True Value of Rail, The Australasian Railway Association, Deloitte Access Economics, 3 June 2011

https://www.containerterminalpolicyinnsw.com.au/wp-content/uploads/2016/01/Deloitte-Access-Economics-True-Value-of-Rail-3-June-20111.pdf

A report by <u>Deloitte</u> Access Economics "provides evidence on the level of the benefits not captured in prices or costs that arise from shifting passengers or freight from road to rail". The following are <u>extracts</u> from this report, "The true value of rail, 3 June 2011":

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Benefits of rail

A key part of ensuring correct investment decisions are made is to recognise the true value of rail. This report provides evidence on the level of the benefits not captured in prices or costs that arise from shifting passengers or freight from road to rail. The benefits identified are:

Passenger transport:

- Road travel produces more than 40% more carbon pollution than rail travel per passenger kilometre.
- Road transport generates almost eight times the amount of accident costs as rail transport does.
- In the longer term, high speed rail provides the potential to alleviate pressures that will emerge to move people between major cities and along east coast corridors as Australia's population grows.

Urban passenger transport:

- An additional commuter journey by rail reduces congestion costs alone by between around \$2 and \$7.
- For every passenger journey made on rail rather than road in Australia's four largest cities, between \$3 and \$8.50 can be saved in congestion, safety and carbon emission costs.
- In Sydney, for example, if rail absorbed 30% of the forecast increase in urban travel then congestion, safety and carbon emission costs could be reduced by around \$1 billion a year by 2025.

Interstate freight transport:

- Heavy vehicle road freight users do not face the full maintenance costs that they cause. Under-recovery of these costs has been estimated at between \$7,000 and \$10,500 per truck each year (Productivity Commission 2006 and NTC 2006). The National Transport Commission (NTC) has recommended changes which seek to address this issue.
- Freight moved between Melbourne and Brisbane by rail instead of road reduces carbon costs by around \$56 per container and reduces accident costs by around \$92 per container.
- Along the North-South freight corridor, for example, if rail was to achieve a 40% share of the market then savings, in terms of carbon pollution and accidents, would currently be around \$300m a year or \$630m a year by 2030.

Freight transport within urban centres:

- Along with the use of the mass transit of people, a greater use of rail for freight within, especially, Sydney and Melbourne will be needed to alleviate the increasing congestion on road networks. Environmental and safety benefits would also accrue.
- The NSW and Victorian Governments have recognised the need to develop more effective rail freight services within their cities and have set targets accordingly. These goals aim to ease congestion on arterial roads and improve use of existing rail infrastructure and port land. These costs have tangible effects on the lives of all Australian's and the economy. Congestion eats away at leisure time and reduces economic productivity as workers and goods take longer to reach their destination and cost more to transport. Carbon pollution creates social costs to be borne by future generations who will face the duel costs of a changed climate and the need to reduce emissions. In addition to deaths caused by vehicle accidents, injuries create ongoing effects in terms of pain, reduced ability to work and the need for care.

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There are currently some key bottlenecks holding back the efficient use of rail in Australia. Freight movements between Melbourne and Brisbane are constrained by congestion in northern Sydney. The North Sydney Freight Corridor would go a long way to addressing this issue. Fixing this key point of infrastructure is estimated to cost around \$4.4 billion today. A number of other projects on this route such as modern intermodal facilities in Sydney and Melbourne and many minor adjustments to the track might also be needed.

These investments are costly but will help drive a modal shift towards rail freight which creates benefits from reduced carbon pollution and accidents. If rail was to achieve a 40% market share then by 2030 the savings from accidents and carbon pollution could be worth well over \$600 million a year.

The key choke point for freight is intimately linked with Sydney's metropolitan network. The metropolitan network is currently constrained by capacity through the city. Expanding capacity in the city, through the Western Express project, would currently cost around \$4.5 billion. Again, there are large savings in carbon pollution, accident and congestion costs which work to offset the initial infrastructure investment. If a congestion charge and carbon tax were introduced, this could result in around 150 million extra rail journeys a year. All these extra passengers would reduce carbon pollution, congestion and accident costs on the roads by around \$1.2 billion a year.

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5.1.3 Required investments

The initial investment required to free up capacity on the north-south corridor is to establish the northern Sydney freight corridor (NSFC). A project outline for the NSFC has recently been made by Transport NSW (2010a). The proposed NSFC is not a separate freight line but is, instead, a series of augmentations to the existing shared network which would allow passenger and freight trains to interoperate more freely and would therefore create additional freight train paths. The proposed NSFC would operate in three stages, initially increasing the daily number of train paths from 16 to 26 in both directions while stage two would increase this to at least 33 paths in both directions. Stage three would transition towards a dedicated freight line

The NSFC is forecast to cost around \$1.2bn for stage one, \$3.4bn for stage two and \$3.2bn for stage three, for a total of around \$7.8bn. This expenditure would be spread over the next 12 years and so, in present value terms the capital cost is around \$5.2bn. Of this, \$0.8bn has already been allocated under the Nation Building program. This leaves an unfunded capital cost of around \$4.4bn in present value terms.

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On the north-south corridor, where there is significant room for rail to grow its market share, it is currently being held back by inefficient network infrastructure which leads to reliability issues. The main constraint on the north-south corridor is currently in the Sydney metropolitan network. Trains attempting to move through the network must avoid peak passenger periods. This is complicated by a lack of necessary infrastructure in the north of Sydney. There is currently only a single extra freight train path available each day heading north out of Sydney and this path is likely to be used up within the next year or two. The north-south corridor is therefore facing imminent capacity constraints which will hamper any growth in rail freight along the east coast. This constraint could be alleviated with investment in the north Sydney rail freight corridor, which has been proposed to Infrastructure Australia but is currently only partially funded.