

# Domestic Transport Costs and Charges Study

## Working Paper C15 Cook Strait Ferries

Prepared for Te Manatū Waka Ministry of Transport (NZ)  
Chris Stone, Rockpoint Corporate Finance Ltd in association with Ian Wallis Associates Ltd  
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## Disclaimer

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The Research, Economics and Evaluation team operates within the System Performance and Governance Group of Te Manatū Waka Ministry of Transport. The team supports the Ministry's policy teams by providing the evidence base at each stage of the policy development.

The team is responsible for:

- Providing sector direction on the establishment and use of the Transport Evidence Base (see below) – including the collection, use, and sharing of data, research and analytics across the transport sector and fostering the development of sector research capabilities and ideas.
- Leading and undertaking economic analyses, appraisals and assessment including providing economic input on business cases and funding requests.
- Performing the evaluation function for Te Manatū Waka, including designing monitoring and evaluation frameworks and approaches, developing performance metrics and indicators, and designing, conducting and procuring evaluations.

## The Transport Evidence Base

The Transport Evidence Base Strategy creates an environment to ensure data, information, research and evaluation play a key role in shaping the policy landscape. Good, evidence-based decisions also enhance the delivery of services provided by both the public and private sectors to support the delivery of transport outcomes and improve wellbeing and liveability in New Zealand.

The Domestic Transport Costs and Charges study aims to fill some of the research gaps identified in the 2016 Transport Domain Plan (Recommendation R6.2), which forms part of the Transport Evidence Base.

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For more information

For more information about this project and associated report, please contact:

[info@transport.govt.nz](mailto:info@transport.govt.nz)

## Executive summary

### Overview

The Cook Strait ferries form a vital part of New Zealand's transport infrastructure, providing a reliable "land bridge" between North and South Islands for passengers, cars, commercial vehicles and trains. Currently two operators, state-owned KiwiRail<sup>1</sup> and private StraitNZ, collectively operate 5 ROPAX ferries providing 6300 one-way sailings annually.

### Methodology

This paper is informed by public data sources, with cost estimates based on international proxies.

KiwiRail's Annual Reports and website provide complete if high level operational and financial information for their "Interislander" ferry operations.

StraitNZ, owner of "Bluebridge", is a private company and not required to publicly disclose any commercial data – and elected not to provide information or commentary for this paper. We have principally relied on media statements reviewing a sales flyer from StraitNZ's then-owner, CPE Capital.

As part of the DTCC study, Rockpoint had access to the Te Manatū Waka's subscription to Drewry's "Ship Operating Costs Annual Review and Forecast 2019/20" ("Drewry") which provided a detailed global cost breakdown for most commercial ship categories, including RORO. Rockpoint also subscribed to ASXMarine's Alphaliner shipping database for information on fleets, schedules, and ship pricing.

Public sources and websites where available were extensively utilised including:

- KiwiRail – [www.kiwirail.co.nz](http://www.kiwirail.co.nz) and [www.interislander.co.nz](http://www.interislander.co.nz)
- StraitNZ – [www.straitnz.co.nz](http://www.straitnz.co.nz) and [www.bluebridge.co.nz](http://www.bluebridge.co.nz)
- NZ government agencies (Te Manatū Waka , Maritime NZ, NZ Treasury, Statistics NZ and Waka Kotahi/NZTA),
- Global agencies: including International Maritime Organisation (IMO), World Trade Organisation (WTO).
- Global shipping sites: providing databases, commentary and monitoring of world shipping and bunker pricing.

### Current Operations

In a global context, the current Cook Strait Roll-on Roll-Off Passenger (ROPAX) ferries are considered mid-sized, and at average 21 years, relatively old. Since KiwiRail (then NZ Rail Department) established its Interislander ROPAX operations in 1962, the role of pre-existing coastal shipping was largely supplanted. Interislander first faced Cook Strait competition in 1992 when StraitNZ introduced first a small livestock carrier, then a series of non-passenger RORO

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<sup>1</sup> : KiwiRail is a government owned enterprise and so reports to the Minister of State Owned Enterprises. Accordingly, the NZ Treasury, as the Minister's agent, will be privy to detailed financial and operational information.

ships from 1995, before initiating direct ROPAX competition in 2002 with the launch of its “Bluebridge” brand. Bluebridge now claims 56% of the key commercial vehicle market.

Wellington (CentrePort) and Picton (Port Marlborough) provide port terminals to the two ferry operators. CentrePort’s (Wellington) Kaiwharawhara terminal was established in 1962, serving Interislander. A new terminal at Glasgow Wharf was built in 2002 to serve Bluebridge. Port Marlborough similarly provides separate adjacent terminals for the two ferry operators.

The two ports collectively report 6,300 one-way sailings annually, with Interislander providing 3,700 sailings, and Bluebridge 2,600. Sailing schedules adjust slightly to reflect seasonal demand patterns, with extra sailings over the peak summer season, and with maintenance scheduled for off-peak times of year. These schedules allocate 3.5 hours to each sailing implying a transit speed of 16-20 knots, with 2 hours turnaround time. That suggests ship utilisation at a creditable 79% ship (the balance allowing for repairs and maintenance, downtime and surveys, scheduled during off-peak times of the year).

The ferry operators’ booking websites ‘provide an insight into pricing. Competition keeps pricing aligned.

## Financial Assessment

Both Interislander and Bluebridge operate booking websites from which passenger, car and small truck rates can be derived. While neither disclose pricing for larger commercial vehicles, these can be deduced by deducting car and passenger revenue from total revenues, to calculate an approximate charge per lane-m occupied. Our analysis suggests Interislander generates \$60m from commercial vehicles (being 44% of third-party revenues), at a calculated rate of \$50/lane-m. We assume rail wagons are charged at a small premium, nominally \$60/lane-m, to generate \$34 million of related-party revenues.

Bluebridge has steadily gained market share in commercial vehicles (from 47% to a claimed 56%) over the last decade). Given the ship schedules are similar, we assume StraitNZ price at a discount to Interislander – we have assumed \$45/lane-m for commercial vehicles – and would account for \$69m (67%) of its revenues. Total revenues were \$102m in 2019 (or \$120m when projecting forward to 2021) - which implies that StraitNZ’s non-ferry operations generated the balance of the \$175m total cited in CPE’s StraitNZ sales flyer.

Drewry’s 2019 Ship Operating Cost Review and Forecast 2019/20 provides the core data for our ship cost analysis. This confirms that manning accounts for 50-55% of ship operating costs (excluding bunkers). As highlighted in our DTCC Coastal Shipping paper (WP C14), costs applying in NZ are materially higher than prevailing prices internationally, with manning 2.1x global rates, and overall costs 1.6x. Bunkering, which accounts for half the cost of deploying a ship (ship operating costs plus bunkers), is 1.5x more expensive than prices available in Asia.

Capital charges reflect the cost of owning and financing long-term assets over their lifetime. KiwiRail’s annual reports disclose Book Value and Depreciation for its ships, the key (but not only) assets of the Interislander. Bluebridge has made no public disclosures on the values of its ships, although in early 2015 the vendor of *Strait Feronia* recorded its sale price (to Bluebridge) of EUR23m (NZ\$35m).

While NZ ports are required to publish annual accounts and their tariffs, we have no public information on ferry terminal charges. The infrastructure provided is largely owned by the ports, although KiwiRail does own some land and buildings at the Wellington terminal.

## Conclusions

Our financial assessment (chapter 4) provides 2018/19 estimates based on incomplete data. Operational data drives our revenue calculations, while costs cover the ship operating, ship non-operating, bunker, port and capital charges. Our financial modelling derives a 2018/19 operating profit (EBITDA) of some \$49m for Interislander and \$33m for Bluebridge.

KiwiRail's financial statements reveal it depreciates its ships on a straight line (historic cost) basis over 20 years, consistent with the observed lifespan of commercial ships. As at 30 June 2019, its Net Book Value for its ships stood at \$136m (\$236m original cost less \$90m accumulated depreciation), with an annual depreciation charge of \$31m. With the current ferries averaging 21 years old, reliability has become an issue (*Kaiarahi* was out of commission following a "catastrophically" damaged gearbox from September 2021 to September 2022, while *Aratere* was undergoing scheduled dry dock servicing, requiring the chartering of a stand-in ROPAX), diminishing the fleet's economic value. Once the new ROPAX ferries arrive in 2025, Interislander's existing fleet will have minimal residual market value.

The following table provides our best estimates of the operational inputs, operating costs and revenues for each of the two ferry operations in 2018/19.

**Table ES1: Cook Strait Ferries Operating Earnings**  
**Cook Strait Ferries - Operating Earnings - NZ\$m**

		Interislander		Bluebridge
<b>Operational Inputs</b>	<i>\$/unit</i>		<i>\$/unit</i>	
Passengers million	55	0.83	55	0.34
Cars million	115	0.26	120	0.11
Large Trucks lane-m million	50	1.20	45	1.53
Rail lane-m million	60	0.56	0	0
<b>Revenues \$million</b>	<i>share</i>		<i>share</i>	
Passengers	33%	45	18%	19
Cars	22%	30	13%	14
Large Trucks	44%	60	67%	69
Other (unknown)	2%	2	1%	1
Total Third Party		138		102
Rail (Related Party)		34		0
<b>Total Revenue</b>		<b>171</b>		<b>102</b>
Ship Operating Costs		22		11
Ship Non-Operating Costs		21		16
Bunker Costs		24		16
Capital, Port & Other Costs \$m		55		32
<b>Total Ferry Expenses</b>		<b>122</b>		<b>69</b>
<b>Operating Earnings (EBITDA)</b>		<b>49</b>		<b>33</b>

The Cook Strait ferry operations will be transformed following KiwiRail's disclosure of a government-approved \$1.45 billion ferry investment programme, which comprises two new larger ROPAX ferries (\$551 million) due in 2025/26, coinciding with the redevelopment of both Kaiwharawhara and Waitohi ferry terminals and infrastructure required to accommodate the new ferries. Bluebridge will share the Kaiwharawhara terminal while is expected to continue using its existing Picton facilities.



Competition between the two Cook Strait ferry operators is expected to remain strong, with the prospect of other ship operators (such as Move Logistics) providing shipping links between North and South Islands (although these may not be between Wellington and Picton). While existing public data has proved adequate for this initial analysis, commercial considerations may discourage competing Cook Strait ferry operators from providing additional data.

## Chapter 1 Introduction

### 1.1. Study Scope and Overview

The Domestic Transport Costs and Charges (DTCC) study aims to identify all the costs associated with the domestic transport system and its impacts on the wider New Zealand economy, including costs (financial and non-financial) and charges borne by transport users.

The Study is an important input to achieving a quality transport system for New Zealand that improves wellbeing and liveability. Its outputs will improve our understanding of the economic, environmental and social costs associated with different transport modes - including road, rail, public transport and coastal shipping - and the extent to which those costs are currently offset by charges paid by transport users.

The DTCC is intended to support the wider policy framework of Te Manatū Waka, in particular the Transport Outcomes Framework (TOF). The TOF seeks to make clear what government wants to achieve through the transport system under five outcome areas:

- Inclusive access,
- Economic prosperity,
- Healthy and safe people,
- Environmental sustainability, and
- Resilience and security.

Underpinning the outcomes in these areas is the guiding principle of mode neutrality. In general, outputs of the DTCC study will contribute to the TOF by providing consistent methods for (a) estimating and reporting economic costs and financial charges; and (b) understanding how these costs and charges vary across dimensions that are relevant to policy, such as location, mode, and trip type.

Robust information on transport costs and charges is critical to establishing a sound transport policy framework. The Study itself does not address future transport policy options; but the study outputs will help inform important policy development in areas such as charging and revenue management, internalising externalities, and travel demand management.

The Study was undertaken for Te Manatū Waka by a consultant consortium headed by Ian Wallis Associates Ltd. The Study has been divided into a number of topic areas, some of which relate to different transport modes (including road, rail, urban public transport and coastal shipping), and others to transport-related impacts or externalities (including accidents, congestion, public health, emissions, noise, biodiversity and biosecurity).

Working papers (25) have been prepared covering each of the topic areas. Their titles, topic areas and specialist authors are listed in Appendix 3.

### 1.2. Costing Practices

The focus of DTCC is on NZ transport operations, economic costs, financial costs and charges for the year ending 30 June 2019 (FY 2018/19). Consistent with this focus, all economic and financial cost figures are given in NZ\$2018/19 (average for the 12-month period) unless otherwise specified.

All financial costs include any taxes and charges (but exclude GST); while economic costs exclude all taxes and charges.

The DTCC economic and financial analyses comprise essentially single-year assessments of transport sector costs and charges for FY 2018/19. Capital charges have been included in these assessments, with annualised costs based on typical market depreciation rates plus an annualised charge (derived as 4% p.a., in real terms, of the optimised depreciated replacement costs of the assets involved).

## Chapter 2 Scope and Approach

### 2.1. Approach

This paper provides a review of the Cook Strait ferry operations and forms an extension to DTCC Working Paper C14 on Coastal Shipping.

The Cook Strait represents a unique subset of New Zealand's coastal shipping activities. Two operators of five Roll-on Roll-Off Passenger (ROPAX) ferries currently undertake 6,100 sailings annually, providing a "road bridge" to complete State Highway #1 for passengers, cars, commercial vehicles and trains. As such this paper presents the Cook Strait ferries as a distinct market from other coastal shipping activities (as covered by the DTCC Coastal Shipping paper).

### 2.2. Data sources and Literature

This paper is informed by public data sources, with its methodology evolved from the DTCC Working Paper C14 on Coastal Shipping. The two operators were contacted, although both declined to formally provide input. Available public information is incomplete, making assumptions and extrapolations necessary.

KiwiRail's Annual Reports provide complete if high level operational and financial information for its Interislander operations, usefully supported by its website, other publications, and media releases. StraitNZ, owner of Bluebridge, is a private company not required to publicly disclose any commercial information. While approached, StraitNZ elected not to participate in this study. StraitNZ's website offers some background, including for Bluebridge, although its focus is marketing and hosting its on-line booking service. The only financial information available was from an Australian Financial Review article ("CPE Capital seeks buyer", 28 June 2021, when StraitNZ's then-owner, CPE Capital, proposed to sell StraitNZ, providing operational and financial headlines and forecasts. This unaudited data forms the data basis of our Bluebridge analysis. Rockpoint did not receive a copy of that flyer.

As part of DTCC, Rockpoint had access to the Ministry of Transport's subscription to Drewry's "Ship Operating Costs Annual Review and Forecast 2019/20" (Drewry). This provided a detailed global cost breakdown for most commercial ship categories, including RORO. Rockpoint also subscribed to ASXMarine's Alphainer database for information on shipping lines and fleets, global shipping activities and schedules, ship sales and charter pricing.

Public websites were extensively utilised which, not exhaustively, include various NZ government agencies (such as Te Manatū Waka, Maritime NZ, Treasury, Ministry of Business, Innovation and Employment, StatsNZ, Waka Kotahi), global agencies (such as IMO, WTO, International Energy Agency or IEA), and those for various global shipping and ferry operators, databases and commentary.

### 2.3. Analysis

From available public information we built an operational summary of the Interislander and Bluebridge Cook Strait ferry operations for the 2019 year. Our financial model was based on data from KiwiRail's annual report and (in the absence of any other data), media coverage of CPE's 2021 StraitNZ sales flyer. Cost data was derived from Drewry's Ship Operating Costs Annual

Review and Forecast 2019/20 although, based on the analysis completed in the DTCC Working Paper C14 on Coastal Shipping, Drewry's global prices were materially adjusted to better reflect those applicable to NZ domestic ship operators.

## Chapter 3 Current Business

### 3.1. Background

From NZ's earliest history, shipping has provided vital links between the North and South Islands, and indeed along the entire coastline and internationally. The Union Steam Ship Company (USSC), which had dominated coastal shipping for a century, had operated a passenger ship between Wellington and Picton from 1875, but withdrew that service in 1962. It also operated a ROPAX service from Wellington-Lyttelton, although it struggled after the sinking of its *Wahine* in 1968 and ceased the service in 1974. USSC itself foundered after an "open coast" policy was ushered in by the passing of the Maritime Transport Act 1994.

The New Zealand Railways Department's (now KiwiRail) recognised the potential for rail-capable ROROs on the Cook Strait (Wellington-Picton) route, establishing its own service in 1962. It is now considered a vital component of NZ's transport infrastructure, providing a "land bridge", and completing State Highway 1 from Cape Reinga to Bluff.

### 3.2. Owners and Operators

While KiwiRail has undergone name and ownership changes over the last 50 years, its "Cook Strait Inter-Island Rail and Road Service" (rebranded "Interislander" in 1989) has provided a ROPAX service between Wellington and Picton since 1962. Its ferries offer a fast, reliable and comfortable inter-island link for trains, trucks, cars and passengers. It currently operates 3 ROPAX ferries, *Kaitaki*, *Kaiarahi* and the rail enabled *Aratere*. Having been sold to private interests in 1993, KiwiRail returned to government ownership in 2008.

KiwiRail first faced competition on the Cook Strait in 1992, from a small walk-on walk-off stock ship, *Straitsman*, operated by what is now StraitNZ. StraitNZ's early success led to a succession of larger, RORO freight ships (non-passenger) until, in 2002, it competed head on by introducing its ROPAX *Santa Regina*. StraitNZ's "Bluebridge" brand was launched. From there, Bluebridge has upgraded its fleet to now operate *Straitsman* and *Strait Feronia*.

From 1995-2003, a succession of 6 "fast ferries" were introduced. The first two were operated by new entrants, while KiwiRail operated four of the five latter wave-piercer catamarans. They proved to be uneconomic, uncomfortable in Cook Strait's heavy seas, while speed restrictions (Wellington Harbour from 1994 and the Marlborough Sounds from 2000) eroded their speed advantage.

### 3.3. The Ships

Roll-On Roll-Off Ferries (RORO) are a category of cargo ship designed to carry wheeled cargo which drive aboard under their own power. ROROs typically operate on short fast-transit routes, serving commercial vehicles (trucks), private vehicles, passengers and tourism.

The key characteristics of ROPAX ferries are:

- **Size:** Traditional dimensions are length (Length Over All - LOA), carrying capacity (deadweight tonnes - dwt) and/or internal volume (Gross Tonnes - GT).
- **Lane-meters (lane-m):** a measure of vehicle deck space able to accommodate wheeled vehicles, with 1 lane-m being defined as 1m long by 2m wide (2 sqm). Cars typically occupy 6 lane-m, rigid trucks (6-12 lane-m), articulated semi-trailers (12-18 lane-m), and B-trains (22-25 lane-m).

- **Passengers (PAX):** Maritime NZ establishes the passenger capacity for ROPAX under IMO rules, allocating each passenger interior space for seating, lounges, and public areas. Many ROPAX ferries offer private sleeping cabins.
- **Design:** RORO hulls open to lower a ramp (linkspan) allowing vehicles to drive on and off. Those with link spans in their quarters or sides enable them to load/unload on conventional wharves. All NZ ROPAX ferries employ bow and/or stern linkspans which are linked to dedicated wharf structures.

Since 1962 the Cook Strait has been served by a succession of 15 RORO ships, of which five were rail-enabled. Prior to 2009, KiwiRail had commissioned only new ships for its Cook Strait service. With the advent of competition, since 1994 all “new” ferries have been bought second-hand.

**Table 3.1: Ships serving Wellington to Picton route**

Ships serving Wellington to Picton route					
Ships		type	built	from	to
Union Steamship Co	Hawea & Taupo	passenger		1875	1888
	Tamahine	passenger		1925	1962
Kiwirail	Aramoana	Rail ROPAX	1962	1962	1985
	Aranui	ROPAX	1965	1965	1985
	Arahanga	Rail ROPAX	1972	1972	2001
	Aratika	Rail ROPAX	1974	1974	1999
	Arahura	Rail ROPAX	1983	1983	2015
	Aratere	Rail ROPAX	1998	1999	curr
	Kaitaki	ROPAX	1995	2009	curr
	Kaiarahi	ROPAX	1998	2015	curr
StraitNZ	Straitsman	Livestock	1972	1994	2004
	Suilven	RORO	1974	1995	2003
	Kent	RORO		2001	2008
	Santa Regina	ROPAX	1985	2002	2015
	Monte Stella	ROPAX	1979	2006	2010
	Straitsman	ROPAX	2005	2010	curr
	Strait Feronia	ROPAX	1997	2015	curr
Fast Ferries					
Brooke McKenzie	Albayzin	Fast ROPAX		1995	1995
KiwiRail	Incat 050	Fast ROPAX		1999	2003
	Condor 10	Fast ROPAX		1994	1999
	Condor Vitesse	Fast ROPAX		1999	2000
	Incat 057	Fast ROPAX		<b>2000</b>	2003
	Incat 046	Fast ROPAX		2003	2005

In a global context, the current Cook Strait ROPAX ferries are considered mid-sized, with their capacity more weighted towards vehicles than passengers, consistent with their role as a “road bridge” completing State Highway 1.

With an average age of 21 years, NZ’s ROPAX fleet is considered old and becoming increasingly subject to failures and unscheduled maintenance. For example, in September 2021, Kaiarahi suffered a “catastrophically” damaged gearbox at a time when *Aratere* was undergoing scheduled dry dock servicing in Singapore. This required KiwiRail to charter a stand-in ROPAX, *Valentine*, which KiwiRail bought outright in September 2022. KiwiRail has contracted to buy two new larger rail-enabled ferries to replace its existing fleet, with delivery scheduled for 2025 and 2026.

Other coastal ships provide indirect competition to these Cook Strait ferries for general freight. Pacifica operates NZ's only domestic containership, *Moana Chief*, while Coastal Bulk Shipping operates a small bulk carrier *Anatoki*. Specialist carriers have included Coastal Oil Logistics operating 2 petroleum tankers (ceased 1 April 2022) and cement bulk carriers operated by Golden Bay Cement (*Aotearoa Chief*) and Holcim (*Buffalo*). In 2021, Move Logistics proposed an inter-island service, initially using the *Anatoki*, but potentially a regular service linking Nelson, Whanganui and/or New Plymouth.

### 3.4. Port Facilities

All infrastructure requires capital investment, with large costs incurred infrequently. As with the ships, the Cook Strait ferry terminals are similarly aged.

#### **Wellington (CentrePort)**

A ferry terminal was built at Kaiwharawhara when KiwiRail (predecessors) first established the Cook Strait ferry operations in 1962. The terminal is adjacent to KiwiRail main truck lines, and its major railway yards (and near its terminus at the Wellington Railway Station). The ferry terminal is served by a rail line and shunting yards connecting the ferries via a rail-enabled link-span. In the period since 1962, the ferry terminal has required several upgrades to cope with the strong growth in patronage, periodic refurbishments to modernise, and in 1969 the need to accommodate a major motorway overpass (literally above the terminal building). As part of its wider port developments, in the 1950s CentrePort had reclaimed land northeast of the current Kaiwharawhara terminal, which remains largely unused.

Unable to be accommodated at Kaiwharawhara, StraitNZ (Bluebridge) operates from Glasgow Wharf near Wellington Railway Station. A new terminal building and linkspan were built in 2004

#### **Picton (Port Marlborough)**

KiwiRail's Picton ferry terminal was established at Waitohi wharf by Port Marlborough in 1962, adjacent to the railway yards. As with Kaiwharawhara, the terminal infrastructure is dated and sub-optimal.

StraitNZ operates from a wharf adjacent to but separate from KiwiRail's. As at Kaiwharawhara, it could not be accommodated in the terminal building used by KiwiRail, and so a new terminal building was constructed in 2004 some 700m from the Waitohi berth.

### 3.5. Operations

KiwiRail is government owned and required under the State-Owned Enterprises Act to make full public disclosures in its Annual Reports and other communications. While its Interislander operations is widely discussed, generally only high-level financial and operational data is disclosed.

StraitNZ, as private company, is not required to publicly disclose any commercial information.

Both StraitNZ (Interislander) and Strait NZ (Bluebridge) maintain online booking websites which offer basis marketing background.

#### **Schedules**

Port Marlborough (Picton port) and CentrePort (Wellington port) reported 3159 and 3148 ferry sailings respectively in 2019, indicating 6307 sailings. KiwiRail claims 3700 sailings (2019 Annual



Report) from its 3 ferries (nominally 1230 per ferry), while StraitNZ (Bluebridge) undertakes the other 2600 sailings with 2 ferries (1300 sailings per ferry).

Schedules adjust to reflect seasonal demand patterns, with extra sailings over the peak summer season, and maintenance typically scheduled for off-peak periods. The current (Spring 2020) schedules are shown, with Interislander's rail-enabled ferry is shown in blue.

**Table 3.2: Cook Strait Ferry Schedules**

<b>Cook Strait Ferry Schedules</b>												
<b>KiwiRail - Interislander</b>	Picton-Wellington				Wellington-Picton				Sailings			
Monday			14:15	18:30	20:45		8:45	13:00	20:30	6		
Tuesday	7:30	11:00	14:15	18:30	20:45	2:00	8:45	13:00	16:00	20:30	10	
Wednesday	7:30	11:00	14:15	18:30	20:45	2:00	8:45	13:00	16:00	20:30	10	
Thursday	7:30	11:00	14:15	18:30	20:45	2:00	8:45	13:00	16:00	20:30	10	
Friday	7:30	11:00	14:15	18:30	20:45	2:00	8:45	13:00	16:00	20:30	10	
Saturday	7:30	11:00	14:15	18:30	20:45	2:00	8:45	13:00	16:00	20:30	9	
Sunday	7:30		14:15	18:30		2:00	6:30	8:45	13:00	16:00	20:00	9
<b>Strait NZ - Bluebridge</b>	Picton-Wellington				Wellington-Picton				#/wk			
Monday	8:00		14:00	19:00	2:30		8:00	13:30	20:45	7		
Tuesday	8:00		14:00	19:00	2:30		8:00	13:30	20:45	7		
Wednesday	8:00		14:00	19:00	2:30		8:00	13:30	20:45	7		
Thursday	8:00		14:00	19:00	2:30		8:00	13:30	20:45	7		
Friday	8:00		14:00	19:00	2:30		8:00	13:30	20:45	7		
Saturday			14:00				8:00		20:45	3		
Sunday			14:00	19:00			8:00	13:30	20:45	5		

Each voyage is allocated 3.5 hours, at a transit speed of 16-20 knots, with a further 2 hours required for turnaround to dock, unload and load. Based on 6,300 sailings by 5 ships, ship utilisation over the full year is calculated at a creditable 79% (based on a 24 hr day). The 21% balance allows for scheduled repairs and maintenance, downtime and surveys (undertaken overseas).

Interislander claims to deliver 99% of its scheduled services, with 93% being on time.

### 3.6. Markets and Pricing

KiwiRail's Interislander and StraitNZ's Bluebridge provide ROPAX ferry services across the Cook Strait. The principal market is commercial vehicles (trucks), supplemented by passengers and private cars. Competition keeps pricing between the operators generally aligned. Based on their booking websites, the following charts (July 2020) show costs per passenger are \$56 and \$54 respectively, per car \$115/\$120, and for a small (6m) truck \$160/\$155. For this analysis, we ignore any premium paid for ticket flexibility, or variation of price by season. Neither operator discloses pricing for larger commercial vehicles, their key market, although rates are understood to be charged per lane-m.



Figure 3.1 Cook Strait Ferries pricing

## Chapter 4 Financial Assessment

### 4.1. KiwiRail Revenues

KiwiRail, as a State-Owned Enterprise, publicly discloses some high-level information on operations and finances. Selective Interislander data derived from its Annual Reports are summarised below.

**Table 4.1: Interislander operation and finances**

<b>KiwiRail Annual Reports - Interislander</b>					
<i>selective summary</i>	2015	2016	2017	2018	2019
Sailings - #				3770	3700
Passengers - million		0.8	0.75	0.78	0.825
car lane-m - million					
truck lane-m - million		1.3		1.2	1.2
train lane-m - million				0.5	0.56
cars - 000s				250	260
trucks - 000s		83			>10ks
trains - #					>1000
<b>Financials - \$ million</b>					
Revenue (third party, ex rail)	127.3	127.6	130.2	137.0	137.7
Operating Earnings		25.0			

Applying Interislander's published 'base' pricing (from its booking website) to known passengers and car volumes (above) provides a revenue estimate. Netting this off disclosed total Interislander Operating Revenues (being third party revenues, excluding rail) suggests commercial vehicles are charged at about \$50/lane-m. This compares to \$20/lane-m for passenger cars (\$120/6). Each passenger is charged \$55, noting they provide additional revenues from on-board hospitality. In the absence of any 'hard' evidence, we assume that rail wagons would be charged at a \$/lane-m premium to commercial vehicles, reflecting the specialist infrastructure needs (axle loadings, a contiguous rail deck corridor, and shunting operations) – and hence we have applied \$60/lane-m. The residual somewhat volatile "Other" revenue reflects the difference, presumably capturing a mix of premium (refundable) bookings and any on-ship hospitality revenues.

**Table 4.2: Interislander revenues**

<b>Interislander Revenues</b>					
June Year		2016	2017	2018	2019
<b>Operational Inputs (estimates)</b>					
Passengers		0.80	0.75	0.78	0.83
Cars (<6m)		0.25	0.24	0.25	0.26
Trucks (lane-m)		1.30	1.20	1.20	1.20
Rail (lane-m)		0.45	0.48	0.50	0.56
<b>Unit Revenue</b>					
	<i>\$/unit</i>	\$m	\$m	\$m	\$m
PAX (each)	55	42	40	42	45
Car (each)	115	27	26	28	30
Large Truck (lane-m)	50	59	58	59	60
Other (unknown)	6	0	7	9	2
<b>Interislander Revenue \$m</b>					
Third party (actual) \$m		128	130	137	138
Rail (est) \$m	60	32	32	33	34
<b>Total Interislander (est) \$m</b>		<b>159</b>	<b>162</b>	<b>170</b>	<b>171</b>

## 4.2. Strait NZ Revenues

StraitNZ, as a private entity, remains circumspect.

The operational data can be derived from overall vehicle and passenger volumes disclosed by the ports netting off Interislander's disclosures.

The most definitive financial information has been sourced from an Australian Financial Review article ("CPE Capital seeks buyer", 28 June 2021, <https://www.afr.com/street-talk/cpe-capital-seeks-buyer-for-transport-play-straitnz-maccap-on-ticket-20210628-p584y6>) which cites a confidential sale flyer (we have not had access to the flyer itself). Bluebridge claimed 56% market share in freight vehicles (up from 47% in 2011), and 31% for passengers (up from 24% in 2011). The flyer forecast Cook Strait vehicle freight would grow at 4% CAGR out to 2040, and passenger numbers at 2% CAGR. Much of its commercial revenue is understood to be contracted and prices CPI-linked.

The flyer states StraitNZ's annual (2020/21) revenue of \$175m, with earnings (EBITDA) of \$45m. We note, however, that StraitNZ consolidates Bluebridge with its non-ferry operations, StraitNZ Freight Forwarding (formerly Streamline) and Strait NZ Linehaul (previously Freight Lines). Accordingly, the following revenue breakdown is derived from known Cook Strait volumes (including from Port Marlborough and CentrePort), net of known Interislander volumes, and otherwise mirrors the methodology used for the Interislander (above).

Given Bluebridge provides fewer sailings, and that Interislander claims reliable performance (99% of scheduled sailings, 93% on-time), we conclude that Bluebridge captures market share by offering a material price discount to commercial vehicles. We have assumed Bluebridge charges commercial vehicles \$45/lane-m (against Interislander's \$50/lane-m), while using the passenger and car prices indicated on its booking website. On this basis, we estimate Bluebridge revenue to be \$102m in 2019. Projecting forward at the indicated revenue growth suggests Bluebridge revenues would be ~\$120m in 2021. We have no basis for verifying that split with "other" revenues of \$55m (Freight Forwarding and Linehaul) to make up the flyer's 2021 revenue of \$175m. The flyer suggests StraitNZ EBITDA will reach \$81m in 2031 (implied 6% CAGR).

**Table 4.3: Bluebridge revenues**

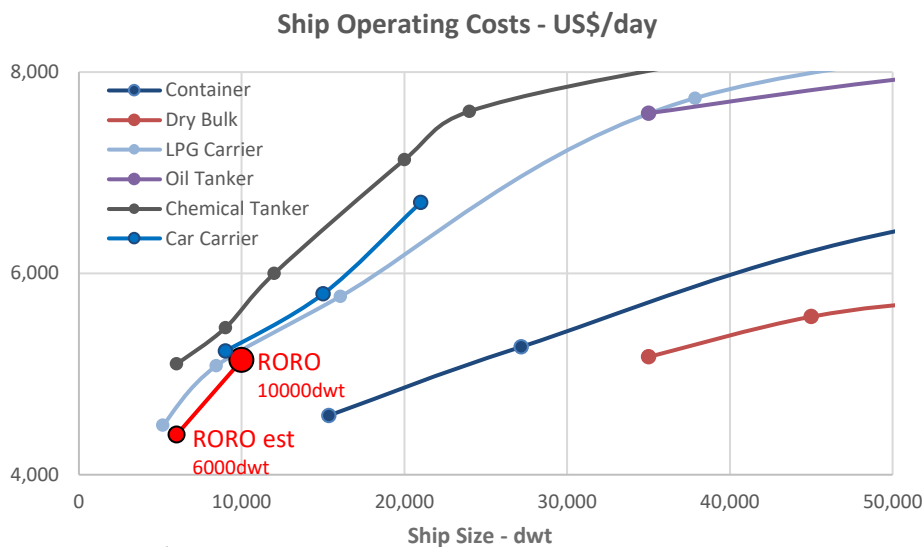
<b>Bluebridge Revenues</b>							
June Year		2016	2017	2018	2019	2020	2021
Operational Inputs ( <i>estimates</i> )							<i>from flyer</i>
Passengers		0.30	0.30	0.36	0.34		
Cars (<6m)		0.10	0.10	0.12	0.11		
Trucks (lane-m)		1.27	1.42	1.47	1.53		
Rail (lane-m)							
Unit Revenue	<i>\$/unit</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>		
PAX	55	16	16	19	19		
Car	120	11	12	14	14		
Large Truck (lane-m)	45	54	61	65	69		
Catering	3	1	1	1	1		
<b>Estimated Bluebridge Revenue \$m</b>		<b>82</b>	<b>90</b>	<b>99</b>	<b>102</b>	<b>110</b>	<b>120</b>
<i>Inferred "Other" StraitNZ (non-ferry) Revenue</i>					47	51	55
<i>Strait NZ Revenue (from flyer)</i>					149	161	175

We do not know the price the Barker family sold StraitNZ to CPE Capital in 2016, although understand it was valued at \$400m in a 2018 minority equity sale to Macquarie. Reportedly its December 2021 sale price to Morgan Stanley Infrastructure Partners was more than \$500 million.

### 4.3. Drewry RORO Operating Costs

Drewry Ship Operating Cost Review and Forecast 2019/20 presents global cost breakdowns across a range of sizes for several ship categories, including ROROs. While ROROs are small relative to other ship categories, operating costs for all are broadly aligned. NZ ROPAX ferries average 6,000dwt (4,168dwt to 7,910dwt), smaller than the 10,000dwt default used by Drewry. Accordingly, we have adjusted Drewry’s default costs down from US\$5,100/day to US\$4,400/day to reflect a 6,000dwt RORO. We note that KiwiRail’s new ferries, at 9,500dwt, more closely mirror Drewry’s default size.

Figure 4.1 Drewry RORO operating costs



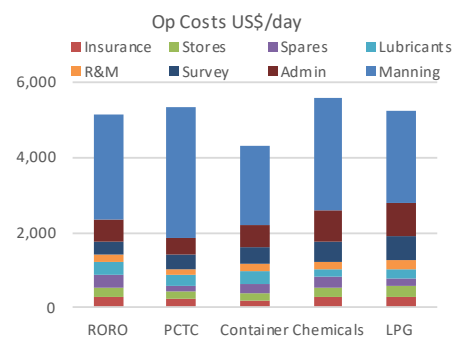
Source: Drewry Ship Operating Costs 2019

Drewry’s RORO operating costs are broadly in line with other 10,000dwt ship in categories, although Container Ship manning costs are notably lower. Dry Bulk Ships and Oil Tankers are not shown given Drewry’s size range starts at 35,000dwt. Composition of operating costs varies, with Admin and Survey costs high for Chemicals and LPG ships (reflecting a cargo risk loading).

Table 4.4: Bluebridge revenue

#### Operating Costs for 10,000dwt ship - US\$/day

	RORO	PCTC	Container	Chemicals	LPG
Manning	2,818	3,456	2091	2983	2443
Insurance	299	265	200	307	271
Stores	252	186	208	223	314
Spares	318	127	212	283	178
Lubricants	350	287	347	223	280
R&M	188	172	219	180	210
Survey	357	387	404	540	652
<u>Admin</u>	<u>556</u>	<u>441</u>	<u>596</u>	<u>840</u>	<u>872</u>
<b>Total</b>	<b>5,138</b>	<b>5,321</b>	<b>4,277</b>	<b>5,580</b>	<b>5,222</b>



The largest operating cost component across all ship categories is manning. Drewry's manning costs for ROROs aligns with other ship categories, representing 50-55% of ship operating costs (with PCTC's being the outlier at 65%). Crew numbers are broadly similar across categories, with Drewry reporting 20 crew for a 10,000dwt RORO, while crew number levels off at 20-22 for all ships above 20,000dwt (excepting PCTC at 25). Smaller ROROs operate with slightly smaller crews – we assume 18 for a 6,000dwt RORO.

**Table 4.5: Ship Manning Costs for 10,000 dwt ship (US\$/day)**

Ship Manning Costs for 10,000dwt ship - US\$/day					
	RORO	PCTC	Container	Chemicals	LPG
Crew #	20	22	17	18	16
Manning costs	2,818	3,424	2,288	3,250	2,390
Implied annual salary \$/crew	51000	57000	49000	66000	55000

#### 4.4. NZ ROPAX Operating Costs

Drewry's global ship operating costs do not apply in NZ. In our wider DTCC Coastal Shipping paper we highlighted that NZ's ship operating cost structure is materially higher than Drewry's global averages.

The overall cost of operating a domestic ship (ship operating, bunker and capital costs) was assess in our DTCC Coastal Shipping paper to be 1.6x a visiting foreign ship.

Ship Operating Costs: 2.1x (+110%) Drewry global average

- Manning: 2.55x (+155%)
  - Crewing levels: 1.2x – more crew
  - Base rates: 1.25x – higher hourly rate
  - Shore leave: 1.7x - 1 month on, 1 month off (vs foreign crew typically 6 on, 1 off).
- Consumables: 2.0x – spares and lubricants imported, higher labour rates for R&M, lack of scale
- Survey: 1.5x – without NZ dry dock, undertaken overseas
- Insurance and administration: 1.0x – parity

#### 4.5. Bunker Costs

Bunkers, or ship fuel, is the largest single cost component of shipping. Consumption varies primarily with ship size and operating speed, and to lesser extent with ship age (hull and engine design) and voyage length (time in transit vs time in port).

The 5 Cook Strait ROPAX ferries range from 4,168dwt to 7910dwt, although the average ship size for both KiwiRail and Bluebridge fleets is close to 6,000dwt. Each ROPAX undertakes 25 sailings per week, with schedules indicating similar transit times of 3.5 hrs (implying 20kt operating speeds – confirmed by ship tracking websites). These schedules indicate the ships are in transit for 50% of each day/week/year, consuming at a rate of 50t/day to 65t/day while in transit and an assumed 10% of that while idling in port. Each ferry therefore would consume 10,000-14,000 tonnes

annually, at a price of NZ\$670/tonne (US\$480/tonne) in 2019. This equates to \$7-9m per ferry per year.

From the DTCC Coastal Shipping paper, bunker costs are estimated at 1.5x (+50%) of Drewry global average.

Notes:

- NZ is not due to adopt tighter MARPOL VI fuel standards until mid- 2022, whereas international shipping adopted them in 2020. For the DTCC study year to June 2019, NZ ships therefore could continue to use the cheaper IFO180, while international ships were required to switch to the more expensive very low sulphur fuel oil (VLSFO) or marine gas oil (MGO). NZ ships however were subject to Emission Trading Scheme (ETS) charges which add \$70/t while foreign ships are exempt.
- NZ's sole domestic supplier (Refining NZ) set bunker prices for IFO380 (not-MARPOL VI-compliant) at US\$330/t against a nominal US\$250/t in Singapore, while nominally VLSFO was set at US \$450/tonne against US\$320/tonne prevailing in Singapore (and globally). NZ's bunker price premium reflects its remoteness and small scale, and the lack of competition in supply.
- Refining NZ ceased refining operations on 1<sup>st</sup> April 2022. Renamed Channel Infrastructure, under an import-only strategy, it now provides import berth facilities for product ships, product storage, testing and pipeline services.

## 4.6. Capital Charges

Capital charges reflect the cost of owning and financing long-term assets over their lifetime. Book Value reflects the accumulated capital investment incurred acquiring or enhancing long-term assets, less any asset disposals or impairments. Depreciation is a nominal charge to allocate capital costs over the expected life of each operational asset (with the Net Book Value being Book Value (investment) less Accumulated Depreciation). KiwiRail states that it depreciates its ships over 20 years, although the rate implied from the accounts is 8-12% (Depreciation/Book Value).

KiwiRail's annual reports disclose in Note 8 its Non-Financial Assets (property plant and equipment) by asset classes. One of these classes is Ships (being the 3 ferries, 2 owned, one chartered/leased) (table following). The Interislander operation also owns non-ship assets such as terminals and dedicated plant which are not separately disclosed. Chartering represents an operational lease conferring no ownership rights, with lease costs expensed each year. Long-term charters may permit investment on improvements, which can be capitalised and depreciated.

**Table 4.6: Interislander capital investment and ship values**

KiwiRail Annual Reports - Interislander <i>Balance Sheet - Ships</i>	Buy Kaitaki				
	2015	2016	2017	2018	2019
Capital investments	1.7	24.5	93.6	3.5	20.7
Impairments/disposals	-14.0	0.1	0.0	0.0	0.0
Ships - Book Value - close	114.1	138.7	232.3	235.8	256.5
Ships - Depreciation (net)	9.3	10.7	20.8	25.2	30.7
Ships - Accum Depreciation	32.8	43.5	64.3	89.5	120.2
Ships - Net Book Value - close	81.3	95.2	168.0	146.3	136.3

Public sources do not provide a clear basis for allocating KiwiRail's stated Ship Book nor Net Book Values between Interislander's three ferries. Mentioned capital investments include buying Kaitaki in June 2017 (leased since 2007, sum not disclosed), replacing *Arahura* with *Kaiarahi* (both

chartered) in July 2015, and the 2011 \$55m refit of *Aratere* (owned) (see first table above). *Kaiarahi* being leased will hold the lowest Book and Net Book Value. *Aratere*, bought in 2003 at 5 years old, underwent a major refit and lengthening in 2011, so will have a higher book value but is otherwise well depreciated. *Kaitaki* was bought out of lease when already 23 years old.

StraitNZ (Bluebridge) has made no public disclosures on the values of its ships. Stena Lines did however disclose the sale price of *Strait Feronia* to StraitNZ in early 2015 at EUR23m (NZ\$35m at that time), presumably prior to its refit. <https://www.stena.com/app/uploads/2020/05/Restricted-Group-Data-as-of-December-31-2015.pdf>. No public mention has been found of the purchase price of *Straitman*. We observe that the *Strait Feronia* price is materially lower than the implied Book Values of Interislander's ferries.

## 4.7. Port Costs

While NZ ports are required under the Port Companies Act 1988 to publish annual accounts and tariffs, they provide no public information on their ferry terminal charges. The Wellington and Picton ferry terminals (comprising land for receiving and parking vehicles and trains, terminal buildings, link spans and wharves) were originally established in 1962 and, while the terminals have been periodically refurbished, they are now considered old and sub-optimally configured for modern ferry operations.

CentrePort has promoted a shared ferry terminal for some years. KiwiRail's investment plans for new ferries are predicated on major terminal investments in both Wellington and Picton. Both projects will be jointly funded by the ports, councils and government agencies, to be commissioned in time for the arrival of new ferries in 2025.

The existing terminal infrastructure is largely owned by the ports and made available to the ferry operators under dedicated, long-term leases. KiwiRail does own some land and buildings used for its ferry operations in Kaiwharawhara, Wellington. We have derived a nominal annual charge based on a target return on assessed ferry-related assets.



## Chapter 5 Conclusions and Prospects

### 5.1. Financial Summary

Table 5.1 (following) summarises our operational and financial analyses for the two ferry operations for the 2018/19 financial year – noting these are our estimates based on public sources:

- Operational inputs including patronage were derived from public sources (principally the ferry operators, the ports, and the media).
- As presented in chapter 3, revenues were calculated from operational inputs and the pricing derived from each operator's website.
- Operating costs are based on Drewry, modified as appropriate for NZ conditions.
- Other costs include our assessment of capital charges, bunker costs and port (terminal) costs.
- The net result (the bottom line) is Operating Earnings being Earnings Before Interest, Depreciation and Amortisation (EBITDA).

### 5.2. Future Prospects

In June 2021 KiwiRail announced government approval for its \$1.45 billion ferry investment programme. This included USD\$369 million (NZ\$551m) allocated to build 2 modern rail-enabled ferries to replace its existing 3 ferries. The 2 new ferries would offer double the passenger and vehicle capacity of its existing 3-ship fleet and triple the rail capacity. Contracts had been signed for Hyundai Mipo Dockyard in South Korea to be deliver the first ferry in 2025 and the second in 2026.

In Wellington, CentrePort has long promoted to stakeholders (government agencies, councils and ferry operators) the concept of a new ferry terminal located at Kaiwharawhara, to be shared by KiwiRail and StraitNZ. This appears to form part of KiwiRail's \$1.45 billion ferry upgrade project, with funding available to redevelop the terminal infrastructure at Kaiwharawhara (for KiwiRail and StraitNZ) and Picton (for KiwiRail, with StraitNZ expected to remain in its existing terminal building). Scope will encompass new terminal buildings, wharves, rail systems, vehicle marshalling and walkways. In February 2022 a design consortium was appointed to finalise terminal designs, with construction scheduled to start later in 2022.

As CentrePort stated, "This is a transformational investment in critical infrastructure which supports a vital freight service and a truly iconic New Zealand passenger experience. This once-in-a-generation investment will generate significant tourism, economic and environmental benefits for the whole of New Zealand."

### 5.3. Competition

The establishment of StraitNZ's "Bluebridge" in 2002 heralded direct competition on Cook Strait for the first time. Since then, StraitNZ claims to have captured 56% market share in freight vehicles and 31% for passengers. Such market share would have been hard-won and is testament to strong competition between the operators. As Move Logistics have announced, there is scope for further competition across Cook Strait, including from other ports (Whanganui, Nelson, New Plymouth).

Table 5.1: Financial Analyses, Interislander and Bluebridge Ferry Operations, FY 2018/19

Cook Strait Ferries - Annual Operating Profit - NZ\$m				
		Interislander		Bluebridge
<b>Operational Inputs</b>				
ROPAX Deadweight (dwt)	<i>Kaiarahi</i>	7,012	<i>Strait Feronia</i>	7910
	<i>Aratere</i>	5,464	<i>Straitsman</i>	4168
	<i>Kaitaki</i>	5,794		
	Fleet	18,270	Fleet	12,078
<b>Patronage and Unit Rates</b>				
	<i>\$/unit</i>		<i>\$/unit</i>	
Passengers million	55	0.83	55	0.34
Cars million	115	0.26	120	0.11
Large Trucks lane-m million	50	1.20	45	1.53
Rail lane-m million	60	0.56		
<b>Revenues \$million</b>				
	<i>share</i>		<i>share</i>	
Passengers	33%	45	18%	19
Cars	22%	30	13%	14
Large Trucks	44%	60	67%	69
Other (unknown)	2%	2	1%	1
Total Third Party		138		102
Rail (Related Party)		34		0
<b>Total Revenue</b>		<b>171</b>		<b>102</b>
<b>Ship Operating Costs</b>				
Manning		12		8
Insurance		0		0
Stores		1		1
Spares		1		1
Lubricants		1		1
R&M		1		0
Survey		1		1
Admin		1		1
Lease/Charter		5		0
<b>Total \$m</b>		<b>22</b>		<b>11</b>
<b>Ship Non-operating Costs</b>				
Hospitality crew		4		2
Hospitality Provisioning		8		3
Other		9		5
<b>Total</b>		<b>21</b>		<b>10</b>
<b>Bunker Costs</b>				
NZ\$/tonne		670		670
Consumption t/day at 20kts		55		55
Consumption 000tonne/yr		35		24
<b>Bunker Cost \$m</b>		<b>24</b>		<b>16</b>
<b>Capital, Port &amp; Other Costs \$m</b>				
Ship Capital Charges		17		6
Terminal R&M and Operations		15		10
Head Office, Marketing, Booking		9		6
Port Marlborough		6		4
CentrePort		8		6
<b>Capital, Port &amp; Other Costs \$m</b>		<b>55</b>		<b>32</b>
<b>Total Ferry Expenses</b>		<b>122</b>		<b>69</b>
<b>Operating Earnings (EBITDA)</b>		<b>49</b>		<b>33</b>

**Sources:** Published material together with Rockpoint's own estimates and judgements.

## 5.4. Limitations and Caveats

The Cook Strait ferries are a significant component of New Zealand's transport infrastructure and capability. However, there is limited public data available to reliably assess operating costs and pricing.

KiwiRail<sup>2</sup> releases detailed commentary and financial statements in its Annual Reports, although break out for the Interislander are generally only high-level summaries.

StraitNZ does not publicly disclose financial or operational information, although a one-off media review of CPE Capital's sale flyer did provide some useful financial and operational data.

Operational data (passenger, cars, commercial vehicle lane-m) can be gleaned from public Annual Reports of KiwiRail, CentrePort and Port Marlborough.

The Interislander and Bluebridge ferry booking websites yield ferry pricing for passengers and non-commercial vehicles, but not for commercial and rail customers.

Combined these data sources permit a reasonable basis for independently assessing revenues.

Drewry's report provides a detailed template for ship operating costs, although these differ materially from the cost structures applying in New Zealand. Similarly domestic bunker prices are high against global markets.

While greater public disclosure would assist government in setting transport policy and sector stakeholders better understanding the dynamics of the ferry operations, it is reasonable that private companies are able to protect their commercial confidential data.

## 5.5. Comments on Future Updating

This paper has demonstrated that, with some research, an acceptably comprehensive public dataset of Cook Strait ROPAX ferry operations and financials can be assembled.

While greater public disclosure (and analysis) may assist government in transport policy and KiwiRail investment, we recognise the rights of private parties to reasonably protect their commercial confidential data. With only two ferry operators (currently) competing on the Wellington-Picton route, uneven public disclosures may adversely impact the disclosing party's commercial position.

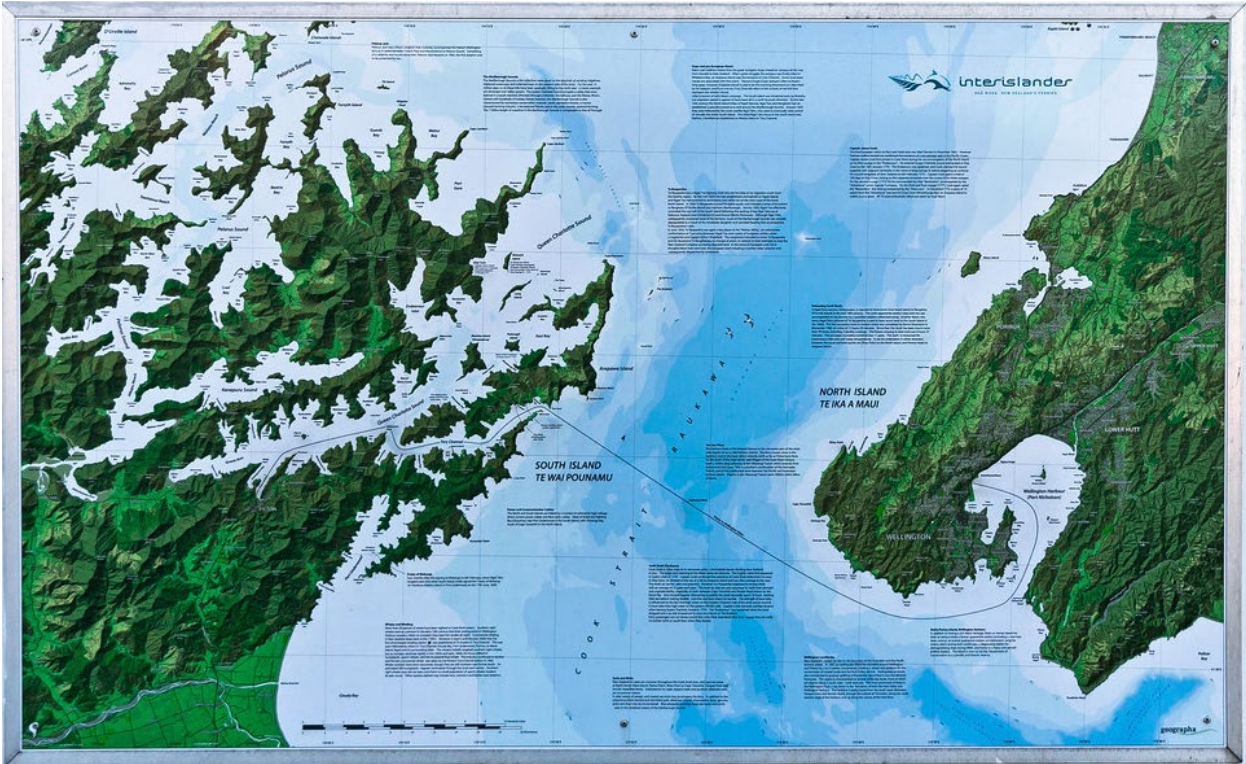
The opportunity exists for government agencies to demonstrate the benefit of participation in data gathering studies, and so to encourage voluntary disclosure by market competitors. An example is the Ministry of Transport's excellent Freight Information Gathering System (FIGS) database, supported by all NZ container ports. FIGS provides a comprehensive, reliable dataset of wide interest to transport sector stakeholders and the public, including individual data contributors, without it seems compromising their competitive position.

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<sup>2</sup> KiwiRail is a government owned enterprise and so reports to the Minister of State Owned Enterprises. Accordingly, the NZ Treasury, as the Minister's agent, will be privy to detailed financial and operational information.

## Chapter 6 Maps and Plans

### 6.1. Cook Strait Ferry Route

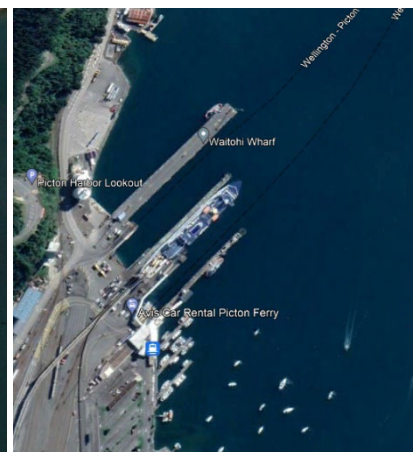
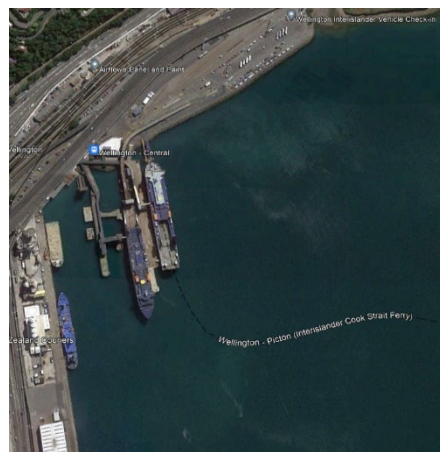
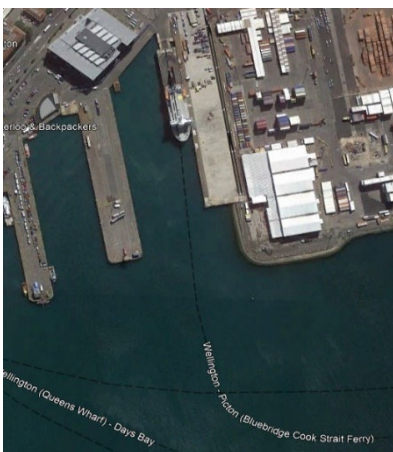


### 6.2. Ferry Terminals

Wellington – Bluebridge

Wellington – Interislander

Picton – Bluebridge & Interislander



### 6.3. Proposed Ferry Terminal Upgrades

**CentrePort Northern Gateway** – early concept drawing (2018) – since most likely superseded

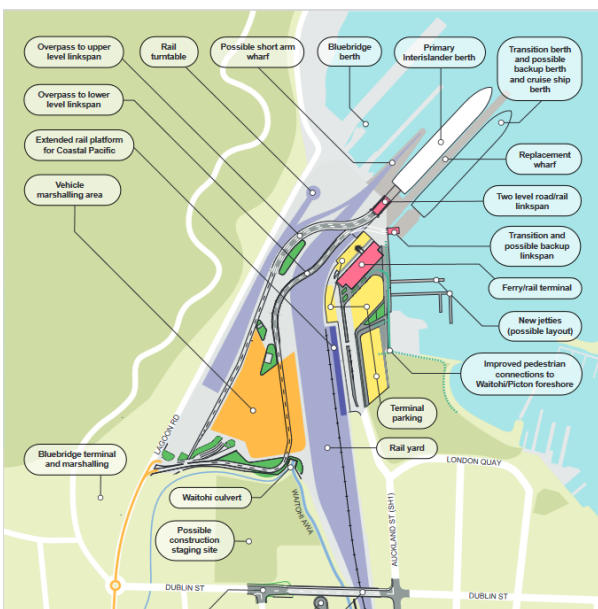


<https://www.stuff.co.nz/dominion-post/wellington/123706104/kiwirail-backs-down-on-plan-for-controversial-wellington-harbour-ferry-terminal>



### Waitohi Picton Ferry Precinct Redevelopment - Consultation Summary – August 2020

<https://www.epa.govt.nz/assets/Uploads/Documents/Fast-track-consenting/Waitohi-Picton/Volume-3/Appendix-Q-Consultation-Summary-Report-and-Consultation-Outcomes-Report.pdf>



## Appendix 1 Glossary

Glossary	Description
DTCC	<i>Domestic Transport Costs and Charges study</i>
EBITDA	<i>Earnings Before Interest, Tax, Depreciation and Amortisation</i>
ETS	<i>Emission Trading Scheme</i>
IEA	<i>International Energy Agency</i>
IMO	<i>International Maritime Organisation</i>
WTO	<i>World Trade Organisation</i>
IWA	<i>Ian Wallis Associates</i>
MARPOL	<i>The International Convention for the Prevention of Pollution from Ships</i>
MGO	<i>Marine gas oil</i>
ROPAX	<i>Roll-On Roll-Off Passenger ferry</i>
RORO	<i>Roll-On Roll-Off ferry (nominally with no passengers)</i>
Te Manatū Waka	<i>Ministry of Transport (NZ)</i>
TOF	<i>Transport Outcomes Framework</i>
USSC	<i>The Union Steam Ship Company</i>
VLSFO	<i>Very Low Sulphur Fuel Oil</i>
Waka Kotahi	<i>New Zealand Transport Agency</i>

## Appendix 2 Bibliography

### Published reports:

- Te Manatū Waka - National Freight Demands Survey (various editions), Freight Information Gathering System (FIGS) quarterly reports
- Rockpoint – Coastal Shipping and Modal Freight Choice (2009) – for Te Manatū Waka
- Drewry – Ship Operating Cost Annual Review and Forecast 2019/20 – a key reference document accessed via Te Manatū Waka subscription
- ASX Marine’s Alphaliner reports and database – via Rockpoint subscription
- International Chamber of Shipping – Annual Review 2019
- Lloyd’s List – Total Cost of Operation, 2018
- Seafarers International Research Centre, Cardiff - An Analysis of Crewing Levels (2006) United Nations Conference on Trade and Development – Review of Maritime Transport (2019)

### Websites:

- KiwiRail – [www.kiwirail.co.nz](http://www.kiwirail.co.nz) , [www.interislander.co.nz](http://www.interislander.co.nz)
- StraitNZ – [www.straitnz.co.nz](http://www.straitnz.co.nz) , [www.bluebridge.co.nz](http://www.bluebridge.co.nz)
- Centreport – [www.centerport.co.nz](http://www.centerport.co.nz)
- Port of Marlborough – [www.portmarlborough.co.nz](http://www.portmarlborough.co.nz)
- Te Manatū Waka (Ministry of Transport) – [www.transport.govt.nz](http://www.transport.govt.nz)
- Maritime NZ – [www.maritimenz.govt.nz](http://www.maritimenz.govt.nz)
- Statistics NZ – [www.stats.govt.nz](http://www.stats.govt.nz)
- Treasury NZ – [www.treasury.govt.nz](http://www.treasury.govt.nz)
- Waka Kotahi (NZ Transport Agency) – [www.nzta.govt.nz](http://www.nzta.govt.nz)

### Global organisations

- International Maritime Organisation (IMO) – [www.imo.org](http://www.imo.org)
- World Trade Organisation (WTO) - [www.wto.org](http://www.wto.org)
- Ship Bunkers – including Ship and Bunkers – [www.shipandbunkers.com](http://www.shipandbunkers.com) , Bunkerworld – [www.bunkerworld.com](http://www.bunkerworld.com) , Live Bunkers – [www.livebunkers.com](http://www.livebunkers.com) , Bunker Index – [www.bunkerindex.com](http://www.bunkerindex.com)
- Ferry Shipping News [www.ferryshippingnews.com](http://www.ferryshippingnews.com)

## Appendix 3 Listing of DTCC Working Papers

The table below lists the working papers prepared as part of the DTCC study, together with the consultants responsible for their preparation.

Ref	Topic/working paper title	Principal Consultants	Affiliation
<b>MODAL TOPICS</b>			
<b>C1.1</b>	Road Infrastructure – Marginal Costs	David Lupton	David Lupton & Associates
<b>C1.2</b>	Road Infrastructure – Total & Average Costs	David Lupton	David Lupton & Associates
<b>C2</b>	Valuation of the Road Network	Richard Paling	Richard Paling Consulting
<b>C3</b>	Road Expenditure & Funding Overview	Richard Paling	Richard Paling Consulting
<b>C4</b>	Road Vehicle Ownership & Use Charges	Richard Paling	Richard Paling Consulting
<b>C5</b>	Motor Vehicle Operating Costs	Richard Paling	Richard Paling Consulting
<b>C6</b>	Long-distance Coaches	David Lupton	David Lupton & Associates
<b>C7</b>	Car Parking	Stuart Donovan	Veitch Lister Consulting
<b>C8</b>	Walking & Cycling	Stuart Donovan	Veitch Lister Consulting
<b>C9</b>	Taxis & Ride-hailing	Stuart Donovan	Veitch Lister Consulting
<b>C10</b>	Micromobility	Stuart Donovan	Veitch Lister Consulting
<b>C11.2</b>	Rail Regulation	Murray King	Murray King & Francis Small Consultancy
<b>C11.3</b>	Rail Investment	Murray King	Murray King & Francis Small Consultancy
<b>C11.4</b>	Rail Funding	Murray King	Murray King & Francis Small Consultancy
<b>C11.5</b>	Rail Operating Costs	Murray King	Murray King & Francis Small Consultancy
<b>C11.6</b>	Rail Safety	Murray King	Murray King & Francis Small Consultancy
<b>C12</b>	Urban Public Transport	Ian Wallis & Adam Lawrence	Ian Wallis Associates
<b>C14</b>	Coastal Shipping	Chris Stone	Rockpoint Corporate Finance
<b>C15</b>	Cook Strait Ferries	Chris Stone	Rockpoint Corporate Finance
<b>SOCIAL AND ENVIRONMENTAL IMPACT TOPICS</b>			
<b>D1</b>	Costs of Road Transport Accidents	Glen Koorey	ViaStrada
<b>D2</b>	Road Congestion Costs	David Lupton	David Lupton & Associates
<b>D3</b>	Health Impacts of Active Transport	Anja Misdrak & Ed Randal	University of Otago (Wellington)
<b>D4</b>	Air Quality & Greenhouse Gas Emissions	Gerda Kuschel	Emission Impossible
<b>D5</b>	Noise	Michael Smith	Altissimo Consulting
<b>D6</b>	Biodiversity & Biosecurity	Stephen Fuller	Boffa Miskell

Note: The above listing incorporates a number of variations from the initial listing and scope of the DTCC Working Papers as set out in the DTCC Scoping Report (May 2020).





## Domestic Transport Costs and Charges Study

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**Working Paper C15**  
Cook Strait Ferries

[transport.govt.nz](http://transport.govt.nz)

ISBN 978-1-99-117849-7



**Te Kāwanatanga o Aotearoa**  
New Zealand Government

