AUSTRALIAN LOGISTICS COUNCIL
SUPPLY CHAIN EFFICIENCY AND SAFETY

CHARTING THE COURSE FOR A NATIONAL FREIGHT AND SUPPLY CHAIN STRATEGY

AN INDUSTRY PERSPECTIVE
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INTRODUCTION

Although the words of our national anthem speak of our nation having "boundless plains to share", the lived experience of Australian society over recent decades points to increasing levels of urbanisation. Effectively, this means we are trying to do more in a limited physical space.

In particular, a resurgence in the desirability of inner-city living, coupled with rapid rates of population growth, have conspired to present some urgent challenges for our freight logistics industry.

The essential items which most Australians take for granted in everyday life – food to eat, household appliances, clothing, medications and automobiles to name just a handful – are generally not grown or manufactured close to the cities where most of us live.

These commodities must be transported from their point of origin to the retailers from which we purchase them, or otherwise delivered directly to our doorsteps from ports, freight depots or warehouses.

Yet, as we create more populous cities, it is fast becoming apparent that our existing planning regimes and approaches to development are failing to adequately prioritise the movement of freight.

The congested state of many major freeways and key arterial roads, as well as traffic gridlock within cities themselves, is a constant source of annoyance for many Australians. However, more than simply being an irritation, these problems are symptomatic of a far deeper issue.

Capacity constraints in the road network are not only a problem for motorists – they also impose significant costs on the freight logistics industry.

The disruption to the supply chain that occurs because of road congestion, as well as capacity issues afflicting ports, airports and rail freight facilities all have an impact on the cost of moving freight – and ultimately, the prices paid for goods by Australian consumers.

Indeed, congestion on our roads alone is already costing the Australian economy some $16 billion a year. Without remedial action, that cost is projected to rise to more than $50 billion each year.[1]

With the National Transport Commission projecting Australia's freight task will grow by 26% over the next decade alone, it's clear that unless corrective steps are taken quickly, the safety and efficiency of Australia's supply chains are at enormous risk.

In the lead-up to the 2016 Federal Election, the Australian Logistics Council (ALC) urged the development of a comprehensive National Freight and Supply Chain Strategy to address these challenges, and the Federal Government agreed to undertake the development of such a Strategy in the November 2016 Annual Infrastructure Statement.

The consultation process for the Strategy is now underway, and ALC has been proactive in working with its members and other key supply chain participants to identify the issues the Strategy must address.

Already, it is clear that one core aspect of the Strategy must be to overcome the regulatory and investment barriers that are currently limiting our capacity to achieve better outcomes.

Australia's supply chains do not stop at state borders. Our economy is a national one – and accordingly, it is time for a nationally consistent approach to improving supply chain safety and efficiency.

One of the most significant issues in this regard pertains to planning, and specifically the impact of urban encroachment on our freight and supply chains. Poor planning decisions made in the past already impose additional costs for freight operators and consumers today.

Put simply, the logistics industry will not be able to meet Australia's growing freight task if transport infrastructure and freight facilities are subjected to increasingly onerous restrictions on their use, such as curfews, prohibitive speed limits and the failure to preserve freight corridors.

Ultimately, the rising costs associated with such limitations will be paid by consumers in the form of higher prices, and by all Australians though lower rates of economic and employment growth.

We must do more to ensure our urban planning structures properly account for the need to deliver goods to those people living in our cities – today, and into the future.

1 *Australia's Economic Future: An Agenda for Growth,* CEDA, June 2016 (p. 42) - http://adminpanel.ceda.com.au/FOLDERS/Service/Files/Documents/30867~CEDAAEFJune2016Final.pdf

In the past, Australian governments have developed strategies targeting particular modes of freight transport, including the National Ports Strategy and the National Land Freight Strategy. Likewise, state governments have also produced freight and port strategies.

While these documents were well considered and went some way towards developing a coherent national approach to the Australian supply chain, now is the time to develop a comprehensive blueprint that clearly identifies the challenges confronting the nation's supply chains, and which sets out practical solutions for dealing with those challenges.

In ALC's view, the National Freight and Supply Chain Strategy must not become 'just another report'.

What ultimately emerges must be a comprehensive, dynamic blueprint that emulates and expands the depth of the 2012 National Ports Strategy across all modes of freight transport.

This will make it easier for future governments at all levels to get the policy settings right, and to ensure the nation's supply chains are meeting the needs of consumers and our economy alike.

A National Freight and Supply Chain Strategy will help to make sure we are able to derive full economic benefits from our existing freight infrastructure, by having it operate as efficiently as possible, for as long as possible. Significant long-term investments made by those in the freight logistics industry must be respected by governments at all levels.

This point was echoed by Infrastructure Victoria in its *Advice On Securing Victoria's Ports Capacity*.[2]

A comprehensive Strategy will also provide additional impetus for industry to continue pursuing key initiatives such as the electronic collection of heavy vehicle speed and movement data, which will help drive better planning and investment decisions.

This will complement the development of key safety initiatives in the industry, such as a registered industry Master Code of Practice under the Heavy Vehicle National Law.

ALC is currently working with other industry partners to establish such a Master Code, helping all supply chain participants from consignors and consignees, to heavy vehicle operators to ensure the safe operation of the supply chain.

Research commissioned by ALC has established that for every 1% increase in efficiency in our national supply chain, there is a $2 billion benefit to the Australian economy.[3]

In an environment where strengthening economic growth and creating job opportunities is vital, that alone is a compelling reason to ensure we get the National Freight and Supply Chain Strategy right.

TALKING TO INDUSTRY

In ALC's view, a comprehensive and dynamic National Freight and Supply Chain strategy requires a comprehensive and dynamic consultation process to help guide its development.

Accordingly, ALC has been working closely with its members and with other key supply chain participants over the past year to clearly identify industry's priorities for the content of the Strategy.

The material that follows sets out some of the issues and themes that have emerged in those discussions to date.

It helps to provide a view of some of the day-to-day challenges experienced by those working within Australia's freight logistics industry, as well as some industry-led suggestions as to how those challenges might be addressed.

2 *Advice On Securing Victoria's Future Ports Capacity,* Infrastructure Victoria, May 2016 (http://www.infrastructurevictoria.com.au/sites/default/files/images/Securing%20Victoria's%20ports%20capacity%20-%20FINAL%20WEB_0.PDF)

3 *The Economic Significance of the Australian Logistics Industry*, ACIL Allen Consulting, 2014 (http://austlogistics.com.au/wp-content/uploads/2014/07/Economic-Significance-of-the-Australian-Logistics-Indsutry-FINAL.pdf)

GETTING THE SUPPLY CHAIN RIGHT

In May 2016, ALC published its election priorities document, *Getting the Supply Chain Right.*[4]

It identified six separate areas critical to ensuring Australia has appropriate national regulation and infrastructure in place to meet Australia's future freight challenges.

» structure;
» planning;
» rail;
» road pricing;
» road safety; and
» technology

It also canvassed a number of pertinent issues, which it said should be priorities for an incoming government.

With regards to **urban encroachment**, ALC observed that an efficient freight chain needs to operate 24 hours, 7 days a week. Urban encroachment, lack of buffer zones and land separation setbacks have the ability to impact on the efficient operation of freight related infrastructure.

To address this, ALC urged the incoming government to support Infrastructure Australia's call to develop a **National Corridor Protection Strategy**.

On **Inland Rail and short haul rail**, it noted that Inland Rail is critical to Australia's freight future given the expectations of growth in the freight task, with ALC members committed to operating in the short haul rail market sector.

This is because moving more freight to rail (where it makes sense commercially) has the potential to significantly improve freight efficiency, while at the same time, improving urban amenity, reducing road congestion and decreasing queuing times at ports.

ALC accordingly called on the incoming government to identify, support and promote opportunities where short haul rail services may offer freight chain efficiencies, which includes ensuring state-based planning instruments promote efficient linking of ports with intermodal terminals, as well as buffer zones and land use setbacks from rail corridors.

Regarding **road pricing,** ALC noted the Transport and Infrastructure Council, chaired by the Commonwealth, is developing a road pricing system to replace the current PAYGO formula, with a view to adopting independent price regulation for heavy vehicles.

To maintain the confidence of industry, it is necessary to ensure that any revenue raised is used on infrastructure investments that will enhance productivity outcomes on National Key Freight Routes, and not diverted to general revenue.

Governments must also ensure:

» the principles guiding the development of the road pricing model are clearly articulated;
» industry is involved in discussions as possible funding models are developed so as to ensure its workability, and not just presented as a fait accompli in a regulatory impact statement; and
» any community service obligations placed on road owners by Government must be funded from the government's general revenue and not from any new road user charge.

Finally, on **technology** issues, there was interest to encourage the ability to transfer non- proprietary information so as to improve the flow of freight from one end of a freight chain to another, in a manner similar to the Hunter Valley Coal Chain.

4 *Getting the Supply Chain Right, ALC 2016* - www.austlogistics.com.au/wp-content/uploads/2016/05/Getting-the-Supply-Chain-Right.pdf

ALC FORUM– MARCH 2017

ALC Forum 2017, held on 7-9 March at the Melbourne Cricket Ground, provided industry with an opportunity to explore these issues in greater depth.

ALC Forum is the largest annual gathering of leaders and decision-makers in the Australian logistics industry. Once again, this year's event proved to be an invaluable opportunity for the industry's most senior representatives to discuss the challenges and opportunities now confronting the freight and logistics sector.

ALC Forum 2017 was especially significant in that it was the first industry-wide gathering since the confirmation last year that the Federal Government has agreed to develop a National Freight and Supply Chain Strategy.

Accordingly, the entire focus of the Forum was on what needs to be included in the Strategy, and what needs to be done to make sure that what emerges is right for our industry, and right for our economy.

The key themes to emerge from the discussions at Forum were:

» The need for freight infrastructure to operate as efficiently as possible. This means developing planning instruments that not only identify and preserve the industrial lands to provide the jobs and logistics facilities of the future, but also ensure residential developments do not encroach on infrastructure and prevent its effective utilisation.

» The development of some form of mandatory system for the electronic collection of information required for safety, planning and productivity purposes.

» Levies, fees, charges and taxes raised for the purposes of developing an identified piece of infrastructure (either through road funding, 'value capture' or any other device) should be 'hypothecated' for the express purpose of developing that infrastructure; our industry cannot be used as an ATM to raise funds for the general purposes of government.

» The development of Inland Rail as an important component in ensuring rail as a modality has a clear place in moving freight within the Australian freight supply chain.

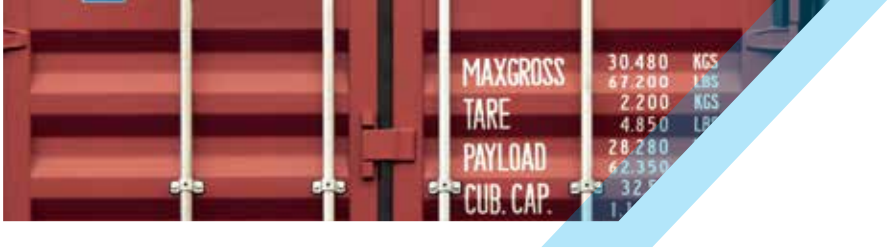
» Commonwealth leadership is required to promote greater supply chain safety and efficiency. This means:

a. helping industry in making the case to the public at large that Australia's economic future requires not only investment in freight and logistics infrastructure, but also the capacity to operate such infrastructure with maximum efficiency.

b. promoting greater efficiency in the use of freight infrastructure by pursuing agreements with States and Territories that require, (as a condition of funding) the development of planning instruments that:
   i. clearly preserve transport corridors and employment lands; and
   ii. prevent urban encroachment in areas that surround freight infrastructure.

c. establishing a dedicated Freight Planning and Strategy Division within the Department of Infrastructure and Regional Development, so as to concentrate all Commonwealth expertise in these issues (including the development of funding mechanisms) in one area.

A list of the major outcomes and points of agreement to emerge from ALC Forum 2017 is included at *Attachment 1* of this document.



KEY PRIORITIES FOR THE FREIGHT LOGISTICS INDUSTRY

Conversations with supply chain participants have revealed a range of specific items that are of particular concern to industry.

The National Freight and Supply Chain Strategy will need to incorporate specific mechanisms for dealing with these issues, if it is to be truly relevant to the needs of industry.

The following material summarises these key industry priorities.

Planning and encroachment issues

One of the greatest challenges facing the industry is the effect poor planning decisions have on the operation of freight infrastructure, and its flow-on impact upon efficiency of the supply chain.

A truly safe and efficient supply chain needs to be able to operate round-the-clock, so that freight movement is able to occur at all times and operators can take advantage of off-peak road traffic volumes.

Regrettably, current trends in planning policy favour the interests of residential development over freight efficiency. The result is lost economic opportunities and, very often, higher costs for freight operators.

NSW Ports offered one clear example, in relation to Port Botany in NSW:

Marika Calfas, Chief Executive Officer of NSW Ports, said that urban encroachment is one of the top five concerns her organisation has about the future. The most concerning aspect is that encroachment is preventing the industry from using existing infrastructure to capacity before we have to start planning and building new facilities.

Ms Calfas highlighted Port Botany as a textbook illustration of the problem. The facility was originally constructed in the 1960s as a means of getting industry out of Sydney's residential areas. Yet, over the last 50 years, the zoning for the adjacent land has been altered, first from industrial to commercial, and now increasingly from commercial to residential.

The end result is a situation where there is now a residence just 200 metres from the port – and many formerly single dwelling properties in the vicinity have become high density properties. The value of land is skyrocketing, and it is much more lucrative to sell it as residential land. Accordingly, even old factories in the area are now also being converted into residential properties.

This is engendering more and more noise complaints from new residents, and the political response invariably results in decisions that favour residents over freight operators - despite the fact that the port was there long before the residents were.

Ms Calfas pointed to the flow-on effect of this phenomenon – increasing scarcity of industrial land available to unload and redistribute freight. In the case of Sydney, this means trucks must travel further west to redistribute, further hampering efficiency in the supply chain.

The subsequent discussion among delegates revealed a high degree of support for addressing urban encroachment issues as a core aspect of the National Freight and Supply Chain Strategy.

Other industry representatives have correctly noted that there is a symbiotic relationship between good outcomes for freight efficiency and good outcomes for the community. The problem lies in the fact that this is vastly underappreciated by the wider community.

Accordingly, there is a need to preserve corridors if we want to derive the full benefit of the project and so there is a need to 'sell' the fact that corridor preservation equates to improved safety, liveability and efficiency outcomes.

The salience of corridor preservation has been noted in some jurisdictions, including by Infrastructure Victoria in its *30 Year Infrastructure Strategy*.[5] However, Australia operates as a national economy, and thus it is time for a national approach to these issues.

The liveability of Australia's cities will be compromised if we are unable to transport the consumer goods necessary to a comfortable modern existence to consumers.

Unfortunately, many of our current planning regimes fail to take account of this simple reality, and pursue the 'path of least resistance' by ranking the needs of residents above the needs of freight movement when it comes to decision making.

Yet, by failing to adequately prioritise the needs of freight in urban planning systems, we risk entrenching inefficiencies in the supply chain, as well as needlessly high consumer prices.

As NSW Ports have subsequently noted in a joint presentation with the NSW Department of Planning & Environment:

1. Ports are clearly too important to not be part of Metropolitan planning, the viability of which need to be **protected**.
2. We need a **plan and clear direction** on what we are planning for at all levels of government.
3. Compromised planning outcomes between industrial and residential uses fails both industry and residents. We need a sustainable land use **planning solution that allows industry to operate and expand** in order to increase economic activity and jobs. **Land use compatibility including land separation**.
4. Planning regimes must acknowledge **freight as an urban priority**. It's important that it gets recognition in planning at a state, regional and local government level.
5. The planning system needs to **recognise that the current operational environment will change** (particularly 24/7 operations) and therefore impacts could intensify including amenity impacts on sensitive uses. Also that the industry will continue to change and evolve.
6. **Retention and protection of industrial and employment lands** are required including suitable sizes for freight logistics and port related lands.[6]

These views are not isolated to one particular operator. The challenges of urban encroachment and poor planning systems have been a consistent theme in many of ALC's discussions with supply chain participants. For instance, Sydney Airport is impacted upon in the same way, and the protection of suitably zoned employment lands is also a key issue

Failing to properly take account of freight movement priorities had significant negative consequences for ports, airports, road transport operators, those using rail freight, passenger vehicles and – though they may not immediately realise it – for all consumers, who end up paying the price.

It will be important for the National Freight and Supply Chain Strategy to establish practical measures that will provide proper consideration of freight movement activities in urban planning systems.

5 *Victoria's 30 Year Infrastructure Strategy*, Infrastructure Victoria, December 2016 (http://www.infrastructurevictoria.com.au/sites/default/files/images/IV%2030%20Year%20Strategy%20WEB%20V2.PDF)

6 From NSW Ports & NSW Department of Planning & Environment presentation: *To Plan for Freight, or not Plan for Freight; That is the Question* - 5 May 2017

CHALLENGES FOR CBD FREIGHT DELIVERY

Australia is a highly urbanised country - and this is unlikely to change in the near future.

The growth in CBD traffic congestion - stemming from significant residential and employment growth in inner- city areas - presents significant challenges for freight operators undertaking deliveries in CBD areas.

Increasing competition between passenger and freight vehicles in a congested road network is significantly adding to business costs. This circumstance flows directly from a lack of investment, and from the insufficient consideration of freight movement in our current planning schemes.

A lack of adequate street loading zones, as well as new residential and commercial buildings with poor (or non-existent) freight delivery facilities are likewise making CBD freight delivery a more cumbersome and costly exercise.

These difficulties are exacerbated by the continuing imposition of curfews or outright bans on vehicle movement in parts of our major cities.

Perversely, this is occurring during a period where growth in e-Commerce is fuelling expectations among many consumers of faster delivery timeframes, and lower shipping costs.

The National Freight and Supply Chain Strategy must consider how to deal with these issues, to ensure the needs of freight operators are given proper weight in CBD planning and infrastructure decisions, so that freight operators are not faced with unsustainable cost pressures.

Technology

The constant evolution and improving affordability of technology offers tremendous scope to improve supply chain visibility in Australia.

As was noted at the ALC Forum, the longest supply chain in Australia is the equivalent of a route from Dundee to Athens every day. Keeping track of freight movement over such vast distances is a significant exercise.

Though it is becoming more affordable than has historically been the case, obtaining information about movement and quality though the supply chain will nonetheless still require significant investment on the part of suppliers and partners.

This makes it more important than ever that regulatory frameworks do not impede the uptake of new technologies that may help to enhance supply chain efficiency.

The pace of technological change is relentless. Five years ago, few would have predicted Uber's rise as a major player in passenger transport. Now, the conversation is turning towards the use of automated vehicles.

The challenge is to establish a regulatory structure that doesn't impede potential efficiency improvements in supply chain efficiency through the use of new technologies.

In ALC's conversations with industry participants, it has been indicated that opportunities to employ technologies that can assist the movement of freight are 'bobbing up all over the place'.

A leading international example already in operation is the European Port Community System, which is outlined in the table on the next page.

Another development in the Australian context has been the joint development between ALC and GS1 of the *Australian Transport Standards for Freight Labelling and EDI*. These standards outline a roadmap for industry to help it move from costly manual processes to full automation, and in the process greatly enhance supply chain visibility.

ALC's conversations with freight logistics industry representatives over the past year have revealed there is an emerging consensus that the sharing of non-commercial data regarding freight movement may offer profound benefits for the efficiency of the nation's supply chains.

To help facilitate these improvements, there may be scope for a National Freight and Supply Chain Strategy to encourage (or even incentivise) the sharing of non-commercial data down identifiable freight chains, and where necessary, facilitate competition law authorisation for any form of information sharing.

THE EUROPEAN PORT COMMUNITY SYSTEM

Most major ports have systems for the exchange of information between clients and national Customs and other authorities. Port Community Systems are a form of Single Windows for Trade, and are similar to Airport Community Systems.

The European Port Community Systems Association (EPCSA) defines a Port Community System as a neutral and open electronic platform enabling intelligent and secure information exchange between public and private stakeholders in order to improve the competitive position of the seaport communities. A Port Community System optimizes, manages and automates logistics-efficient processes through a single submission of data, connecting transport and logistics chains.

Role of the system

A Port Community System handles electronic communication in ports between the private transport operators (shipping lines, agents, freight forwarders, stevedores, terminals, depots), the private hinterland (pre- and on-carriage by road, rail and inland waterways), the importers and exporters, the port authorities, Customs and other authorities.

Typical services of a Port Community System are:

- information exchange between transport operators in the port and for hinterland connections, the port users, Customs, port and other authorities;
- electronic exchange of Customs declarations and Customs responses, and cargo releases between private parties and Customs;
- electronic handling of all information regarding import and export of containerized, general and bulk cargo for the port community;
- status information and control, tracking and tracing goods through the whole logistics chain; and
- processing declarations of dangerous goods with the responsible authorities.

One of the most useful functions of a Port Community System is to automatically derive, from information exchanges between the private port operators, that information needed by Customs, such as the Customs manifest. This information can then be sent to Customs without further manual intervention.

Most Port Community Systems have their own internal standards but communicate with other Port Community Systems or Trade Communities using international standards, in particular those developed by UNECE-UN/CEFACT.[7]

In 2010, APEC Leaders committed to "address impediments to moving goods and services through Asia-Pacific supply-chains …with a view to achieving an APEC-wide target of a ten percent improvement in supply-chain performance by 2015."[8]

In 2012, APEC Leaders recognised "...the importance of addressing unnecessary barriers to trade by advancing regulatory convergence and coherence to achieving our shared objectives of strengthening regional economic integration and ensuring product safety, supply chain integrity…"[9]

Within Australia, there has already been work done on looking at what is termed a 'Port Community System (PCS) – also sometimes described as a One Stop Shop or Single Window system.

Australia currently has several well-developed systems capable of being aligned into one window, and used as a model for APEC Economies to emulate, and would help to deliver the benefits outlined in the 2010 commitment.

During the recent APEC Forum in Vietnam, the technical sub group Asia Pacific Model E-Port Network (APMEN) approved and provided funding to support the full development of this pilot, which is being led by ALC Member, NSW Ports.

7 http://tfig.unece.org/contents/port-community-systems.htm
8 *2010 APEC Leaders' Declaration,* Yokohama, Japan, 13 November 2010 (http://www.apec.org/Meeting-Papers/Leaders-Declarations/2010/2010_aelm.aspx)
9 *2012 APEC Leaders' Declaration*, Vladivostok, Russia, 8 September 2012 (http://apec.org/Meeting-Papers/Leaders-Declarations/2012/2012_aelm.aspx)

RAIL AND INTERMODAL ISSUES

Industry believes that the advent of the National Freight and Supply Chain Strategy will have a major impact in encouraging greater use of rail and promoting the associated safety benefits.

In particular, industry participants believe that swift development of the Inland Rail project would mean these benefits would quickly become more obvious.

Likewise, supporting the growth of short-haul rail services and the development of intermodal terminals in metropolitan areas will help promote greater safety and efficiency in our supply chains.

Other industry participants expressed the view that the national rail regulator will also prove helpful in increasing rail's share of the freight task by promoting greater cross-jurisdictional consistency for operators.

This relates not only to rail gauges, but also to regulations governing rail safety and environmental matters.

Smarter use of information may also assist in ensuring that the right freight uses the right modality to move from point to point.

However, the importance of rail as part of an overall freight and supply strategy can be gleaned from the following summary of one of the sessions held at the ALC Forum:

Panellists Andrew Adam, National General Manager – Intermodal at Pacific National and James Wright, Director of Commercial Development with Maritime Container Services provided delegates with an overview of the capacity and growth trajectories of their respective organisations.

Mr Adam particularly emphasised the importance of developing infrastructure such as the Parkes intermodal facility in building the freight capacity of the rail network. We lose opportunities if we can double-stack trains from Perth to Parkes, but are forced to shuttle single-stacked trains from Parkes through to Chullora.

Ian Hunt, Chief Executive Officer, Moorebank Intermodal Company noted that NSW presently moves around 2.5 million containers per year. In his view, we need to lift the number of containers moving by rail from 100,000 to 1 million per year. There is capacity to do this with existing infrastructure, and Moorebank will be able to take an additional 1 million per year – but growth of the freight task means we will need capacity for another one million on top of that. This is something that must be addressed in the National Freight and Supply Chain Strategy.

He said the most significant problems stem from the fact that existing facilities are located near residences and roads that have limited expansion capacity.

Maurice James, Managing Director, Qube Holdings, explained how Sydney's congested road network is making road freight in and out of Port Botany more expensive and unworkable, expressing confidence that the advent of new technologies will witness changes in the supply chain. Moorebank sees no reason why freight cannot be conveyed from Port Botany to the intermodal facility via driverless trains. The crippling traffic congestion on Sydney's M5 could be substantially alleviated if more containers shifted to rail from road freight.

During the discussion which followed, it was observed that the preservation of freight corridors now will actually avoid community objections and hostility down the line.

It's important to get engagement with the general community right, and not take short-cuts. In the current environment, the industry is likely to obtain more support for its objectives if it can explain what those objectives would mean for job creation – now, and for future generations.

As an industry participant noted at the May 2017 Dialogue between ALC and the Department of Infrastructure and Regional Development:

> *Many organisations are multi-modal, so when using data to inform investment decisions or planning, it would be helpful if that could be examined on a commodity basis, rather than simply what is occurring with particular modes. BITRE is undertaking this in some respects, but it needs to be more widespread to assist industry. The 'gap' between operator capability and government's ability to effectively use/leverage data is also a concern.*

This means that the whole supply chain needs to be examined over the longer term, with the need for rail to take a greater share of the workload so as to reduce road congestion (amongst other reasons) playing a significant part of the review.

ROAD PRICING

Mr Rod Sims, Chairman of the Australian Competition and Consumer Commission told the ALC Forum that the development of a National Freight and Supply Chain Strategy should receive far more attention than it does, given its economic importance.

Mr Sims highlighted road pricing reform as especially important, but noted that there is a considerable lack of awareness about it, both in the general community and among some decision-makers. The mere mention of "congestion pricing" immediately kills any sensible discussion, because it is portrayed as a new tax.

That said, it would appear that there is an increasing acceptance that the way Australians pay for roads will have to change.

It is evident that our current approach, which relies on fuel excise and other similarly 'blunt instruments' to generate the revenue required to maintain the road network is failing to provide sufficient resources.

The political challenges associated with obtaining reform in this area will be significant. However, the consequences of failing to act will ultimately prove far more dire.

At the very least, the shortcomings and inefficiencies inherent in the present system – which have been apparent for some time - are starting to gain broader recognition.

Some of these shortcomings were touched upon by representatives of the NRMA during a recent appearance before a NSW Legislative Council Inquiry into Road Tolling:

> *The Hon. PAUL GREEN: In section 4 you say that eventually the NRMA would like to see a comprehensive reform of road funding in New South Wales including consideration of a broad-based road user charge. Will you explain what your hope is there?*
>
> *Mr LOADES: I can do. If you start with the fuel excise, roughly 40¢ a litre every time you fill up, that goes to the Federal government and over time between one-third and 50 per cent gets reinvested back into roads. When it first began it was 100 per cent back into roads. Over time the balance has gone into consolidated revenue and spread. What is happening recently is that more and more people are buying newer cars and you have got electric cars here now and more on their way, which means the revenue base is declining.*
>
> *From a Federal government perspective it is a flawed model that relies on a decreasing income to fund that $100 billion backlog in New South Wales let alone what else is going on around the rest of the country. We actually need to move towards a fairer system that actually is fair and equitable where it is based on usage, whether that is per kilometre or other factors. The Federal government is talking 10 years, the State government is quite in tune with this.*
>
> *We would like to see it fast-tracked because that is when we can have a better model. This is not a new tax overlaying other taxes. This is genuine reform where the fuel excise will disappear and other State taxes will disappear and there will be a new tax that will be delivering net results where you actually only pay for genuine usage.*[10]

10 *NSW Legislative Council Portfolio Committee No.2 - Health and Community Services – Inquiry Into Road Tolling* Hansard 22 May 2017, p.4 (https://www.parliament.nsw.gov.au/committees/DBAssets/InquiryEventTranscript/Transcript/9919/Transcript%20-%2022%20May%202017%20-%20UNCORRECTED.pdf)

CHARTING THE COURSE

PLANNING AND ENCROACHMENT ISSUES

The Transport and Infrastructure Council of COAG met in Brisbane on 19 May 2017.

One of the things discussed was investment in rail.

Part of the published communiqué said:

> *The meeting included a strategic discussion regarding rail infrastructure and operations, recent pressures and developments and the future of rail investment in Australia. Ministers noted strong growth in rail use nationally, and discussed key rail trends and challenges in each jurisdiction. …...*
>
> *Discussions were broad ranging, including: land use integration, funding and financing challenges, new rail lines and extensions of existing lines to new growth areas; meeting increased demand growth on existing rail lines; infrastructure investments that enhance network capacity; the challenge of managing capacity freight and passenger demands; the need to tailor value capture approaches; and the role that technology can play in achieving outcomes.*[11]

The last paragraph of the communiqué neatly encapsulates many of issues raised by industry participants that affect the supply chain more generally.

As one of the participants in the ALC/Department of Infrastructure and Regional Development Dialogue held during May 2017 indicated:

> *Current planning systems have too many governments/authorities involved. There is capacity to streamline processes, and for greater Commonwealth involvement. There needs to be some form of incentive offered to states/local authorities to cooperate in reform – competition payments or something similar (City Deals may help to facilitate this). It would also assist to have planning issues feature on the TIC agenda, to give them a degree of national prominence.*

The Federal Government appeared mindful of this in its response to the House of Representatives Standing Committee on Infrastructure and Communications report*: Planning, procurement and funding for Australia's future infrastructure: Report on the inquiry into infrastructure planning and procurement*:

> *While the Australian Government supports the removal of red tape and location of regulatory processes across governments, it notes that planning regulations are primarily the responsibility of the relevant state, territory and local governments.*[12]

The Government also noted:

> *The IA Plan and IPL have identified a number of priority transport corridors and precincts the preservation that are likely to be required to support future infrastructure priorities.*
>
> *Through the Transport and Infrastructure Council and its officials Infrastructure Working Group, COAG is working to share current approaches leading practice in the protection of land transport corridors and precincts across all jurisdictions. This work programme will inform a future Action Plan for addressing identify gaps and reform opportunities.*
>
> *Also, as outlined in the Smart Cities Agenda, City Deals will introduce a new mechanism through which the Australian Government will engage with states and territories on regulatory and policy reforms. Aligning transport in metropolitan planning strategies to protect important transport corridors for future uses will be a focus for Government throughout this engagement.*[13]

ALC has consistently maintained there is a high desirability for the Commonwealth to show national leadership to the States by encouraging them to ensure all the corridors and employment plans are protected from urban encroachment.

11 TIC Communique, 19 May 2017, p. 1 (http://transportinfrastructurecouncil.gov.au/communique/files/Council_7th_Communique_19_May_2017.pdf)

12 *Australian Government Response to the House of Representatives Standing Committee on Infrastructure and Communications report: Planning, procurement and funding for Australia's future infrastructure*, p. 4 (http://www.aph.gov.au/Parliamentary_Business/Committees/House/Infrastructure_and_Communications/Planning_and_Procurement/Government_Response)

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While ALC may not necessarily agree with the Opposition recommendation contained in the House of Representatives report response, i.e. the Commonwealth should legislate to establish a dedicated Commonwealth Authority to work with the states on the designation of land corridors for the development of significant infrastructure projects, including high-speed rail[14], ALC remains of the view the Commonwealth should:

- establish a dedicated Freight Strategy and Planning Division with the Department of Infrastructure and Regional Development, staffed with appropriately qualified personnel to provide it with the quality advice necessary to provide national leadership and better policy outcomes in planning; and
- provide incentive funds to the states to encourage them to preserve transport corridors and employment lands through specific National Partnership agreements, rather than relying solely on the City Deals process, which is designed to address far broader outcomes in the urban environment.

SECURING GREATER COMMONWEALTH INVOLVEMENT IN PLANNING

ALC has consistently stated that greater Commonwealth involvement in planning will help secure better economic outcomes and the more efficient delivery of infrastructure projects.

In the 2017/18 Federal Budget, the Government provided $17 million over four years from 201718 to establish an Infrastructure and Project Financing Agency to assist in the identification, development, brokerage and assessment of financing options for investment in major infrastructure projects.

It likewise provided $23.5 million over four years from 201718 to expand the capacity of the Department of the Prime Minister and Cabinet to support delivery of the National Cities Agenda.

ALC hopes that this concentration of responsibility within PM&C does not mean that the needs of a productive and efficient freight chain is ignored in favour of other urban considerations, and that in particular, the needs of ports and employment lands operating in an environment that is free from urban encroachment, is given full consideration.

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THE INFRASTRUCTURE PRIORITY LIST

Infrastructure Australia's *Infrastructure Priority List* makes it clear that improving freight capacity should be considered a key national economic priority.[11]

The most recent version of the list, issued in February 2017, assigns either High Priority or Priority status to a number of freight-related infrastructure projects, including:

- Port Botany freight rail duplication;
- Port of Brisbane dedicated freight rail connection;
- Inland Rail;
- National Freight and Supply Chain Strategy;
- M80 Ring Road upgrade;
- WestConnex;
- Improve the connection between the Eastern Freeway and CityLink
- Newell Highway Upgrade
- Murray Basin Rail Project;
- Western Sydney Airport;
- Road connection between West Gate Freeway and Port of Melbourne;
- Adelaide-Tarcoola Rail Upgrade Acceleration;
- Moorebank Intermodal Terminals road connection upgrade;
- Preserve corridor for Western Sydney Freight Line and Intermodal Terminal access;
- Preserve corridor for Lower Hunter freight rail realignment;
- Lower Hunter freight corridor construction;
- Southern Sydney Freight Line upgrade;
- Improved freight rail access to Port Kembla;
- Northern Sydney Freight Corridor Stage 2;
- Melbourne container terminal capacity enhancement;
- Mount Isa-Townsville rail corridor upgrade;
- Gladstone Port land and sea access upgrade;
- Perth container terminal capacity enhancement;
- Melbourne-Adelaide-Perth rail upgrade;
- Complete Metro Ring Road from Greensborough to the Eastern Freeway;
- Burnie to Hobart freight corridor strategy;
- Advanced Train Management System implementation on ARTC network;
- Sturt Highway High Productivity Vehicle capacity enhancement;
- Upgrade Tanami Road.

If the nation is to derive the full economic benefit of the significant boost to infrastructure investment resulting from this year's Budget, then planning challenges – and particularly, the preservation of freight corridors – are paramount.

ALC has identified those projects from the most recently issued *Infrastructure Priority List* which it considers crucial to enhancing supply chain efficiency and the nation's productive capacity.

Extracts from the *Infrastructure Priority List* that detail the scope and economic importance of these projects are set out at *Attachment 2* of this document.

A PRECEDENT HAS NOW BEEN SET…

ALC was particularly interested to observe that the 2017/18 Budget Papers included the offer of an unspecified amount of money under the Western Sydney City Deal for incentive payments to State and Local Governments to support planning and zoning reform, accelerate housing supply and deliver affordable housing outcomes in Western Sydney.

The Budget Papers went on to say that the funding will support the trial of incentive payments in the Western Sydney City Deal region, which is facing above average population growth and housing affordability pressures.

ALC has long called for similar incentives to be offered to state and local governments to preserve transport corridors and employment lands from encroachment, and strongly recommends that future Budgets appropriate funds for incentive payments that can help to deliver such outcomes.

11 *Infrastructure Priority List*, Infrastructure Australia, February 2017 (http://infrastructureaustralia.gov.au/projects/infrastructure-priority-list.aspx)

TECHNOLOGY

It is clear there is significant willingness within industry to facilitate the transfer of non-commercial data down freight chains.

The TIC *National Policy Framework for Land Transport Technology: Action Plan: 2016-2019* advocates for a supportive regulatory environments, that particularly proposes the removal of barriers to new technology in a proactive fashion and to wherever possible provide certainty about future regulatory requirements.

The Action Plan also suggests that where feasible, government agencies will avoid favour in particular technologies or applications, in order to encourage competition and innovation. New applications should support interoperability, backwards compatibility and data sharing, and should account for possible future transitions to other technology platforms.[12]

So as to enhance productivity and efficiency, it follows that one area that the National Freight and Supply Chain Strategy could explore is encouraging the sharing (or identify systems that can permit the sharing) of non-commercially sensitive data down identifiable supply chains to other participants.

In that case, the only proactive regulatory activity that a government may need to perform is to provide some form of competition for authorisation (in much the same way as the Hunter Valley Coal Chain requires ACCC authorisation).

This proposal in no way impacts the desirability of developing the Data Collection and Dissemination Plan, which may in the long run form a 'single source of truth' that could form the backbone of an Australian Port Community System.

It is also becoming increasingly clear the transfer of data for commercial purposes (as outlined above) will need to be dealt with differently and information collected for regulatory purposes, such as road pricing and safety information.

That said, it would now appear that technology is available that can operate within an operating framework meeting international standards that generates data with sufficient integrity that it can be used for non-criminal regulatory purposes.

A National Freight and Supply Strategy could encourage exploring what type of freely available equipment can be considered as being of a type suitable for collecting data for regulatory purposes, such as for instance, road pricing and the collection of heavy vehicle safety data.

ROAD PRICING

So as to ensure that the investment is made in the infrastructure necessary to keep freight moving, there is clear industry support for the continued development of a 'forward looking' funding approach to roads.

The political challenges that will accompany such reform will require industry to work closely with governments at all levels to secure the right outcome.

As part of this, it will be crucially important to demonstrate the inadequacies and inequities of the current system of road pricing, and to highlight the benefits for all road users that could flow from doing away with inefficient fuel taxes.

RAIL

It is clear that industry sees the development of the Inland Rail project as a major driver in changing the mode of travel taken by freight. The decision to fund construction of the Inland Rail in the 2017/18 Federal Budget is welcome.

More generally, industry members see that a greater harmonisation in rail regulation would make it easier for operators to meet regulatory requirements, particularly around safety and environmental issues.

During 2014 and 2015, work was directed towards developing what was originally called a 'national rail vision', which then turned into a discussion on the Australian Government's Freight Rail Objectives.

Some of this work canvassed issues such as greater harmonisation within the rail industry as well as the broader role of rail in the freight effort.

The development of the National Freight and Supply Chain Strategy may offer an opportunity to kick-start this work.

12 *National Policy Framework for Land Transport Technology: Action Plan: 2016-2019*, p. 18 (http://transportinfrastructurecouncil.gov.au/publications/files/National_Policy_Framework_for_Land_Transport_Technology.pdf)

CONCLUSION

Although the consultation process surrounding the development of the National Freight and Supply Chain Strategy is ongoing, it is already clear that what emerges must address several core concerns for the freight logistics industry.

Although the continuing consultation process will likely expand this list significantly, these items effectively represent a 'benchmark' for designing a National Freight and Supply Chain Strategy that is relevant to the needs of industry.

ALC is committed to working closely with the freight logistics industry and with governments at all levels in furtherance of these key objectives over the months ahead.

Australian Logistics Council
June 2017

1. Establish a dedicated Freight Planning and Strategy Division within the Department of Infrastructure and Regional Development, staffed with appropriately qualified personnel that will allow it to provide the quality advice necessary to lead the planning debate and secure better outcomes;

2. Rather than rely on the City Deals process, develop specific National Partnerships with State and Territory Governments to provide incentive funds for jurisdictions to institute planning principles recognising freight as an urban priority, and so rewarding policies that preserve transport corridors and employment lands in a way that allows 24/7 operation of infrastructure.

3. Actively cooperate with industry to identify how non-commercially sensitive data about freight movements down identifiable supply chains can be shared with other participants, thus enhancing productivity and efficiency and to facilitate the obtaining of any competition law authorisation that may be necessary.

4. Continue the development of a forward looking approach to road funding that shifts the focus to the expenditure required to maintain and expand roads in light of forecast demand and subject to service and technical standards.

5. Continue to progress the construction of the Inland Rail.

6. Encourage the renewed development and execution of a nationally based system of Freight Rail Objectives.


MERGE
RIGHT

ATTACHMENTS

ATTACHMENT 1

ALC FORUM 2017 - MAJOR OUTCOMES & POINTS OF AGREEMENT

- There was general agreement that the National Freight and Supply Chain Strategy should build upon positive progress in recent years to improve logistics planning and reforms, which included the development of state freight and port strategies and the National Land Freight and Port strategies. The National Strategy stands its best chance of success if its development is supported by all political parties and at all levels of government.
- The Forum emphasised the pressing need to overcome fragmented decision-making on critical infrastructure projects between local, state and federal governments. Delegates expressed particular concern at the parochial attitude that still pervades some aspects of decision-making.
- Although logistics is a highly competitive industry both within and across the modes, there was nonetheless general agreement that the National Freight and Supply Chain Strategy should be 'mode neutral''. However, there was broad agreement that the strategy should particularly examine initiatives to increase rail's share of the national freight task, especially with regard to long-haul, bulk freight.
- The proposed Inland Rail link from Melbourne to Brisbane enjoyed significant support from delegates. With freight movements on the east coast of Australia projected to double over the next decade, there was a broad consensus that Inland Rail should be 'port to port' and form the backbone of the National Freight and Supply Chain Strategy.
- There was agreement that achieving a better road-rail mix in the delivery of the national freight task will help to reduce costs, deliver improved safety outcomes on our roads and produce clear environmental benefits. Communicating these benefits, both to government and to the wider community, will be absolutely crucial in building political and public support for Inland Rail.
- Many speakers observed that the National Freight and Supply Chain Strategy must be more than just a priority list of infrastructure projects. The Strategy must take a long-term view, to ensure the best freight links are not lost to the supply chain through encroaching residential and commercial development.
- Attendees called for more effective action from government at all levels when it comes to preserving transport and logistics corridors. Unless state and local governments commit to a National Strategy that protects freight corridors from expanding residential and commercial development, the most efficient transport and logistics solutions will become prohibitively expensive. This will in turn limit the nation's capacity to achieve better economic outcomes.
- There was firm recognition that the National Strategy must be backed by investment. The financial resources required to make it work will be significant over time, and will likely depend on investment from a mix of government, private and institutional sources, and possibly proceeds from asset recycling.
- The National Freight and Supply Chain Strategy must also focus on the lost opportunities and continuing costs that arise from overlapping and outdated regulation within the logistics sector, especially at the state level. There is a need for greater harmonisation between state jurisdictions when it comes to regulation in this area if efficiency and economic gains are to be achieved.
- There was strong support for reform of road pricing. With technological enhancements (such as GPS tracking) now making it easier than ever to monitor vehicle use, it is imperative that we move to a model where road users pay according to where and when they travel. It is clear that fuel excise is no longer raising sufficient revenue to support the road network of a 21st century economy.
- It was recognised that we must achieve a better balance between the planning needs of efficient freight transport and residential development requirements. Curfews, detours and prohibitive speed limits all impose added costs on businesses, which are ultimately borne by consumers.
- In particular, local government must be incentivised to consider national freight needs in the context of their own decision-making. Equally, state and federal governments must recognize that local government cannot be expected to pick up the cost burden of building and maintaining roads which form part of a national or export freight network.

ATTACHMENT 2

THE INFRASTRUCTURE PRIORITY LIST: KEY PROJECTS FOR THE FREIGHT LOGISTICS SECTOR

The Australian Logistics Council (ALC) considers that Infrastructure Australia (IA) plays a critical role advancing the infrastructure projects Australia needs to promote economic and employment growth.

Having an expert independent body like Infrastructure Australia in place to ensure that proposed infrastructure projects are subject to a rigorous economic assessment means investment decisions can be made on a sound basis.

This is particularly important in making sure that taxpayers are receiving value for money when governments make the decision to invest in key infrastructure projects.

Each year, IA publishes its *Infrastructure Priority List*, which identifies those infrastructure projects that will help to improve the nation's productive capacity.

The *Infrastructure Priority List* provides clear, evidence-based advice to governments and investors alike, helping them to make investment decisions that ultimately support economic and employment growth.

The most recent version of the *Infrastructure Priority List*, issued in February 2017, provided positive assessments of a number of projects that are absolutely key to boosting the productive capacity of Australia's freight networks, and enhancing supply chain safety and efficiency.

These projects include:

- Port Botany freight rail duplication;
- Port of Brisbane dedicated freight rail connection;
- Inland Rail;
- National Freight and Supply Chain Strategy;
- M80 Ring Road upgrade;
- WestConnex;
- Improve the connection between the Eastern Freeway and CityLink
- Newell Highway Upgrade
- Murray Basin Rail Project;
- Western Sydney Airport;
- Road connection between West Gate Freeway and Port of Melbourne;
- Adelaide-Tarcoola Rail Upgrade Acceleration;
- Moorebank Intermodal Terminals road connection upgrade;
- Preserve corridor for Western Sydney Freight Line and Intermodal Terminal access;
- Preserve corridor for Lower Hunter freight rail realignment;
- Lower Hunter freight corridor construction;
- Southern Sydney Freight Line upgrade;
- Improved freight rail access to Port Kembla;
- Northern Sydney Freight Corridor Stage 2;
- Melbourne container terminal capacity enhancement;
- Mount Isa-Townsville rail corridor upgrade;
- Gladstone Port land and sea access upgrade;
- Perth container terminal capacity enhancement;
- Melbourne-Adelaide-Perth rail upgrade;
- Complete Metro Ring Road from Greensborough to the Eastern Freeway;
- Burnie to Hobart freight corridor strategy;
- Advanced Train Management System implementation on ARTC network;
- Sturt Highway High Productivity Vehicle capacity enhancement;
- Upgrade Tanami Road.

The inclusion of these projects on the list makes is clear that IA considers improving freight infrastructure to be a core national economic priority.

It accords with the recommendation contained in IA's 15-year Infrastructure Plan to develop a National Freight and Supply Chain Strategy – a long-held ALC policy priority, and one that has now been adopted by the Federal Government.

Likewise, many of the projects contained on the list refer to the need to preserve key freight corridors that will allow the nation to meet its future freight task. This is another key policy priority for ALC and its members.

The following pages contain extracts from IA's February 2017 *Infrastructure Priority List* which detail those projects that ALC considers are of particular importance for the freight logistics industry.

These projects have been assigned either High Priority or Priority status by IA, indicating their potential to make a significant contribution to improving national economic performance.

Australian Government | Infrastructure Australia

Infrastructure Priority List

Australian Infrastructure Plan

Project and Initiative Summaries

February 2017

Port Botany freight rail duplication

Location

Sydney, NSW

Problem timescale

Near term (0–5 years)

Nominator

NSW Government

Problem

Port Botany is one of Australia's most significant import/export terminals for containerised freight, and a backbone asset for economic productivity within Sydney and NSW. Infrastructure NSW forecasts container movements through the Port will increase from 2 million twenty-foot equivalent units in 2011 to 7 million in 2031.

The Port Botany freight line is currently operating close to capacity. Additional demand arising from growth in interstate, intrastate and import/export freight has the potential to create a bottleneck along this line, impacting on reliability and restricting the efficient movement of freight across the broader Sydney rail network.

As Sydney's primary container port, it is vital that Port Botany maintains throughput capacity to meet demand over the long term. Currently, only a small portion of freight is moved using the freight rail network, which imposes additional demands on the road network. Truck traffic at Port Botany is estimated to increase by 400% by 2030, driven largely by expected growth in throughput at Port Botany.

Proposed initiative

The proposed initiative aims to upgrade the capacity of the Port Botany rail line by completing a duplication of 2.8 km of the line. The proposed initiative will form part of a broader strategy designed to drive growth in rail mode share.

Next steps

Business case development

Port of Brisbane dedicated freight rail connection

Location

Brisbane, Queensland

Problem timescale

Medium term (5–10 years)

Nominator

Audit identified gap

Problem

Container trade at the Port of Brisbane is forecast to increase by 300%, representing an increase of 4.8% per year to 2045. The Australian Infrastructure Audit 2015 identified that growth at the Port of Brisbane is likely to become constrained by the lack of a dedicated rail freight connection.

Population growth in South East Queensland is creating congestion on both the road and rail networks, negatively impacting the productivity of greater Brisbane and the Queensland economy as a whole.

The preservation and, ultimately, construction of a dedicated freight rail corridor will allow more freight movements to be removed from the road network, which would help alleviate congestion.

Proposed initiative

The proposed initiative is to improve connectivity between the Port of Brisbane and freight terminals in the Brisbane region through preserving and, ultimately, constructing a dedicated freight rail corridor. The initiative should aim to meet the projected increase in freight volumes and capitalise on economic opportunities, while encouraging a modal shift from road to rail.

Next steps

Options assessment - required

Inland Rail

Melbourne to Brisbane via inland NSW

Location

Melbourne to Brisbane via inland NSW

Indicative delivery timeframe

Longer term (10–15 years)

Proponent

Australian Government

Problem

Demand for freight transport in the Melbourne to Brisbane corridor is expected to grow substantially over coming decades, from approximately 4.9 million tonnes in 2016 to around 13 million tonnes, or 1.1 million containers (Twenty-Foot Equivalent Units), by 2050. This increased demand will require additional freight capacity in the corridor.

The current rail connection between Melbourne and Brisbane, via Sydney, cannot offer the transit times and reliability required by industry. This is largely a function of poor rail alignments and capacity constraints, particularly on the section between Sydney and Brisbane, and delays on freight transiting the Sydney metropolitan area. The current road connection between Melbourne and Brisbane via inland NSW offers faster transit times than rail via Sydney. However, much of the road is two-lane single carriageway, with limited passing lanes. Without additional capacity, transit times on this corridor will increase as freight volumes rise.

Project description

Construction of a freight rail line of approximately 1,700 km between Melbourne and Brisbane via inland Victoria, New South Wales and Queensland. Around 40% of the proposed route would be constructed as new railway, or converted from narrow gauge to dual gauge in Queensland, maintaining the existing narrow gauge connections between Brisbane and regional centres. The remainder of the route would utilise and where necessary upgrade existing standard gauge track in Victoria and NSW.

Trains operating the service would have capacity to carry up to 485 containers (TEU) when capacity for longer, double-stacked trains is introduced over time.

Economic, social and environmental value

Key benefits of the proposed project include improved productivity, improved network efficiency and reliability, shorter transit times, safety improvements, sustainability benefits, and reduced lifecycle costs. The proponent's stated benefit-cost ratio is 1.1 (7% real discount rate).

National Freight and Supply Chain Strategy

Location

National

Problem timescale

Near term (0–5 years)

Nominator

Audit identified gap

Problem

The Australian Infrastructure Audit 2015 found that population and economic growth will increase demand for freight transport, with the national land freight task expected to increase by 86% to 2031.

While there has been significant work undertaken on national strategies for land transport and ports, there is a need to further progress this work, taking a whole-of-supply chain perspective. National-level long-term freight master planning will facilitate more effective infrastructure planning, and more robust investment decisions in the freight and supply chain sector. Failure to adequately cater for the expected increase in freight transport will increase freight network congestion around Australia, and ultimately harm national productivity.

Proposed initiative

A National Freight and Supply Chain Strategy would build on existing work, adopting a holistic approach to the planning and performance of the national freight and supply chain networks. This would provide appropriate frameworks to support end to end planning of key freight and supply chains, and to:

- Guide future investment
- Support better use from existing infrastructure assets
- Enable a program of regulatory reforms and capital initiatives to be developed.

The Australian Government has announced its intention to appoint an expert panel to provide advice on how best to lift the productivity and efficiency of Australia's freight and supply chain infrastructure, and to use the expert panel's advice as an input to the development of a national freight and supply chain strategy by the end of 2017.

Next steps

Initiative development - underway

M80 Ring Road upgrade

Location

Melbourne, Victoria

Indicative delivery timeframe

Near term (0–5 years)

Proponent

Victorian Government

Problem

The M80 connects major population centres in Melbourne's north and west to the CBD and elsewhere, and facilitates access to Melbourne's port, airports and other major road corridors. Congestion on the M80 is increasing average travel times, imposing significant costs on business. Congestion also produces negative social and environmental impacts as a result of increased travel time and fuel consumption, and higher vehicle crash rates. Projected population and economic growth in centres to the west and north of Melbourne are likely to increase these problems.

The Australian Infrastructure Audit 2015 identified capacity constraints along the corridor as a significant problem, and found that, without additional investment, the annual cost of congestion along the corridor is projected to grow from $86 million in 2011 to $161 million in 2031.

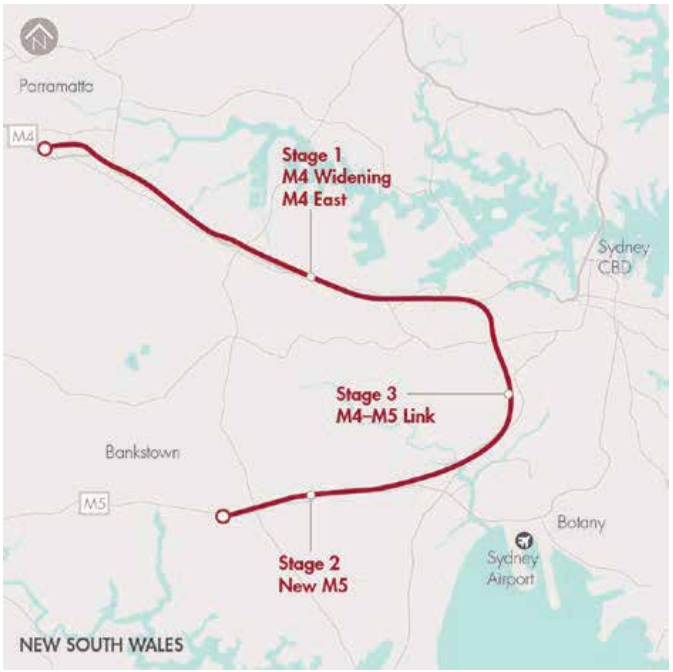
Project description

The project proposes to complete three sections of the freeway that have yet to be upgraded. These are (i) Plenty Road to Greensborough Highway (2.4 km); (ii) Princes Freeway to Western Highway (7.9 km); and (iii) Sydney Road to Edgars Road (4 km). The project would widen the existing road to a minimum of three through-lanes in each direction with auxiliary lanes between interchanges where required, and implement intelligent transport system infrastructure.

Economic, social and environmental value

The project will deliver significant economic benefits in the form of travel time savings, with associated social and environmental benefits including reduced fuel consumption costs and lower vehicle crash rates. The proponent's stated benefit-cost ratio for the current project is 2 (7% real discount rate).

WestConnex



Location

Sydney, NSW

Indicative delivery timeframe

Near term (0–5 years)

Proponent

NSW Government

Problem

The Australian Infrastructure Audit 2015 projected that, in the absence of interventions to address the problem, the cost of congestion in the Sydney/Newcastle/Wollongong area would more than double from $5.6 billion in 2011 to $14.8 billion in 2031. The Audit noted that a number of corridors in Sydney's inner west, including the M5, M4 and key arterials such as King Georges Road and Parramatta Road, are severely congested now, and will become more congested in the future in the absence of additional capacity.

Project description

WestConnex is a program of interconnected road projects that involves:

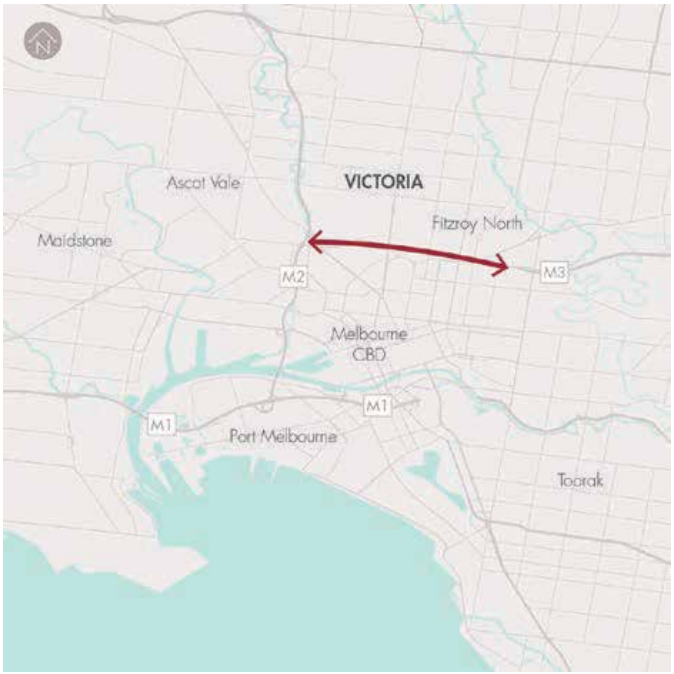
- Stage 1: Widening the existing M4 Motorway and extending the motorway from Strathfield towards Sydney's inner-west (13.8 km, including a 5.5 km tunnel)
- Stage 2: Widening the M5 (surface section east of Kings Georges Road) and duplicating the tunnels to St Peters (11 km, including a 9 km tunnel)
- Stage 3: Linking the two motorways with a new tunnel under the inner western suburbs of Sydney (9.2 km tunnel)
- 'Sydney Gateway' – road improvements between an interchange at St Peters and the Airport precinct, which would also provide some improvement in access to Port Botany.

WestConnex was the major priority project put forward in Infrastructure NSW's 2012 State Infrastructure Strategy, and was subsequently identified in the NSW Government's Long Term Transport Master Plan as an immediate priority in a longer term vision to complete the critical links in Sydney's motorway network.

Economic, social and environmental value

The primary benefits of the project are travel time savings and vehicle operating cost savings, constituting a combined 86% of benefits. However, other benefits include reduced vehicle emissions and improved community wellbeing. The proponent's stated benefit-cost ratio for the project is 1.7 (7% real discount rate), not including wider economic benefits.

Improve the connection between the Eastern Freeway and CityLink



Location

Melbourne, Victoria

Problem timescale

Near term (0–5 years)

Nominator

Audit identified gap

Problem

The Australian Infrastructure Audit 2015 identified the east-west corridor to the north of Melbourne CBD as one of Melbourne's major congestion challenges. Vehicles travelling east-west between the Eastern Freeway and CityLink are forced to navigate the congested inner city road network, or the heavily utilised M1 corridor to the south of the city. This results in congestion and delays on Melbourne's urban road network for both passenger and freight vehicles. The Audit found that this corridor had the highest road congestion delay cost in Melbourne in 2011, with a delay cost of $73 million. This is expected to worsen by 2031, with the delay cost projected to increase to $144 million.

The Eastern Freeway only extends as far as Hoddle Street on the edge of the CBD, channelling the large volume of vehicles heading into and out of the city onto residential streets in the inner north.

Proposed initiative

The initiative is to improve the connection between the Eastern Freeway and CityLink.

Next steps

Initiative development - required

Newell Highway upgrade

Location

NSW section of Melbourne-Brisbane Inland route

Problem timescale

Near term (0–5 years)

Nominator

NSW Government

Problem

The Newell Highway is part of the National Land Transport Network. It is the principal inter-capital freight route between Melbourne and Brisbane, and is a critical link for regional producers in central and western NSW. Freight movements on the corridor are expected to grow strongly, supported by robust population growth in both Melbourne and Brisbane.

The efficiency of the route is constrained by localised congestion, deteriorating pavement and a lack of overtaking opportunities. Road alignment and geometry in several sections are also unsuitable for some High Productivity Vehicles.

These factors constrain freight productivity by increasing travel times and the number of vehicle journeys required, as well as reducing freight reliability.

Proposed initiative

The initiative seeks to improve several sections of the highway to support safe Higher Productivity Vehicle access, and improve safety and reliability. The initiative will also consider first/last mile issues faced by Higher Productivity Vehicle operators in the corridor.

Next steps

Business case development

Murray Basin Rail Project

Location

North-west Victoria

Indicative delivery timeframe

Near term (0–5 years)

Proponent

Victorian Government

Problem

Capacity on the Murray Basin rail network is constrained by the mixture of broad and standard gauge lines, a 19 tonne axle load limit, and declining levels of service due to a historical underspend on maintenance. This results in fragmentation and capacity constraints, reducing network accessibility and flexibility. As a consequence, transit times for rail freight are longer and less reliable than those for road freight, and costs to business are higher. Increasing rail freight costs have resulted in an increase in road freight in the Murray Basin region, which has a detrimental impact on grower returns, regional amenity and the environment.

Project description

Rail network improvements include standardisation of the existing broad gauge rail, and axle load upgrades from 19 to 21 tonnes, for the Mildura, Sea Lake and Manangatang lines. It will also include re-instatement and upgrade of the standard gauge rail line between Ararat and Maryborough, and conversion of the rail line between Gheringhap and Maryborough to dual gauge.

Economic, social and environmental value

The majority of benefits are economic, in the form of transport cost savings. Other benefits include reductions in noise and greenhouse gas emissions. The proponent's stated benefit-cost ratio is 1.7 (7% real discount rate).

Western Sydney Airport

Location

Western Sydney, NSW

Indicative delivery timeframe

Medium term (5–10 years)

Proponent

Australian Government

Problem

Sydney is Australia's primary aviation gateway, accounting for around 40% of international services, 43% of domestic services, and 45% of international air freight. Demand for airport services in the Sydney basin is forecast to grow beyond the capacity of Sydney's Kingsford Smith Airport by the 2030s. Airports are critical economic assets, and constraints on Sydney's airport capacity would increase the cost of accessing Sydney, with a significant negative impact on Australia's economy and national productivity.

The Australian Infrastructure Audit 2015 identified the need for additional airport capacity in the Sydney basin, and the February 2016 Infrastructure Priority List included development of a Western Sydney Airport as a High Priority Initiative.

Project description

The project includes initial construction of a 3,700 m runway with a parallel taxiway, and associated aviation terminal infrastructure and support precincts. Subsequent stages of development would ensure the Airport could meet longer-term passenger demand in the Sydney basin. The final design of Stage 1 and the nature and timing of subsequent developments will be at the discretion of the airport operator, subject to contractual and regulatory requirements.

Economic, social and environmental value

Addressing the identified capacity constraint would improve productivity and facilitate broader economic impacts such as increased trade, tourism and foreign direct investment, and wider economic benefits such as agglomeration benefits derived from improved connectivity between businesses (including the clustering of airport businesses). The proponent's stated benefit-cost ratio is 1.9 (7% real discount rate).

Road connection between West Gate Freeway and Port of Melbourne and CBD North

Location

Melbourne, Victoria

Problem timescale

Near term (0–5 years)

Nominator

Victorian Government

Problem

The key problem is the absence of an east-west connection between West Gate Freeway and Port of Melbourne and CBD North. A lack of connectivity results in road transport congestion and the reliance on the West Gate Bridge for travel from Melbourne's west towards the CBD.

The initiative relates to an area which suffers from significant congestion. According to the Australian Infrastructure Audit 2015, the cost of congestion on the West Gate Freeway/Princes Freeway corridor is projected to increase from $105 million in 2011 to $355 million in 2031. The network-wide cost, including the cost for arterial roads that are used to access the Port of Melbourne, would be higher than this.

Proposed initiative

The initiative proposes to develop a connection between the West Gate Freeway, CityLink and Port of Melbourne.

Next steps

Business case development

Adelaide – Tarcoola Rail Upgrade Acceleration

Location

Adelaide–Tarcoola, SA

Indicative delivery timeframe

Near term (0–5 years)

Proponent

Australian Rail Track Corporation

Problem

Rail dominates freight movements between Perth and Australia's eastern states, with approximately 80% of the land-based freight market serviced by the interstate railway network. Rail freight volume is projected to increase by two-thirds by 2030, placing additional pressure on the east-west railway corridor. At the national level, the Australian Infrastructure Audit 2015 projected the value-add of rail freight services to grow from $5.4 billion in 2011 to $9.5 billion by 2031. Without adequate investment, travel time and reliability for the interstate rail freight network will deteriorate as a result of congestion, poor alignments, and asset age. This, in turn, will reduce national productivity.

Upgrading rail infrastructure along the Melbourne–Adelaide–Perth corridor is currently listed as a priority initiative on the Infrastructure Priority List. The initiative proposes upgrades along the corridor to accommodate higher axle loads, via enhanced network capacity and speed, and improved train management systems.

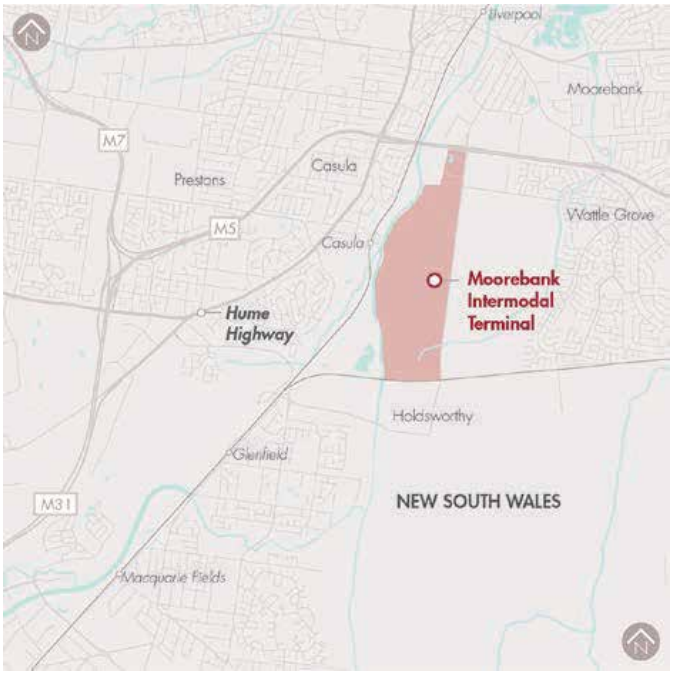
Project description

The project represents an acceleration of phase one of the 25-year long, phased re-railing program outlined in Australian Rail and Track Corporation's Asset Management Plan. The project will bring forward the upgrade of 600 km of track from 23 Tonne Axle Load (TAL) capabilities, to 25 TAL, to completion by 2019. This will support the operation of double-stacked trains at speeds of up to 115 km/hour between Adelaide and Tarcoola, north-west of Port Augusta.

Economic, social and environmental value

The project will deliver economic benefits through reduced travel time for interstate freight, and increased reliability on the east-west rail corridor. The proponent's stated benefit-cost ratio for the project is 1.1 (7% real discount rate).

Moorebank Intermodal Terminal road connection upgrade



Location

Western Sydney, NSW

Problem timescale

Near term (0–5 years)

Nominator

NSW Government

Problem

The Australian Infrastructure Audit 2015 identified the M5 corridor – the key corridor linking the Moorebank Intermodal Terminal (MIT) and Port Botany – as highly economically significant. The delay cost per kilometre in the corridor is projected to be the 10th highest of any corridor in NSW in 2031, even after accounting for the duplication of the M5 as part of WestConnex Stage 2.

The development of the MIT presents an opportunity to moderate growth in freight traffic on the M5 corridor. However, it will generate additional freight traffic in the vicinity of the terminal. The current road network provides a single point of access to the freight precinct. This constraint could create significant 'last mile' congestion affecting the efficiency of freight movements, and ultimately the effectiveness of the MIT itself.

The broader road network surrounding the MIT is currently highly congested, particularly sections of the M5, which has a poor safety record due to significant 'weaving' conflicts (where vehicles are weaving in and out of lanes).

In the absence of any network improvements, the additional freight demand will adversely affect travel times and reliability to the precinct, and ultimately harm freight productivity.

Proposed initiative

The initiative proposes a package of inter-related road infrastructure improvements to increase network efficiency and improve access to the MIT. The major components of the Program include:

- Upgrades to the M5 interchanges at the Hume Highway and Moorebank Avenue
- Connection improvements between the MIT and the M7 Motorway and M31 Hume Motorway
- Upgrades to key intersections.

Next steps

Options assessment - underway

Preserve corridor for Western Sydney Freight Line and Intermodal Terminal access

Location

Western Sydney, NSW

Problem timescale

Near term (0–5 years)

Nominator

NSW Government

Problem

The national land freight task is expected to grow by 86% between 2011 and 2031. The Australian Infrastructure Audit 2015 found that freight rail will need to play a growing role in the movement of goods between ports and inland freight terminals. The role of freight rail will be particularly important for containerised freight with demand for container terminal port infrastructure projected to grow faster than Gross Domestic Product.

Currently, only 14% of container freight handled at Port Botany is transported by rail. If this trend continues, congestion on Sydney's road network will increase as the number of trucks required to meet the growing freight task increases.

In order to facilitate a shift from road to rail for containerised freight movement in Sydney, additional capacity and higher levels of service are required on Sydney's rail freight network.

Proposed initiative

The Western Sydney Freight Line is a proposed dedicated rail freight line connecting Western Sydney to the Sydney Metropolitan Freight Network, with connections to intermodal terminals to service freight moving through Western Sydney from across NSW. The core objective of the initiative is to reduce growth in truck movements on the Sydney road network and reduce delays to freight trains on the main Western Line, where passenger trains have priority. Preservation of the corridor is the first step to achieving this objective.

Next steps

Business case development

Preserve corridor for Lower Hunter freight rail realignment

Location

Hunter Region, NSW

Problem timescale

Near term (0–5 years)

Nominator

NSW Government

Problem

The existing Main North railway line services coal freight movements to the Port of Newcastle, interstate freight movements from Sydney and Melbourne to Brisbane, as well as intrastate freight and passenger trains.

Line congestion, and the priority given to passenger trains on shared parts of the rail network, reduce the efficiency and cost effectiveness of freight movement in the Lower Hunter region. This affects bulk freight destined for the Port of Newcastle as well as containerised and general freight being transported on the east coast freight rail network linking Melbourne, Sydney and Brisbane. Rail freight inefficiency increases costs, and makes rail less competitive than road. This in turn creates an incentive to use trucks, which increases congestion, vehicle emissions and noise, and affects amenity.

Proposed initiative

This initiative is to identify and protect a rail corridor alignment in the Lower Hunter Region to provide an opportunity to construct a dedicated freight rail line that will allow passenger services and freight trains to run concurrently on separate lines.

Next steps

Business case development

Lower Hunter freight corridor construction

Location

Lower Hunter region, NSW

Problem timescale

Longer term (10–15 years)

Nominator

NSW Government

Problem

The existing Main North railway line services coal freight movements to the Port of Newcastle, interstate freight movements from Sydney and Melbourne to Brisbane, as well as intrastate freight and passenger trains.

Line congestion, and the priority given to passenger trains on shared parts of the rail network, reduce the efficiency and cost effectiveness of freight movement in the Lower Hunter region. This affects bulk freight destined for the Port of Newcastle as well as containerised and general freight being transported on the east coast freight rail network linking Melbourne, Sydney and Brisbane. Rail freight inefficiency increases costs, and makes rail less competitive than road. This in turn creates an incentive for more trucks to be on the road, which increases congestion, vehicle emissions and noise, and affects amenity.

Proposed initiative

Develop a new rail freight alignment from Fassifern to Hexham bypassing suburban Newcastle.

Next steps

Business case development

Southern Sydney Freight Line upgrade

Location

Sydney, NSW

Problem timescale

Longer term (10–15 years)

Nominator

NSW Government

Problem

The forecast growth in interstate, intrastate and import/export freight, particularly with the development of the Moorebank Intermodal Terminal, will place significant pressure on Sydney's rail freight network and the Southern Sydney Freight Line (SSFL) in particular. The SSFL forms a key connection between the proposed terminal and other logistics hubs. Without additional capacity once Moorebank Intermodal Terminal is fully operational, the SSFL could become increasingly unreliable and face capacity constraints.

Currently, only 14% of freight handled at Port Botany is transported by rail with the remainder transported by road. On average, Port Botany produces around 3,900 truck movements daily, contributing to significant congestion on key arterial roads including the M4 and M5, both of which were identified in the Australian Infrastructure Audit 2015 as highly congested corridors.

In order to incentivise a shift from road to rail for containerised freight movement in Sydney (consistent with both NSW Government policies and findings from the Audit), further capacity and higher levels of service are required on Sydney's freight rail network. Investment in the rail freight network will be crucial to ensuring the competitiveness of landside freight infrastructure such as the Moorebank Intermodal Precinct.

Proposed initiative

The SSFL is a 36 km single line from Macarthur to Sefton. The proposed initiative involves track duplications and additional passing loops on the line. The initiative aims to support the movement of freight by rail through the city, particularly between Port Botany and the Moorebank Intermodal Precinct. It forms part of a broader strategy designed to drive growth in rail mode share.

Next steps

Business case development

Freight rail access to Port Kembla

Location

Illawarra/Southern Highlands region, NSW

Problem timescale

Near term (0–5 years)

Nominator

NSW Government

Problem

The Australian Infrastructure Audit 2015 identified that Port Kembla would face capacity constraints in the absence of any additional rail network improvements. Port Kembla is a significant economic asset. Maintaining efficient movement of freight to and from the port is a key challenge.

Currently, 60–65% of freight travelling to and from Port Kembla is transported by rail on either the Illawarra line or the Moss Vale to Unanderra line. Operations on both lines are limited by passenger rail services in the region, resulting in disruptions to freight scheduling. Queuing of up to 11 hours is common as passenger services are given priority.

Port Kembla's Outer Harbour development is expected to attract overflow container traffic from Port Botany. The NSW Government has stipulated that Port Kembla should generally not accept more than 120,000 TEUs per annum by road. This is around 10% of Outer Harbour container capacity. This is likely to lead to a significant increase in demand for rail services.

Inadequate rail freight capacity may lead to a substantial increase in road freight, further constraining the Illawarra region's road network.

Proposed initiative

Improve rail freight access to Port Kembla. This could be through enhancements to the Illawarra and/or Moss Vale–Unanderra lines, or through future development of an alternative rail alignment to the port.

Next steps

Options assessment - required

Northern Sydney Freight Corridor Stage 2

Additional track West Ryde to Rhodes and Thornleigh to Hornsby

Location

Sydney, NSW

Problem timescale

Longer term (10–15 years)

Nominator

NSW Government

Problem

Demand for East Coast rail freight is projected to grow rapidly. Interstate container freight in the Newcastle to Sydney corridor is projected to grow four-fold from 2012 to 2028. This rapid near term growth is driven by improvements to freight transport availability and reliability due to the Northern Sydney Freight Strategy Stage 1 project.

Once Stage 1 is completed in 2016, the corridor's capacity will increase by 50%, from 29 to 44 freight trains each day, and will accommodate growth in demand for rail freight up until 2028. In the longer term, the Sydney metropolitan rail network may again become a point of bottleneck for the rail freight network, mainly because of priority given to passenger rail services.

Proposed initiative

The initiative comprises additional tracks from West Ryde to Rhodes and from Thornleigh to Hornsby.

Next steps

Business case development

Melbourne container terminal capacity enhancement

Location

Melbourne, Victoria

Problem timescale

Longer term (10–15 years)

Nominator

Audit identified gap

Problem

The Port of Melbourne is Victoria's busiest port and the largest container and general cargo port in Australia. Traffic at the port has grown at 6% per year over the last two decades. The Australian Infrastructure Audit 2015 identified that, even with planned expansions, additional container terminal capacity will be required before 2031.

The development of additional container terminal capacity in Melbourne, with dedicated rail links connected to the national rail system, will help to alleviate congestion caused by road freight movements.

Given Melbourne's central role in Australia's freight supply chain, inadequate port capacity in Melbourne could have broader national consequences.

Proposed initiative

Planning and construction of additional container terminal capacity in Melbourne to cater for projected increases in containerised freight volumes.

Next steps

Initiative development - required

Mount Isa–Townsville rail corridor upgrade

Location

Far North Queensland

Problem timescale

Medium term (5–10 years)

Nominator

Queensland Government

Problem

The current rail line between Townsville and Mount Isa is capacity constrained with inefficient rail and terminal operations. These constraints include access to the Port of Townsville, short passing loop lengths, and limited passing opportunities.

In its current form, the rail line does not have capacity to cater for the projected increase in demand for rail haulage from mines in the Mount Isa region to the Port of Townsville. Future demand on the line is, under a moderate scenario, estimated to be 20 million tonnes per year. In 2011, the line carried 6 million tonnes and had a theoretical capacity of 7.5 million tonnes.

Proposed initiative

The initiative proposes the following works:

- Enhancements to western sections of the Mount Isa to Townsville Rail Corridor
- Construction of a new 6.5 km Townsville Eastern Access Rail Corridor to provide direct access to export facilities at the Port of Townsville for longer trains.

Next steps

Business case development

Gladstone Port land and sea access upgrade

Location

Gladstone, Queensland

Problem timescale

Medium term (5–10 years)

Nominator

Gladstone Ports Corporation

Problem

The Australian Infrastructure Audit 2015 found that growth in mineral and gas exports will lead to significant growth in demand for regional highway, rail and port infrastructure. Improving connections to ports will be essential to supporting these industries.

Gladstone Port handled 116.7 million tonnes in 2015–16. The Port's most recent 50 year plan (2012) envisages the port's capacity will ultimately grow to 250–300 million tonnes per year. The Audit noted that Gladstone Port handled around 7.5% of Australia's total bulk imports and exports (measured in gross mass tonnes) in 2012–13.

Gladstone Ports Corporation has referred to a recent study which identified a number of opportunities to invest in infrastructure to underpin growth in Central Queensland's mining, export and agricultural sector. These opportunities relate to land and sea access infrastructure designed to support productive supply chains to Gladstone Port.

Proposed initiative

The proposal covers a range of potential projects including:

- Channel management to increase export capacity through the port
- Upgrades to road and bridge infrastructure that service the port
- New rail infrastructure to provide direct connections from the Surat Basin to the port.

Next steps

Options assessment - required

Perth container terminal capacity enhancement

Location

Perth, WA

Problem timescale

Longer term (10–15 years)

Nominator

Audit identified gap

Problem

Capacity at the current container terminal at Fremantle Port is limited. The Australian Infrastructure Audit 2015 indicates that with improvements in productivity and some development, the capacity of the terminal could be up to 1.4 million containers per year.

In 2015–16, Fremantle Port handled 715,107 containers. Assuming port container traffic grows at 3.6% (in line with the average annual growth rate between 2010/11 and 2015/16), and based on current port and landside access capacity, the current facility could reach capacity in around 15 years.

According to the Audit, Fremantle Port accounted for 9.4% of Australia's containerised trade in 2012–13.

The Audit found that significant investment will be required in order to ensure that port capacity can meet the forecast growth in demand by 2031.

Proposed initiative

The initiative involves investigation, planning, and potentially corridor and site preservation for additional container terminal capacity to accommodate future demand in Perth.

Next steps

Initiative development - required

Melbourne–Adelaide–Perth rail upgrade

Location

Corridor between Melbourne and Tarcoola, SA

Problem timescale

Longer term (10–15 years)

Nominator

SA Government

Problem

The interstate rail freight network in South Australia comprises links between Melbourne, Adelaide, Perth, Sydney and Darwin and was identified in the Australian Infrastructure Audit 2015 as a key part of the National Land Transport Network. The track handles 80% of the land-based east-west intercapital freight market and is also utilised by regional mineral and agricultural producers in South Australia.

The track is expected to become capacity constrained over the next 10–15 years due to steady growth in the east-west non-bulk freight task (expected to double by 2030) and future mining and agricultural production. Some sections of track are approaching the end of asset life and have alignments that impose speed and axle load restrictions.

The combination of congestion, poor alignment, and asset age is expected to impact travel times and the reliability and productivity of the interstate freight network. The viability of future mining projects may also be affected.

Proposed initiative

The initiative proposes upgrades to accommodate higher axle loads, capacity and speed, and improve train management systems. Future development of the Melbourne–Port Augusta sections of the network will need to be considered as part of the development of the National Freight and Supply Chain Strategy, which is being recommended in the Australian Infrastructure Plan.

A project to accelerate re-railing of the Adelaide–Tarcoola section of the track, which is listed as a Priority Project on the Infrastructure Priority List, will facilitate higher axle loads, capacity and speed on that section of the track.

Next steps

Options assessment - underway

Complete Metro Ring Road from Greensborough to the Eastern Freeway

Location

Melbourne, Victoria

Problem timescale

Medium term (5–10 years)

Nominator

Victorian Government

Problem

The option for freeway travel between Melbourne's north and south-east is currently limited, and requires passing through Melbourne's inner city which is regularly congested with commuter traffic and freight traffic from the Port of Melbourne.

There is currently a 'missing link' between the M80 Metropolitan Ring Road in Melbourne's north and the M3 Eastern Freeway – EastLink in Melbourne's east and south-east. The current route – which is to use Greensborough Highway, Rosanna Road, Banksia Road and Bulleen Road – spanning approximately 9.5 km, is congested and operating close to capacity during peak periods, making it inadequate for supporting commercial and freight transport activities.

The Australian Infrastructure Audit 2015 estimates the total cost of delay on Melbourne–Geelong's urban transport network in 2011 at around $3 billion. In the absence of additional capacity, this cost of delay is projected to grow to around $9 billion by 2031.

Proposed initiative

Development of a new motorway-standard connection between the Metropolitan Ring Road and Eastern Freeway ('North East Melbourne Corridor') to reduce congestion and capacity constraints.

Next steps

Options assessment - underway

Burnie to Hobart freight corridor strategy

Location

Burnie to Hobart, Tasmania

Problem timescale

Medium term (5–10 years)

Nominator

Tasmanian Government

Problem

The road and rail corridor connecting Burnie and Hobart is identified in the Australian Infrastructure Audit 2015 as a corridor of national significance.

The corridor connects regional producers to Tasmania's ports, and producers depend on it to bring goods to market at competitive prices. The Audit projects that economic activity in the corridor will increase by 44% between 2011 and 2031.

Given the corridor's importance to Tasmania's transport network, there is a need for an integrated strategy to ensure its future efficiency and reliability. This strategy would facilitate the development of the corridor as a key freight route, supporting the economic productivity of regional producers and businesses.

Proposed initiative

The initiative seeks to develop a Burnie to Hobart Freight Corridor Strategy, which will prioritise areas for investment along the corridor, with a focus on improving intermodal freight productivity. The key elements of the strategy are to:

- Identify a single, integrated package of investment priorities for road and rail based on freight demand, corridor and system outcomes
- Confirm required road and rail infrastructure standards and service levels
- Plan for appropriate road freight infrastructure standards across the state road network, including the use of high productivity vehicles.

The strategy would be considered in conjunction with the development of the National Freight and Supply Chain Strategy.

Next steps

The Tasmanian Government is developing a Freight Strategy for the corridor for release in the first half of 2017.

Advanced Train Management System implementation on ARTC network

Location

Australian interstate rail network

Problem timescale

Near term (0–5 years)

Nominator

Australian Rail Track Corporation

Problem

Australia's interstate freight rail network is constrained over many long sections of single track. This restricts the number of train paths, reducing rail's competitiveness with road, and hindering rail's ability to meet growing freight movement demand.

Proposed initiative

An Advanced Train Management System (ATMS) is a wireless satellite communications-based train control system, that will replace line-side signalling, allowing:

- More train paths on single tracks
- Improved line capacities
- Reduced transit times and improve competition with road
- Improved rail safety
- Improved system reliability.

ATMS will improve the safety and efficiency of train operation between metropolitan centres and between national ports.

Next steps

Business case development

Sturt Highway High Productivity Vehicle capacity enhancement, including Truro bypass

Location

Truro, SA

Problem timescale

Medium term (5–10 years)

Nominator

SA Government

Problem

The road transport system is the only means of transporting goods in most regional areas of South Australia. However, the existing road network does not allow for the use of High Productivity Vehicles and the absence of a fully developed High Productivity Vehicle network is constraining productivity and the realisation of opportunities in the South Australian economy.

The Sturt Highway is part of the National Land Transport Network, providing the main route between Adelaide and Sydney. Freight growth on the Sturt Highway is expected to increase at 1.6 % per year. Increases in freight vehicle numbers will reduce the capacity of the Sturt Highway, resulting in increased travel time and costs. This negatively affects business competitiveness and productivity.

High Productivity Vehicles have the potential to carry over 30% more freight per vehicle, resulting in fewer vehicles required to move the same freight task. This reduces the costs to transport operators and end users, and reduces the number of heavy vehicles on the road, improving safety, capacity and efficiency of transport services.

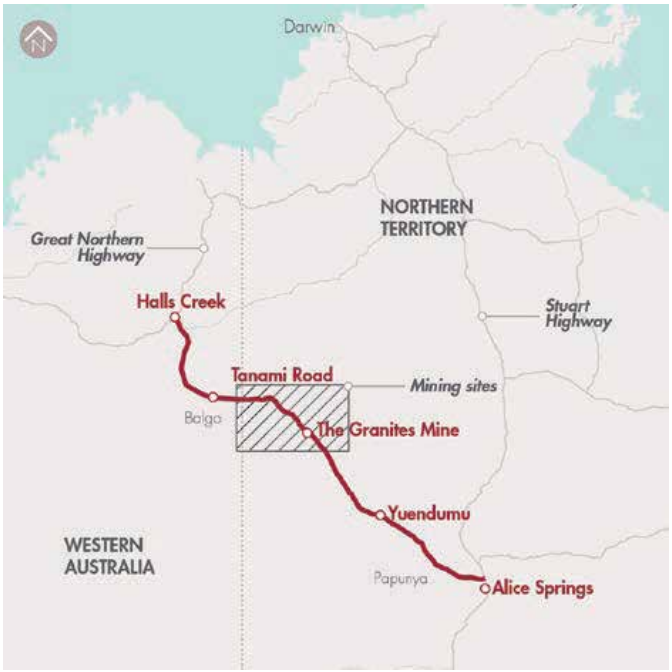
Proposed initiative

This initiative proposes the realignment of the Sturt Highway through the Truro Hills, including a bypass of the town of Truro, to improve safety and allow use of High Productivity Vehicles on the highway.

Next steps

Options assessment - required

Upgrade Tanami Road



Location

Tanami Road links the Stuart Highway in the NT to the Great Northern Highway in WA

Problem timescale

Near term (0–5 years)

Nominator

NT Government

Problem

The key problems identified in the region include:

- Limited economic opportunities for Indigenous and non-Indigenous people in the region
- Limitations to development in mining, tourism and pastoral operations
- High vehicle operating costs
- Poor flood immunity resulting in lengthy road closures
- Reduced opportunities for employment in remote areas
- Reduced access to essential services for the Indigenous population
- Broader risks to the health and safety for road users arising from poor road geometry, excessive corrugations and poor visibility.

A key cause of these problems is the poor quality of the road. Over two thirds of Tanami Road is unsealed with substantial sections being unformed. This surface has led to the development of significant ruts and corrugations from heavy vehicles.

This initiative aligns with the findings from the Australian Infrastructure Audit 2015, as well as with other government priorities, such as Closing the Gap policies. Further, the initiative was identified as an infrastructure gap in the Northern Australia Audit 2015.

Proposed initiative

Upgrade and improve flood immunity and resilience for the Tanami Road between the Stuart Highway north of Alice Springs, and the Great Northern Highway at Halls Creek.

Next steps

Business case development