



Report to:  
**Port Taranaki**

# **ECONOMIC IMPACT OF PORT TARANAKI**

## **2007**

**Final Report**

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# 1 Executive Summary

This report provides an economic impact assessment of Port Taranaki on the Taranaki Region economy. It looks at the direct economic impacts and then the related impacts on industry and investment decisions in the Taranaki Region.

Port Taranaki is an integral part of the Taranaki Region's transport infrastructure. It facilitates the movement of goods into and out of the region and country. Port Taranaki is New Zealand's second largest export port by volume<sup>1</sup> and the fourth largest export port by value. In 2006, the Port accounted for the movement of 2.65 million tonnes of goods valued at close to \$2.4 billion into and out of the Taranaki Region.

Port Taranaki provides services to the Taranaki Region's main export industries, which are the key drivers of the regional economy. These industries are oil and gas, primary production, dairy and meat processing, chemical and fertiliser production and engineering. Also, growing container traffic suggests that the Port is having an increasing effect across all export/import industries in the Taranaki Region.

This economic impact analysis of Port Taranaki on the Taranaki regional economy identifies the impacts of the Port operations, the Port's impact on businesses whose activities are directly dependent on it, the Port's association with export and import-related industries and the Port's impact on investment in the region.

Port Taranaki, both through its operations and its role as regional infrastructure, has a quantifiable impact on economic activity in the Taranaki Region. Directly, economic activity is generated by Port operations and the activities of Port-related businesses (such as shipping agents, transport and storage companies). These benefits are measurable and make up the quantifiable economic impact of Port Taranaki on the regional economy.

Table 1 summarises the economic impacts of the port on output, value added and employment broken down by Port operations and Port-related activity.

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<sup>1</sup> When including coastal trade.

**Table 1. Economic impact summary**

<b>Port operations</b>	<b>direct</b>	<b>total</b>
Output	\$32,060,112	\$49,008,567
Value Added (GDP)	\$14,096,655	\$22,362,157
Employment (FTEs)	137	228

<b>Port related activity</b>	<b>direct</b>	<b>total</b>
Output	\$369,950,209	\$555,156,195
Value Added (GDP)	\$173,950,372	\$267,675,816
Employment (FTEs)	770	1,257

<b>Total Impact</b>	<b>direct</b>	<b>total</b>
Output	\$402,010,321	\$604,164,762
Value Added (GDP)	\$188,047,027	\$290,037,973
Employment (FTEs)	908	1,485

Source: BERL

The total economic impact of Port Taranaki is a contribution of \$604 million to output, \$290 million to GDP, and the employment of 1,485 FTEs. The vast majority of this impact is from Port-related activity rather than the Port's own operations.

Considering this in relation to total activity in the Taranaki region, the Port directly contributes 4.6 percent of regional GDP and 2.0 percent of regional employment. Adding indirect and induced effects the contribution of the Port increases to 6.6 percent of regional GDP and 3.3 percent of regional employment.

Indirectly, Port Taranaki acts as an enabler. In its role as infrastructure, the Port facilitates business activity in the Taranaki Region. Industries that utilise Port services benefit from additional/specialist transport options and/or reduced transport costs, improving their ability to operate effectively and move goods to market.

While Port Taranaki plays an important role in facilitating activity, there is not necessarily increased production attributable to the Port. This is because the main industries utilising Port services need to operate near their main resources – oil and gas fields, and farms – and are not dependent upon the Port to operate. As such, the Port cannot claim additional impacts.

However, it can be argued that Port Taranaki plays a key role in enabling activity in those industries that use its services. In some industries, such as oil and gas, this enabling role is greater than in others.

This report covers two areas in relation to enabling activity in the Taranaki Region.

First, the Port supports the major industries in the Taranaki region. In particular, the Port plays a key role in the provision of services to the oil and gas, primary production, dairy and meat processing, chemical and engineering industries.

Second, significant investments in the Taranaki Region can be attributed to the Port because it plays a key role in their viability. Investments identified in this report related to the Port include oil and gas projects, a potential LNG plant, the Pike River coal project and the Eastern Harbour redevelopment.

The economic contribution of these 'enabled' industries and projects to the Taranaki Region are summarised in Table 2. It is important to note that this is the total direct contribution to the region by these industries, not all of which can be directly attributed to Port Taranaki.

**Table 2. Associated activity**

<b>Associated industries</b>	<b>direct</b>
<i>Output</i>	\$5,365,771,967
<i>Value Added (GDP)</i>	\$1,862,595,952
<i>Employment (FTEs)</i>	14,794
<hr/>	
<b>Potential projects</b>	<b>direct</b>
<i>Output</i>	\$903,851,797
<i>Value Added (GDP)</i>	\$350,098,129
<i>Employment (FTEs)</i>	4,123

Source: BERL

Associated industries account for \$5.37 billion in direct expenditure. These industries generate GDP of \$1.86 billion and employ close to 14,800 FTEs.

For potential projects, only the capital expenditure likely to be captured by regional businesses and the portion of that likely to be spent within the Region is considered. The ongoing operational expenditure from projects is not considered.

From these assumptions we estimate that potential projects would account for \$904 million in output, generating \$350 million in regional GDP and employing over 4,120 FTEs.

Port Taranaki is therefore associated with industries that have turnover of almost \$6.3 billion, generate \$2.2 billion in value added and employ close to 19,000 FTEs. To put this into a regional context, Port Taranaki is a key participant in industries/activities that account for 43 percent of Taranaki's GDP and a third of its employment.

# Port Taranaki Economic Impact Assessment 2007

<b>1 Executive Summary .....</b>	<b>1</b>
<b>2 Introduction .....</b>	<b>7</b>
<b>3 The Role of the Port .....</b>	<b>9</b>
3.1 National context.....	9
3.2 Regional context.....	11
3.3 Port Taranaki throughput volumes .....	12
3.4 Port Taranaki throughput values .....	15
3.5 Major industries .....	18
<b>4 Port Taranaki Quantifiable Economic Impact.....</b>	<b>19</b>
4.1 Port operations .....	19
4.2 Port-related business activity .....	20
<b>5 Port Taranaki Associated Activity .....</b>	<b>22</b>
5.1 Oil and gas industry.....	23
5.2 Primary production and food processing.....	25
5.3 Chemicals and metal product manufacturing.....	30
5.4 Transport and storage .....	32
<b>6 Upcoming Projects .....</b>	<b>34</b>
6.1 Pike River coal.....	35
6.2 Oil and gas projects.....	35
6.3 Eastern Harbour redevelopment .....	36
6.4 LNG plant .....	37
<b>7 Other Port Impacts .....</b>	<b>38</b>
<b>8 Appendices .....</b>	<b>41</b>
8.1 Multiplier analysis .....	41
8.2 Consultation.....	45
8.3 EIA comparisons .....	46
8.4 Port-related sub-groups.....	49
8.5 Port trends .....	52
8.6 Port clients.....	55

## List of Tables

Table 1. Economic impact summary .....	2
Table 2. Associated activity .....	3
Table 3. Exports and imports by port .....	10
Table 4. Port Taranaki key export industries by value .....	16
Table 5. Port Taranaki key import industries by value .....	17
Table 6. Port Taranaki coastal trade key industries by value.....	18
Table 7. Quantifiable economic impact of the Port .....	19
Table 8. Port expenditure.....	19
Table 9. Port impacts .....	20
Table 10. Port-related companies .....	21
Table 11. Port-related activity .....	21
Table 12. Port Taranaki associated activity .....	22
Table 13. Summary of oil and gas industry 2006.....	23
Table 14. Impact of the oil and gas industry on Taranaki Region economy.....	24
Table 15. Primary sector summary indicators 2006.....	26
Table 16. Primary sector industry summary.....	27
Table 17. Primary sector economic impact.....	27
Table 18. Dairy processing industry summary .....	28
Table 19. Dairy processing economic impact .....	29
Table 20. Meat processing industry summary .....	30
Table 21. Meat processing economic impact.....	30
Table 22. Chemical and metal product manufacturing industry summary.....	31
Table 23. Chemical and metal product manufacturing economic impact.....	31
Table 24. Transport and storage industry summary.....	32
Table 25. Transport and storage industry economic impact .....	33
Table 26. Economic impact of capital expenditure on major projects .....	34
Table 27. Economic impact of Pike River coal project .....	35
Table 28. Economic impact of oil and gas projects.....	36
Table 29. Economic impact of Eastern Harbour redevelopment.....	36
Table 30. Economic impact of an LNG plant.....	37
Table 31. Comparison with earlier Port EIAs .....	47
Table 32. Comparison of EIA with Port of Tauranga.....	47
Table 33. Impact on port services and agents .....	49
Table 34. Impact on transport and storage industry.....	50
Table 35. Impact on the fishing industry .....	50
Table 36. Boatbuilding industry economic impact.....	51
Table 37. Oil and gas companies related to Port Taranaki .....	55
Table 38. Meat processing and related companies .....	55

## List of Figures

Figure 1. Volume of product throughput, 2006.....	13
Figure 2. Volumes by transport type .....	14
Figure 3. Port Taranaki container volumes .....	14
Figure 4. Port Taranaki trade type by volume .....	15
Figure 5. Port Taranaki sponsorship .....	38
Figure 6. Port Taranaki employees .....	52
Figure 7. Port Taranaki revenue .....	52
Figure 8. Port Taranaki operational expenditure .....	53
Figure 9. Port Taranaki capital expenditure .....	54
Figure 10. Port Taranaki dividends .....	54

## 2 Introduction

This report aims to show the economic impact of Port Taranaki on the Taranaki Region and the wider economy.

Port Taranaki contributes to the Taranaki economy as:

1. a business operating in its own right, employing people and adding value.
2. an enabler, contributing to business activity in businesses and industries in the Region.
3. infrastructure that many industries and businesses use due to its specialist services and efficiency in transporting goods.

We suggest that the first two of these effects – the operational expenditure generated by the Port and those companies that are directly dependent on the Port for their business - constitute the quantifiable economic impact of Port Taranaki.

Examples of industries that are directly reliant on the Port include shipping agencies, port services, and port-linked surveying companies.

Transport and storage companies benefit from transporting the goods imported and exported through the Port. Because of the Port, these goods do not need to be delivered to another Port (Auckland, Wellington or Tauranga) and those goods exported out of, and imported into, the Region do not need to be trucked or, to a lesser extent, railed. Port activity supports a significant proportion of many transport companies' business in the Region. It is unlikely that these companies would generate the same level of business if all goods were exported or imported through another port.

After considering the operational expenditure of the Port, the report identifies the proportion of expenditure, GDP and employment in Port-related businesses directly due to the Port. We then apply multipliers to the identified expenditure to identify the total effects of the Port.

The report then looks at the effects the Port has on associated industries in the Region as identified in point 3 above. We discuss the size of these industries and their importance to the Taranaki Region as well as the role of the Port as an enabler for these industries. However, estimates of the direct impact of the Port on these industries cannot be quantified. While the Port reduces logistical costs and complications for these businesses, it doesn't necessarily follow that the Port increases their economic activity.

Examples of Port associated industries are the oil and gas, transport and storage, dairy and meat processing, chemicals and engineering industries. The effect of Port Taranaki on these industries differs depending upon the industry.

In the oil and gas industry, the link with Port Taranaki is inextricable. It can be argued that the Port has enabled the oil and gas industry in the Region and, vice versa, the oil and gas industry has supported the development Port Taranaki into its current structure. It is therefore hard to separate the Port from the oil and gas industry. The discussion instead is the impact of the oil and gas industry on the regional and national economies, and how the Port plays a key role in enabling it.

In the commodity-based industries (dairy and meat), investment decisions are based mainly on the supply of resources, namely farms. The Port reduces the cost of transporting produce to export markets. However, it should not affect the ability of these industries to operate. The effect of the Port is a combination of decreased costs and or increased output.

It can be argued that goods transported out of and into the Region directly through Port Taranaki are cheaper than if they had to be imported or exported through another port and then trucked into the Region. Therefore, there are some marginal benefits to business from having the Port in the Region. Port Taranaki's effect on businesses in the region is increasing in that the Port is handling significantly higher volumes of general goods outside of oil and gas, dairy and meat industries.

In this report we use multiplier analysis to identify the indirect and induced effects of activity in the region. Multiplier analysis also allows us to work backwards or forwards in identifying output, GDP and employment. Multiplier analysis is explained in appendix 8.1.

The analysis is for the year to June 2006. All port data relates to this period. Industry analysis is for the year to March 2006.

Section 3 discusses the role of Port Taranaki, putting it into a regional and national context, and identifying the services it provides and the industries it facilitates.

Section 4 presents the economic impact of the Port on the Taranaki region, while Section 5 presents the economic impact of the industries associated with Port Taranaki. In Section 6, we present the economic impact of major projects that are closely related to Port Taranaki.

Section 7 discusses social and indirect impacts of Port Taranaki on the Taranaki Region. More detailed discussion and related information are included as appendices in Section 8.

## 3 The Role of the Port

The Port has been a key piece of infrastructure in the Taranaki Region since the 1880's. Over the years it has developed in its role as an enabler for industry. It is likely that the Port will remain a key piece of transport infrastructure into the foreseeable future.

Port Taranaki was established in 1875. In 1881, work on a breakwater began to provide safe anchorage from the Tasman Sea. Port Taranaki is now well sheltered by two breakwaters that extend from either end of a naturally curved bay.

Since 1881, Port Taranaki has grown with the Taranaki Region and today handles large volumes of international and coastal cargoes, principally those of the farming, engineering and oil and gas industries. Port Taranaki is also a servicing base for sea transport and related industries and has, since the beginnings of major offshore and onshore oil exploration in the 1960s, been a provider of related maritime, support and heavy lift services.

Port Taranaki transports over 2.6 million tonnes of goods annually, with a value of over \$2 billion dollars. By value, it is New Zealand's fourth largest port in terms of exports. The majority of exports are in oil and gas, dairy and meat products. These exports are in line with the most significant industries in the Taranaki Region.

Port Taranaki is the only deepwater port on the West Coast of the North Island. It is the closest Port to the Eastern Seaboard of Australia. It is currently serviced by the major shipping lines and goods can be delivered through the Port to most countries in the world.

### 3.1 National context

Ports play a relatively important role in the New Zealand economy. This is due to high levels, and the commodity-based nature, of our exports; as well as our distance from most of our markets. As a result, most exports and imports by volume (and to a lesser extent by value) are transported through seaports. This can be seen in Table 3 below.

**Table 3. Exports and imports by port**

Overseas Cargo Year ended June 2006	exports		Imports	
	tonnes	\$m	tonnes	\$m
Tauranga	6,051,994	7,259	3,830,747	3,850
Christchurch (Lyttelton)	3,583,280	2,608	1,139,597	2,266
Auckland	2,231,954	6,530	3,719,055	15,340
Napier	1,743,734	2,268	547,500	650
<b>Port Taranaki</b>	<b>1,304,226</b>	<b>1,778</b>	<b>347,028</b>	<b>219</b>
Dunedin (Port Chalmers)	1,203,431	3,255	263,990	344
Nelson	1,135,541	703	79,942	223
Whangarei	900,576	250	5,707,633	3,689
Wellington	705,743	807	1,002,747	1,970
Invercargill (Bluff)	606,689	1,009	1,109,811	413
Timaru	543,487	1,186	246,790	369
Gisborne	388,809	80	4,590	2
<b>ALL SEAPORTS</b>	<b>21,737,758</b>	<b>27,788</b>	<b>17,999,441</b>	<b>29,335</b>
<b>ALL CARGO UNLOADED</b>	<b>21,844,340</b>	<b>32,955</b>	<b>18,105,626</b>	<b>37,393</b>

Source: Statistics New Zealand Overseas Cargo Statistics

There are 12 main ports in New Zealand, which account for around 99.5 percent of all New Zealand exports and 99.4 percent of all New Zealand imports by volume. Even by value, ports still account for 84.3 percent of exports and 78.5 percent of imports.

Port Taranaki accounts for 6.0 percent of all seaport exports by volume and 6.4 percent by value. Port Taranaki is the fifth largest export port by volume<sup>2</sup> behind Tauranga, Lyttelton, Auckland and Napier. It is the sixth largest exporter by value, with Dunedin joining the other four ports ahead of Port Taranaki.

Port Taranaki has much lower levels of imports, accounting for 1.9 percent of seaport imports by volume and less than 1.0 percent of imports by value. Port Taranaki is the eighth largest importer by volume and the eleventh largest importer by value.

In terms of national impact, the Port does not generate significant increases in economic activity. There are another eleven ports in the country, across which the activity undertaken at Port Taranaki could be provided.<sup>3</sup> Port Taranaki reduces the transport and logistics costs to a number of businesses. These costs would be higher if products were transferred from another port.

In saying that, the Port does make a significant contribution to the oil and gas industry. The Taranaki Region has a nationally significant oil and gas sector. The Port accounts for almost

<sup>2</sup> Note that this does not include coastal shipping, which would make Port Taranaki the second largest export port by volume and fourth largest by value.

<sup>3</sup> Although activity would likely shift to Auckland, Tauranga or Wellington.

90 percent of all mineral fuel exports out of New Zealand. Furthermore, a significant portion of condensate is transported to Whangarei (Marsden Point) for processing. The infrastructure and the expertise necessary to facilitate this sector are based in the Taranaki Region and have been developed over a period of time. This infrastructure (gas pipelines and storage) and the industry expertise that has developed over a significant period of time cannot be replicated very easily. In fact, gaining the resource consents required to lay another major gas pipeline would be extremely costly and time consuming. This suggests a major contribution to the nation in this sector.

The more important role of the Port is as transport infrastructure, particularly for exports, but also for imports and the movement of bulk goods around New Zealand. The movement of coastal goods accounts for almost 30 percent of Port Taranaki throughput.

The sheer volume of goods that are moved through ports raise issues as to how they would be transported otherwise. Primary sector industries need to be close to their key resource. This holds true for the oil and gas industry as well. Because of the nature of industry in Taranaki, this suggests that a large volume of goods would need to be moved out of the Region.

First, there is the capacity of the road and rail networks in and out of the Region to consider.<sup>4</sup> Secondly, there is the increased cost, and even ability, to shift these bulky items. Finally, there are the environmental (and social) impacts of the increased number of large vehicles on the roading infrastructure.

Therefore, from a national perspective, the economic impact of the Port is in:

- facilitating the oil and gas industry;
- providing transport infrastructure; and
- reducing the costly (economic and environmental) effects of transportation on significant industries.

### **3.2 Regional context**

To put the Port impacts into context, in 2006 the Taranaki region had around 45,000 FTEs, generating \$4.38 billion in GDP through 12,800 businesses. The Taranaki region accounts

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<sup>4</sup> In most cases, the shift would be to road.

for around three percent of New Zealand's GDP and businesses and around 2.5 percent of employment.

The geographic location of Taranaki and the nature of industry in the Region make the Port vital to the regional economy. The Region is relatively isolated, being halfway down the west coast of the North Island. Road and rail infrastructure are adequate, but cannot cater for significant increases in traffic volumes.

The Taranaki Region has significant oil and gas reserves and prospects. An industry (in fact several industries if we include heavy engineering) has grown up around this. There are also large primary, dairy and meat processing, chemical production and engineering industries. Products from these industries are relatively bulky and/or difficult/costly to transport. Therefore they rely on, and benefit greatly from, their ability to transport their products to market through Port Taranaki.

Similarly, other bulky imports and exports (for example engineering material and machinery) could become more costly and even uneconomic if they had to be trucked into or out of the Region, which would reduce the desirability of operating a business in the Region.

As a result, a number of key industries rely on Port Taranaki for transport and support services. This is particularly so for the oil and gas industry, but also for the primary sectors (dairy, meat), and some manufacturing industries in the Region.

### **3.3 Port Taranaki throughput volumes**

In terms of freight tonnes handled, Port Taranaki is New Zealand's second largest export port and fifth largest port overall.<sup>5</sup> In 2006, the Port handled around 2.65 million freight tonnes of goods. Around two thirds of this is Liquid Bulk products related to the oil and gas industry.

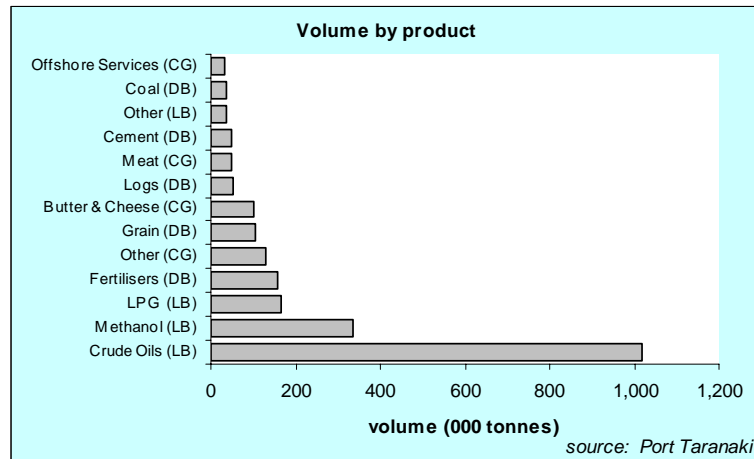
Figure 1 shows the volumes of the major products going through Port Taranaki.<sup>6</sup>

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<sup>5</sup> Port Taranaki website.

<sup>6</sup> Volume data includes coastal shipping, whereas the value data in the previous section does not.

**Figure 1. Volume of product throughput, 2006**

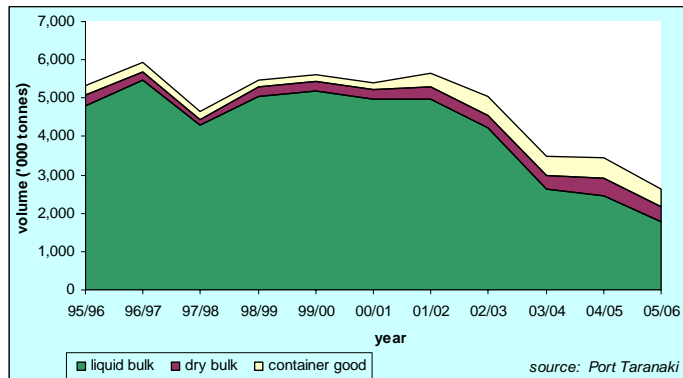


The top three products and four of the top five products by volume are Liquid Bulk products. Crude oil is by far the most significant product item transported through Port Taranaki, followed by methanol and petrol/fuel oil. Milk products are the most significant container good and fertilisers the main Dry Bulk product.

Liquid Bulk is generally made up of the import, export and coastal movement of fuels (crude oils, methanol, and petrol/fuel oil) related to the energy sector. Dry Bulk products are generally related to imports to the primary sector (grains and fertilisers) and energy sector (coal), the coastal shipping of cement and the export of logs for the forestry sector. Containers are used mainly to export milk, butter, cheese and meat products. They are also used to import and export general goods. Finally, containers are used for offshore services, mainly to oil rigs (oil and gas industry) in the area. Goods transported via container are generally higher value goods (per tonne).

Figure 2 shows the total freight (by volume) through Port Taranaki between 1996 and 2006. Note that throughput includes coastal shipping, which is not included in import and export data. The figure also shows the volume breakdown by Liquid Bulk, Dry Bulk and Container Goods.

**Figure 2. Volumes by transport type**

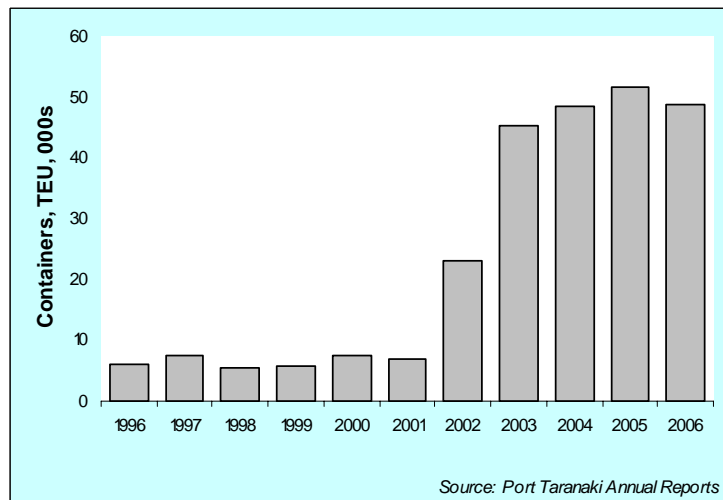


Generally, volumes through the Port have been falling since 2001/02. This has been due largely to a decline in Liquid Bulk volumes. Dry Bulk volumes have been increasing, as have Container Good volumes.

In 2006, Liquid Bulk volumes accounted for around two-thirds of all volume throughput. This was down from around 90 percent of all volumes in 1996. Meanwhile, Dry Bulk increased from six percent in 1996 to 15 percent of volumes in 2006. Container Goods grew even more strongly to account for over 18 percent in 2006, from only four percent in 1996.

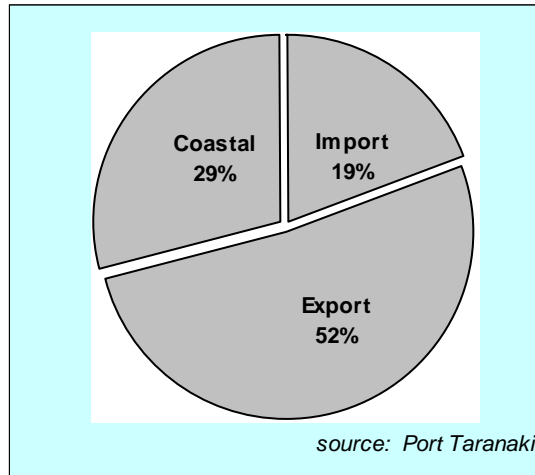
The rapid growth in container volumes is shown in Figure 3.

**Figure 3. Port Taranaki container volumes**



Freight throughput is either for export out of New Zealand, import into New Zealand, or coastal trade to or from another port in New Zealand. Figure 4 provides a breakdown of type of trade (imports, exports and coastal) for the June 2006 year.

**Figure 4. Port Taranaki trade type by volume**



Around 2.7 million freight tonnes went through Port Taranaki in 2006.

In 2006, exports accounted for over half of the volume of freight through Port Taranaki. Coastal trade accounted for around 30 percent of freight volume, with imports accounting for the remaining 20 percent.

Export volumes were dominated by Liquid Bulk products - crude oils (45%) and methanol (25%). Milk products (13%), butter and cheese (7%) and meat (4%) were the main container products exported. Logs were the only Dry Bulk product exported and accounted for 13 percent of total export volumes.

Imports were largely made up of Dry Bulk products – fertilisers (31%), grains (21%) and coal (7%). A further 20 percent of imports were petrol and fuel oil, while other Container Goods made up 18 percent of imports.

Coastal trade volume was largely the movement of crude oils (53%), LPG (22%) and petrol/fuel oil (13%). The other major product moved through coastal shipping was cement.

### **3.4 Port Taranaki throughput values**

This section looks at the significant trade items that are exported and imported through Port Taranaki. It gives an idea of the main industries that utilise the Port's services and the degree to which they are dependent on the Port.

Approximately \$2.4 billion worth of goods is transported through Port Taranaki. The majority of this (74%) is exports, around ten percent is imports and the remaining 24 percent is coastal trade.

### 3.4.1 Export values

Table 4 shows the main exports by value by industry that go through Port Taranaki and the corresponding value of total exports in New Zealand. Each commodity's share of Port Taranaki exports and Port Taranaki's proportion of New Zealand exports in that industry are also shown.

**Table 4. Port Taranaki key export industries by value**

exports (yr to June 2006)	Port Taranaki	% of region	New Zealand	% of national
dairy industry	\$842,823,619	47.4%	\$6,760,583,617	12.5%
oil and gas industry	\$519,634,515	29.2%	\$596,717,686	87.1%
meat industry	\$274,790,320	15.5%	\$5,481,402,227	5.0%
engineering industry	\$12,660,600	0.7%	\$4,472,391,326	0.3%
<b>total</b>	<b>\$1,778,232,050</b>		<b>\$32,948,368,555</b>	<b>5.4%</b>

source: Statistics New Zealand

Port Taranaki exports by value amounted to around \$1.8 billion in 2006.<sup>7</sup> Excluding confidential items, the top three commodity groups (at the 2-digit NZHSC level) account for around 92 percent of all port exports by value. The three groups are dairy (47%), oil and gas (29%) and meat (16%)<sup>8</sup>.

Port Taranaki accounts for 5.4 percent of all exports out of New Zealand by value. However, it accounts for 87 percent of all oil and gas exports and 13 percent of all dairy exports by value.

### 3.4.2 Import values

Table 5 shows the top three imports by commodity type that go through Port Taranaki and their proportion of total Taranaki imports. The table also shows total New Zealand imports for that commodity, which allows us to see the relative proportion that goes through Port Taranaki.

<sup>7</sup> Note that export values only relate to the final port from which goods are exported. For example if dairy products were shipped from Port Taranaki to Port of Auckland then exported from there, the export value would be captured by Auckland. With the rationalisation of the major shipping lines in New Zealand, it is likely that the values identified for several ports will reduce.

<sup>8</sup> Including raw hides and skins, and animal fats, the meat industry accounts for around 16 percent of exports.

**Table 5. Port Taranaki key import industries by value**

imports (yr to June 2006)	Port Taranaki	% of region	New Zealand	% of national
fertiliser and chemical industry	\$74,261,406	33.9%	\$1,745,994,079	4.3%
engineering industry	\$56,263,348	25.7%	\$10,336,033,879	0.5%
oil and gas industry	\$48,835,091	22.3%	\$5,696,737,912	0.9%
<b>total</b>	<b>\$219,227,454</b>		<b>\$37,392,039,504</b>	<b>0.6%</b>

source: Statistics New Zealand

Port Taranaki imported \$219 million worth of goods in 2006. The Port accounted for 0.6 percent of all merchandise imports into New Zealand. The top three industries accounted for 82 percent of all imports through the Port.

The fertiliser and chemical industry accounted for around \$74 million, or a third of imports. This was followed by the engineering industry, which accounted for around a quarter of imports. The oil and gas industry accounted for a further fifth of all imports.

### **3.4.3 Coastal shipping values**

The export and import analysis above does not take into account the total activity through Port Taranaki. There is a large amount of activity moving goods around the country (coastal freight). Moreover, Port Taranaki has a unique role servicing the oil and gas industry, which has a major presence in the Region.

Coastal trade is mainly in Liquid Bulk cargo, consisting of all of the LPG throughput, 50 percent of petrol/fuel oil and other Liquid Bulk throughput and 40 percent of crude oil throughput. All cement throughput is also coastal shipping. Finally, there is the servicing of the oil and gas rigs in the Taranaki basin.

As there is no official value of coastal trade available, we have estimated it based on coastal volumes. Liquid Bulk items make up almost 90 percent of coastal trade. The volume of coastal trade of Liquid Bulk is 73 percent of the volume of Liquid Bulk exports. The export value of oil and gas is \$520 million.

Taking a straight proportion, we estimate that coastal trade in Liquid Bulk is worth around \$380 million. A further six percent of coastal volume is cement, which is worth approximately \$5 million. The final four percent of coastal traffic is offshore services, which is tied up with the oil and gas industry. It is not possible to estimate the value of goods transported, but we can be certain that the value of goods is relatively high in comparison to oil condensate, LPG or cement. Assuming that the goods transported are similar to the average for all imports gives us a value of \$13.5 million.

This gives an order of magnitude of approximately \$400 million, which is consistent with the value of exports and imports when related to volumes and type of goods transported.

**Table 6. Port Taranaki coastal trade key industries by value**

<b>coastal trade values (yr to June 2006)</b>	<b>Port Taranaki</b>	<b>% of region</b>
oil and gas industry	\$393,500,000	98.7%
other industries	\$5,000,000	1.3%
<b>total</b>	<b>\$398,500,000</b>	<b>100.0%</b>

*source: Port Taranaki and BERL*

### **3.5 Major industries**

From the volumes, values and types of goods going through the Port, we can see that there are some significant industries that utilise Port services for the export and import of their goods and raw materials.

The main industry catered for, as we have alluded to throughout this report, is the oil and gas industry. Other major export industries are dairy and meat. On the import side, significant industries are the fertiliser and chemicals, and engineering industries.

The industries that utilise the Port are the producers of the main commodities in the Taranaki Region. While the Port does not directly increase activity in the industries, the Port has an impact in terms of costs and/or production mix. There is a possibility that businesses operating at the margins may shift out, go out of business, or may not consider Taranaki if the Port services were not available.

## 4 Port Taranaki Quantifiable Economic Impact

This section considers the first two areas in which the Port contributes to the regional economy – operational expenditures by the Port and expenditure by businesses that are dependent on the Port for their existence.

A summary of the quantifiable economic impacts from Port operations and Port-related business activity is shown in Table 7.

**Table 7. Quantifiable economic impact of the Port**

<b>Port Economic Impact</b>	<b>direct</b>	<b>total</b>
Output	\$402,010,321	\$604,164,762
Value Added (GDP)	\$188,047,027	\$290,037,973
Employment (FTEs)	908	1,485

source: BERL

Port Taranaki has a direct impact on regional activity of around \$402 million, contributes around \$188 million to regional GDP and employs over 900 FTEs. This is equivalent to 3.3 percent of regional GDP and 2.0 percent of regional employment.

Adding the indirect and induced effects to the direct effects, Port Taranaki contributes \$604 million to output, adds \$290 million to GDP, and employs 1,485 FTEs in the Taranaki Region. This is equivalent to 6.6 percent of regional GDP and 3.3 percent of regional employment.

The following sub-sections break down these numbers into the two areas – Port operations and Port-related business activity.

### 4.1 Port operations

The Port is a significant business in the Taranaki Region in its own right. In 2006, the Port employed over 110 people, spent over \$37.4 million and paid a dividend to the Regional Council in the order of close to \$850,000.

Table 8 summarises Port Taranaki's expenditure for 2006.

**Table 8. Port expenditure**

<b>Port Expenditure (2005/06)</b>	
payments to suppliers and employees	\$19,880,112
capital expenditure	\$11,340,000
dividends to council	\$840,000
<b>Total</b>	<b>\$32,060,112</b>

Source: Port Taranaki

In 2005/06, Port Taranaki had total expenditure of \$32 million. This was made up of around \$20 million in operational expenditure, \$11.3 million in capital expenditure and dividends of \$840,000. Total expenditure in 2005/06 was slightly higher than in previous years due to the increase in capital expenditure<sup>9</sup>.

From this expenditure, the total impact on output, GDP and employment was determined using multiplier analysis. The economic impact generated from Port operations is shown in Table 9.

**Table 9. Port impacts**

<b>port operations</b>	<b>direct</b>	<b>total</b>
Output	\$32,060,112	\$49,008,567
Value Added (GDP)	\$14,096,655	\$22,362,157
Employment (FTEs)	137	228

*source: BERL*

Based on total expenditure in 2005/06 of \$32.1 million, Port Taranaki generated value added of \$14.1 million and employed 137 FTEs. Adding the indirect and induced effects, output increased to \$49 million, value added increased to \$22.4 million and employment increased to 228 FTEs. Further information on Port activity and trends is presented in appendix 8.5.

#### **4.2 Port-related business activity**

A number of businesses in the Taranaki Region are reliant on the Port for either all or part of their business activity. These include agents, port services, offshore services and port servicing companies. Most of these businesses are included in Table 10 below.

To estimate the related activity, we identified and contacted the companies that provided Port-related services and asked them

- a) what portion of their business was driven by the Port and then
- b) how many people they employed.

For those companies we did not contact, we estimated the employees directly related to the Port in discussion with the Port.

From this we estimated employment due to the Port, which allowed us to determine GDP and output. We then used multiplier analysis to identify the indirect and induced effects.

<sup>9</sup> Average capital expenditure has averaged approximately \$6.6 million over the last 11 years.

**Table 10. Port-related companies**

<p><b>Agents</b> Cape Shipping Services Phoenix Shipping Agencies Alpha Customs Services Ltd Worldfreight Customs and Forwarding Ltd</p> <p><b>Port Services</b> New Plymouth Stevedoring Kingston Providers</p> <p><b>Surveying Companies</b> Intertek Testing Services SGS New Zealand ETL Group</p> <p><b>Offshore Services</b> NZ Offshore Services Offshore Marine Services Swire Pacific Offshore New Zealand Ltd Wendell Group of Companies Offshore Solutions</p>	<p><b>Storage</b> A J Cowley FBT Group Bulk Storage Terminals Technix Group Ltd Works Infrastructure</p> <p><b>Transport</b> New Plymouth Customs Agency (Hookers) JD Hickman Clark and Rogers Ltd GJ Sole Limited Q transport FBT Group</p> <p><b>Other</b> Customs/Immigration Port Health Maritime New Zealand MAF Quarantine</p>
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Within each of the businesses, the levels of activity related to the Port ranged from 100 percent down to less than five percent.<sup>10</sup>

The economic impact generated by Port-related activity is presented in Table 11.

**Table 11. Port-related activity**

<b>port related activity</b>	<b>direct</b>	<b>total</b>
Output	\$369,950,209	\$555,156,195
Value Added (GDP)	\$173,950,372	\$267,675,816
Employment (FTEs)	770	1,257

*source: BERL*

We estimate that Port-related activity generated output of \$370 million, contributing around \$174 million to GDP and employing 770 FTEs.

Adding indirect and induced benefits increased output to \$555 million, GDP to \$268 million and employment to 1,260 FTEs.

The break-down of Port-related activity into four subgroups – Port services and agents, transport and storage, fishing industry and boatbuilding and repair industry is included in appendix 8.4.

<sup>10</sup> We accept that this is not a definitive list of companies that have Port-related activity. However, it does cover the most obvious ones and we believe it is close to capturing most of them. In any event, it is likely that the results can be considered an underestimate.

## 5 Port Taranaki Associated Activity

Port Taranaki is the key transport component for the operations of a number of industries in the Taranaki region. These industries benefit financially, operationally and strategically from having easy access to Port Taranaki. However, it is difficult to imply that the Port has an economic impact on these industries or if it has, how much, as causality and additionality are not assured.

However, we can say that these industries benefit from the Port by using it to transport their goods to market or import raw materials. In the case of the oil and gas industry, the Port is used as a service base as well.

The level of reliance on Port Taranaki differs between industries. For the oil and gas industry, the reliance is very high – to the point where some operations would clearly not be possible without the Port. For other industries it is a matter of cost or convenience where, if it were cheaper to transport goods out of a different port or by a different method, they would.

We argue that the Port has significant relationships with these industries. The Port acts as an enabler or as a service, facilitating but not generating, activity. Our approach is therefore to consider the impact of these industries on the Taranaki Region, and then realise the level of importance of the Port to their activity.<sup>11</sup>

Industries covered are based on the volumes and values of their goods that go through Port Taranaki. The major industries utilising Port services are the oil and gas, primary, dairy, meat, fertiliser and chemical, and engineering industries.

The combined output, value added and employment for these industries in the Taranaki Region are shown in Table 12.

**Table 12. Port Taranaki associated activity**

<b>associated industries</b>	<b>direct</b>
Output	\$5,365,771,967
Value Added (GDP)	\$1,862,595,952
Employment (FTEs)	14,794

*source: BERL*

<sup>11</sup> This is where our impact analysis differs from earlier EIAs of Port Taranaki and the recent EIA of Port of Tauranga. The comparison with these other EIAs is discussed in appendix 8.3.

The major industries using the Port account for around \$5.37 billion in output, generating around \$1.86 billion in GDP and employing 14,800 FTEs in the Taranaki Region. We can therefore infer that Port-facilitated industries account for around a third of the Region's employment and over 43 percent of its GDP.

## 5.1 Oil and gas industry

Taranaki is the focus province for oil and gas production in New Zealand. It has the advantage over other developing frontier oil and gas regions (such as Southland) of having established support services and good prospectivity available to developers.<sup>12</sup>

Port Taranaki and the petroleum (oil, natural gas, LPG, etc) and the petrochemical (methanol, urea, formaldehyde resins, etc) industries have been inextricably linked for a long time – perhaps as long as 140 years.

The Alpha well, one of the first in the world and probably the first in the former British Empire, was drilled by hand at Moturoa, New Plymouth, in 1865. The first New Zealand oil refinery was built in New Plymouth in 1913.

Since then Port Taranaki has grown on the back of significant oil projects, Kapuni in the 60's and Maui in the 70's. The Port's Newton King Tanker Terminal was built specifically to service the oil and gas industry and also has storage facilities designed specifically for the oil and gas industry.

**Table 13. Summary of oil and gas industry 2006<sup>13</sup>**

	FTEs	GDP (\$m)	AUTs	Location Quotient
<b>Oil and Gas</b>				
Oil and Gas Exploration	372	719	12	36.02
Services to Mining	401	14	30	14.64
<b>Total Oil and Gas</b>	<b>773</b>	<b>733</b>	<b>42</b>	
<i>% of region activity</i>	<i>1.7%</i>	<i>16.7%</i>	<i>0.3%</i>	

*source: BERL regional database*

The oil and gas industry is a major driver of economic activity in the Taranaki Region. In 2006, the oil and gas industry contributed \$733 million to the Taranaki Region GDP, which is close to 17 percent of total regional GDP. The oil and gas industry employed 770 FTEs in 40 businesses.

<sup>12</sup> Arete Consulting Ltd June 2006.

<sup>13</sup> AUT refers to geographic business activity units. Rather than counting each company only once, it counts each unique branch of a company.

Of more interest is the intensity of the oil and gas sector in the Taranaki Region compared to nationally. Looking at location quotient analysis, the oil and gas exploration industry has employment in the Taranaki Region that is 36 times higher than the national average. For services to mining, the location quotient for the Taranaki Region is almost 15 times higher. This suggests the importance of the oil and gas industry within the Taranaki Region, but also the importance of the Taranaki Region to the national oil and gas industry.

Table 14 shows the economic impact of the oil and gas industry on the Taranaki Region's economy.

**Table 14. Impact of the oil and gas industry on Taranaki Region economy**

<b>Oil and gas</b>	<b>direct</b>	<b>total</b>
Output	\$1,610,792,269	\$2,424,242,365
Value Added (GDP)	\$732,910,482	\$1,407,188,126
Employment (FTEs)	773	3,113

*source: BERL*

Directly, the oil and gas industry generated \$1.61 billion in output, adding around \$733 million to the Taranaki Region's GDP and employing 773 FTEs. Including indirect and induced impacts, the oil and gas industry contributed \$1.41 billion to regional GDP and employed over 3,100 FTEs.

Economic activity has been declining with the diminishing Maui supply. More recently, increasing oil and energy prices have set off a new round of exploration and development in the Taranaki Region. Out of 103 Permits for all oil and gas activities nationally, the Taranaki Region accounts for 45 Petroleum Exploration Permits and 20 Petroleum Mining Permits.

Projects such as the Pohokura and Kupe gas fields, along with several smaller prospects, should replace the loss from existing reserves. Further, new oil prospects, such as Maari and Tui, could generate increasing activity in the industry in the region.

There are currently five offshore oil and gas fields in the Taranaki Region (either operating, or in development), namely Maui, Kupe, Maari, Pohokura and Tui. All five fields utilise the Port as their operating base for offshore services. The last four fields named above are likely to come on stream over the next few years (first gas has flowed from Pohokura). The capital investment in these new projects has been significant and is discussed in Section 6.

The Port plays a vital role in facilitating the operations of the oil and gas sectors. It provides key infrastructure that enables the oil and gas industry to operate and has developed specialist services and infrastructure to meet their demands. This is reflected in Port throughput. In relation to the Port:

- Sixty-seven percent of volume throughput is oil and gas related
- Thirty-three percent of exports by value is oil and gas
- Twenty-two percent of imports by value are oil and gas related.
- The Port accounts for close to 90 percent of all oil and gas exports out of New Zealand.

All onshore liquids go through Port Taranaki as does all Maui condensate. Most offshore oil is shipped to its destination directly from the platform through an FPSO (Floating Production Storage and Offloading vessel), while offshore gas is piped through to onshore production stations. However, all offshore platforms are serviced through Port Taranaki.

We suggest that Port Taranaki and the oil and gas industry are inextricably linked. The oil and gas industry increases the viability of Port Taranaki and the Port ensures the viability of the oil and gas industry.

A further issue is that the Taranaki Region has developed the infrastructure, industry and experience to support the oil and gas industry. Some of this infrastructure, such as the Maui Pipeline, cannot be replicated outside the Region without considerable effort and cost.

## **5.2 Primary production and food processing**

Primary production and food processing is the most significant grouping of industries in the Taranaki region. According to the BERL Regional Database for 2006, the primary and food processing sectors in Taranaki Region together account for \$880 million in GDP, which is equivalent to 20 percent of total regional GDP. The GDP split is almost 50/50 between primary production and food processing.

A summary of the primary production and food processing sectors is presented in Table 15.

**Table 15. Primary sector summary indicators 2006**

	FTEs	GDP (\$m)	AUTs	Location Quotient
<b>Primary Sector</b>				
Agriculture	6,828	399	4,163	2.38
Services to Agriculture; Hunting and Trapping	480	16	275	0.92
Forestry and Logging	119	30	174	0.66
Commercial Fishing	34	3	19	0.35
<b>Total Primary</b>	<b>7,461</b>	<b>448</b>	<b>4,631</b>	
<i>% of region activity</i>	16.5%	10.2%	36.2%	
<b>Food Processing</b>	<b>3,785</b>	<b>432</b>	<b>50</b>	2.28
<i>% of region activity</i>	8.4%	9.9%	0.4%	
Meat Processing	1,629	186	12	
<i>% of region activity</i>	3.6%	4.2%	0.1%	
Dairy Processing	1,464	167	9	
<i>% of region activity</i>	3.2%	3.8%	0.1%	
<b>Total Primary and Food Processing</b>	<b>11,245</b>	<b>880</b>	<b>4,681</b>	
<i>% of region activity</i>	24.9%	20.1%	36.6%	

source: BERL regional database

The primary production and food processing industries employed 11,250 FTEs, which is 25 percent of the Taranaki Region's total employment. These industries accounted for 4,700 businesses, around 37 percent of all businesses in the Taranaki Region.

Within these sectors, primary industries account for around two thirds of FTE employment but 99 percent of business units (mainly farms). There were 6,800 FTEs employed in the agriculture sector (farmers or horticulturalists of some description) in 4,160 businesses. The agriculture sector has a location quotient of close to 2.4, suggesting the importance of the industry to the Region.

A significant volume of grains<sup>14</sup> was transported through the Port. This was mostly bought by farmers in the region to feed their stock, with the remainder transported further afield.

There were only 50 food processing business units in the Taranaki Region, but they employed 3,800 FTEs. Their relative importance is apparent when you consider the location quotient of 2.28, which suggests that in the Taranaki Region, the food processing industry employs over twice as many people relative to national levels.

Meat and dairy processing account for most of the food processing in the Region. Over 80 percent of both employment and GDP in the food processing sector are in the meat and

<sup>14</sup> 106 tonnes or four percent of total throughput.

dairy processing industries. Similarly, the majority of Port throughput is dairy and meat-related.

### 5.2.1 Primary sector

The primary sector has some involvement in the Port in terms of imported grains and use of fertilisers. However, its main relation is through the processing of its products (especially milk and meat), where a large proportion is exported through Port Taranaki.

The primary sector also includes forestry and logging, and commercial fishing. The Port does transport some logs, while commercial fishing is inextricably linked to the Port and is included in the Port-related impacts in section 4.2. A summary of the primary sector in the Taranaki region is presented in Table 16

**Table 16. Primary sector industry summary**

	FTEs	GDP (\$m)	AUTs	Location Quotient
<b>Primary Sector</b>				
Agriculture	6,828	399	4,163	2.38
Services to Agriculture; Hunting and Trapping	480	16	275	0.92
Forestry and Logging	119	30	174	0.66
Commercial Fishing	34	3	19	0.35
<b>Total Primary</b>	<b>7,461</b>	<b>448</b>	<b>4,631</b>	
<i>% of region activity</i>	<b>16.5%</b>	<b>10.2%</b>	<b>36.2%</b>	

source: BERL regional database

The primary sector accounts for around 17 percent of regional employment, ten percent of regional GDP and 36 percent of regional businesses. Of most importance is the agriculture sector with over 90 percent of employment in the primary sector and a location quotient of 2.38.

The economic impact of the primary sector on the Taranaki region is presented in

**Table 17. Primary sector economic impact**

Primary Sector	direct	total
Output	880,446,531	1,322,681,116
Value Added (GDP)	447,921,046	677,336,015
Employment (FTEs)	7,461	10,790

source: BERL

Including indirect and induced effects the primary sector employs almost 10,800 FTEs and generates around \$677 million on output of over \$1.3 billion.

### 5.2.2 Dairy processing

Taranaki is the second most concentrated dairy region in the country behind Waikato. It accounts for 16.3 percent of all herds (1,930) and 12.6 percent of all cows (481,200) in New Zealand.<sup>15</sup>

Dairy processing is a major industry in the Taranaki Region as shown in Table 18.

**Table 18. Dairy processing industry summary**

	FTEs	GDP (\$m)	AUTs
Dairy Processing	1,464	167	9
% of region activity	3.2%	3.8%	0.1%

source: BERL regional database

In the Taranaki Region, there are 1,460 FTEs employed in dairy processing across nine major business units. Dairy processing contributes around \$170 million to regional GDP, which is close to four percent of total regional GDP. Fonterra Co-operative Limited is the major processing business in the dairy industry in Taranaki. Fonterra operates three major plants. The Whareroa (near Hawera) milk processing plant boasts the Southern Hemisphere's largest milk processing operation, there is a cheese factory at Eltham (Central Taranaki) under the Fonterra Brands banner, and there is a by-products manufacturing plant at Kapuni (South Taranaki), where lactose-based products are made.

Investment decisions in dairy processing are based on costs. Dairy factory locations are based on proximity to their main resource – dairy farms. Therefore, the Port is unlikely to have much economic impact on the dairy industry other than in terms of reducing transportation costs for production in the Region.

The dairy processing industry exports the vast majority of its production, primarily by sea. The Port of Taranaki is a major supplier of transportation services to the industry.

Around 13 percent of all New Zealand dairy exports are through Port Taranaki. This is similar to the proportion of cows in the Region. Over 90 percent of Fonterra's dairy processing is exported out of the Region, with almost all of this going through Port Taranaki.

Dairy factories are situated close to supply of product. Combined with capital and infrastructure investment, moving a processing plant is not a viable option. Having Port Taranaki reduces production costs and logistics (i.e. time). Exporting through a different port

<sup>15</sup> Dairy Statistics 2005-2006 (Livestock Improvement).

would require significant logistics and transportation changes. This could result in increasing production costs and or movement of some processing or products to a factory closer to an export port.

In relation to the industry's interaction with the Port:

- Milk products and butter/cheese accounts for around 55 percent of the Port's container throughput by volume.
- Over 50 percent of Port Taranaki exports by values are dairy related.

Table 19 shows the economic impact of the dairy processing sector on the Taranaki economy in 2006.

**Table 19. Dairy processing economic impact**

<b>Dairy Processing</b>	<b>direct</b>	<b>total</b>
Output	\$1,113,573,997	\$2,171,469,295
Value Added (GDP)	\$167,036,100	\$756,673,531
Employment (FTEs)	1,464	8,771

*source: BERL*

The dairy processing sector generates output of around \$1.1 billion. This contributes around \$167 million to the Taranaki Region's GDP and employs almost 1,500 FTEs. Adding indirect and induced impacts, the dairy processing sector generates around \$2.2 billion of economic activity, around \$757 million in regional GDP and employs almost 8,800 FTEs.

Based on the above analysis, the Port is involved with the transportation of close to 80 percent of dairy processing output.

### **5.2.3 Meat processing**

Meat processing is the second largest food processing industry in the region. PPCS Richmond operates a significant slaughter and meat-processing facility at Hawera, which boasts the group's largest beef-killing operation. In addition, Riverlands operates a similar beef-only processing operation at Eltham. There are a number of smaller processing and packing operations handling deer, pig and sheep meat processing within the area.

There is also some secondary processing of meat products in the region with the commissioning in 2005 of the Itoham (NZ) Ltd plant at Waitara (North Taranaki). This plant processes meat products into a variety of patties and smallgoods for export to Japan.

The meat processing industry in the Taranaki Region is shown in Table 20.

**Table 20. Meat processing industry summary**

	<b>FTEs</b>	<b>GDP (\$m)</b>	<b>AUTs</b>
Meat Processing	1,629	186	12
<i>% of region activity</i>	<i>3.6%</i>	<i>4.2%</i>	<i>0.1%</i>

*source: BERL regional database*

In 2006, the meat processing industry contributed \$186 million to GDP, and employed over 1,600 FTEs. The sector directly accounted for 4.2 percent of GDP and 3.6 percent of employment in the Taranaki Region.

In relation to Port Taranaki, the meat processing industry:

- accounts for around two percent of volume throughput (all exported).
- is the third largest export by value, accounting for around 15 percent of export value through the Port.

According to Statistics New Zealand, Port Taranaki exported close to \$245 million worth of meat products and a further \$26.5 million of meat-related products in 2006.

Table 21 shows the economic impact of the meat processing industry on the Taranaki Region in 2006.

**Table 21. Meat processing economic impact**

<b>Meat Processing</b>	<b>direct</b>	<b>total</b>
Output	\$774,265,721	\$1,285,281,097
Value Added (GDP)	\$185,823,773	\$423,678,203
Employment (FTEs)	1,629	3,762.9

*source: BERL*

The meat processing sector generates GDP of around \$186 million and employs over 1,600 FTEs. Adding indirect and induced effects, the industry generates GDP of \$424 million and employs almost 3,800 FTEs.

Based on the above analysis, the Port handles around a third of all meat produced in the region. There is potential for the Port to increase its involvement in this industry.

### **5.3 Chemicals and metal product manufacturing**

The other main industries that tend to utilise port services are the chemical and metal product manufacturing sectors. In 2006, around \$74 million of fertiliser and chemical product was shipped through the Port. Similarly, around \$69 million of metal products were

transported through Port Taranaki. Further, the metal product manufacturing industry does a significant amount of work for the oil and gas industry, which is inextricably linked to the Port.

Major businesses in the chemicals industry include Ravensdown Fertilisers, Methanex and Ballance.

Table 22 shows the economic activity in these two sectors in 2006.

**Table 22. Chemical and metal product manufacturing industry summary**

	FTEs	GDP (\$m)	AUTs	Location Quotient
<b>Chemical Manufacturing</b>	<b>339</b>	<b>33</b>	<b>10</b>	
<i>% of region activity</i>	<i>0.7%</i>	<i>0.8%</i>	<i>0.1%</i>	
<b>Metal Product Manufacturing</b>	<b>1,612</b>	<b>154</b>	<b>130</b>	2.13
<i>% of region activity</i>	<i>3.6%</i>	<i>3.5%</i>	<i>1.0%</i>	

*source: BERL regional database*

Chemical manufacturing employed 339 FTEs and produced \$33 million in GDP through 10 businesses. Metal product manufacturing employed more than 1,600 FTEs and produced GDP of \$154 million through 130 businesses. Together, these two industries account for 4.3 percent of regional employment and GDP, and 1.1 percent of businesses.

Engineering firms in Taranaki evolved from performing some of New Zealand's largest heavy engineering projects - primarily linked the growth of major oil, gas and petrochemical developments. The importance of the metal product manufacturing industry to the region is represented by its location quotient of 2.13, which suggests that relative to national employment, Taranaki has over twice as much of its employment in that industry.

Table 23 presents the economic impact of the chemical and metal product manufacturing industries on the regional economy in 2006.

**Table 23. Chemical and metal product manufacturing economic impact**

<b>Chemical Manufacturing</b>	<b>direct</b>	<b>total</b>
Output	\$166,761,766	\$240,136,943
Value Added (GDP)	\$33,352,353	\$60,701,283
Employment (FTEs)	339	741
<b>Metal Product Manufacturing</b>	<b>direct</b>	<b>total</b>
Output	\$394,207,939	\$607,080,226
Value Added (GDP)	\$153,741,096	\$256,747,631
Employment (FTEs)	1,612	2,466

*source: BERL*

Chemical manufacturing in the Taranaki Region is estimated to directly produce \$167 million in output, with a resultant contribution to GDP of \$33.4 million and employment of 339 FTEs.

Metal product manufacturing has a direct output of \$394 million, producing GDP of \$154 million and over 1,600 full-time jobs.

Adding indirect and induced effects to the equation, the two industries collectively produce \$847 million in output, resulting in a GDP contribution of \$317 million and the employment of around 3,200 FTEs.

Engineering loads of up to 800 tonnes can be transported to the port via a heavy haul route. This route has no vertical obstructions and can take a maximum width of 17 metres. Work has been successfully barged and shipped all over Australasia, Asia and the Pacific.<sup>16</sup>

#### 5.4 Transport and storage

Discussions with key players in the transport and storage industry in Taranaki suggest that Port-related activity could account for up to 20 percent of all road transport and storage activity in the Region. Two main transport companies, Hookers and Hickmans, account for around half of port freight.

The importance of the Port to the transport and storage industry is highlighted by the priority given to the proposed Bell Block bypass, which will provide a crucial northern road link to the Port.

Table 24 gives an overview of the transport and storage industry in Taranaki in 2006.

**Table 24. Transport and storage industry summary**

	FTEs	GDP (\$m)	AUTs	Location Quotient
<b>Transport and Storage</b>				
Road Freight Transport	785	61	131	1.09
Storage	39	2	18	
<b>Total Transport and Storage</b>	<b>824</b>	<b>63</b>	<b>149</b>	
<i>% of region activity</i>	<i>1.8%</i>	<i>1.4%</i>	<i>1.2%</i>	

source: BERL regional database

In 2006, the road freight transport and storage industry employed 820 FTEs, generating \$63 million through 150 businesses. The sector directly accounted for 1.8 percent of employment, 1.4 percent of GDP and 1.0 percent of businesses in the Taranaki Region.

The transport and storage industry in the Taranaki Region has a slightly higher location quotient than nationally at 1.09. This suggests that almost ten percent more of the Region's

<sup>16</sup> Engineering Taranaki Consortium website.

population are employed in the industry compared to nationally. Table 25 shows the economic impact of the transport and storage industry on the Taranaki Region economy.

**Table 25. Transport and storage industry economic impact**

<b>Transport and Storage</b>	<b>direct</b>	<b>total</b>
Output	\$158,357,814	\$272,977,764
Value Added (GDP)	\$62,938,152	\$118,149,910
Employment (FTEs)	824	1,428.2

*source: BERL*

The transport and storage industry had output of \$158 million, generating \$62.9 million in regional GDP and employing 824 FTEs. Adding indirect and induced effects increased output to \$273 million, GDP to \$118 million and employment to 1,430 FTEs.

Assuming that the Port is responsible for around 20 percent of activity in the industry suggests that the Port is responsible for almost \$13 million in GDP and 165 FTEs in the transport and storage industry.

This is consistent with the findings in the Port-related analysis where we estimate the impact on the transport and storage industry of close to \$15 million.

## 6 Upcoming Projects

There are a number of projects currently in the planning or development stage in the Taranaki Region that are based around the Port. A number of these are oil and gas related. However, there is also the Pike River coal project and the Port Eastern Harbour redevelopment.

These projects all have substantial capital investment costs and are reliant on the Port for transport infrastructure. As such it is useful to include these as activity supported by the Port.

We do not suggest that all the expenditure here is due to the Port (although some, such as Pike River Coal, Eastern Harbour redevelopment, LNG plant) would definitely not be able to proceed without Port access. What we do say is that the Port was a key factor in the final decisions for these projects to proceed.

**Table 26. Economic impact of capital expenditure on major projects**

Major Projects	
Capital Expenditure	direct
Output	\$903,851,797
Value Added (GDP)	\$350,098,129
Employment (FTEs)	4,123

*source: BERL*

Combining the estimated expenditure of all these projects gives a total of \$904 million in expenditure in the Region. This would contribute around \$350 million to regional GDP (8.0% of regional GDP) and employ 4,120 FTEs (9.1% of regional employment) for one year.

Note that we are trying to get an order of magnitude rather than exact numbers. Hence we have:

- used estimates of expenditure and not broken that expenditure down into industry activity when calculating the multiplier effect;
- made general assumptions on the amount of expenditure captured in the Region; and
- suggested that the expenditure figure is the total capital cost and could be spread over several years or may have already been spent.

We therefore urge caution when using these numbers to show economic activity of the individual projects.

## 6.1 Pike River coal

Port Taranaki has a joint venture with Pike River coal to transport its coal to market. Greymouth coal will be shipped to Port Taranaki, and then trans-shipped to overseas markets in Asia, India, South America and Europe. Port Taranaki is spending \$56 million installing coal-handling facilities as part of the Pike River coal project.

**Table 27. Economic impact of Pike River coal project**

Pike River Coal		
Capital Expenditure	direct	total
Output	\$56,000,000	\$88,480,000
Value Added (GDP)	\$19,600,000	\$34,300,000
Employment (FTEs)	256	427

source: BERL

Capital expenditure on the project is likely to result in an increase in total output of \$88.5 million, with a direct increase in value added of \$34.3 million, and employment of 427 FTEs.

## 6.2 Oil and gas projects

Rising energy and oil prices have seen an environment of increasing activity in oil and gas projects in the Taranaki Region. Four major projects are in various stages of development. Several smaller projects are also underway.

Just looking at capital expenditure, these projects are worth in the vicinity of \$2.8 billion. Assuming that the Taranaki Region captures a portion of that suggests a major contribution to regional activity.

The following economic impact analysis focuses only on capital expenditure and assumes that the Taranaki Region captures around 25 percent of the project work.<sup>17</sup>

<sup>17</sup> The 25 percent is a relatively conservative estimate based on discussion with oil and gas experts and other available information. In general, a significant portion of capital expenditure on oil and gas projects is sourced offshore. However, expertise in New Zealand is increasing and a growing proportion of expenditure is being captured in New Zealand, and indeed in Taranaki. For example, on the Kupe project, up to 600 construction workers were needed at the peak of the development with New Zealand companies capturing up to \$200 million worth of work. Fitzroy engineering, which won almost NZ\$30 million on the NZ\$1 billion Pohokura project believed New Zealand engineering firms could win up to NZ\$200 million on the Kupe project (which is expected to have cost around NZ\$980 million). And while the sea mattresses for the Pohokura gas project went to a Singapore-based company, they were fabricated on site in Taranaki employing about 30 staff locally. Allied Concrete, a Taranaki based company, supplied all the concrete products and an Auckland company manufactured the SEAMAT components in Auckland and the rope was manufactured in New Zealand by Quality Equipment Ltd.

**Table 28. Economic impact of oil and gas projects**

Oil and Gas Projects		
Capital Expenditure	direct	total
Output	\$700,357,143	\$1,106,564,286
Value Added (GDP)	\$245,125,000	\$428,968,750
Employment (FTEs)	3,201	5,346

source: BERL

The current confirmed projects are expected to spend around \$700 million in the Taranaki Region on setting up their operations. This will generate around \$245 million in regional GDP and employ 3,200 FTEs for one year.

Considering indirect and induced effects, regional GDP increases by \$429 million and employment by 5,350 FTEs for one year.

There is likely to be further activity in the oil and gas sector with the next round of exploration likely to generate a further \$1 billion in activity (of which a portion would be captured by the region).

### 6.3 Eastern Harbour redevelopment

The Taranaki Region, along with Port Taranaki, is progressing a project aimed at redeveloping the Eastern Harbour including the Taranaki Marina. BERL had undertaken an earlier economic impact analysis of the marina redevelopment on the Taranaki Region. Table 29 shows the economic impacts of the capital expenditure associated with the Eastern Harbour redevelopment.

**Table 29. Economic impact of Eastern Harbour redevelopment**

Marina Redevelopment		
Capital Expenditure	direct	total
Output	\$22,494,654	\$35,541,553
Value Added (GDP)	\$7,873,129	\$13,777,976
Employment (FTEs)	95	159

source: BERL

BERL estimated that it would cost around \$22.5 million to redevelop the Eastern Harbour area. From this, the Region would capture around \$7.87 million in GDP and employ 95 FTEs for one year.

Adding indirect and induced effects would increase regional GDP to \$13.8 million and regional employment to 160 FTEs for one year.

## 6.4 LNG plant

Genesis Energy and Contact Energy have formed a joint venture (Gasbridge) and have agreed that, if it is necessary/economically viable to import liquefied natural gas (LNG) into New Zealand, they would import it through Port Taranaki. This would require the building of an LNG plant. The plant could cost around \$500 million. Again, taking the same assumption as for the oil and gas projects – that the Taranaki Region captures around 25 percent of this activity – provides the following economic impacts.

**Table 30. Economic impact of an LNG plant**

	LNG Plant	
Capital Expenditure	direct	total
Output	\$125,000,000	\$197,500,000
Value Added (GDP)	\$77,500,000	\$135,625,000
Employment (FTEs)	528	882

source: BERL

Expenditure of \$125 million in the Region would contribute around \$77.5 million to regional GDP and employ 530 FTEs for one year.

Adding indirect and induced effects would increase GDP to around \$136 million and employment to 880 FTEs for one year.

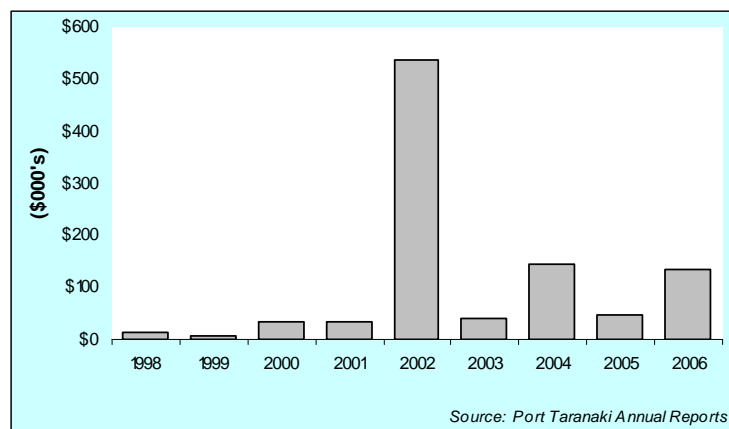
Note that this project is only likely to occur at some stage in the future and only if insufficient domestic discoveries are made and developed.

## 7 Other Port Impacts

Port Taranaki also has intangible impacts on the Taranaki economy that cannot be quantified and captured in the economic impact analysis. These intangible impacts are generally around social and environmental contributions that improve the quality of life of the community.

Port Taranaki sponsors a number of causes and activities in the Taranaki Region. The total level of sponsorship since 1998 is shown in Figure 5.

**Figure 5. Port Taranaki sponsorship**



Since 1998 the Port has given away almost \$1 million in sponsorship, or almost \$100,000 annually. The amount given as sponsorship has increased each year. There has been an overall upward trend in sponsorship, with over \$132,000 in sponsorship given in 2006.

The Port is a regionally focussed, socially responsible organisation. As well as the monetary sponsorship, it is closely linked to the viability of a number of social events and community groups in the Region. It provides cheap leases to community clubs (Yachting, Surf Lifesaving and Diving Clubs), access to its land for significant sporting events, and has worked with the community to ensure access to Ngamotu beach and other water-based attractions (e.g. Sugar-loaf Islands), and contributed to the preservation of the Sugar Loaf Marine Reserve.

An unusual feature of Port Taranaki is that it has a beach within its breakwaters adjacent to its operational area. The popularity of Ngamotu Beach with the local community and their ability to use it is testament to Port Taranaki's commitment to safe working practices and regard for the environment.

Finally, and noted in the Port expenditure section, the Regional Council is the 100 percent owner of the Port. The Port pays a dividend each year. Rather than going out of the region to a foreign owner, this dividend tends to get redistributed back into the regional economy through the Council's role of providing regional services and infrastructure.

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## 8 Appendices

### 8.1 Multiplier analysis

A multiplier analysis uses multipliers derived from inter-industry input-output tables for the Taranaki Region, and for New Zealand. The Taranaki regional input-output tables have been derived from the national input-output tables and other data by Butcher Partners, Canterbury - a recognised source for regional input-output tables and multipliers.<sup>18</sup>

Multipliers allowed us to identify the direct, indirect and induced effects in terms of output (GDP) and Full Time Equivalent (FTE) employment.

#### *Measures*

**Gross Output Multipliers** – gross output is the value of production, built up through the national accounts as a measure, in most industries, of gross sales or turnover. This is expressed in \$ million at constant prices. Gross output is made up of the sum of:

- Compensation of employees (i.e. salaries and wages);
- Income from self employment;
- Depreciation;
- Profits;
- Indirect taxes less subsidies;
- Intermediate purchases of goods (other than stock in trade); and
- Intermediate purchases of services.

**Value added multipliers** – value added multipliers measure the increase in output generated along the production chain, which, in aggregate, totals Gross Domestic Product (GDP). Value added is made up of the sum of:

- Compensation of employees (i.e. salaries and wages);

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<sup>18</sup> For a discussion on regional input output tables and the validity and reliability of the Butcher input output tables see *Statistics New Zealand (2003) Regional Input Output Study*.

- Income from self employment;
- Depreciation;
- Profits; and
- Indirect taxes less subsidies.

**Employment Impact multipliers** – Employment impact multipliers determine the number of Full Time Equivalent (FTE) roles that are created for every \$1 million spent in an industry for one year. It provides a measure of total labour demand associated with Gross Output.

An FTE is the percentage of time an employee works represented as a decimal. A full-time position is 1.00; a part time position is 0.50.

#### *Direct, indirect and induced effects*

The underlying logic of multiplier analysis is relatively straightforward. An initial expenditure (**direct** effect) in an industry creates flows of expenditures that are magnified, or “multiplied”, as they flow on to the wider economy. This occurs in two ways:

1. The industry purchases materials and services from supplier firms, who in turn make further purchases from their suppliers. This generates an **indirect** effect.
2. Persons employed in the direct development and in firms supplying services earn income (mostly from wages and salaries, but also from profits) which, after tax is deducted, is then spent on consumption. There is also an allowance for some savings. These are the **induced** effects.

Hence, for any amount spent in an area (**direct** effect), the actual output generated from that spend is greater once the flow on activity generated (**indirect** and **induced** effects) is taken into account.

#### *Leakages*

Generally the more developed, or self sufficient, an industry in a region is, the higher the multiplier effects. Conversely, the more reliant an industry is on supply inputs from outside the region, the lower the multipliers. These outside factors can be referred to as “leakages”.

To put this another way, if a house was purchased in Taranaki, and all the materials and labour were sourced in Taranaki, and all the materials and labour that went into making the housing materials were made in Taranaki and so forth, and then the labour spent their

wages or salaries in Taranaki, again on goods or services produced solely in Taranaki, then all the multiplier effects would be captured by Taranaki. Where inputs or outputs come from outside Taranaki, leakages are said to exist, and the multiplier effect reduces.

### **Limitations of multiplier analysis**

#### *Partial equilibrium analysis*

Multiplier analysis is only a “partial equilibrium” analysis, assessing the direct and indirect effects of the development being considered, without analysing the effects of the resources used on the wider national and regional economy.

In particular, it assumes that the supply of capital, productive inputs and labour can expand to meet the additional demand called forth by the initial injection and the flow on multiplier effects, without leading to resource constraints in other industries. These constraints would lead to price rises and resulting changes in overall patterns of production between industries.

To assess inter-industry impacts in full would require economic modelling within a “general equilibrium” framework. Applying such models becomes more relevant where the particular development is considered significant within the overall economy.

#### *Additionality*

Related to partial equilibrium, using multipliers for economic impact assessments assumes that the event is something that would not have been undertaken anyway and that it will not displace existing activity. That is, the event is additional to existing activity. If it does either of the above, then the economic impact is less than that determined by the multiplier and it would be necessary to subtract both the activity that would have occurred anyway and the displacement effect.

#### *Impact*

Again related to “partial equilibrium”, multiplier analysis assumes that an event will not have an impact on relative prices. However, in a dynamic environment, it can be assumed that a large event would have an impact on demand and supply and hence prices. Hence, the larger the event and the more concentrated it is in a single industry or region, the more likely it is that the multipliers would give an inaccurate analysis of impacts. For example, if multiplier analysis was used to determine the effect of residential building construction nationally it would likely be inaccurate as residential building construction accounts for over 6 percent of GDP.

### *Aggregation*

Industries outlined in input output tables are aggregates of smaller sub-industries. Each sub industry has unique inputs and outputs. The higher the level of aggregation the less accurate these inputs and outputs become. Thus, if determining the multiplier effect of a very specific event using highly aggregated data, there will be a lower level of accuracy. Similarly if an event encompasses a range of industries and multipliers from a single industry are applied the accuracy levels will diminish.

### *Regions and boundaries*

The smaller or less defined a region and its boundaries the less accurate the multiplier analysis will be. Similarly, the easier it is to move across boundaries the less accurate the analysis will be. For example, at the national level the multipliers will be very accurate as it is easy to determine the inputs and outputs crossing through the New Zealand borders.

Similarly it would also be fairly easy to determine a north island/south island split. As smaller regions without obvious geographic boundaries are selected then a higher level of assumptions need to be made and the multipliers become less accurate. For example, an individual could work in the Auckland Region but live in the Waikato Region and spend a large proportion of his/her recreation money in the Bay of Plenty Region.

For any regional analysis the level of accuracy will have to be accepted. As a rule of thumb, the larger and more defined the region, the more accurate the analysis will be.

## 8.2 Consultation

A special thank you to the people listed below for the time and effort contributed in enabling this economic impact.

Mike Aberhart	JD Hickmans
Keith Aldam	Kingston Providers
Joanne Armitage	PPCS
Paul Asquith	Worldfreight Customs and Forwarding Ltd
Gordon Blyth	SGS New Zealand
Tom Cloke	Taranaki Road Transport Association
Murray Dixon	New Zealand Offshore Services
John Geraghty	FBT
Abdul Halim	Intertek Testing Services (NZ) Ltd
Peter Harrison	Bulk Storage Terminals
Les McGrath	Hookers
Captain Michael Murdock	ETL Group
Andy Neville	Swire Pacific Offshore NZ Ltd
Shane Parker	New Plymouth Stevedoring Ltd
Greg Pope	Fonterra
Neil Ritchie	energy and gas expert
John Spurway	Offshore Marine Services (NZ) Ltd
Ian Twomey	Hale and Twomey (energy and gas consultants)

### **8.3 EIA comparisons**

In this section we attempt to compare Port Taranaki's current economic impact to earlier EIAs in 1994 and 1997. We also compare Port Taranaki's current economic impact to the economic impact of Port of Tauranga on the Bay of Plenty Region.

The results from the various EIAs are not directly comparable.

Comparison of the current economic impact to earlier EIAs of the Port is difficult due to significantly different methodologies. In this regard, we caution against directly comparing the two numbers. We have attempted to compare like with like and only used those parts of our analysis that are (relatively) consistent or comparable with the earlier studies. Even then, we struggle to arrive at any useful conclusions.

The major difference in approach is that our analysis does not suggest that a portion of activity in key industries that use the Port is due to the Port. We argue that these industries are likely to continue to produce at similar levels, regardless of involvement with the Port. Hence, our total economic impact is significantly lower than the other reports.

However, we have considered those key users of the Port as being associated with the Port and have measured their impact on the Region. We can therefore compare as if we had included them in the impact – but suggest that they are associated with, rather than products of, Port activity.

We have not included the associated activity of impending oil and gas and marina projects in the comparison to ensure consistency.

#### **8.3.1 Port of Westgate 1994 and 1997 EIAs**

Port Taranaki undertook EIAs in 1994 and 1997. The major difference between the current (2006) analysis and the earlier ones is that the earlier analyses identified a portion of industry activity as a ratio of exports, which were counted as an impact of Port activity. In our comparison we assume that these are associated effects rather than economic impact effects and so we believe they were overstated in previous EIAs.

The main results are compared to the current EIA in Table 31.

**Table 31. Comparison with earlier Port EIAs**

	Regional GDP (\$m, 2006)			Regional Employment (FTEs)		
	port related impacts	associated effects	total	port related impacts	associated effects	total
Port Taranaki 1994	22	1,084	1,106	205	7,980	8,185
Port Taranaki 1997	18	1,241	1,259	210	9,300	9,510
Port Taranaki 2006	22	1,862	1,884	211	14,794	15,005

source: BERL, Port Taranaki

The only comparisons that can be made are on Port-related impacts that result from the direct operation of the Port. As expected these have not changed significantly (in real terms) between 1994 and 2006.

The reason that associated effects were higher in 2006 is because the 2006 figure includes total activity in the main industries, whereas the earlier studies only took a portion of those industries. On the other hand the earlier studies included all industries related to the cargo and multiplied out the effects, whereas the current study did not incorporate multiplier effects.

### 8.3.2 Port of Tauranga 2006 EIA

An economic impact assessment of Port of Tauranga was recently (November 2006) released. The approach taken was relatively similar to that of this report. A comparison of our results with those of the Port of Tauranga report is shown in Table 32.

**Table 32. Comparison of EIA with Port of Tauranga**

	Regional GDP (\$m, 2006)			Regional Employment (FTEs)		
	port related impacts	associated effects	total	port related impacts	associated effects	total
Port Taranaki 2006	313	1,862	2,175	1,468	14,794	16,262
% of Taranaki totals	7.1%	42.5%	49.7%	3.2%	32.7%	36.0%
Port of Tauranga 2006	383	3,547	3,930	1,889	39,774	41,663
% of BoP totals	4.7%	42.0%	46.7%	1.9%	39.7%	41.6%

source: BERL, Port of Tauranga

Port Taranaki has a higher economic impact relative to the size of the Region. The economic impact of the Port on Region GDP is 7.1 percent in Taranaki compared to only 4.7 percent in Tauranga. In employment, Port Taranaki accounts for 3.2 percent of regional employment compared to 1.9 percent for Port of Tauranga.

The numbers suggest a higher reliance of economic activity in the Taranaki Region on the Port. This is to be expected considering the export-oriented economy and the industry mix.

In terms of associated effects, Port Taranaki's area of activity is slightly higher than that of Port of Tauranga at 42.5 percent versus 42 percent in the case of GDP. However, in the case of employment, it is lower, at 32.7 percent versus 39.7 percent for employment.

## 8.4 Port-related sub-groups

### 8.4.1 Port services and agents

Port services and agents provide shipping related services through the Port. They include shipping agents, stevedoring, chandlers and providers. This group also includes offshore services, which provide services to vessels and rigs in the oil and gas industry as well as general shipping clients.

**Table 33. Impact on port services and agents**

<b>port services</b>	<b>direct</b>	<b>total</b>
Output	\$337,037,555	\$502,185,957
Value Added (GDP)	\$165,148,402	\$249,374,087
Employment (FTEs)	629	1,032

<b>agents</b>	<b>direct</b>	<b>total</b>
Output	\$2,082,794	\$3,207,503
Value Added (GDP)	\$1,041,397	\$1,645,408
Employment (FTEs)	7	10

source: BERL

The impact on port services is significant, with the majority of business directly attributable to the Port. Agents, on the other hand, generate activity through other avenues as well as the Port.

Port services derive \$337 million in activity via the Port. This activity generates \$165 million in regional GDP, directly employing 629 FTEs. Adding indirect and induced effects increases contribution to GDP to \$249 million and employment to 1,032.

The Port's impact on agents in the Region is \$2.08 million, which generates \$1.04 million in regional GDP and employs seven FTEs. Adding indirect and induced effects increases contribution to regional GDP to \$1.65 million and employment to 10 FTEs.

### 8.4.2 Transport and storage

The transport and storage industry has close relations to the Port, particularly in moving goods in and out of the Port. The Port therefore has a major impact on activity across a number of businesses in the transport and storage industry. Activity generated through the Port ranges from 100 percent (for some storage industries) down to less than five percent for some transport businesses.

Table 34 shows the economic impact of the Port on the transport and storage industry.

**Table 34. Impact on transport and storage industry**

	<b>direct</b>	<b>total</b>
<b>road transport</b>		
Output	\$15,803,840	\$27,498,682
Value Added (GDP)	\$6,321,536	\$11,947,703
Employment (FTEs)	37	58
<b>storage</b>		
Output	\$25,322,428	\$34,438,503
Value Added (GDP)	\$8,609,626	\$13,258,824
Employment (FTEs)	28	44

source: BERL

The Port is directly responsible for \$15.8 million output in the transport industry and \$25.3 million in the storage industry. This results in regional GDP of \$14.9 million and employment of 65 FTEs.

Adding indirect and induced effects results in GDP contribution of \$25.2 million and employment of 102 FTEs.

### **8.4.3 Fishing industry**

The fishing and seafood processing industry in the Taranaki Region is relatively small. It employs around 40 FTEs and contributes around \$3 million to GDP.

The fishing industry in the Taranaki Region is reliant on the Port for docking and offloading catch. While not a significant industry (there is only one processor), it still makes a contribution to the regional economy.

An earlier study by BERL identified the economic impact of the fishing industry on the Region's economy. This is presented in Table 35.

**Table 35. Impact on the fishing industry**

<b>fishing and seafood processing</b>	<b>direct</b>	<b>total</b>
Output	\$4,800,000	\$7,170,000
Value Added (GDP)	\$1,548,000	\$2,657,520
Employment (FTEs)	15	27

source: BERL

The fishing industry has direct expenditure of \$4.8 million. This contributes \$1.55 million to regional GDP and employs 15 FTEs. Adding indirect and induced effects, the contribution to GDP increases to around \$2.66 million and employs 27 FTEs.<sup>19</sup>

<sup>19</sup> Note that these figures are based on an earlier BERL study, while the figures given earlier (40 FTEs and \$3 million in GDP) are taken from the regional database.

#### 8.4.4 Boatbuilding industry

Taranaki has a fledgling boatbuilding industry, based around Fitzroy Yachts, which operates on Port land and uses Port facilities to launch their boats. The BERL regional database shows that the boatbuilding industry employs 142 FTEs in four businesses in the Region.

A previous BERL study identified the economic impact of the boatbuilding industry. Because of the inter-relationship between the Port and Fitzroy Yachts, we suggested that the industry, and Fitzroy Yachts in particular, relies on the Port. To be conservative, our analysis only considers the impacts of Fitzroy Yachts rather than the entire industry.

Table 36 shows the economic impact of the boatbuilding industry in the Taranaki Region.

**Table 36. Boatbuilding industry economic impact**

<b>boatbuilding and repair</b>	<b>direct</b>	<b>total</b>
Output	\$5,450,000	\$8,938,000
Value Added (GDP)	\$1,798,500	\$3,435,135
Employment (FTEs)	30	49

*source: BERL*

In 2006, it was estimated that the boatbuilding and repair sector generated direct output of around \$5.5 million. This resulted in a \$1.8 million contribution to GDP and employment of 30 FTEs.

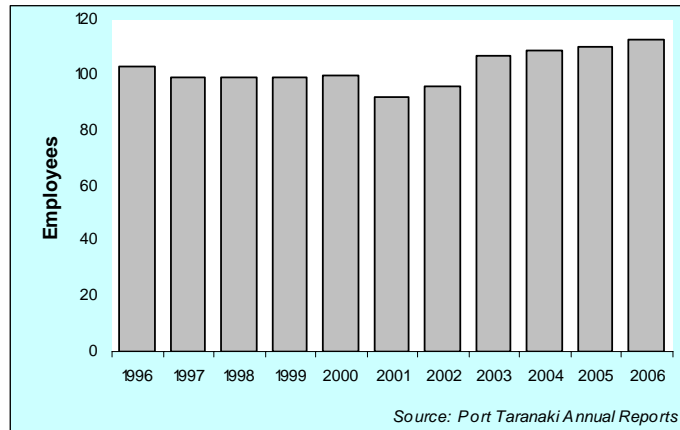
Adding indirect and induced effects to the analysis generates around \$3.4 million in GDP and 49 FTEs.

## 8.5 Port trends

This section looks at some of the trends in key Port measures.

Port employment has remained relatively constant over the last eleven years as shown in Figure 6.

**Figure 6. Port Taranaki employees**

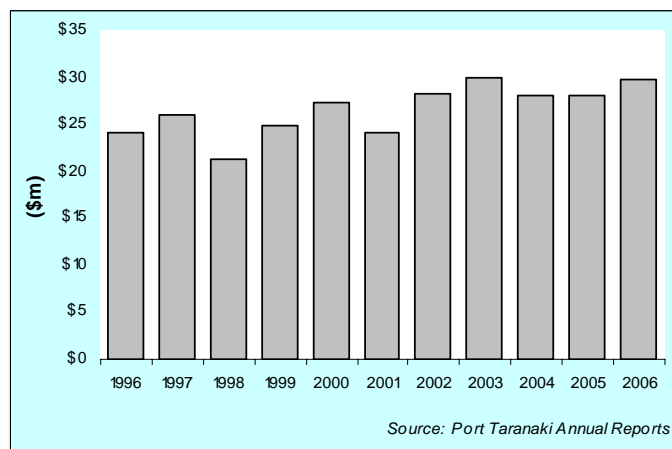


As at June 2006, Port Taranaki employed 113 people. Employment decreased from 1996 to 2001 when it employed 92 people. There was a period of rapid increase between 2001 and 2003. From 2003, there have been slight increases each year.

Employment at the Port has been more consistent than revenue, which is shown in Figure 7 in the following section.

Port Taranaki has significant revenues. This is shown for the last eleven years in Figure 7.

**Figure 7. Port Taranaki revenue**



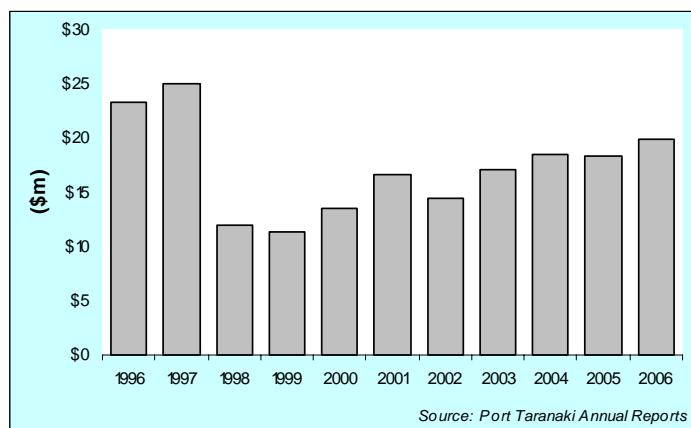
Revenue in the year to June 2006 was almost \$30 million. This is significantly higher than the \$24 million in revenue in 1996 and the low of around \$21 million in the 1998 year.

In this section, we can see the importance of the Port to the oil and gas and primary sector industries. Moreover, the growth of container goods volume supports general industry activity and consumer goods availability for the Region's residents. Interesting is the significant movement of goods around the country, with coastal trade accounting for almost 30 percent of activity by volume. With falling volumes and increasing revenues, there is a shift in the Port's activity toward higher value added products and services.

From the volume and value analysis we can discuss the key sectors, industries and businesses that Port Taranaki impacts on.

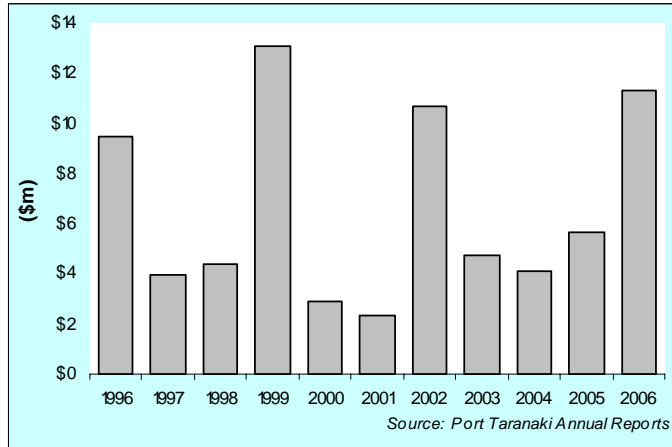
Figure 8 shows the Port's operational expenditure between 1996 and 2006.

**Figure 8. Port Taranaki operational expenditure**



In the latest year, payments to suppliers and employees were close to \$20 million. In 1996 and 1997, operational expenditure was much higher than currently. There was a significant reduction in expenditure of over 50 percent in 1998 and then a further (slight) fall in 1999. Operational expenditure increased steadily since 1999. Figure 9 shows the Port's capital expenditures over the last decade.

**Figure 9. Port Taranaki capital expenditure**

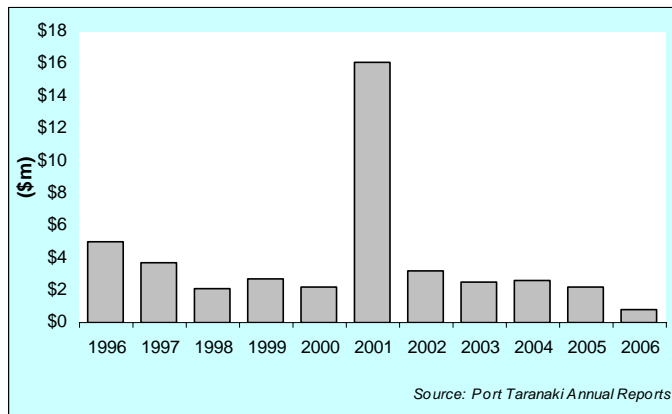


Over the last eleven years, the Port has spent almost \$73 million on capital items. This is an average of \$6.6 million each year.

The distribution of capital expenditures has not been very smooth. There were peaks in 1996, 1999, 2002 and in the current year (2006). Conversely, there was low expenditure in 2000 and 2001.

Port Taranaki pays dividends each year to its owners. These are shown for the last eleven years in Figure 10.

**Figure 10. Port Taranaki dividends**



Over the last eleven years, Port Taranaki has returned over \$43 million to its owners in dividends, an average of close to \$4 million each year. Dividend payments each year have been relatively similar other than in 2001, when there was a significant payment of around \$16 million. In the latest year, the dividend was substantially lower at around \$1 million.

## 8.6 Port clients

There are a number of businesses in, or related to, the oil and gas sector. The main oil and gas businesses operating in the Region that have relationships with Port Taranaki are shown below.

**Table 37. Oil and gas companies related to Port Taranaki**

BP Oil (NZ) Ltd	Rockgas (NZ) Ltd
Gasbridge Ltd	Shell (Petroleum Mining) Company Ltd
Greymouth Petroleum Ltd	Shell Todd Oil Services
Liquigas Ltd	Swift Energy (NZ) Ltd
Methanex New Zealand Ltd	Technip Singapore PTE Ltd
New Zealand Overseas Petroleum Ltd	Todd Taranaki Ltd
Offshore Solutions Ltd	

*Source: Port Taranaki*

A number of meat processing and meat-related companies have relations with Port Tauranga. The major ones are listed in the following table.

**Table 38. Meat processing and related companies**

AFFCO Limited	Itoham (NZ) Limited
Bernard Matthews Limited	Mathias Meats Limited
Canterbury Meat Packers Limited	Pilot (NZ) Limited
CMP Canterbury Limited	PPCS Limited
Crown Marketing Limited	Riverlands Limited
Crusader Meats International	Taranaki Bio Extracts
CTG Rendered Products	Taylor Preston
Gardner Smith (NZ) Limited	Tradeskins (NZ) Limited
IBBCO Trading PTY Limited	

*Source: Port Taranaki*