



Doubling of Freight Task in Tasmania

Background Information

The Tasmanian freight Logistics Council has recently undertaken research on the often quoted figure that the freight task will double over a twenty-year period. The Council's CEO undertook some research on this matter – including talking to the Australian Freight Council Network, Department of Infrastructure Energy and Resources (DIER), Tasmanian Chamber of Commerce and Industry (TCCI) and industry – to determine if this is likely to be the case and compiled this report on the outcomes of that research.

Input for this report was provided by the Department of Infrastructure Energy and Resources, Port of Melbourne Corporation and TCCI.

Limited responses were also received from the Australian Logistics Council, Freight and Logistics Council of Western Australia, South Australia Freight Council, Sea Freight Council of Queensland and the Victorian Freight and Logistics Council.

No responses were received from Council Members.

Origins of quote “that the freight task will double over a twenty-year period”

It is understood that the claim that the freight task will double over a twenty-year period can be attributed to the Federal Government's Bureau of Transport and Regional Economics (BTRE) which has forecasted in a number of its publications (including its Information Sheet 22 “*Freight Between Australian Cities 1972 – 2001*”) that freight between Australian cities in 2020 will be on average twice their 2000 levels – hence a doubling of the freight task over a twenty-year period from 2000 – 2020.

The National Transport Commission's February 2006 report “*Twice the Task - A Review of Australia's Freight Transport Tasks*” notes that freight forecasts from the Bureau of Transport and Regional Economics, generally regarded as Australia's leading transport research organisation, suggest that the land transport freight task will double within the next 20 years. The report goes on to say that these conclusions are generally supported by others working in this field and validated in the Department of Transport and Regional Services AusLink White Paper (DoTARS 2004).

National Transport Commission Report

The National Transport Commission report in February 2006, “*Twice the Task - A Review of Australia's Freight Transport Tasks*” was the NTC's first major response to forecasts that Australia's land freight transport task will double from 2000 – 2020.

The report reviewed freight task forecasts and concluded that while there are some alternative opinions to the freight doubling scenario outlined by the Bureau of Transport and Resource Economics and others, they do not justify a departure from the central position that Australia's freight task will increase significantly in a relatively short time period. Alternative views refer more to timing of the predicted doubling, and differences in effect in various locations (such as urban, regional or specific states).

Forecasts clearly indicate that adverse impacts will be greatest in urban areas, where congestion from cars compounds the impact from freight task growth. The forecasts suggest that most of the growth will be on road, despite some shifts to rail for port shuttles.

Annual growth forecasts are highest for Darwin (3.53%), followed by Brisbane (2.98%), Perth (2.93%), Canberra (2.78%), Sydney (2.74%), Melbourne (2.52%), Hobart (2.05%) and Adelaide (2.01%).

It seems probable that the greatest impacts from freight task growth in urban areas will be in, near and between ports, intermodal freight terminals and outer industrial suburbs where the largest warehouses and distribution centres have been established. There are opportunities for modal shift, particularly on longer corridors, with moves to rail for Melbourne – Brisbane and coastal shipping for eastern states to Perth. However, the forecasts conclude that road will carry the majority of increase on shorter inter- and intra-state corridors.

The key influences on demand are increases in resource demand for minerals and agricultural production, and the substitution and growth of imports as both consumer goods and raw material inputs. The increasing desire to reduce inventory will see growth in air freight and probably a continuing reduction in average delivery size to end destinations.

The international freight market and the domestic to a lesser extent may see growth in air freight as time sensitive deliveries increase and just in time delivery becomes more intense, although fuel issues will be greater for air freight.

One of the key views expressed in the report was that a doubling of the freight task in two decades is not particularly daunting to industry.

The study concludes that in the light of almost certain significant increases in the land freight transport task, a do-nothing option will lead to increased road and rail system congestion, increased costs, and reductions in air quality, society amenity and greater noise.

Freight Task Projections

Generally speaking an annual increase of less than 4% is all that is required over a twenty year period to double the freight task.

The Federal Government's Bureau of Transport and Regional Economics (BTRE) 2006 Working Paper 66 "*Demand Projections for AusLink Non-Urban Corridors*" focused on road, rail and coastal shipping freight tasks which account for over 90 per cent of the domestic freight task.

The average annual growth for the twenty five years from 1999 to 2025 is estimated to be as follows:

Mode	% Average Growth
Road	2.98
Rail	2.38
Coastal Shipping	1.51
Air	6.1
All Modes	2.75

If the above growth happens, it will result in less than doubling of the freight task over that period in all transport modes apart from air freight.

Sea Freight - Tasmanian Ports Corporation

Tasmanian Ports Corporation claims that it facilitates 99% of Tasmania's interstate and international trade. Tasmania is very much an export state, with export freight usually twice that of import. Exports represent about 65% of Tasmania's freight trade.

All of the Tasmanian major sea ports facilitate the freight of goods in and out of the state. Generally, each port has its specialities:

- Hobart - Cruise ships, Navy vessels, Antarctic supply vessels, fertilizers, metals
- Bell Bay (Launceston) – Minerals, fuels, timber, timber products, food
- Devonport – Interstate ferries, wheat grain, cement, fertilizers, fuels
- Burnie – bulk minerals, timber, timber products
- Triabunna – Woodchips, timber products

The following chart shows actual Tasmanian freight statistics (as compiled by TasPorts) for the ten-year period 1997-98 through to 2006-07. Assuming average growth takes place for the next ten years, the chart then forecasts growth for the ten-year period from 2007-08 through to 2017-18.

Tasmanian Ports Corporation								
Tasmanian Freight Statistics 1997-98 to 2007-08								
	Year	Import	Growth	Export	Growth	Total	Growth	Cumulative Change
0	1997-98	3,761,369		7,884,961		11,646,330		
1	1998-99	3,922,775	4.3%	8,171,669	3.6%	12,094,444	3.8%	3.8%
2	1999-00	4,024,561	2.6%	9,474,676	15.9%	13,499,237	11.6%	15.9%
3	2000-01	4,233,789	5.2%	9,480,821	0.1%	13,714,610	1.6%	17.8%
4	2001-02	4,607,605	8.8%	9,962,502	5.1%	14,570,107	6.2%	25.1%
5	2002-03	4,705,460	2.1%	10,742,429	7.8%	15,447,889	6.0%	32.6%
6	2003-04	5,030,925	6.9%	10,822,777	0.7%	15,853,702	2.6%	36.1%
7	2004-05	5,729,600	13.9%	10,670,528	-1.4%	16,400,128	3.4%	40.8%
8	2005-06	5,112,865	-10.8%	9,681,748	-9.3%	14,794,613	-9.8%	27.0%
9	2006-07	4,985,676	-2.5%	10,209,748	5.5%	15,195,424	2.7%	30.5%
10	2007-08	5,520,424	10.7%	10,705,520	4.9%	16,225,944	6.8%	39.3%
Average total growth over the last ten years has been 3.93% per annum.								
Assuming average growth takes place for the next ten years, Tasmanian freight statistics will be as follows								
11	2008-09	5,737,377	3.9%	11,126,247	3.9%	16,863,624	3.9%	44.8%
12	2009-10	5,962,856	3.9%	11,563,508	3.9%	17,526,364	3.9%	50.5%
13	2010-11	6,197,196	3.9%	12,017,954	3.9%	18,215,150	3.9%	56.4%
14	2011-12	6,440,746	3.9%	12,490,260	3.9%	18,931,006	3.9%	62.5%
15	2012-13	6,693,867	3.9%	12,981,127	3.9%	19,674,994	3.9%	68.9%
16	2013-14	6,956,936	3.9%	13,491,285	3.9%	20,448,221	3.9%	75.6%
17	2014-15	7,230,343	3.9%	14,021,493	3.9%	21,251,836	3.9%	82.5%
18	2015-16	7,514,496	3.9%	14,572,538	3.9%	22,087,034	3.9%	89.6%
19	2016-17	7,809,816	3.9%	15,145,238	3.9%	22,955,054	3.9%	97.1%
20	2017-18	8,116,741	3.9%	15,740,446	3.9%	23,857,188	3.9%	104.8%

The above projects show that the freight task in Tasmania will indeed double over the twenty-year period from 1997-98 to 2017-18 if growth of 3.9% per annum is maintained for the next ten years.

If growth is more or less than the past ten-year average from 2008-09 onwards then growth over the twenty-year period will be as follows:

% Growth	20-Year Growth
1	53.9%
2	69.8%
3	87.2%
4	106.2%
5	126.9%
6	149.5%
7	174.1%
8	200.8%
9	229.8%
10	261.4%

Air Freight

The National Transport Commission report of February 2006, "*Twice the Task - A Review of Australia's Freight Transport Tasks*" reports that the domestic airfreight task is relatively small, with only 0.25 billion tonne-kilometres of freight carried in the 150 billion total task. This task is expected to increase by 2020 to 0.41 billion tonne-kilometres. However, this contribution is still less than 1% of the total forecast freight task.

The Federal Government's Bureau of Transport and Regional Economics (BTRE) do not publish domestic and regional air freight moved in Australia.

However, it is estimated that air freight in Tasmania accounts for approximately 2% of the total freight task which means that in 2007-08 approximately 330,000 tonnes of cargo was air freighted into and out of Tasmania.

Rail Freight

Eddie Gaul from DIER has advised that there is no rail data for Tasmania available in recent times. Historically it was in the order of 3,000,000 tonnes annually, however, DIER suspects that in recent times this has decreased due to coal now being transported by road and the decrease in output from Nystar.

Intrastate Freight

The National Transport Commission report of February 2006, "*Twice the Task - A Review of Australia's Freight Transport Tasks*" reports that the growth of the urban freight task in all capital cities of Australia is strong over the forecast period. Historically the growth of the urban freight task has outstripped GDP.

The forecasts assume the task is carried entirely by road and while some shifts to rail shuttles in the next two decades are likely, the volumes are likely to be proportionately small. This does not imply that the efforts to streamline and encourage rail to port and other intermodal terminals are futile. On the contrary, the value and nature of port based traffics and the projected growths in international trades impose real challenges for a road based system alone. It is likely that governments and their constituents will put increasing pressure upon shippers to move more of the freight task to rail to increase its share of this task.

The Federal Government's Bureau of Transport and Regional Economics (BTRE) 2006 Working Paper 66 "*Demand Projections for AusLink Non-Urban Corridors*" focused on road, rail and coastal shipping freight tasks which account for over 90 per cent of the domestic freight task.

The report looked at actual and projected origin – destination freight movements by Auslink corridor and transport mode – using actual figures for 1999 and projected freight movements in 2025. In Tasmania, the result was as follows:

Mode	1999 (‘000 tonnes)	2025 (‘000 tonnes)	Growth Per Annum (%)	Growth Over 20 Years (%)
Road	294.8	568.5	2.6	92.8
Rail	174.0	129.7	-1.1	-25.4
Coastal Shipping	295.0	377.3	1.0	27.9
All Modes	763.8	1075.5	1.3	40.0

What freight is increasing?

It is difficult to ascertain what freight increases are causing the potentially doubling of the freight task in Tasmania. However, perusal of Tasmanian Freight Equalisation Scheme (TFES) payments made in recent years does give some indications.

The following chart shows the top twenty areas of TFES assistance paid in 2002 and again in 2007 with the increase or decrease in assistance paid over the five year period.

Tasmanian Freight Equalisation Statistics				
Major Commodities Shipped				
Commodity	Assistance Paid		Assistance Paid	Variation
	2002	2007		
	\$	\$		%
Vegetables - Frozen	12,599,730	14,926,705		18.5%
Manufacturing & Mining - Other	9,148,068	13,284,136		45.2%
Newsprint	11,355,468	12,455,631		9.7%
Paper	4,889,993	5,640,399		15.3%
Vegetables - Fresh	2,046,266	4,725,912		131.0%
Confectionery	3,044,559	4,344,107		42.7%
Timber	3,340,564	3,847,515		15.2%
Beverages - Cartons	2,214,057	3,769,177		70.2%
Cattle Adult	737,276	2,493,348		238.2%
Fodder (excluding wheat)	1,067,282	2,474,667		131.9%
Manufacturing & Mining - High Density	1,719,424	2,396,316		39.4%
Wood & Cork	3,202,704	2,322,008		-27.5%
Fish - Fresh	956,492	2,034,219		112.7%
Metal Waste and Scrap	1,316,220	1,967,058		49.4%
Cheese	1,285,585	1,872,087		45.6%
Milk - Dried, Condensed & UHT	1,125,793	1,519,291		35.0%
Sheep Adult	373,186	1,143,851		206.5%
Wheat	n/a	1,131,662		
Waste Paper	1,380,545	950,233		-31.2%
Apples - Cartons	901,036	935,341		3.8%

Global Financial Crisis

The global financial crisis, which began in September 2008, has sharply weakened the world economic outlook for 2009 and beyond. The crisis has had far reaching consequences and its effects have been felt by many sectors of Australian business. In response to the crisis, governments in the United States, China, Japan, Western Europe, Australia and many other advanced and emerging economies have implemented substantial monetary and fiscal policy measures aimed at supporting economic activity, stabilising markets and bolstering consumer and business confidence. Notwithstanding these efforts, the world economic outlook has continued to weaken.

In March 2009 the Australian Bureau of Agricultural and Resource Economics (ABARE) in its *Australian Commodities March Quarter 09.1 Report* forecast economic growth in Australia to be 1% in 2008-09 and 0.75% in 2009-10. Towards 2013-14, Australian economic growth is anticipated to average around 3% a year.

Projections are fraught with peril and using projections based on history during an economic crisis is probably misleading. It remains unclear at this stage how the global financial crisis will affect growth in the freight task, however, it is most likely that projected growth figures will not be as strong as projected and the freight task may not double in twenty years as predicted.

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