BEFORE THE HEARING PANEL IN TIMARU

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the hearing of submissions in relation to the Proposed Timaru District Plan

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STATEMENT OF PRIMARY EVIDENCE OF LAWRENCE RYAN MCILRATH ON BEHALF OF PRIMEPORT TIMARU LIMITED AND TIMARU DISTRICT HOLDINGS LIMITED

HEARING STREAM F

Dated: 9 April 2025

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EXECUTIVE SUMMARY

1. My full name is Lawrence Ryan McIlrath. I am a director of Market Economics Ltd (M.E). I have prepared this statement of evidence on behalf PrimePort Limited (**PrimePort,** or **the Port**) and Timaru District Holdings Ltd (**TDHL**) in respect of matters arising from PrimePort's submissions and further submissions on the Proposed Timaru District Plan (**Proposed Plan**).

2. My evidence considers the economic role of the Port and the PORTZ in the district and regional economies. I use a scenario approach to illustrate the adverse economic effects that would be felt if the Port could not respond to growth pressures or if exports decline due to infrastructure constraints.

3. The Port fulfils a several key economic roles, including that of a large business, influencing the location of businesses, and most importantly, facilitating international trade. Many of the businesses located in the immediate vicinity of the Port have a direct relationship with Port activity. Using official information, I estimate that this includes 1,066 employees, and the annual GDP activity generated by these businesses is $157m – almost 4% of the district's GDP. However, the Port's true economic effects relate to the trade (imports and exports) it facilitates.

4. The GDP and employment impacts are estimated in a way that isolates the direct impacts – the GDP associated with the activity excluding any supply chain effects. The total GDP and supported employment are also reported. This includes the economic effects inclusive of the supply chain effects.

5. The Port enables international trade, linking the district and regional economies with international markets via import and exports. International trade supports local economic activity. Exports are international sales and bring foreign receipts to the district, and New Zealand. Producing the goods that are exported uses local resources, and generates GDP and supports local jobs. In contrast, imported goods support local activity by enhancing productivity and providing inputs, thereby supporting production.

6. Official import and export data only capture shipments from the final New Zealand port. If goods are first shipped to another New Zealand port before being shipped offshore, then those exports are recorded at the final port. The StatsNZ data is seen as the conservative position and the economic analysis is based on the lower values. Using third-party analysis about exports suggests that total exports could be two to three times greater than Stats NZ

data suggests. This means that the economic value of the Port to the district could be greater by the same magnitude as those presented here.

7. By value, the Port facilitates more exports than imports. In 2023, the Port facilitated (based on the official data):

   (a) Exports to the value of $1.3bn,

   (b) Imports to the value of $412m.

8. However, expanding the approach to include goods that are shipped to other New Zealand ports (e.g., Port of Tauranga), suggests that the exported value could be more than double the official data at $3.3bn[1].

9. Exports are concentrated in a small collection of commodities that account for more than 90% of total exports. Dairy-related and agricultural goods dominate exports. This concentration illustrates the Port's strong link to the district and regionally significant primary/agricultural economy. The Port facilitates the earning of foreign receipts (money flows to the district and New Zealand).

10. In terms of imports, the top 10 commodities account for 71% of imports. Fertiliser and animal feed account for 64% of imports – again highlighting the link to agriculture and the Port's role in supporting the rural economy.

11. The Port also facilitates trade in niche goods used in local manufacturing.

12. I translate the import and export data from commodities to industries to enable an analysis of the supply chain effects. The focus is on exported goods because including imports would double count some values[2].

13. The direct GDP and employment[3] effects associated with the exported goods in Timaru District is $83m, supporting 275 jobs. At a total level (including the supply chain effects), the Port facilitated effects generate GDP of $221m in the district, supporting 3,330 jobs.

14. The importance in the Port's facilitated effects in the Timaru context also highlights this significance. The direct facilitated effects account for 2.1% of Timaru's GDP and the total GDP associated with the facilitated effects is estimated at 5.5% of the district's GDP. These GDP estimates are annual

[1] Calculations based on Infometrics data.
[2] Exports are final goods that leave the NZ economy. Imports are used in production processes and therefore already reflected in the value of exports.
[3] Employment is expressed in modified employee count (MEC) terms. A MEC is a headcount of employee as well as an adjustment to account for working proprietors.

i.e., showing only one year's values. However, the economic effects are associated with ongoing activity and are durable.

15. Over a twenty-five year period (present value at a 2% discount rate), the Port's direct GDP effects in Timaru District is $2.0bn, and $4.5bn across the Rest of Canterbury and the rest of New Zealand (combined). Including the supply chain effects increases this to $5.3bn in Timaru District, and $31.5bn across the Rest of Canterbury and New Zealand.

16. To provide an indication of the potential scale of the direct economic loss associated with constraints of the Port's expansion, a scenario approach is used. The scenarios reflect a no-growth situation and one with a slow decline in export volumes (-0.5% per year compounded). The net difference between the baseline outlook, and the two scenarios illustrate the GDP impact of constraining growth and activity at the Port. The scenarios do not reflect a 'no-Port' situation, instead illustrating no-growth or declining export situations.

17. The direct loss is in Timaru as well as the Rest of Canterbury, with the lost GDP in the district estimated at between -$341.5m and -$425.3m (over 25 years). This is the effects associated with a change in economic activity and lower exports. It does not include any supply chain effects. For the Rest of Canterbury, the potential (direct) economic loss is between -$594.3m and -$750.9m. A large share (31%) of the direct economic effects will be in the Timaru District. The Rest of Canterbury will also experience large shares of the impacts (54%).

18. The economic effects of constraining the Port, or undermining its ability to respond to growth pressures, are significant. The direct effects are felt in Timaru and across Canterbury – this observation highlights the Port's large service area and high degree of integration into supply chains. It also points to the Port's regional significance.

19. If the Port was not operational, then one alternative for the importers and exporters would be to use other ports, such as Lyttelton or Port Otago. However, these options would see substantial increases in the transport distance, with associated costs (direct transport costs, emission and social costs). Crucially, the distances would alter the costs structures, potentially foreclosing some business opportunities.

20. The Port also contributes to the visitor economy by enabling cruise ships to visit Timaru. Total spending associated with cruise passengers (and crew) is estimated at between $2m and $2.2m in the 2023/24 season. Compared to the Port's overall facilitated economic effects, the cruise ship portion is relatively minor, but it illustrates the Port's wide reach, across sectors.

21. Crucially, the Port's economic effects are enduring and occur year-on-year. It is part of the local investment landscape, and a key economic asset that is used by a diverse range of sectors, delivering economic benefits to the local communities.

INTRODUCTION

22. My full name is Lawrence Ryan McIlrath, and I am a director at Market Economics. I have twenty-five years' experience in regional growth and development, market analysis and assessing the spatial-economic interaction of markets.

23. This evidence is in support of PrimePort and TDHL's submissions relating to the Proposed Plan generally, but also in respect of Hearing F particularly:

    (a) The Natural Hazards chapter;

    (b) The Coastal Environment chapter; and

    (c) The Lighting and Noise chapters.

24. In this evidence I:

    (a) Present key economic data about the Port's economic functioning and estimate the size of the Port's economic role in the district and regional economies;

    (b) Comment on the potential change in the local economy if the Port's operations were curtailed or adversely affected.

25. I am authorised to provide this evidence on behalf of PrimePort and TDHL.

Qualifications and experience

26. I have a BA et Sc (Planning), majoring in Economics from the Potchefstroom University of Christian Higher Education (South Africa), as well as a Master of Business Administration from North-West University (South Africa).

27. I specialise in market assessments, demand and supply analysis, sectoral analysis, and urban-economic analysis. My work includes assessing sectoral structures and interactions, over time and across locations, scenario assessment and growth modelling, as well as evaluating the implications of different growth pathways on market segments. I have applied these skills across many sectors and locations around New Zealand.

28. I have extensive experience in assessing the economic effects associated with ports and airports, including related sectors. I have successfully completed economic assessments relating to:

    (a) ports, and their roles in business capacity assessments;

    (b) economic impact assessment of ports infrastructure;

    (c) estimating the value of the New Zealand Cruise sector[4];

    (d) the economic impacts of New Zealand's domestic airport network;

    (e) developed evaluation frameworks for the Ministry of Transport to assessment the costs and benefits associated with different airports around New Zealand;

    (f) evaluated wharf development proposals as part of funding applications (e.g., Provincial Growth Fund including Russell and Opua wharves),

    (g) assessed the economies and economic growth prospects of many regions around New Zealand.

Code of conduct

29. While this is a Council hearing, I have read the Code of Conduct for Expert Witnesses (contained in the 2023 Practice Note) and agree to comply with it. Except where I state I rely on the evidence of another person, I confirm that the issues addressed in this statement of evidence are within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

Scope of evidence

30. My statement of evidence addresses the following matters:

[4] Current study for Ministry of Business, Innovation and Employment (MBIE)

(a) The role of PrimePort ("The Port") in the district and regional economies;

(b) The effects associated with anticipated changes relating to PrimePort/TDHL submissions;

(c) The net economic position associated with different growth pathways using a scenario approach. The scenarios are designed to show the potential economic losses associated with a constrained port.

31. I address each of these points in my evidence below. My evidence focuses on the key points, and I provide supporting information in referenced appendices.

PRIMEPORT'S ECONOMIC ROLE

32. PrimePort fulfils a several key economic roles. These roles capture the immediate spending and transactions of the Port as a business, as well as the business activity in the immediate vicinity of the port. However, the Port's true economic effects relate to the activities that it facilitates across the local and regional economies i.e., imports and exports.

33. I estimate the economic values of these effects, and I illustrate the significance of PrimePort in the local (Timaru) and regional (Canterbury) contexts covering three core roles:

(a) The Port as a business;

(b) The Port Zone (the **PORTZ**) area as a business location;

(c) The trade and economic activity that the Port facilitates, that is the imports and exports enabled through the Port.

(d) I also comment on the Port's role in the visitor economy through the cruise ship sector.

34. The relative size of these roles is illustrated by firstly describing the direct economic transactions. I estimate the GDP and employment effects of the supported transactions using a bespoke, Multi-regional Input-Output model (MRIO). The model provides a mathematical representation of all sectoral relationship in an economy. It captures how sectors buy and sell goods/services to each other as part of everyday business activities. The

model integrates households, employees, government, as well as imports and exports. Appendix 1 provides a short description about the model structure.

35. Crucially, the Port's economic contribution is durable, spanning multiple years. This means that focusing on only one year's economic activity will not present the total picture of the Port's value. In other words, the Port's overall size and economic value is significantly greater than one, single year's GDP and employment. This is because the economic contributions occur annually and over multiple years.

PORT AS A BUSINESS

36. PrimePort is a large business with annual revenue of $28.9m in 2023, and $30.3m in 2024.[5] The port transacts with the rest of the local economy by purchasing goods and services. The Port's operation expenditure was $22.0m in 2023 and increased to $25.3m in 2024.

37. The Port's spending flows through the local economy, generating economic activity, and supporting employment in the wider economy. In the 2024 financial year, the Port's direct spending amounted to:

    (a) Salaries and wages returned to households $8.7m;

    (b) Operational costs $7.7m;

    (c) Depreciation and amortisation[6] $3.7m;

    (d) Dredging $1.3m;

    (e) Other $0.4m.

38. The Port's direct spending patterns highlight:

    (a) Role in supporting local household income levels: Thirty five (34%) of the Port's operating expenditure goes to households in the form of salaries and wages.

    (b) The value of the economic assets: Depreciation and amortisation costs show the 'annual value' of the asset that is used in delivering the

[5] Financial Year ending 30 June 2024. PrimePort Timaru Limited. Annual Report 2024.
[6] This is a non-cash expense, and reflects the value of the assets used during the year.

business activity. The current value (balance values) of the operational fixed assets is reported as $156.3m[7] with the key parts that support economic activity including:

(i) Wharves $51.5m;

(ii) Plant and equipment $18.1m;

(iii) Buildings, and improvements $20.0m; and

(iv) Breakwater and channel $9.2m.

39. The Port's spending, including the transactions with local businesses, as well as business in the rest of New Zealand, flows through the economy. These transactions generate additional rounds of economic activity, and support employment.

40. The GDP and employment supported by the Port's spending is estimated at $11.4m and 69 Modified Employee Counts (**MECs**)[8]. If the flow on transactions is included, then the Port's economic impact increases to $20.8m, supporting 254 jobs – 77% of the supported employment is in Timaru; equalling 0.9% of the district's overall employment.

41. Crucially, these effects relate to the Port's transactions. If a port-related service is delivered by contractors that are unrelated to the Port, then economic effects associated with that activity is not captured in the Port's financial records. This means that the economic value of the Port as represented by its own transactions is understated.

PORT AS A BUSINESS LOCATION

42. The PORTZ accommodates a range of activities that have essential business linkages to the Port. These linkages are informed by locational factors that can be synthesised into cost efficiencies associated with commodity volumes, a need to reduce transport costs, and limiting intermodal connections (changing transport modes).

43. Many of the businesses that are in the immediate vicinity of the Port have a direct relationship with Port activity. Stats NZ information suggests that these

[7] Including the value of land.
[8] Modified Employee Count is a measure of employment and reflects a headcount of employees together with an adjustment for working proprietors.

businesses employ 1,066 MECs. The direct GDP associated with these businesses is estimated at $157m – 3.9% of the district's annual GDP.

44. The sectoral breakdown of businesses located close to the Port, and with a direct dependence on the Port, show the following structure and size (in GDP and employment terms):

(a) Fishing: $41.6m, 190 MECs

(b) Seafood processing: $31.0m, 248 MECs

(c) Bulk goods (fuel, feed and cement):

(i) Fruit, oil, cereal and other food product manufacturing: $1.2m, 15 MECs;

(ii) Textile, leather, clothing and footwear manufacturing: $0.5m, 6 MECs;

(iii) Non-metallic mineral product manufacturing: $7.3m, 45 MECs;

(iv) Wholesale trade: $4.9m, 35 MECs.

(d) Engineering and manufacturing:

(i) Fabricated metal product manufacturing: $3.6m, 35 MECs;

(ii) Machinery and other equipment manufacturing: $3.8m, 21 MECs;

(iii) Construction Services: $1.6m, 16 MECs.

(e) Transport, Warehousing and Storage:

(i) Rail, water, air and other transport: $5.2m, 36 MECs

(ii) Postal, courier, transport support and warehousing services: $58.3m, 360 MECs.

(f) Marine support

(i) Professional, scientific and technical services: $3.1m, 18 MECs

(ii) Central government administration, defence and public safety: $1.1m, 9 MECs.

45. The businesses that rely on the Port have their own set of supply chain linkages and transactions. These transactions are not only with businesses within the immediate port location and could include support services, such as accountants and lawyers, as well as utilities. These flow on transactions generate additional GDP in the local economy, and support employment. However, this GDP is associated with the imported and exported goods.

FACILITATED TRADE – IMPORTS AND EXPORTS

46. While the Port and the business location are two important parts, the Port's true economic value is associated with economic activity that is beyond the immediate vicinity. The Port enables international trade, linking the district and regional economies with international markets via import and exports.

47. International trade supports local economic activity. The Port supports international sales that brings foreign receipts to the district, and New Zealand. Producing the goods that are sold uses local resources and generates GDP and supports local jobs.

48. Imported goods support local activity by enhancing productivity[9] and providing inputs, thereby supporting production.

49. Stats NZ records the value of goods moved through the Port, covering detailed commodities for both imports and exports. Crucially, official import and export data does not reflect goods that are shipped through the Port to another New Zealand port before being shipped internationally. This means that the official data understates the true extent of the goods moving through the Port.

50. An important distinction is that the Stats NZ data captures the value of goods leaving New Zealand through the Port, but the Port's total facilitated effects relate to the goods moving through it. However, there is no official information about the value or volume of goods moving through the Port to other locations before being exported.

51. Official data about the goods leaving New Zealand through the Port shows that the Port facilitates more exports than exports. In 2023, the Port facilitated:

[9] Through access to new technology via equipment purchases.

(a) Exports to the value of $1.3bn,

(b) Imports to the value of $412m.

52. Crucially, this value excludes goods that are shipped via the Port to another New Zealand port before exported internationally.

53. Using third party information,[10] I estimate that the total value of goods transported through the Port (including the international export component) to be in the order of $3.3bn. This suggests that the Stats NZ data captures around half of the total value of exports that the Port facilitates.

54. It is also important to bear in mind that imports and export values reflect the Dollar-values of the goods. This Dollar-values should not be equated to the level of economic activity (GDP) associated with producing, or using, those goods. Goods are recorded as commodities whereas economic activity is reported at an industry or sector level. I use both metrics to illustrate the wide reach of the Port's facilitated effects.

55. Both imports and exports are important to the local economy.

Exports

56. The Port facilitates exports with Stats NZ data for 2023, revealing the profile of exported goods. Exports are concentrated in a small collection of commodities that account for more than 90% of total exports. These commodities include:

(a) Dairy-related commodities, including dairy products, milk and cream products and products in solid or liquid form. Dairy-related goods to the value of $969m were exported. These commodities account for 73% of total exports.

(b) Prepared fish products to the value of $91m were exported. This represented 7% of total exports.

(c) Chemical products and man-made fibres with a value of $51m were exported through the Port. This equals 4% of total exports.

(d) Animal oils and fats commodities[11] valued at $50m were exported. This represents 4% of total imports.

[10] From Infometrics (Timaru regional database).
[11] Specifically tallow.

(e) Wood and non-wood forest products to the value of $44m were exported, accounting for 3% total exports.

57. Other minor commodities are also related to the primary (agriculture) sector and include:

(a)	Cattle[12]	$27m, (2%)
(b)	Meat and offal[13]	$24m, (2%).
(c)	Natural and man-made textile fibres[14]	$23m (2%)
(d)	Vegetables and prepared vegetables	$16m, 1%.
(e)	Beer, soft drinks, and fruit juices[15]	$7m, 1%.

58. The concentration of exports in agricultural commodities shows that:

(a) The Port has a clear and direct link to the district's and regionally significant primary/agricultural economy;

(b) The Port facilitates the earning of foreign receipts (money flows to the district and New Zealand).

59. Apart from agricultural exports, the Port facilitates exports of a diverse range of commodities. While the value of these exports is materially smaller than the agricultural element, it illustrates the fact that the Port also supports niche activities. Examples include:

(a) Wines

(b) Specialists' machinery[16].

60. The opportunities the Port provides to access international markets is being used by niche activities. The specialist goods associated with niche exports are generally high value on a per unit basis.

61. The values reported above reflect the official statistics, and as mentioned, does not show the total value of goods exported. The values are likely to be higher.

[12] This includes breeding animals and dairy cattle (pure-bred and other than pure-bred).
[13] Including sheep and beef (frozen).
[14] Including wool.
[15] Mostly beer, made from malt.
[16] Examples include agriculture and horticulture machinery including mechanical or thermal equipment associated with the germination of plants.

Imports

62. Imports are concentrated in goods associated with agriculture. In 2023, the top 10 commodities[17] accounted for 90% of imports. Again, grouping the top commodities shows that imports are highly concentrated:

    (a) Animal feed accounts for 31% of imports; and

    (b) Fertiliser accounts for 27% of imports.

63. The import data reveals the strong link between the Port and the district, and Canterbury's agriculture. Close to two thirds (66%) of imports are related to agriculture. Fertiliser[18] is important because it is used to increase yields and to maintain crop and pasture productivity. Similarly, feed is associated with animal farming, supporting the rural economy.

64. Beyond these commodity groupings, the Port facilitates the import of crucial goods that supports productive economic capacity and highlights include:

    (a) Steel products, semi-finished metal products $24m;

    (b) Machinery $18m;

    (c) Structural metal products and other fabricated metal products $24m.

65. These goods are used as inputs into manufacturing, as well as the equipment used to manufacture other goods.

66. The import data shows that the Port:

    (a) supports the regionally significant agriculture sector by ensuring that important inputs can be sourced;

    (b) is essential and secures access to international technology and manufactured goods that are used in local manufacturing and production lines.

67. The value of the goods that are exported is associated with local production activities but should not be equated with GDP. To estimate the value of the economic production associated with the exported commodities, the export data (commodities) must first be linked to industries. This is done by using

[17] Based on the 10 digit Harmonised System classification. This classification has over 12,000 individual commodities.
[18] I acknowledge that nitrogen and phosphorus are sources of pollution and farmers are facing increased environmental regulation around nitrogen leaching.

regionalised Supply and Use Tables. These tables show how industries/ sectors use commodities to make goods. The tables record which sectors make (supply) which commodities.

68. I estimate the share of the local and district economy that rely on the Port by drawing on the relationships between imports, exports and industries.

GDP associated with imports and exports

69. The Port facilitates significant exports and import movements. The value of exports and imports reflect the Dollar-values of those goods, but it is not GDP. Producing the goods that are exported is associated with local economic activity, supporting employment and generating wider economic activities through supply chains. The supply chain effects associated with imports and exports differ.

70. Exported goods are a 'final good' as no further value is added to the good once it leaves New Zealand. Therefore, the GDP associated with producing the good can be estimated. Considering the type of goods (commodities) that are imported (e.g., fertiliser and animal products) means that care is needed when looking to estimate the GDP effects associated with both imports and exports because these is a risk of double counting. Imported goods are consumed as part of the production process when the exported goods are made/produced. Therefore, a conservative approach is used to illustrate the GDP values associated with the Port's facilitated activity by focusing on exports. However, niche imports are considered separately.

71. The GDP estimates reflect the spatial relationships i.e., where the exports originate from: Timaru, the Rest of Canterbury, or the rest of the South Island. The employment associated with the GDP is also reported. The different degrees of supply chain effects are reported, including:

    (a) Direct – the GDP and employment that is associated with producing the goods that are exported. This is the GDP and employment without any supply chain linkages.

    (b) Total – the GDP and employment associated with the entire supply chain, including the flow on effects associated with the production process as well as salaries and wages returned to employees.

72. The subsequent analysis is based on the official Stats NZ data and reflects a conservative position. Basing the analysis on the export estimates as

prepared by third parties[19] will see the GDP impacts more than double compared to those based on the Stats NZ data.

73. The direct (annual) GDP and employment[20] effects associated with the exported goods is estimated at:

(a)	Timaru district	$83m	275 MECs
(b)	Rest of Canterbury	$145m	945 MECs
(c)	Rest of New Zealand[21]	$42m	275 MECs
(d)	***Total***	***$270m***	***1,495 MECs.***

74. The total (annual) GDP and employment effects across the entire economy, including the flow-on effects, are estimated at:

(a)	Timaru district	$221m	3,330 MECs
(b)	Rest of Canterbury	$838m	14,790 MECs
(c)	Rest of New Zealand[22]	$476m	7,525 MECs
(d)	***Total***	***$1,534m***	***25,645 MECs.***

75. The Port's role in the district and regional economy is clear with 84.5% of the direct GDP effects felt in Timaru and the Rest of Canterbury.

76. The importance in the Port's facilitated effects in the Timaru context also highlights this significance. The direct facilitated effects account for 2.1% of Timaru's GDP and the total GDP associated with the facilitated effects is estimated at 5.5% of the district's GDP.

77. These GDP estimates are annual i.e., showing only one year's values. However, the economic effects are associated with the ongoing activity and are durable. I note that current export levels, and therefore the facilitated effects, are lower that levels seen in recent years reflecting the challenging economic conditions.

[19] As highlighted in para 53.
[20] Employment is expressed in modified employee count (MEC) terms. A MEC is a headcount of employee as well as an adjustment to account for working proprietors.
[21] In reality, this is areas such as Otago and the West Coast.
[22] In reality, this is areas such as Otago and the West Coast.

78. Using a conservative posture,[23] I estimate the present value of the Port's facilitated effects over a 25 year period (I see this as the baseline future):

(a) The direct GDP associated with the facilitated effects is estimated at:

(i)	Timaru district	$2.0bn,
(ii)	Rest of Canterbury	$3.5bn, and
(iii)	Rest of New Zealand	$1.0bn.
(iv)	***Total***	***$6.5bn.***

(b) Adding all the supply chain effects to the assessment sees the total GDP effects increase to:

(i)	Timaru district	$5.3bn,
(ii)	Rest of Canterbury	$20.1bn, and
(iii)	Rest of New Zealand	$11.4bn.
(iv)	***Total***	***$36.8bn.***

79. The size of the Port's role in supporting economic activity is illustrated – the Port makes a significant economic contribution to the Timaru and regional economies.

NET ECONOMIC POSITION UNDER ALTERNATIVE POSITION

80. The Port and PORTZ are essential parts of the local economy, supporting the agricultural sector across Timaru, the Rest of Canterbury as well as the rest of the South Island. Ensuring that the Port and supporting industries can continue to operate, as well as respond to growth pressures is important. Constraining existing activities, or undermining the ability to respond to growth has adverse economic effects and in the context of the Port and the supporting industries, these are likely to be in the form of:

(a) direct cost increases associated with increased traffic/transport distances to access markets;

[23] Compound growth of 1.5% in exports over 25 years.

(b) change in spatial investment patterns as businesses seek to minimise costs;

(c) lower export volumes due to additional transport costs increases making some production unviable;

(d) Increased social costs associated with transport accidents;

(e) Increased emissions costs due to a lift in total transport function associated with accessing alternative ports (e.g., Port Otago or Lyttelton).

81. The specific response or timing of the potential losses (additional costs) is uncertain because the rate of change and the intensity of the potential change are unknown. In addition, some commodities can be containerised and transported via the rail network to alternative ports. The cost increases of using alternative transport modes must also reflect additional handling costs (loading/unloading).

82. To provide an indication of the potential scale of the direct economic loss associated with constraints of the Port's expansion, a scenario approach is used. The scenarios reflect:

(a) A no-growth situation,

(b) A situation where the constraints lead to reduced competitiveness[24], that in turn leads to a slow decline in export volumes (-0.5% per year compounded).

83. The present values of the scenarios are compared against the baseline scenario to illustrate the direction of the change. Table 1 below summarises the differences, and Appendix 2 provides the detailed results. Importantly, two approaches are used to illustrate the effects. The first shows the direct effect associated with the economic activity that produce the exported goods without any supply chain effects. The second illustrates the total effects if all the supply chain effects are included. While related, the two approaches are not comparable.

84. The net difference between the baseline and the two scenarios illustrates the GDP impact of constraining growth and activity at the Port. The scenarios show the spectrum of the lost economic GDP. The direct loss is concentrated

[24] Increasing transport costs flow through to higher prices that erode any price competitiveness that a business (or sector) might enjoy. Cost increases could be absorbed by the sector but this lower profitability.

in Timaru, with the lost GDP in the district estimated at between -$341.5m and -$425.3m. This is the effect associated with a change in economic activity and lower exports. It does not include any supply chain effects. The direct economic loss for the Rest of Canterbury is estimated at between -$594.3m and -$750.9m, with the balance (15%) of the effects felt in the Rest of New Zealand. Most (85%) of the direct economic effects will be felt in the Timaru District and the Rest of Canterbury.

Table 1: Net Change in Economic Activity vs Baseline

Present value @ 2% over 25 years		$'m	
		Scenario 1: No-growth	Scenario 2: Decline
Direct	Timaru District	-341.5	-425.3
	Rest of Canterbury	-594.3	-750.9
	Rest of New Zealand	-169.7	-216.4
	TOTAL	**-1,105.5**	**-1,392.6**
Total economy (including supply chain effects)	Timaru District	-896.2	-1,127.6
	Rest of Canterbury	-3,401.7	-4,337.5
	Rest of New Zealand	-1,927.3	-2,457.5
	TOTAL	**-6,225.1**	**-7,922.6**
Figures are rounded			

85. The total economy effects (including all supply chain effects) show that the economic impacts are likely to be widespread, covering the Rest of Canterbury as well as the Rest of New Zealand. The long-term nature (ongoing, over time) means that the scale of these potential effects is significant. This reflects the integrated nature of supply chains, with Timaru businesses buying goods and services from other economic centres. In addition, the large impacts in the Rest of Canterbury relate to the effects on dairy product manufacturing and other agricultural sectors. For example, it shows the potential transport effects associated with operations such as the Fonterra plant at Studholme, near Waimate.

86. Crucially, the analysis shows the economic losses using a scenario approach. Historic investment decisions were based on assumptions around the availability of infrastructure such as railways, roads and the Port. Constraining the Port's ability to respond to growth and market shifts will change the investment decisions logic. If the Port cannot accommodate growth, then businesses are likely to respond by seeking alternative transport options, and in the extreme relocate operations. For context, in the absence of the Port, the main commodities (dairy products) would still need to be

exported. This will occur through either Lyttelton or Port Otago. Using the dairy export weight[25] and export tonnage provided by the Port suggest that the milk product alone would require around 10,000 containers to transport.

87. Apart from the additional transport costs, other costs would arise from changing the transport configuration. The scale of these changes depends on the transport mode i.e., rail vs road, and include:

    (a) Emissions cost:

        (i) Health effects;

        (ii) Value of carbon (shadow price of carbon).

    (b) Social costs

        (i) Accidents.

88. The transport mode, timeframes and intensity of the potential change are not known making it difficult to place a value on these effects. If rail is used to transport, then the scale of the effects is likely to be materially less than those associated with road transport. However, there are still emissions costs that are associated with the rail option.

89. The distances and the volume of goods that would need to be transported to/from the alternative ports to Timaru would alter the costs structures, potentially foreclosing some business opportunities. Therefore, the economic structure would be completely different meaning that economic outlook for the district would change materially. This change will mean structural shifts in the economy and in my opinion, this shift would be towards (comparatively) lower value agriculture with less local value adding.

90. Ultimately, such a change would see income levels fall, leaving the community worse off.

Contribution to the visitor economy (Cruise ships)

91. In addition to the facilitated exports and imports, the Port supports the local visitor economy. While cruise ship activity at the Port is relatively small when compared to other ports around New Zealand, it is meaningful in the local context.

[25] Published by Stats NZ.

92. In the 2023/24 season there were 13 port calls by cruise ships. Across these visits, there was a total of 16,500 passengers, at an average rate of around 1,270 passengers per ship. Total spending[26] associated with the cruise passengers is estimated at between $2m and $2.2m. The spending is approximately 9% of cruise spending in Canterbury.

93. Compared to the Port's overall facilitated economic effects, the cruise ship portion is relatively minor. Nevertheless, the contribution to the visitor economy, and the non-agriculture sector, is important to note.

CONCLUSION

94. The Port fulfils a crucial role in the Timaru economy. The Port as a business as well as the supporting industries in the PORTZ deliver economic activity. However, the Port's true economic value is in the trade it facilitates. Imports and exports to the value of $412m and $1.3bn, respectively. Using a conservative position shows that the economic activity associated with this trade is significant, with the exports supporting $83m of GDP in Timaru ($186m across the rest of New Zealand[27]). If the supply chain effects are also included, then the GDP effects increase materially to $221m in Timaru district ($1.3bn across the rest of New Zealand). In reality, these impacts could be significantly greater because official information does not capture all the Port's facilitated effects.

95. Crucially, the Port's economic effects are durable and occur year-on-year. Undermining the Port and supporting industries' ability to fulfil its role, and facilitate trade will result in adverse economic effects. Using a scenario approach to illustrate the potential magnitude, I estimate the potential GDP losses[28] as between -$1.1bn and -$1.4bn. Most (85%) of the direct economic effects will be felt in the Timaru District (31%) and the Rest of Canterbury (54%). These are the effects associated with a change in economic activity and lower exports. It does not include any supply chain effects.

LR McIlrath

Date: 9 April 2025

Lawrence McIlrath

[26] Excluding spending by cruise ships.
[27] Rest of Canterbury and the rest of New Zealand combined.
[28] Covering a 25 year period, and using a 2% discount rate.

Appendix 1: Short introduction to Input-Output Modelling and the types of impacts.

96. Any Input-Output (**IO**) analysis is based on data that shows the buying and selling patterns between sectors and groups in the economy. The transactions are normally for an entire year and recorded in Dollar terms. An IO table is structured to show sectoral inputs (columns) and outputs (rows). The columns report how much each sector purchases from other sectors (its production recipe to make its goods/services), and how sectors sell to each other (rows). These relationships reflect the mathematical relationships in the economy.

97. Using these relationships, it is possible to calculate how a change (e.g., economic shock) translates into lost/gained economic effects. In simple terms, this is done by tracing all the change through the economy and summing the differences. This captures all the necessary changes in production that are likely to occur throughout supporting industries within the wider economy.

98. As with all modelling approaches, IO analysis relies on certain assumptions for its operation. Among the most important is the assumption that the input structures of industries (i.e., technical relationships/buying-selling relationships) are fixed. In the real world, however, technical relationships will of course change over time as a result of new technologies, relative price shifts causing substitutions, and the introduction of new industries. For this reason, IO analysis is generally regarded as most suitable for short-run analysis, where economic systems/relationships are unlikely to change greatly from the initial snapshot of data used to generate the base IO tables.

99. In addition to the 'fixed structure' assumption, other important assumptions (and limitations) of IO models are:

    (a) Constant return to scale: This means that the same quantity of inputs is needed per unit of output, regardless of the level of production. In other words, if output increases by 10 per cent, input requirements will also increase by 10 per cent.

    (b) No supply constraints: IO assumes there are no restrictions to inputs requirements and assumes there is enough to produce an unlimited product. There may be some transfer of inputs from other industries, which means that some economic activity associated with the impact may not be net additional.

(c) The model is static: No price changes are built in meaning that dynamic feedbacks between price and quantity (e.g., substitution between labour and capital) are not captured.

100. The following indicators are used to measure economic impact:

(a) Value added measures all payments to factors of production (land, labour and capital), and excludes all purchases of intermediate inputs. It broadly equates with gross domestic product (GDP) as a measure of economic activity on the national level, and gross regional product on the regional level. Components of value added include compensation of employees (salary and wages), operating surplus (company profits), consumption of fixed capital (depreciation), and subsidies.

(b) Employment is measured in Modified Employee Count (MECs). This is the number of full-time and part-time employees as well as working proprietors on an annual basis. This provides a measure of the labour demand associated with the estimate level of economic activity. Note that additional MEC-years do not necessarily require that additional persons be actually employed. It may mean existing employees or proprietors work longer hours to complete the additional work.

101. The economic impact caused by the spending, covering:

(a) Indirect impacts occur when suppliers to the directly impacted businesses must increase their production to meet the increase in demand for goods and services. This requires the further purchase of other goods and services from their suppliers, along with additional labour.

(b) Induced impacts cover the additional wages, salaries and profits paid into the economy, thereby inducing additional expenditure, such as spend on retail or services. Businesses either directly or indirectly impacted, are assumed to be operating at maximum capacity and therefore additional demand causes them to either hire additional workers or pay overtime. This means more money is available to households in the economy. The induced effect covers how this money then flows through the system as households increase their spending.

Appendix 2: Results

This table reports the Dollar-values of each scenario. Table 1 in the evidence above shows the difference between the base situation and each scenario.

Present Value ($'m) over 25 years		Base	Sc 1	Sc 2
Direct	Timaru District	1,997	1,655	1,571
	Rest of Canterbury	3,473	2,879	2,723
	Rest of New Zealand	1,004	834	788
	Total	6,474	5,369	5,081
Total economy	Timaru District	5,287	4,391	4,160
	Rest of Canterbury	20,080	16,678	15,742
	Rest of New Zealand	11,410	9,483	8,953
	Total	36,777	30,552	28,855