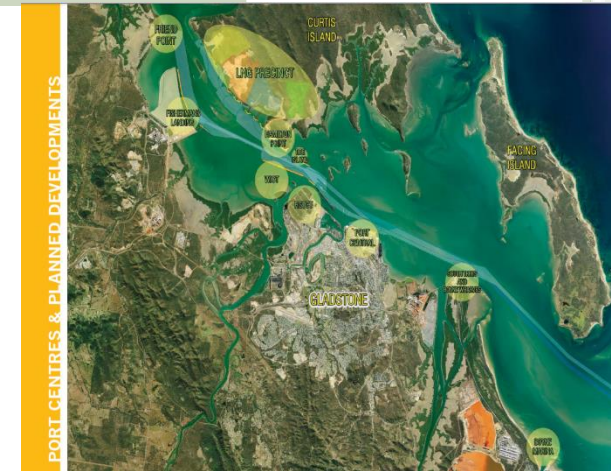
Grain freight begins its journey on rural local roads, but strategic planning and investment has traditionally ignored this part of the chain. A rural road productivity fund would address this oversight.

Local roads are the start of the journey and influence 'downstream' logistics problems

All grain products begin their journey on rural roads. Grain produced for livestock feed – almost a quarter of the total grain task in NSW – is almost entirely transported by road.

3d. Next

- Gladstone: economic significance
 - minerals, energy, industry
 - scale of impact is % of GDP
 - fulcrum?
 - Newcastle: port city
 - city and port planning
 - evolution of settlement
 - international interest
- 
- A photograph of a helicopter in flight against a clear blue sky. The word 'eXcellence' is written in white on the side of the helicopter's body. A pilot wearing a red and yellow helmet is visible in the foreground.





4. Implications

- food plan initiatives were anticipated by national ports strategy
- history shows strategic options are limited
- success lies in harnessing natural advantages and forces
- ‘tactics’, especially ‘government funding’, need to fit strategy?
- least cost pathway implications for storage and product assurance
- user pays approach must include user says
- field trials of ‘reform’ elements are essential



5. Thank you

Freight policies need clarity and relevance

- overelaborate / activity list plan will fail
- minutiae risks relegating history, geography & economics and alienating the community

A place for freight

- harness economic and innovative forces
- least cost pathways, visible from the moon
- reconnection with the national story & agriculture

Road reform

- needs a real story
- particular attention to local rural roads