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Walter Glass: 'genuine bloke', knowledge was second to none
Port for New Zealand's biggest city
No silver bullet for Foodstuff's supply chains



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The Chartered Institute of Logistics and Transport

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ON THE COVER

Ordering optimisation tools have been a saviour to ensuring Foodstuffs' systems operate more efficiently. Photo: Foodstuffs South Island

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The editorial team welcomes expressions of interest for submitting an article for the June 2022 edition of this journal, especially from young professionals (those under the age of 35). Contributors should in the first instance contact the editorial convenor, Murray King (email murray.king@xtra.co.nz) to discuss their article.

Deadline for the June 2022 edition: May 3 2022.



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Managing effective Life Science Logistics during the COVID Pandemic ... the DHL Way

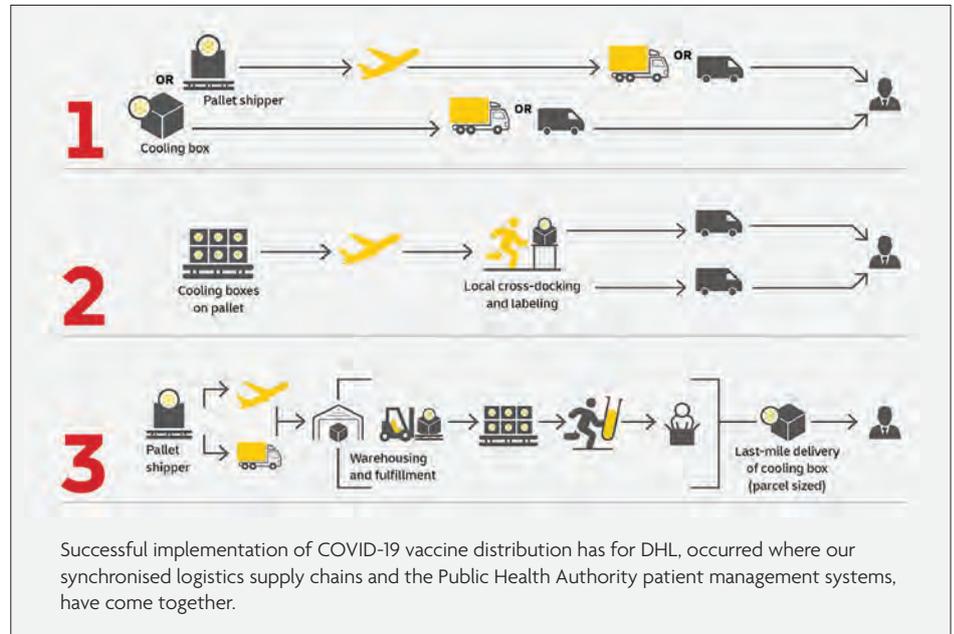
BY ZANE MORTON

DHL Quick Facts:

2.0 billion doses of COVID vaccines distributed internationally to **169 countries**

350 facilities worldwide involved in the distribution process with **50 organisation / company collaborations** instituted across the pharmaceutical & public service sectors

10 new dedicated vaccine distribution services introduced with **250 pharmacists** located in warehouses across the globe



DISTRIBUTING LIFE-SAVING vaccines is ‘not all beer and skittles’ as the saying goes – it’s neither an easy nor a straightforward process. In moving COVID vaccines from the production plants to the end patients, DHL considered three core archetypes of end-to-end logistics solutions:

Direct Shipment to the Point of Use

Pallet shippers containing specialised cooling boxes, are delivered from the places they are filled, directly to the places where they are end-used.

Local-Cross Docking

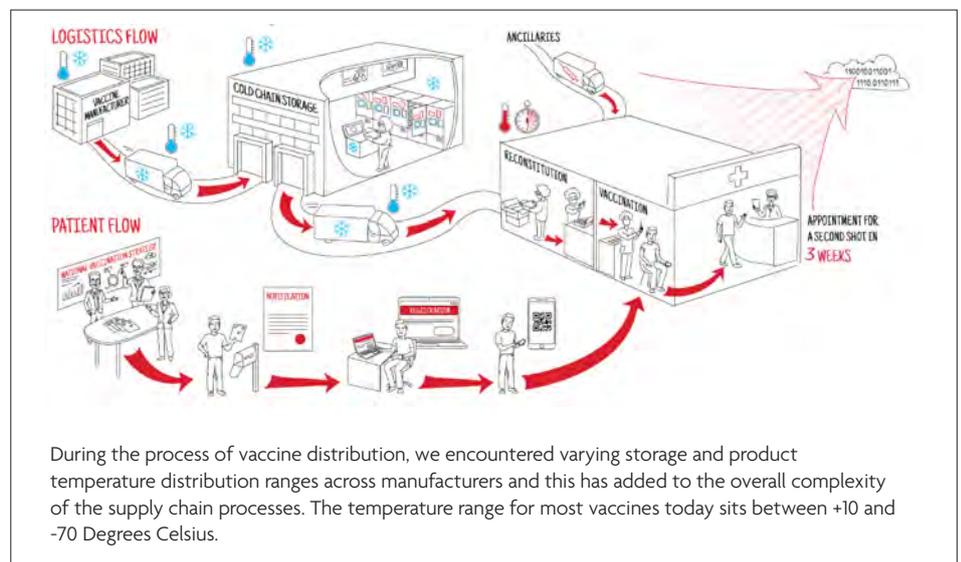
Cross-docking of cooling boxes are done on-pallet to reduce cross-border shipment costs.

Local Warehousing

Utilising local storage and fulfilment capacities to break-down pallet shippers into smaller vaccine vial combinations for last mile-shipment – in cooling boxes or inside refrigerated trucks.

We have learnt that:

- It’s not about the distribution of the vaccine alone. Central supply and planning for all the ‘ancillaries’ is critical – prime examples are the supply of the needles, the syringes, the printed instructional



- materials, the necessary signage and the necessary PPE;
- Markets quickly meet the demand for testing, ancillary supplies and for PPE;
- Ancillaries represent up to 30 times the cubic volume of vaccines that need to be moved;
- The complex global vaccine supply chain, ramped up within just a few months to deliver approximately 8 billion doses worldwide;

- Lockdowns have reduced air and ocean freight capacity, compounding supply challenges of PPE and ancillaries, resulting in flights being chartered and high competition for capacity;
- Vaccination rates already outpace infection rates by a factor of nine;
- Collaboration across private and public sectors is critical to delivering global access to vaccines;

Cont. on page 4

- Vaccine economics work. On a per capita basis, end-to-end costs for vaccines, equal just one week of lockdown costs;
- Quality systems and regulatory compliance is crucial!

Booster shots is the next focus for the supply chain, as the nature of the pandemic changes. It is estimated that an additional 7-9 billion doses will be needed annually to keep COVID-19 in check. The need for these additional doses is driven by three factors:

FIRST: 4-5 billion doses will account for “booster shots” - to maintain the immunity of the people who were vaccinated in 2021.

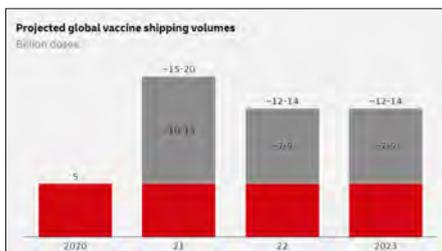
SECOND: Another 2-3 billion doses is to be earmarked for patient groups, such as children under the age of 12.

THIRD: With time, the willingness to get vaccinated will likely increase. These new patients will account for an additional (circa) 1 billion doses, assuming a 10 per cent uptake.

To ensure that today’s supply chain provides a solid platform for the coming years, we believe industry players need to aim to implement three measures. These are:

- Remain prepared for high patient and vaccine volumes;
- Maintain logistics infrastructure and capacity, and;
- Plan for seasonal fluctuations.

In doing the above, the supply chain will provide a solid platform, primarily due to 30 per cent lower shipping volumes.



To continue successful vaccination campaigns, there are a number of factors to consider:

Fostering collaboration	<ol style="list-style-type: none"> Partnerships without borders Supportive data backbone
Securing inbound flows	<ol style="list-style-type: none"> Transportation capacity management Packaging sustainability
Setting up the last mile for success	<ol style="list-style-type: none"> Strategic warehousing Synchronized flow of goods Vaccination points
Maximizing demand for vaccines	<ol style="list-style-type: none"> Well-informed population A User-Friendly Process Incentives convincing last movers



Finally, as we get ready for the very near COVID future, there are 10 suggested strategic actions Governments and other key stakeholders may need to consider pursuing:

Prevention and early identification	Containment and countermeasures	Medication rollout capacity
<ol style="list-style-type: none"> Institutionalize active partnerships and systems Double down on global early-warning systems Create and follow through on integrated epidemic-prevention agenda Invest in targeted research and development to improve diagnostics, therapeutics, and vaccines 	<ol style="list-style-type: none"> Implement national containment and escalation plans Leverage digital contact tracing and monitoring app Establish an emergency stockpile and associated “supplies and logistics” emergency system 	<ol style="list-style-type: none"> Maintain “ever-warm” manufacturing capacity Define blueprint research, production, and procurement plan for diagnostics, therapeutics, and vaccines Maintain and expand rollout capabilities for diagnostics, therapeutics, and vaccines

So as you can see, it’s not all ‘beer and skittles’ by any means, doing what we do in DHL to get life-protecting vaccines to the worldwide community.

Throughout 2021 and well into 2022, it is the planning, the partnerships and the rigorous attention to detail that continues to enable us to ensure supply reliability and continuity for this most precious of products.

Good things always happen when people work well together, and we are committed to fulfilling our role as the world’s leading global logistics provider to ensure we deliver against our values of ‘connecting people and saving lives’.



Zane Morton

Zane Morton is Managing Director New Zealand & Fiji of DHL Global Forwarding.

Walter Glass: 'genuine bloke', knowledge was second to none

BY FIONA KNIGHT

Almost weekly, someone with little to no logistical connections sought Walter Glass' expertise in moving freight domestically and internationally. It was no skin off his nose to help in any way he could, and with so many relationships and connections in the industry, he was able to help in various ways.

The former logistics educator at Massey University passed away on December 24, 2021, surrounded by family. Aged only 66, Walter's career was extensive, much of which would see him connecting New Zealanders with the world.

After working in the meat export sector and with aviation services for more than two decades, he – while director of AERO Logistics between 1992-2000 – was part of an initiative in the Manawatū to establish a multi-modal distribution hub using Palmerston North as the “Logistics Centre of Gravity” for the lower North Island.

And for one year, while a Project Consultant for the International Cricket Council, he managed shipping, clearance, and delivery of all stadia seating componentry from Slovenia and Greece to the various Caribbean nations hosting the 2007 Cricket World Cup. Reportedly, his efforts played a major role in reducing average shipping times down from 75-100 days to 17-24 days.

Throughout this time, Walter also committed himself to directing and managing the development and delivery of an internationally recognised post-graduate level Diploma in Logistics, registered on the United Kingdom (UK)/European Union qualifications framework.

Ten years later, the education license at Massey University in 2005 for this programme was taken over by his company, The Logistics Training Group.

It was a pleasure for CILT Fellow and current Council member Jean-Paul to liaise with Walter's ideas and visions on how to serve industry best. “Walter would always participate in any type of critical analysis trying to support all stakeholders, including all his students.”

Numerous people were introduced to CILT while he was a member of the Institute's International Education Standards Committee, a position he relished serving for nearly 11 years.

Unsurprisingly, he was made a Fellow of CILT in New Zealand and in the UK. Even less surprising was his recognition for outstanding contribution to the Logistics, Supply Chain Sector, and Community when he received the Sir Bob Owens Award in 2018.

“The winner is someone who has promoted professionalism and excellence through leadership and example. They have encouraged young people to enter the sector and assisted them in their development,” Walter's award introduction reads.

“And they have provided personal leadership on a voluntary basis in the wider community beyond anything to do with their paid employment.”

Walter was known for going above and beyond the expected requirements to help many of the international Massey University students who were enrolled in the university's logistics department. He was always willing to give his time and advice, and more than happy to make calls for people to the respective freight providers on their behalf.

For John Mullins, former Foodstuffs South Island General Manager of Supply Chain, his fond memories of Walter date back to the mid-nineties while completing his logistics diploma. Some of those studies included the odd weekend session, driven by Walter.

“Walter was always full of support, from the beginning when he wanted myself and other students to graduate, right throughout my career. My receiving of the Sir Bob Owens back in 2020, and Walter's introduction of my award, will forever be a kind memory.”

Walter is remembered by many as a “leader, a mentor and an amazing visionary”, but most of all, a true genuine bloke.

Walter facilitated CILT Logistics Diplomas and Certificates for a number of the Foodstuffs South Island team – one of whom remember Walter's “second to none” knowledge and enthusiasm.

Supply Chain Development Manager Kris Lancaster experienced Walter's capacity to support others first-hand, as he also watched his career with great interest from beginning to end.

“Walter always went out of his way to keep connected as he loved to stay in contact with people from across the industry. He



Walter Glass. Photo: Fiona Knight

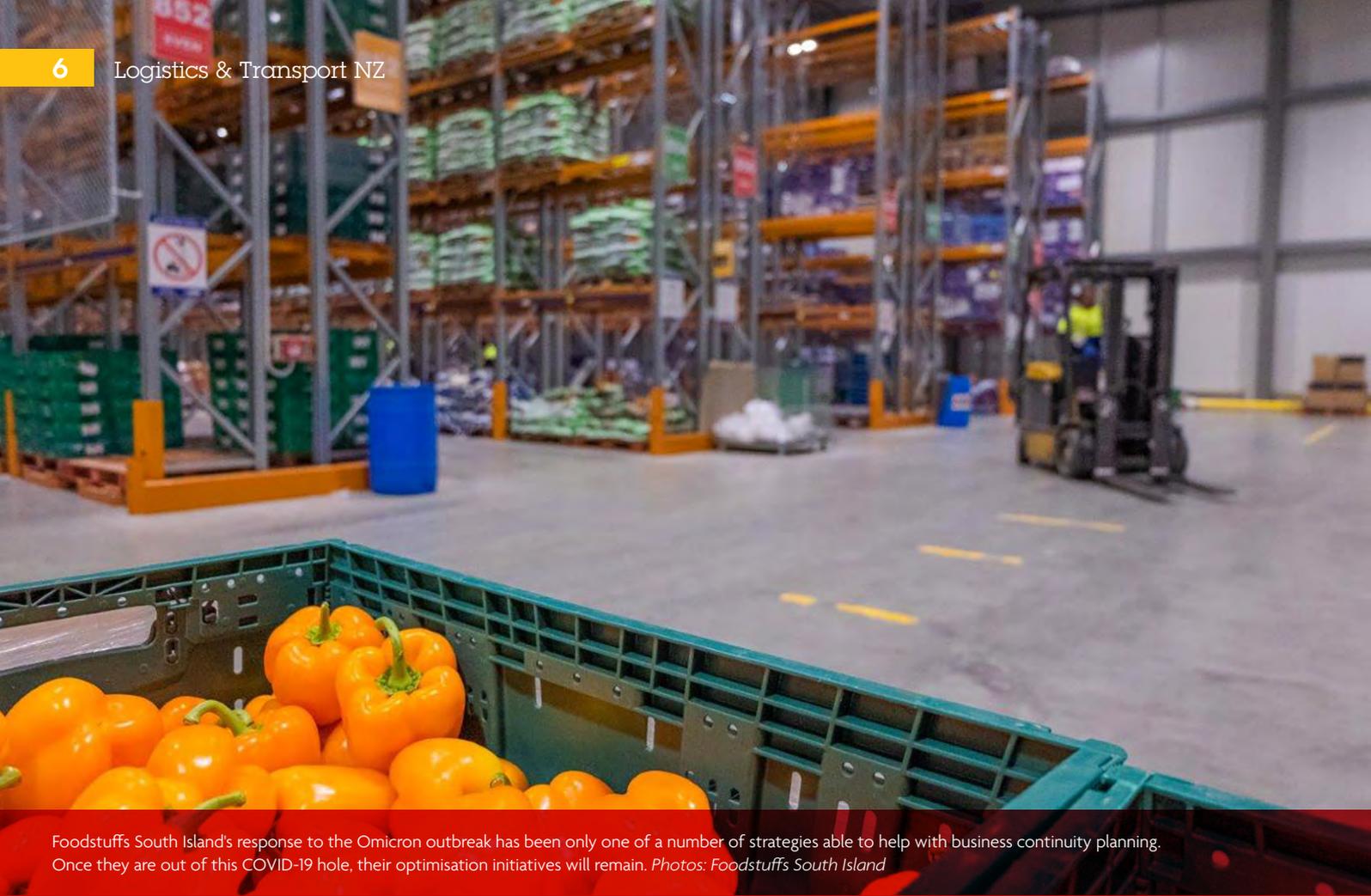
was always known for a good chat and took great interest in watching people develop and progress their careers,” Kris says.

“Walter was a true genuine bloke who was well supported by Tessa, they made a great team. He will be sorely missed by us all and we will remember the fond memories. Our thoughts are with Tessa and the family.”

However, his passion and concern were not exclusive qualities extended only to students and colleagues – since his twenties, Walter developed a strong sense of voluntary service sourcing and cutting firewood for the elderly. This would eventually lead him to the project of “last-mile humanitarian logistics” – utilising his vast network back in 2016 to organise materials, water, and aid to Vanuatu.

Sitting in pride of place, alongside his ‘Uncle Bob’ trophy (as nicknamed by Walter's colleagues), was his CILT NZ President's Appreciation Award – received for his leadership as part of the humanitarian response to Vanuatu in the wake of Cyclone Pam. It was an award that he said was shared with many.

Many condolences have been received since Walter's passing. Both people who shared intimate memories with him, and those who had briefly interacted with him during his lifetime, consider themselves fortunate to have done so.



Foodstuffs South Island's response to the Omicron outbreak has been only one of a number of strategies able to help with business continuity planning. Once they are out of this COVID-19 hole, their optimisation initiatives will remain. *Photos: Foodstuffs South Island*

No silver bullet for Foodstuff's supply chains

WHILE COVID-19 CONTINUES TO CAUSE BOTH INTERNATIONAL AND DOMESTIC SUPPLY CHAIN PAIN, ANOTHER ISSUE HAS REARED ITS HEAD TO TURN THE SCREWS EVEN HARDER. DESPITE THIS, AND THANKS TO A COMBINATION OF INITIATIVES TO MITIGATE THE CHALLENGES, FOODSTUFFS SOUTH ISLAND CONTINUES TO MOVE 24,000 PALLETS OF PRODUCT A WEEK.

BY JAMES PAUL

COVID-19 panic buying or demand surges have been difficult for domestic suppliers of supermarket goods to manage, compounded by the supply chain disruptions felt globally that are altering the flow of goods to our shores.

Even now, two years on from the original outbreak in New Zealand, the situation remains painful across the entire supply chain – and even more so, according to Foodstuffs South Island Supply Chain Development Manager Kris Lancaster, thanks to a constrained labour market.

“At the end of the day, things are certainly not normal. We are in a different time and a different world now than in previous months or years. One of our largest observations is that there is a lot of pain right across the supply chain in

a number of areas, both internationally and domestically,” he says.

“If you focus on our people-side of the business within our supply chain, and there is a strain on labour, and the labour market – generally – is very tight at the moment. That adds pressure to an already challenged operation; not just for us, but also our suppliers, partners, and service providers right across the board. There is not as much flexibility as we would have under normal circumstances.”

Statistics New Zealand (Stats NZ) announced on 2 February that seasonally adjusted unemployment reached 3.2 per cent in the December 2021 quarter while the underutilisation rate stayed at 9.2 percent. The labour force underutilisation rate is defined as the sum of the number of persons

unemployed and underemployed, expressed as a percentage of the labour force.

Stats NZ also revealed the unemployment rate remained low in the last quarter of 2021, down to 3.2 per cent, from 3.3 per cent (revised) the previous quarter, while the underutilisation rate did not change at 9.2 per cent.

Unfortunately, while Foodstuffs South Island may need labour resources, there is not any to be found – making for a challenging time for Mr Lancaster and his team to manage appropriate labour levels.

“Particularly in COVID-19 times, this a much harder challenge to overcome. Add on top of that demand spikes, and we’re experiencing some extra pressure on certain days or weeks,” he says.



On average each week, Foodstuffs South Island is delivering 1.2million cases of product – which equates to 24,000 pallets – from its distribution centres to retail stores.

“And then when the outbreak of the Omicron variant was announced, we saw quite a big surge for a couple of days around consumer purchasing habits, which is around stock building, which puts pressure on the network.”

While it has not been possible to exactly predict how Omicron would behave once it took a hold in the country, Mr Lancaster says Foodstuffs had the benefit of seeing and learning how the variant has impacted supply chains overseas, and set in place measures to manage their supply chain end-to-end.

Some of these measures were tested when the Delta variant arrived in August 2021 and required a large number of store teams to self-isolate in Auckland.

Employing roughly 1,200 people across its two sites in Dunedin and Christchurch, Foodstuffs implemented the Government’s return-to-work policy under Phase 2 of the red setting of the COVID-19 Protection Framework.

Now classed as part of New Zealand’s critical workforce, Foodstuffs’ vaccinated team members who become close contacts, and are asymptomatic, and return a negative rapid antigen test can return to work.

Contactless and segregated supplying of goods from suppliers to Foodstuffs’ distribution centre and then onto supermarkets retail, ensured business as usual. Staff are also operating in shift bubbles, and regularly undergo rapid antigen tests.

Unfortunately, staff are unable to work overtime as it could see some shifts overlap with others, compromising the bubbles, thus restricting extra capacity. In an effort to plug those gaps, Mr Lancaster says Foodstuffs is hiring more – where it can – and increasing part time hours, as well as undertaking a

recruitment strategy to keep the labour levels where they need to be.

But thinking ahead has been crucial, Mr Lancaster says.

“Forward planning and visibility are key. So, we’ve had a lot of the engagement, end-to-end, from supplier throughout our distribution centre and into retail, trying to forecast and get a forward picture on what is the demand and where are we heading.

“We are having daily, if not twice-daily, meetings about the plan and the required actions to keep things as normal as possible. For example, how is next week looking and what do we need to do? The short and long of it is, there is pressure on service levels right through the supply chain based on stock availability based on international disruption – that’s a known fact.

“We’ve all seen in the media products like pet food have had huge demand surges and the suppliers – whether they are based in New Zealand or overseas – are still filling gaps around service levels. So, we are operating on some fairly challenging service levels in what we can get.

“So, based on the product that we can secure, we operate a number of initiatives to manage the flow of products through our sites. And a lot of that is around working closely with our retail stores to manage the peaks and troughs of demand, to spread and balance orders out and work together based on our available labour, matching our volumes output to labour volume.”

Ordering optimisation tools have been something of a saviour, too, ensuring Foodstuffs’ systems operate more efficiently and “leaner”. This involves rounding profiles and ordering the right product at the right time at the right level.

If a supermarket doesn’t have toothpicks for a day, it is not the end of the world as all of Foodstuffs’ key A category lines are prioritised. However, Mr Lancaster says that is only if they get really stretched. “At the moment we’re not quite there yet because we’re just keeping things flowing.”

Foodstuffs is supplying good volume levels to its stores in the South Island and enacted some direct to store supply where it makes sense. This entails collaborating with set suppliers to continue to balance the stock.

Running these same strategies in Dunedin has meant Foodstuffs is juggling or shifting the source of supply volume to maximise that footprint as well, spreading the workload out between suppliers and distribution centres to manage the peaks and troughs.

On average, over any given week, Mr Lancaster says Foodstuffs is delivering 1.2 million cases of product – which equates to 24,000 pallets of product – from its distribution centres to retail stores.

Mr Lancaster says there is “no big silver bullet”, just a raft of initiatives to help manage and control volume flow throughout the long-winded COVID-19 challenge.

“Our response to the Omicron outbreak has been only one of a number of strategies able to help with business continuity planning. Once we’re out of this COVID hole, these optimisation initiatives we’ve implemented are not going anywhere. We will take any learnings out of disruptive business time and take some of those wins and keep them in place.

“We’ve agreed that some of these order optimisation and efficiency settings, order frequency days, and other things, are all working well for us and to keep them in place. Why would we go back and be less efficient?”

Of Pigs, People, and Pianos

BY MURRAY KING

A SENIOR BOOZ ALLEN CONSULTANT once commented that railways should not carry anything with legs, so no pigs, people or pianos. He might have been only half serious as he went on to run the Long Island Railroad, a major New York commuter system.

NZR stopped carrying livestock 50 years ago. It may still carry pianos, as part of household removals, which it still moves (in containers).

But it is people that Brett André writes about in his interesting new book *Can't Get There From Here: New Zealand Passenger Rail since 1920*. In it he argues that past managements and politicians have been half hearted in their approach to carrying people, and that with a bit of effort (and funding) we could see a resurgence in passenger rail in New Zealand.

He goes back to the day when rail was the only game in town when it came to movement of people over any distance. Back then, rail served a whole host of small communities, often with an inconvenient, uncomfortable, and slow service by mixed freight and passenger trains, or by freight trains "with car attached". But even as competition increased, little was done to counter it. These services persisted into the 1970s, well past their use-by date. The book has a slightly nostalgic view of those trains. Just as for freight, where the role of branch lines and small stations has been eclipsed by road hauls, so too does this sort of passenger market no longer exist, and there is little point in trying to revive it.

As well as these trains, rail used to have a network of purely passenger services, often run by self-propelled diesel multiple units (which we called "railcars"). Their demise was not, Brett argues, due to competition alone, but to the attitude to carrying people that mirrored the view of the Booz Allen consultant. Poor purchasing decisions, he says, were made about vehicles, including engineering oversight, and how many to buy, politicians dithered about funding, and management thought passengers got in the way of freight.

In particular he laments the saga of the FIAT-engined 88-seater railcars of the 1950s and 1960s (pictured). These were conceived before WWII, but not delivered until the mid 50s. They were plagued by mechanical problems, and had to be re-engined. A second re-engining was denied and they were converted into loco hauled carriages, affectionately known as Grass Grubs.



FIAT-engined railcar RMI33 near Palmerston North on a trip from Napier to Wellington in January 1977. Photo: G T Carter

I wouldn't go so far as to call them a fiasco (though "FIAT Fiasco", the heading for Chapter 6, has a nice alliterative ring to it). They did a great job of bringing back passengers to rail and serving smaller communities throughout the country, and were woven into the fabric of the regions. They served some remote parts of the country, and in places you could stop the railcar and get on or off in the middle of nowhere (a feature beloved of Canterbury trampers). They also included some outer suburban runs. The continuing

success of the Wairarapa trains owes its origins to these railcars, which ran the service until it got too big. The real problem was that they were not replaced when they reached the end of their mechanical life, despite a number of calls to do so.

The book concludes with a vision for rail passenger transport in New Zealand.

In setting this out, Brett is avowedly unconstrained by monetary considerations, but instead looks at his suggested passenger network passenger services as "historically informed conversation starters". He calls for large scale infrastructure improvements like tunnels, deviations, widespread electrification and double tracking to make passenger services more viable, and at the same time advocates affordable fares. I think he goes too far and some of his proposals are unrealistic, even if the playing field is levelled and there is more attention paid to the charging for the environmental costs of cars. At one point he suggests that management should have monetised these, i.e. captured them in the fares, which is a bit unfair – that is the job of Government.

We have provided an alternative view of the future by Michael van Drogenbroek in this issue, which you can compare against Brett's. Michael has been in the thick of the issue, both here and overseas.

The book is well presented (apart from a couple of mis-captioned photos), very readable, and

particularly well researched (with only a few minor errors). Of special note are the many maps, which are very useful in giving context to the text. They are each a mix of the diagrammatic (owing a lot to the London Transport Tube map), and the more geographically realistic, but they work well. They are the work of Sam van der Weerden.

I recommend this book to those interested in rail's future role in passenger transport in a carbon-free world. You may not agree with it all, but you will be much better informed.



A new Etihad Rail prototype long distance passenger train. Photo: Etihad Rail, UAE

The Future of Regional and Long Distance Passenger Rail In New Zealand

BY MICHAEL VAN DROGENBROEK

Introduction

New Zealand is at a junction when it comes to inter-regional public transport and passenger rail.

Will it continue its recent path of almost entirely focusing investment on urban passenger rail in the Auckland and Wellington regions? Or is there room to expand planning to include passenger rail reconnecting regions to the main urban areas and extending into New Zealand's Heartland as a national network?

This comes down to the question as to what sort of country we want New Zealand to be? At stake are questions of social equity, national connectivity, transport accessibility, meeting climate change commitments, improved transport safety, regional rejuvenation, affordable housing access, and even patriotic national pride as one joined up nation. Few things give the perception of a united nation like quality national rail networks. In order to get sustainable regional rail up in New Zealand, we will need national consensus to correctly identify viable opportunities and problems we are trying to solve so it can fulfill its potential to help

deliver a more sustainable future that helps New Zealand fully realise its potential.

Brief History Of Rail Passenger

Rail in New Zealand was first delivered by the Provincial Governments from 1863 onwards. About 1873, Julius Vogel, often called the father of New Zealand Railways (and briefly New Zealand Premier), developed a plan for an affordable Cape gauge national rail network spanning the length and breadth of the land. The network was finally completed when the Interisland Picton - Wellington Rail Ferries entered service in 1962. At its height in 1953, 5,690 route km of track were open, however, this has reduced to about 3,700 operational route km today of which only about 700 km is used by passenger trains. In the 1970's, premier trains such as *The Silver Star*, *The Silver Ferns*, *The Northerner*, *The Endeavour*, *The Blue Streak* and *The Southerner* linked New Zealand main centres into a national network of quality services. Various regional trains also ran to outlying regions. NZ Railways Road Services (buses) initially setup to link areas not served by passenger rail, started replacing rail services over time. This combined Railways network

of trains and buses enabled a joined up public transport network across pretty much all of New Zealand. This Railways-run national public transport network was systematically dismantled from 1987 to 2002 when regions were left to determine public transport networks for each individual region. A big change occurred in 1991 when Railways Road Services were sold to a consortium that has since run the InterCity group fully commercial bus network. The national connected public transport network was thus lost.

In 2001/2002 passenger rail services to Rotorua, Tauranga, Napier, Dunedin, and Invercargill ceased. The Auckland and Wellington overnight train ceased in 2004. Only the day time Auckland to Wellington, Picton to Christchurch, and Christchurch to Greymouth rail passenger routes connecting the three main centres via the Interisland Ferry connection remained as 2020 dawned. Over time these services moved more towards a foreign tourist base losing their public transport focus with a new carriage fleet being delivered around 2011.

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Current State

COVID-19 has not been kind to long distance rail in New Zealand. The recent announcements by KiwiRail of the cancellation of the *Northern Explorer* and the *Coastal Pacific*, due in part to absence of international tourism, has reduced the New Zealand passenger network to about 700 route km in total including Metro. These two trains were the last rail passenger connection between our largest main centres of Auckland, Wellington, and Christchurch via the Interisland Ferry connection. KiwiRail's current plan, "Project Restart '22", is to introduce "Trains on tour" covering these, and potentially other, routes when high value international tourism rebounds. This involves reconfiguring the rolling stock from the former services into a cruise on rail concept. It seems unlikely there will be any services for people making more general same day journeys between the main centres rendering intercity rail between New Zealand's main centres dead, an outcome that seems to have gone largely unnoticed.

One bright spot is that in 2021 the Te Huia rail passenger service between Hamilton and Auckland commenced. Unfortunately starting in the middle of a pandemic has not helped its passenger loadings due to various restrictions and constraints. However, it is the first service in perhaps a new paradigm and helps give a glimpse of a model as to how regional rail could re-emerge.

The Capital Connection between Wellington and Palmerston North, running since 1991, also continues to run with replacement carriages currently under refurbishment. Further, the TranzAlpine continues its run between Christchurch and Greymouth as a gesture of good will by KiwiRail to promote domestic tourism.

The Way Forward

In deciding what a future inter-regional rail network may look like, it is important to establish what some of the key success factors may be. Key criteria include identifying where rail has a strategic advantage over other public transport modes or private motor car use. Some of these include potential journey time advantages due to superior rail alignments over road such as tunnelling or serving larger intermediate towns on route where large passenger flows can be generated. As an example, the route between Wellington and Wairarapa through the Remutaka Tunnel offers a key advantage over road avoiding the trip over the hills. Whilst strictly not inter-regional, as both the Hutt and the Wairarapa are part of the broader Greater Wellington region, it does demonstrate how such advantages has seen rail flourish.

Areas for regional rail development broadly follow into four sub networks:



The new regional standard gauge VLocity Train heading to Albury from Melbourne
– Photos: Dept. Of Transport, Victoria, Australia



The VLocity trains can run at faster speeds (up to 130km/h) than classic fleet trains.

1. The Golden Triangle: Auckland – Hamilton – Tauranga

This sub network would connect the three major urban areas of Auckland, Hamilton, and Tauranga and is about 250 route km. Close to 50 per cent of New Zealand's population lives in these regions. Reconfiguration of the Auckland Strand Railway Station to an improved regional rail terminus together with good access to a relocated Parnell Station would enable regional passengers to connect with Auckland's City Rail Link stations.

A fourth main line should be prioritised between Wiri and Westfield (currently the third main is being built) with third mains extended south towards Pukekohe. This should be part of the Auckland Rail programme business case currently under development as it has the benefit of not only facilitating regional rail connections into Auckland but enables Auckland Transport to implement more express services rather than the frustrating situation that sees all trains stop at all stations from Pukekohe to Auckland Central. This development is one of national strategic importance for all New Zealanders – not just Aucklanders and without it, regional rail into Auckland will surely struggle to develop.

A gradual raising of speed towards 160kph south of Papakura to Hamilton enabled by investment in upgraded infrastructure, deviations, and tilt train technology should be the aim. This paves the way for the expansion of time competitive services to Hamilton and Tauranga. Additionally, a sub-regional Waikato network may develop with commuter type services between Te Awamutu, Hamilton, and Huntly and Hamilton to Morrinsville coupled with the reopening of the underground

station at Hamilton Central. Duplication of some track and new signalling east of Hamilton towards Waharoa junction will improve capacity on what is one of KiwiRail's busiest freight corridors. Additionally, electrification south of Pukekohe together with the use of bi/tri-mode (electric, battery, and fuel cell/diesel engine) trains will increase speed efficiency and deal with issues such as fumes in the Kaimai Tunnel. Service patterns with trains every one to two hours on these routes could be feasible over time.

2. Lower North Island: Wellington – Palmerston North – Whanganui

In the lower North Island, a focus on extending metro services north towards Ōtaki and inter-regionally to Levin, Palmerston North, and even Whanganui should be the aim. Much of this is under planning now with regional councils in those areas, with new rolling stock options for these routes being subject to business cases. Extending electrification north towards Palmerston North should be the aim but bi/tri-mode rolling stock provides a cost-effective flexible solution in the meantime. The Wairarapa services, though not inter-regional, will utilise this rolling stock too. A move to higher capacity signalling, such as ETCS L2 along with modest infrastructure will enable better network capacity utilisation and improve transit time.

3. Canterbury and Otago

In the South Island, rapid rail from Christchurch through Ashburton to Timaru would be a priority. These are quite large cities and towns whilst the rail alignment is capable of faster

runs compared to road with only relatively modest investment in stations, infrastructure, and rolling stock being required. This could encourage significant regional growth along that corridor. Urban rail initiatives in Christchurch such as suburban trains on the Lyttelton to Rolleston and north to Rangiora corridors are possible. A Christchurch central station at the former Moorehouse Avenue site would only be a short stroll to the CBD.

Dunedin could have a commuter rail service linking Port Chalmers to Mosgiel. The rail route is ideal as the Dunedin Railway Station is very central being near the new hospital, university, and business/retail district. The rail route is more direct and likely quicker than road at peak periods despite motorway improvements in recent years, due to tunnels through Caversham and Chain Hills as well as to Port Chalmers. This could be run by Dunedin Railways, who have a limited operation in Dunedin. Basic metro stations and some limited track duplication may be required.

4. National Network Integration

A national network that largely joins these sub networks already existed up to 2021. First the Northern Explorer, or a replacement service, should remain and ultimately be enhanced connecting the Golden Triangle and lower North Island current services (Hamilton to Palmerston North through the central North Island). Secondly, the Picton to Christchurch Coastal Pacific Train route should be retained. This would give a national network from Auckland to Timaru in the south over time. The TranzAlpine between Christchurch and Greymouth would remain as the world-famous tourist route it is.

Cont. on page 12



Despite the pandemic constraining passenger numbers, the Te Huia is the first service in perhaps a new paradigm and helps give a glimpse of a model as to how regional rail could re-emerge. Photo Michael van Droogenbroek

Outside of these areas, regional rail can be rebuilt over time as demand and funding allows. Extensions to Dunedin and Invercargill, Hawke's Bay (Napier and Hastings) and possibly New Plymouth and Northland could be considered. These are unlikely to be a priority for now due to lower passenger demand flows and costly capital requirements to get infrastructure up to acceptable service standards. Success of the earlier states of the network will help here – ambition has no limits. InterCity bus networks could connect these regions to rail-served regions in the meantime, thus providing a truly national affordable inter-regional public transport to the nation's people.

Auckland to Christchurch by passenger rail should survive. After all, we already have a State Highway 1 for roads, so why not a State Railway 1 for rail? A change of mindset is required.

Funding and Process

The Ministry of Transport is currently working on guidance for local councils to assist in the planning, costing, funding, and other considerations for establishing a new regional passenger rail service development framework. Waka Kotahi NZ Transport Agency (Waka Kotahi) responsible for funding the Government's contribution to these services, and KiwiRail, as an operator are both involved in this work.

Currently, regional councils and Waka Kotahi both contribute to funding the two current inter-regional rail services Te Huia and The Capital Connection. The process to consider the viability and establishment of further inter-regional passenger trains in New Zealand is spelt out on KiwiRail's website. It is up to regions to prioritise the new service in their Regional Land Transport Plan (RLTP), used by Waka Kotahi to determine regional transport initiative funding. Including a regional rail proposal in the RLTP clearly signals a new passenger rail service is ready for funding. Only then does Government consider if this should be prioritised in The New Zealand Rail Plan – a 10-year vision for rail in New Zealand to guide future investment decisions.

This approach highlights a significant deficiency in the current process. Everything must be instigated by the regions when inter-regional and national public transport is clearly a national issue. This makes establishing inter-regional rail very challenging.

Where is the national vision and who is responsible for that? Therefore, central Government agency leadership is required together with regional partnerships for inter-regional public transport and rail to develop. The current public transport planning process



The Coastal Pacific Train on one of its northern journeys from Kaikoura to Picton. Photo: KiwiRail

is heavily biased to intra-regional transport which has worked well for rail in Auckland and Wellington but not so much elsewhere.

The establishment of a national public transport function with a mandate to plan and develop national and regional integrated public transport networks (buses, rail, and ferries) across all New Zealand would be a start. This will help alignment with national development priorities and ensure business cases are funded, not just as a regional activity, but as national development ones. This would not be a replacement for regional council transport functions, rather a framework and resource with a national joined up public transport planning function – something sadly lacking in New Zealand today.

What Needs To Happen Now

As a matter of urgency, we need to stabilise the situation by halting the move to turn the Northern Explorer and Coastal Pacific trains to exclusive tour train service configurations. This would require an interim subsidy by Government to KiwiRail to top up the revenue to keep these routes active. Whilst a subsidy is required, it is still likely a higher fare box recovery than that in Auckland or Wellington metro during COVID-19 – so perspective is required. High value tour trains should probably not be the priority for passenger rail in New Zealand right now.

Further, the business cases under development for new regional rolling stock by Greater Wellington and Horowhenua regions need alignment to national network platform standards so that with modest configuration and design changes for types of propulsion energy/fuel required, this rolling stock could

be deployed to other potential routes across New Zealand. Joined up thinking is essential for an affordable national rail passenger network.

A compelling case for all stakeholders for approval of funding and delivery is required. Whilst this maybe a 20-year vision, there is no better time to start than now. Let's do this New Zealand!



Michael van Drogenbroek

Michael is a Transport Consultant/Advisor at Heriot-Edievale Ltd with 30 plus years' experience. Currently, he is working with various clients on rail, public transport, and freight development projects both in New Zealand and overseas jurisdictions including the Middle East. He has held various senior executive/management roles in public transport, railway and strategic planning in Victoria Australia, Etihad Rail in the UAE together with over 20 years at KiwiRail and its predecessors.

The future of transport

BY DIANE EDWARDS

In today's article, I am going to discuss something that is perhaps a little controversial – the possibility that supply chain logistics may be severely disrupted by developments in additive manufacturing (known popularly as 3-D printing) and changing socio-economic factors over the next 20 years.

Most supply chain experts use sociological data to extrapolate volume growth and trade routes based on economic modelling grounded in current paradigms – more people mean more freight movements; higher incomes will mean more demand for goods. This type of research and projection has served us well in the past, but with the world changing so rapidly, can we be sure it will serve us well in the future?

In this article I will explore how additive manufacturing could, in the not-too-distant future, slash the number of containers circulating the globe; and how changing consumer patterns will further reduce demand for goods. This is a different view than that being discussed currently by ports and shipping lines. So why this contrary view?

Several years ago, I was speaking at a shipping conference in Singapore, when they were proudly announcing plans for Tuas Megaport, a terminal destined to add 20M TEU capacity by 2021 and a planned 65M TEU in total when completed in 2040. This would mean that by 2040 Singapore would have more than doubled its 2015 capacity of 50M TEU. I grew more and more nervous as the speaker proudly described Singapore's reliance on automation, advanced traffic management systems and tight processes to reduce dwell times.

Imagine the hush in the room when I got up to speak as the presenter providing a different perspective. My brief was to argue that all that capacity may not be needed by the planned 2040 completion date. So, I explained that by 2040 we might be looking at a very different world, where 3-D printing changes the way that people consume goods. So why do I think that might be the way of the future?

Way back in 2010, I attended my first World Future Society conference where I saw my first 3-D printer, churning out plastic likenesses of all the delegates. Pioneered in the 1970s, by 2010 3-D printing was starting to emerge as a promising manufacturing tool. Yet it remained a specialist technology with a high price tag.

The speaker proudly announced that by 2035 he expected 3-D printers to come down in price and perhaps even be available for everyone with a reasonable income to buy.

As with many revolutionary technology predictions, he was only partially right. Yes, they have indeed come down in price but no, it didn't take 25 years for them to be found in shops for everyone to buy. By 2020 additive manufacturing was being used to make a vast variety of things from components for TVs to artificial eyes. Today, you can buy a 3-D printer for less than NZ\$500 – it has come of age.

What has this all got to do with logistics and transport? As a foresight practitioner, I look at the trajectory of this technology and ask "where might this go next?". What, for example, if in a few years, we all have access to a 3-D printer? We could design or download files to print our own uniforms, dial up the printing specs for the spare parts we need for our trucks and trailers, make chairs, and yes, even print the office building. And it is not just companies, anyone can create their own fashion, print any item of home décor, and they no longer have to go searching for spare parts for the broken dishwasher.

If access to consumer goods becomes so easy, why would anyone bother to order anything from overseas? There is no longer any need to import goods, we can simply make our own at home, or perhaps in a shared facility in each street or village.

The impact on containerised shipping is now obvious – the volume of goods being transported long distances drops dramatically. There would probably still be things that we may continue to transport, perhaps premium products or foods which are more difficult to replicate (though many of these are already being made artificially). I'm suggesting that the golden age of containerisation may be at its peak now and will soon decline sharply.

Not all cargo may be impacted. We're not yet at the stage where we can break things down at the molecular level, turning one material into another. This means 3-D printers still need bulk materials to construct their output, so bulk cargo shipments would continue for the foreseeable future – maybe even increasing.

Alongside this technology, socio-economic trends are also suggesting that GDP may be an outmoded way of assessing growth and

success. Socio-economists are noting many trends that signal people are rebelling against materialism. Here are just a few.

Rising consciousness of climate change and global warming means people are questioning whether they need to fill their lives with material goods or increase carbon emissions by transporting goods around the globe.

The Shared Economy, already popular among the young (remember it is they who will inherit the world we are creating today) exhibits behaviour that reduces the need for goods. Rather than buying a car, people carpool or use rides on demand, such as Uber. Perhaps a manifestation of this attitude of shunning material goods can be seen in the tiny house phenomenon. The dream of the quarter acre section is being replaced by some (not all, I admit) who are more than happy to live in a home less than 35m². Another significant cultural shift is the move to the Experience Economy, which Libby Margo¹ says "has changed the way we consume, influencing us to prioritise experience over the ownership of goods". The Experience Economy recognises that as the perceived value of goods start to diminish, people will start to place more emphasis on the experiences they have.

3D printing had the potential to drive all these trends just because it makes goods more accessible. The resulting overabundance of goods as basic economics tells us, will mean supply will start to outstrip demand, and the value placed on goods will fall. If the reason for the glut of goods does not go away, demand for goods will fall to the point where global trade is disrupted.

None of these trends also would be sufficient signal a collapse in freight movements on its own, but when you start looking, there are numerous more signals pointing in the same direction. This means that despite population growth, the next twenty years might actually see a significant decline in freight volumes, particularly containers.

Not the mainstream view, I know but one that I believe should not be ignored.



Diane Edwards

Diane is an experienced executive, change agent and business transformation facilitator, enabling organisations to prepare for the future of work through practical initiatives to transform the business to be agile, resilient and innovative.

1. <https://journeys.autopilotapp.com/blog/experience-economy-small-business/>

E-commerce in New Zealand: where next?

BY PETER JONES

SINCE THE PANDEMIC BEGAN, Kiwis have been shopping online more frequently than ever before and the number of parcels moving through NZ Post's network is up an astonishing 25 per cent year-on-year. Peter Jones, Founder and Managing Director of Prological Consulting, discusses the latest e-commerce trends and offers his thoughts on where this rapid growth is heading.

Just before Christmas last year, NZ Post reported it was delivering nine parcels a second in its final push before Christmas. When analysing data from NZ Post, this is not surprising – as shoppers in New Zealand spent \$25 million online every day in October 2021.

In the lead up to Christmas, NZ Post ramped up its operations to deliver more than two million parcels a week by recruiting hundreds of extra people, extending operating hours, and shifting to a 24/7 operation. The business also re-designed its Auckland network to speed up deliveries.

An already expansive network, NZ Post is one of the largest operating businesses in New Zealand and boasts an impressive network with supporting infrastructure throughout the country.

In delivering the Christmas peak period, NZ Post communicated well with the nation around cut-off dates and delivery expectations – which was a huge win for the business and led to 71 per cent of Kiwis stating they were satisfied with their delivery experiences over the past year¹. While 71 per cent leaves plenty of head room for improvement, in the heavily disrupted quarter four environment of 2021, there are many companies that would have been very pleased with this result.

While NZ Post coped with 2021's peak, scaling any business 25 per cent in less than a year is not without its challenges. As the shift to online shopping looks like it's only set to continue, and with lockdowns up and down the country there has been a distinct shift in consumer behaviour. As a result, parcel networks throughout the world now have a small window of opportunity to reflect, reimagine and reset before activities ramp up again.

Shifting away from crisis mode

NZ Post did an impressive job of maximising their infrastructure, processes, and people to absorb the rapid rise in volume throughout

2021. However, they are not alone in the challenges. Australia Post also dealt with an increase of 17 per cent above 2020, which was already exceeding their 2023 forecasts. Similarly, DHL opened a new facility in Israel in 2021, and Chief Executive Yair Bitton stated just after opening the new facility: "When we planned this facility five years ago, we thought this facility would be good for the next 20 years. Unfortunately, or fortunately, when finishing it we see that it's good maybe for the next five."

It's looking like it's going to take two or three years for this consumer trend to settle down into any kind of new normal and that will be a normal with double digit growth for quite some time. Consumer behaviour has changed and whilst it will settle into new patterns, it will be a few years until we all fully appreciate what those patterns will be.

Business leaders setting strategy with such uncertainty is both complex and carries risk. Will it be business as usual, and operations only expand when dealing with peak periods like Christmas, Easter, and online shopping days? Or do networks need to be expanded to deal with continuous double digit compounding growth?

The data, local and global, points towards continued growth in e-commerce. As a result, businesses like NZ Post, Australia Post, DHL and all the other e-delivery companies around the globe will need to transform their operations to profitably manage consistent growth at this scale. In parallel, work on how they get ahead of the growth curve over the next five years or so, or they run the risk of staying in this scrambling, catch up and reactive cycle for a long time.

Parcel networks around the world (as well as e-businesses who are doing the selling) have a window available to analyse their operations, better plan for volumes above network capability, while at the same time develop the required infrastructure to serve this new marketplace. Critically reviewing networks, how they operate under the various pressures of the annual cycles, and start to ask: "What does 2024 look like and how do we get there, while at the same time, asking what does 2030 look like and what do we need to be putting in place to meet that demand?"

Reviewing networks, infrastructure, assessing the geography of their facilities, access to people all while ensuring flexible and agile

processes to carry out future tasks will be crucial.

An opportunity to be seized

The shift to e-commerce presents a major opportunity for large-scale parcel providers like NZ Post to grow and scale their business. But without a full operational review, 25 per cent year-on-year growth will not necessarily equate to profit growth, and could, as with Australia Post last Christmas, lead to erosion of margin due to the higher operating costs of the short term and ad-hoc processes required to meet exponential demand growth on short notice.

As Brendon Main, Chief Operating Officer at NZ Post said: "New Zealanders have taken to online shopping in a way that has changed the retail landscape forever and it's now up to NZ Post to make sure that they seize this opportunity to change and develop just as the consumers has." Mr Main's comments are not for NZ Post only, but for all businesses in the e-commerce industry.

¹ HERE Technologies Survey 2021



Peter Jones

Peter specialises in domestic and international freight management, network design and supply chain strategy. He has an intuitive understanding of the relationships and off-sets between manufacturing, international and domestic freight, networks and nodes, warehouse space and inventory levels. Peter has completed over 200 supply chain projects during his 20 years of consulting experience.

Driving Change: Reviewing the Road User Charges System

TE MANATŪ WAKA MINISTRY OF TRANSPORT IS INVITING NEW ZEALANDERS TO SUBMIT THEIR VIEWS ON IMPROVING THE ROAD USER CHARGES SYSTEM.

New Zealand has a one-of-a-kind road user charge (RUC) system

Most road users in New Zealand pay levies when they buy petrol. However, unlike many other countries, we also have a distance-based charging system. RUC applies to vehicles that use fuels other than petrol or have a gross vehicle mass greater than 3.5 tonnes. RUC imposes distance and weight-based charges for these vehicles' use of public roads, in proportion to the costs those vehicles generate in road wear and tear.

RUC is a key source of revenue to the National Land Transport Fund (NLTF) – it pays for the maintenance and improvement of the land transport system, including roads, public transport, and walking and cycling infrastructure. In the 2020/21 financial year, RUC contributed nearly \$2 billion in revenue to the NLTF out of a total of \$4.3 billion. Light electric vehicles are exempt from RUC until 1 April 2024.

It's time to assess how the RUC system is working

Though the RUC system has been updated and simplified to allow for technological advancements, its last substantive update was in 2012. Since 2012, the transport industry has changed significantly with a substantial increase in the number of light diesel vehicles and the use of fuels other than petrol and diesel, meaning more road users are subject to RUC. A decade later, it is timely to look again at the system to see if we can improve its operation and make sure it remains fit for purpose.

The consultation document, Te Huringa Taraiwa: Te arotake I te pūnaha utu kaiwhakamahi rori | Driving Change: Reviewing the Road User Charges System, covers a wide range of issues, from simplifying compliance and making better use of technology, to considering whether to modify RUC to address issues like climate change and other government priorities. These include if we

should amend RUC legislation to support the uptake of low carbon fuels; if we should consider costs other than road wear and tear when setting RUC rates; and how we can simplify the RUC system for end users (e.g. should eRUC be mandated for heavy vehicles and whether to remove the requirement for light vehicle owners to display a RUC licence).

We are also proposing a package of minor technical amendments to make the system work more efficiently. Some of the proposals will help to reduce the costs of administering RUC, improve compliance and the value for money delivered by this system.

We're keen to hear your opinion on suggested changes

The Ministry of Transport welcomes your submissions on changes that the Government is considering that relate to RUC set out in the discussion document. Your feedback will help the Minister of Transport and his Cabinet colleagues to decide on what, if any, amendments are made to the RUC system.

Some of the changes discussed are potentially large and complicated. The Ministry is allowing a relatively long time for the consultation (submissions close 22 April 2022) to engage with stakeholders and develop lasting solutions. Written submissions are not the only option to have input. Stakeholder feedback is very important to the Ministry and we would like to engage with groups on specific topics, either virtually or in person (provided it is safe to do so under the COVID-19 Protection Framework). If you are interested in participating in a discussion on any of the proposals, please let us know by emailing RUCConsultation22@transport.govt.nz.

Depending on the results of the consultation, some changes could be implemented as early as mid-2022, whereas more significant changes would involve further consultation and changes to legislation and would come into force no earlier than 2023-2024.



Marian Willberg

Marian is the Manager of the Demand Management & Revenue team at Te Manatū Waka Ministry of Transport. Her team is responsible for advising the Government on demand management policy – why and how the Government should influence transport choices, and revenue policy – oversight of the funding and financing tools for land transport, including road user charges, fuel taxes and tolling. The team is currently exploring congestion charging and what a more sustainable, equitable, and efficient revenue system for land transport might look like. Before taking up her current role, she led the Crown team negotiating funding for the Auckland City Rail Link, New Zealand's first underground railway, and prior to that was the Technology & Transport Systems Policy Manager, responsible for leading the implementation of the government's Intelligent Transport Systems Technology Action Plan 2014-2018. Marian has worked at the Ministry since 2005.



New Zealand is at great risk of losing the millions of dollars inbound tour operators have booked in the pipeline for 2022 and 2023. This would be disastrous and could potentially send many businesses to the wall, Tourism Export Council of New Zealand's Lynda Keene says. *Photo: Tourism New Zealand*

INDUSTRY NEWS

Closed borders costs New Zealand's tourism a billion dollars a month

BY JAMES PAUL

NEW ZEALAND'S COVID-19 response can be counted as one of the best in the world, but it has cost our visitor economy more than a \$1 billion a month since 2020.

Since our borders closed in early 2020 to anyone who is not a New Zealand citizen or permanent resident, the tourism industry has been devastated, Tourism Industry Aotearoa (TIA) says.

The impact on communities from losing tourism businesses and jobs is immense, especially in many smaller towns with a strong reliance on the visitor economy.

Operators have seen their life's work melting away in front of their eyes through no fault of their own, TIA's Cheryl Whitfield says, with closures having cost our visitor economy more than \$1 billion a month.

But don't just take her word for it – the numbers make for incredibly sombre reading.

The Tourism Satellite Account for the year ended March 2021, which was published by Statistics New Zealand in December 2021 and is the official annual measurement of the New Zealand tourism industry, shows that a third of all the people employed in tourism have gone.

That is a loss of 72,285 people from the industry – equivalent to almost the entire population of Palmerston North. This includes 6738 or 25 per cent of tourism 'working proprietors' – those owner-operators who are the backbone of New Zealand's visitor industry.

"No doubt many more jobs and businesses have gone in the year since then. The closure of borders has particularly affected those operators who mainly catered to our international visitors and could not easily pivot to serve domestic travellers," Ms Whitfield says.

"This includes tour operators who arrange itineraries for international travellers, those providing accommodation options which are not commonly used by New Zealand holidaymakers, such as hotels and hosted bed & breakfast operators, coach tour operators, event organisers, those involved in the cruise sector and many more."

And as the country moved away from its Alert Levels and to the COVID-19 Protection Framework (traffic lights), the initial red setting led to numerous cancellations of events and travel bookings. While not a lockdown, the red setting's restrictions to slow the spread of COVID-19 created booking hesitancy among Kiwis, Ms Whitfield says.

"After a devastating two years, the priority is for New Zealand's borders to reopen to international arrivals without self-isolation requirements. The recovery cannot begin until then."

With the announcement of our borders reopening to vaccinated New Zealand citizens and residents travelling from Australia on 27 February, TIA continues to advocate strongly to Government for ongoing support until the self-isolation requirement is removed.

Ms Whitfield says TIA has worked with industry partners to identify a roadmap to recovery from the pandemic. Global factors mean the roadmap is extremely difficult to predict, with a significant “wedge of uncertainty” between the high and low scenarios for the return of international tourism demand.

“This wedge should narrow over time; tourism operators should plan for the low case but be ready to move as opportunity arises. Three significant challenges to a successful recovery have been identified: workforce, productivity, and social licence. These issues need constant attention and a coordinated response.”

As the peak industry body, TIA has a progressive and ambitious vision for the future of tourism in Aotearoa, Ms Whitfield says.

The pandemic has provided an opportunity to make bold changes to fix systemic issues, and TIA is taking a central role in the repositioning and revitalisation of how we ‘do’ tourism in New Zealand.

“That will, hopefully, ensure we create truly sustainable outcomes that are embraced by New Zealanders.”

Tourism has received government support across a range of programmes including the wage subsidy and tourism specific support. However, the support that was available during the lockdowns through the wage subsidy and the resurgence support payment has now gone. Many of New Zealand’s tourism businesses are no better off than they were previously because they still do not have the international visitor market.

“Continued targeted Government support for businesses in the visitor economy is needed until the borders reopen without self-isolation requirements, to ensure business’ survival so we can deliver quality experiences to international visitors when they return.”

New Zealand international tourism businesses’ hopes of a future lasted four days after the Prime Minister of Australia, Scott Morrison, announced on 7 February that the country is ready to welcome back international visitors on 21 February, 704 days since their borders closed to visitors.

Lynda Keene, Chief Executive of the Tourism Export Council of New Zealand (TECNZ), was thrilled for her Australian counterparts, as Australian tourism businesses have a date and can now plan to gear-up their operations and put the welcome mat out.



Tourism operators have seen their life's work melting away in front of their eyes through no fault of their own, says Tourism Industry Association's Cheryl Whitfield says. Photo: Leopard Coachlines

However, back in New Zealand, the immediate reaction from tourism businesses was one of dismay, she says.

“We hadn’t expected Australia to set a date as early as the 21 February, so it’s taken us by surprise. Operators have slumped their shoulders because they know there is a very high chance New Zealand will lose market share to Australia. It’s another barrier to our international recovery.

“This is because long-haul destinations like Australia and New Zealand receive up to 40 per cent of visitors that are dual destination visitors. Particularly visitors from North American countries, UK and European countries who only come to this part of the world every five to ten years.”

She adds that as New Zealand does not have a clear date as yet – just at a time in July (or earlier) – there is ongoing uncertainty for airlines and offshore travel partners to sell New Zealand. This may prompt a switch to increase frequency of flights and sales to Australia only over the next few months.

“This would be devastating as New Zealand tries to start its own international tourism recovery in July 2022,” Ms Keene says.

“The difference of five months to welcome back visitors could affect our tourism recovery for years as Australia throws everything at markets to welcome visitors back. As countries, we’re friends but competition is real.”

Compounding the issue, Ms Whitfield says, is New Zealand’s “major handbrake” in its seven-day self-isolation requirement (for tourists), a measure Australia has not implemented. So, as a prospective visitor ‘Downunder’, the country that has no barriers to entry is the country that is going to get booked.

“New Zealand is at great risk of losing the millions of dollars Inbound Tour Operators have booked in the pipeline for 2022 and 2023. This would be disastrous and could potentially send many businesses to the wall. Competition is going to be fierce for visitors, and at the moment, New Zealand isn’t even off the batting mound.

“We are extremely concerned New Zealand is going to be left behind and our global reputation will take another hit. The self-isolation requirement has baffled all of our offshore travel sellers. The demand is there for visitors to return but if we don’t take action soon, travel sellers will just focus on Australia. We urge the government to provide a set date for the return of international visitors with no self-isolation requirement.

“It’s important we give the industry every chance of success to rebuild its world-class tourism offering and the key factor in this is to remove the self-isolation requirement and allow New Zealand to be competitive with Australia.”

The government has since recognised the issues and taken some action which will help with the problems identified in this article.



COVID-19 continues to have a significant impact on the Ports of Auckland's performance and throughput but it is hoped, with the end of the pandemic closer than two years ago, the port will enter "what is hopefully a better era". Photos: Ports of Auckland

Port for New Zealand's biggest city

BY JAMES PAUL

When Tāmaki Makaurau (Auckland) was first settled between 800-1,000 years ago by Polynesians who discovered New Zealand, its wealth of resources and fine harbours made for a flourishing trade centre.

That still stands today, with the Ports of Auckland Ltd (POAL) handling \$26.4 billion worth of New Zealand imports and exports each year – roughly 30 per cent of New Zealand's trade. The port is located next to the city's central business district, and nearly three-quarters of its inbound cargo (by value) is for Auckland.

However, the last two years of the global pandemic set the stage for a tumultuous time. Auckland was the centre of New Zealand's COVID-19 outbreaks, resulting in it operating under strict conditions set by the Government. Thus, POAL's operations felt the effects of the pandemic more sharply than other ports around the country.

COVID-19 continues to have a significant impact on its performance and throughput, thanks to the combined effects of global disruption in supply chains, lockdown operating difficulties, and local supply chain congestion.

Yet, General Manager Public Relations and Communications Matt Ball believes the country is much closer to the end of the pandemic than we were two years ago and, as a result, the port is entering "what is hopefully a better era".

"The Port is now looking forward to finishing off automation – which was disrupted by COVID-19 and our inability to get people in

from overseas to help finish that off – as well as getting productivity and profitability back."

A crucial step towards reaching a clean slate is recalibrating POAL's health and safety procedures, following the unfortunate fatality of a worker in August 2020. Auckland Council commissioned Construction Health and Safety New Zealand (CHASNZ) to undertake an independent review of health and safety at POAL.

Released in March 2021, the report made 45 recommendations, many of which requiring safety cultural changes. The POAL Board and management supported the report's findings and expressed their willingness to address "our shortcomings in safety processes and culture".

"The CHASNZ report was commissioned to help Ports of Auckland identify and address shortcomings in its health and safety environment," POAL wrote in response to the report.

"By its nature, the report has focussed on the things that need improving, which can make it appear like a daunting challenge for the organisation. However, it is not.

"As the report notes, there are parts of the business which have managed safety well, which shows that we can do it across the entire business if we all work together and support each other to make change. We welcome the opportunity and direction that this report gives us, and we are determined to deliver the change that is needed."

Since the report's release, POAL has completed 21 of the 45 recommendations and aims to complete the rest by June. Additionally, POAL continues to finetune its general safety culture, improving practices and processes, and "to really emphasise the importance of safety", General Manager Public Relations and Communications Matt Ball says.

"Productivity is important, we've got to get the goods through the port, but it must never come at the cost of safety. So, having more staff is something that would help address that. But we are also putting a lot of effort into ensuring everyone's looking out for each other when it comes to safety.

"We're ensuring there is strongly felt collective responsibility that everyone in the business has to keep an eye out for something that's wrong, shortcuts that are being made or something that looks unsafe, and make sure that things are reported so that we can stop and fix things if we need to."

People

POAL's leadership has had a renewal in the last 12 months, appointing new Chief Executive Roger Gray to replace interim Chief Executive, Wayne Thompson, on March 14. Serving at the helm as Lyttelton Port Company's (LPC) Chief Executive Officer for two years, Roger is now excited to be heading north to Auckland.

Through his time in Whakaraupō/Lyttelton, Roger oversaw the beginnings of a workplace culture transformation, investment in infrastructure including the new eastern

development, and record-breaking container volumes through the terminal.

Additionally, POAL's Board elected Jan Dawson as its new Chair, following the retirement of previous Chair Bill Osborne. An experienced director and chair, Jan was made a Companion of the New Zealand Order of Merit for services to governance in 2016.

She says her priorities are to complete the work already underway to implement the recommendations of the CHASNZ review into health and safety, to deliver its automation project, to lift productivity, improve customer service, and to deliver a reasonable return to POAL's shareholder, Auckland Council.

Two new experienced directors - Geoff Plunket and Stephen Reindler – also joined the POAL Board in October 2021.

At the heart of POAL's business is more than 500 direct employees and a further 187,000 jobs are facilitated by the port's activities. Recruitment, however, would only get POAL so far while New Zealand experienced one of its lowest ever unemployment rates.

In order to play catch up after closing for a couple of days in the aftermath of the 2020 fatality – and to accommodate a backlog and an increase in throughput – POAL focused on hiring and retraining those within the business' container terminal.

"For the other highly trained staff like crane drivers, we had to supplement our internal training with hiring overseas, which is really difficult in a COVID environment. But we managed to get approval for up to 10 crane drivers," Mr Ball says.

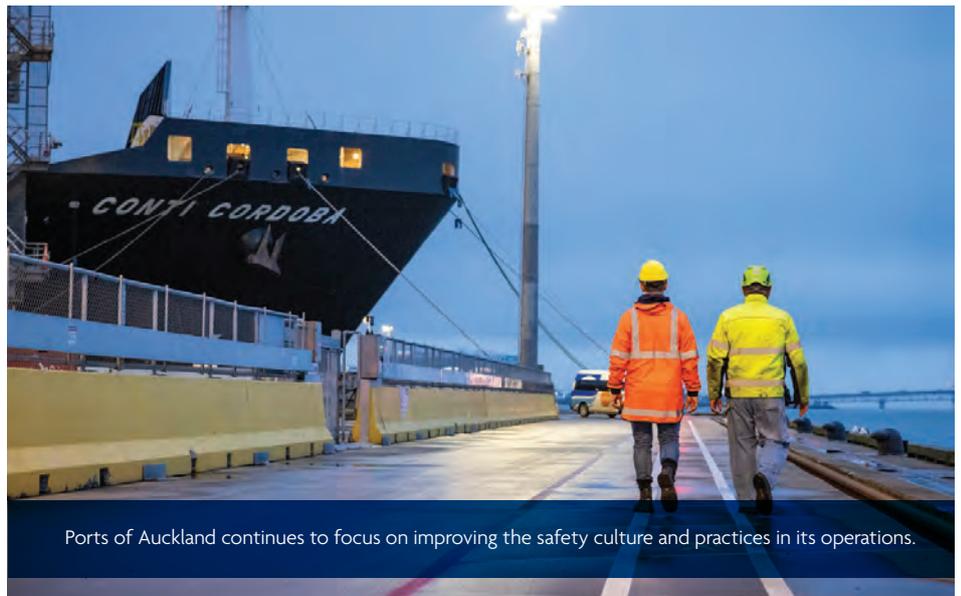
Port configuration

Since delisting from the New Zealand Stock Exchange in 2005 and becoming owned wholly by Auckland Council, POAL has reconfigured its port into two main terminals plus multi-cargo wharves.

Its Bledisloe Multi-Purpose Terminal handles roll-on roll-off vessels and other freight, while the Fergusson Container Terminal is a dedicated container handling facility. The terminal approach is global best-practice and helps POAL use its land efficiently while boosting productivity.

Located to the west of the Fergusson Container Terminal, the Bledisloe Terminal offers 14.5 hectares of operational space. Its longest berth (B3) at 260 metres is POAL's primary roll-on roll-off berth but Bledisloe has two other berths: B1 for Golden Bay Cement and B2 for smaller general cargo and heavy lift vessels.

The Fergusson Container Terminal has eight post-panamax ship-to-shore cranes on 910 metres of berth. Each of the cranes is twin-lift



Ports of Auckland continues to focus on improving the safety culture and practices in its operations.



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capable and the three newest cranes boast extended outreach to help better service large, wide ships.

The expansion of the Fergusson Container Terminal is expected to be completed in the next couple of years, a project started in 2001 to add an extra 10 hectares expansion as well as a third berth along the northern face, measuring 296 metres long.

In addition to Bledisloe Terminal, which during the COVID-19 period has also been handling containers, POAL's multi-cargo facilities include three other operating wharves: Captain Cook, Jellicoe, and Freyberg.

POAL is in the process of finalising consent to deepen Auckland's shipping channel from 12.5 metres to between 14-14.2 metres. It is a key project for this business as it will safeguard Auckland's vital international supply line by allowing larger container ships to enter the port, such as 366-metre-long New Panamax

vessels with a maximum draft of 15.2 metres. Tidal windows will be used to make best use of the natural water depth and keep dredging to a minimum.

The project is relatively low impact from an environmental point of view. Because the bed of the channel is made up of mostly soft material like marine muds, mudstones and some sandstone and gritstone, it can be removed using just a digger on a barge.

POAL was granted consent for this project in August 2020, but unfortunately that consent was appealed and almost two years later are yet to be resolved.

Primary cargo

While Mr Ball admits the last six months ended 31 December 2021 have been difficult, container volume was slightly up at 316,140 Twenty-foot Equivalent Units (TEU) compared to 358,899 TEU for the previous six months.

POAL's multi-cargo business has also been operating at full capacity over that same period, with strong volumes across all cargo categories. Multi-cargo handles a large and diverse range of cargo which includes light and heavy vehicles, project cargo, cement and other bulk products, and the Pacific Island trade.

The multi-cargo operation is important to POAL's business, its customers and to the New Zealand economy – multi-cargo breakbulk volume for the period was 3.910 million tonnes compared to 3.153m tonnes, while car volumes were 129,924 units compared to 104,224 units.

The improved volumes have contributed revenue of \$131.6m for the six months, up by \$17.4m from the previous comparative period (\$114.2m) while costs increased by \$15.7m due to additional costs in energy, depreciation and labour, in particular from the impact of COVID-19.

Looking ahead, POAL is expecting a similar performance for remainder of the financial year.

Future focus

In June 2021, POAL made the decision to pause its container terminal automation project after an incident revealed a potential safety risk. It, however, gave them the opportunity to “re-evaluate and reset the project” after fixing the safety risk.

With a new timeline, POAL is undergoing four stages to automate its terminal while still operating, making it a more complex project. The target completion date is June 30 this year.

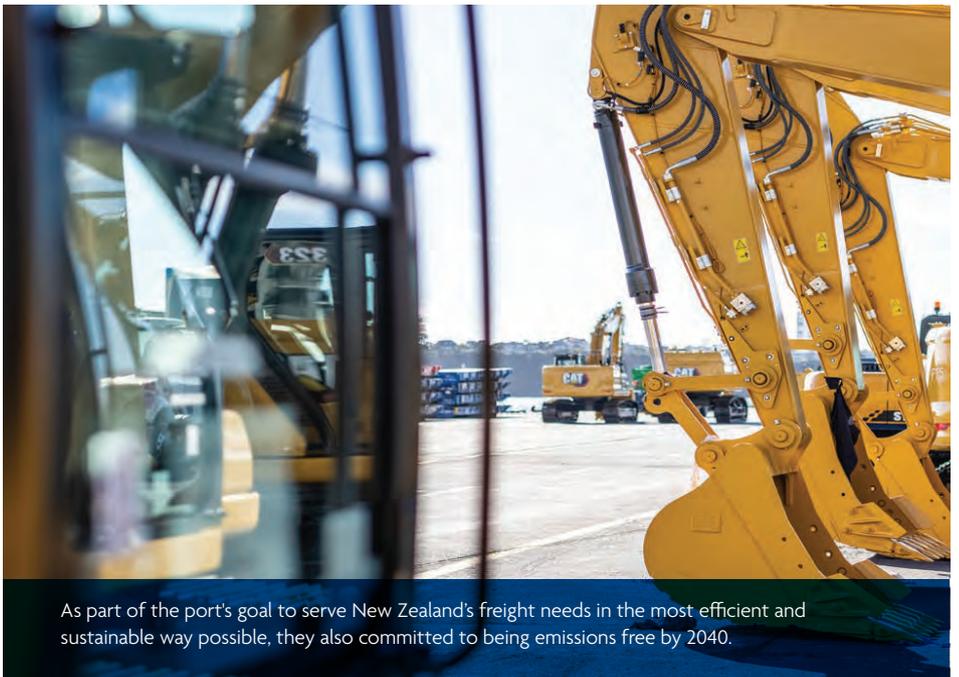
Mr Ball says when automation is working as intended, it will deliver POAL more capacity. Its current theoretical capacity for the terminal is around 900,000 TEU a year. With automation fully implemented and a few other changes to the layout of the terminal, capacity could be increased to between 1.6 and 1.7 million TEU per year.

“It will help us with labour supply, especially as finding good people is hard, and it can take quite a while. But it will allow us to increase our throughput on the same size piece of land.”

As part of POAL's goal to serve New Zealand's freight needs in the most efficient and sustainable way possible, they also committed to being emissions free by 2040.



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In the short- to medium-term, their roadmap involves replacing conventional diesel with renewable diesel, which is a second-generation biofuel that removes carbon emissions. They have already tested the renewable diesel in a pilot boat, tugboat, reach stacker, empty stackers, forklifts and several light vehicles.

“When we set the target of 2040, back in 2015, we decided we wanted a goal that was really ambitious. No one at that stage had set a goal like that. The closest were ports going for zero emission in 2050,” Mr Ball says.

“We probably did that not knowing what a challenge it was. But on the other hand, it's been a really good thing to do. One of the

outcomes it has spawned is the commission of our new electric tug, which is due to be delivered next month.”

‘Sparky’, as it was voted by the public, is the world's first fully electric ship handling tug that is battery operated. Containing batteries that have a total capacity 2,784 kilowatt hours, the boat can carry out two or more berthing/unberthing operations with up to 70 tonnes bollard pull on a single charge. It will take two hours for the tug to recharge to its full capacity.

The tug will save approximately 500 tonnes of carbon emissions a year, or 12,500 tonnes over its planned 25-year life.