



The Chartered  
Institute of Logistics  
and Transport

\$15.00

# Logistics & Transport NZ

THE OFFICIAL PUBLICATION OF CILT NEW ZEALAND

Volume 21 Issue 2

December 2022



**The CILT NZ Annual Awards Dinner**

**Connect, build and grow**

**Paving the way for other vulnerable contractors**



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The Chartered Institute of Logistics and Transport

LOGISTICS & TRANSPORT NZ IS THE OFFICIAL JOURNAL OF THE CHARTERED INSTITUTE OF LOGISTICS & TRANSPORT NZ

ON THE COVER

A highlight in the transport and logistics sector's calendar, the CILT NZ Annual Awards Dinner 2022 was held at Te Pae Conference Centre Christchurch on 14 October.

# Contents



10



12



14

Proud to be part of the world's transport and logistics community .....3

The CILT NZ Annual Awards Dinner .....4

CILT Young Achiever of the year .....7

Rising Star: Young employee of the year ..... 8

Connect, build and grow ..... 9

Auckland network rebuild..... 11

Decarbonising transport: Let the market decide or help it to? ..... 14

2022 a year of achievements for City Rail Link..... 16

Sea rise: Preparing for changes to people and businesses..... 18

Paving the way for other vulnerable contractors..... 19

**In the next edition**

The editorial team welcomes expressions of interest for submitting an article for the March 2023 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](mailto:murray.king@xtra.co.nz)) to discuss their article.

**Deadline for the March 2023 edition: February 10, 2023.**

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**Published under contract (print) by:**  
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21 Jamaica Drive,  
Wellington 5028  
Tel: 04 499 0912  
Email: [studio@exceldp.co.nz](mailto:studio@exceldp.co.nz)

**Also published under contract (web) by:**  
Webstruxure  
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Tel: 04 801 7053  
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# Proud to be part of the world's transport and logistics community

## GUEST EDITORIAL: NEW CILT NZ PRESIDENT DIANE EDWARDS

AS YOUR NEW CILT NZ PRESIDENT, I would like to first introduce myself and then tell you a little about what is in store for 2023.

It is a true honour to be elected as your President. CILT NZ has a long history in New Zealand, having started in 1959, and emerging from its parent organisation, CILT International. But it still is as relevant today as it was then. Transport and logistics are the backbones of our economy, facilitating trade both domestically and as a gateway for imports and exports. CILT NZ strives to provide networking opportunities and development pathways to its members as well as being an important mouthpiece for the industry.

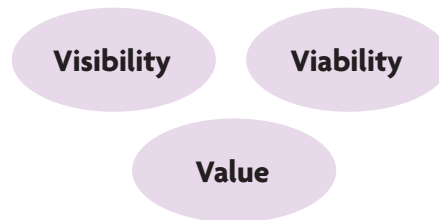
I have been part of the industry for more than 20 years in a variety of different roles. As a consultant in the area for strategy and foresight as well as skills across human resources, finance and IT, I have worked in many large organisations, including P&O Nedlloyd NZ, Maersk NZ and Te Manatū Waka (Ministry of Transport) and Refining NZ. I have also held executive positions at the Ports of Auckland.

During my time there, I had the privilege of being able to work with two industry organisations, particularly focussing on the promotion of women within the industry. I chaired the Women's Forum of the International Association of Ports and Harbours and also help to found a chapter of the Women's International Shipping and Trading Association (WISTA) in New Zealand. I was fortunate enough to be elected to the International Board of WISTA, where I served for two years in the honorary position of the International Secretary of WISTA. Today I work for the New Zealand Red Cross as their Director People and Capability, where we mobilise the power of humanity to help the most vulnerable in society – logistics with a slightly different focus.

I joined CILT NZ a few years ago as I wanted to provide development and mentoring opportunities for my staff and put myself forward for election to the National Council last year as I wanted to help contribute to our strategic direction. I feel passionate about the importance of having an industry body that focusses on transport and logistics, because

of its strategic economic contribution to Aotearoa, the land that I love.

At the last National Council meeting, I put forward a draft strategy for consideration which I would like to share with you now. It is very simple, with three core areas that I believe we need to focus on to ensure we remain strong and relevant. I call it the 3Vs.



In each of these areas, there are some specific goals

### Visibility Goals

- Businesses in our industry know who we are and what we do.
- Members feel that they are recognised within their industry.
- Prospective members aspire to join us.

### Value Goals

- Businesses understand how we can promote them, support them, and develop their talent.
- Members feel that they are part of a professional organisation that can develop them personally and prepare them to excel within their industry.
- Prospective members see joining as the essential next step in their careers.

### Viability Goals

- Clear financial planning and reporting.
- Living within our means, increasing revenue, and decreasing cost.

The next step will be to identify some specific initiatives with clear and measurable outcomes so we can track our progress against the goals that we set. To do this we have formed three National Council sub-committees, with each focussing on one of the three areas, to develop the specific deliverables and plans to underpin the strategic framework.

It is hoped that in the next newsletter we will be able to share with the membership a "strategy on a page" so that we can get input from our members. Once finalised, we will use this to work with our branches and members, to lift the profile of CILT NZ.

This strategy has been designed to recognise that we exist to create value for our members, and that to do so we need to reach out to the wider community to show them what we can offer while ensuring we are careful stewards of the funds entrusted to us. It is my hope that we will all see the real potential to make a difference to individuals, businesses, the wider industry, and New Zealand as a whole as a professional body with members who are proud to be part of the world's transport and logistics community.

I look forward to getting out and about to meet the members and hear what you have to say. It's going to be an exciting year!



### 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.



Among the celebrated recipients of awards at the 2022 CILT Annual Awards Dinner were also new Life Chartered Fellows Murray King (left), William Frith, and Robin Dunlop with Diane Edwards, the new CILT NZ President.

## The CILT NZ Annual Awards Dinner

**THE SOUTHERN SECTION OF CILT** put on a great evening for the 2022 Annual Awards Dinner. Two hundred and twenty-five guests gathered in the Waitaki River Room at Te Pae, the impressive new Christchurch Convention Centre, to celebrate those who received awards.

The room was good, the food excellent, the networking fantastic, and the awards well deserved. All in all, a very successful evening. We are grateful to the sponsors of the dinner and of the awards, without whom we could not have run the event; and to CILT NZ's Awards Convenor, Fiona Knight, and the Southern Section, who made it happen.

### A tribute to Walter Glass

The event also evoked fond memories, with many sharing in a fitting tribute for one of the sector's most revered and remembered members, the late Walter Glass. Surrounded by family on the eve of Christmas, Walter, aged 66, passed away in 2021. Paying homage to his extensive career, the tribute reflected on his working knowledge and that, along with his passion and enthusiasm, being second to none - with much of his experience helping to connect New Zealanders with the world.

You can find a full-length tribute to Walter in the March edition of *Logistics & Transport NZ*.

### Sir Bob Owens Award Brodie Stevens



From one respected leader to another, the Sir Bob Owens Award for Outstanding Contribution to the Logistics, Transport, Supply Chain Sector and Community is widely recognised among the sector as the pinnacle of excellence. A memorial to the late Sir Bob Owens, it is somewhat fitting that this year's recipient Brodie Stevens could be blazing the same trail as the Hall of Fame stalwart himself, albeit with a subtle difference.

With strong associations with the late Sir Bob's home base in Tauranga and 14 years undertaking a range of roles with the Owens Group, Brodie's efforts have stood tall among his peers.

In a career spanning almost 40 years, Brodie is a trained lawyer and has held multiple key management positions, not least of all with the China Navigation Company trading as Swire Shipping. In his role as GM

Commercial for Swire in Singapore, many have commented that under his leadership, Swire has expanded significantly in the New Zealand freight sector, getting involved in international and domestic shipping, bulk shipping, integrated logistics and stevedoring, just to name a few.

Clearly, Brodie doesn't like to rest on his laurels as he has recently become a Board member for the Port of Tauranga, but has importantly retained a mentoring role in Swire.

Prior to taking up his role with Swire, Brodie's experience dates back to 1982, joining Freightways Group as a management trainee, before moving into the role of National Marketing Manager for Post Haste. From there, he joined the Owens Group and served as Divisional General Manager of Seatrans New Zealand and Owens Shipping Services before jumping ship to Swire.

Looking back on his career, Brodie was also a key player in forming CILT, and has retained strong links with the University of Canterbury by being a benefactor for the hostel College House.

So, as Brodie embarks on a new phase in his working life with the country's largest port, he will now join an honoured few as this year's Sir Bob Owens Award recipient.

## Napier Port Award for Safety Made Simple

C3 Logistics Ltd



Steven Davies of C3 being awarded by David Kriel of Napier Port

A short list of quality submissions for this award reflected some extremely high calibre options, though the result was a clear winner in favour of C3 Logistics Ltd. Recognising the design and implementation of their Log Vessel Grapple (LVG), this project has continued to deliver and impress on a number of levels as the concept is implemented throughout Aotearoa.

The fundamental concept of the LVG is to remove the need for any employees to be on the wharf during loading, in theory eliminating or significantly reducing the possibility of any incidents.

The vision first began in 2013 and has since involved the engagement of universities, international suppliers, internal expertise throughout the sector and contributions by Tauranga engineering company Page Macrae Engineering.

Setting out the objectives to cover vessel load rates, greater flexibility, capital cost viability, compatibility with supply chain equipment and an exclusive approach, the LVG ticked many boxes. The first grapple machine was put into action in February 2022, and since then has seen the first eight LVGs load more than 1 million tonnes of logs. Such is the success of the concept, a further 12 LVGs will be deployed into operations by the end of this year alone, paving the way for high demand and regular use, and proving itself as a safe and efficient log loading system.

Highly commended for their submission, Lyttelton Port Company put forward a



LPC Head of Marine Operations Andrew Van der Bent and former Senior Health and Safety Business Partner Arash Rastani

weather risk management procedure and ran through a detailed checklist before all vessels move to assess and manage safety when transferring at sea, specifically preventing pilots falling from ladders while boarding or disembarking from a vessel manoeuvre.

## Norman Spencer Memorial Medal for Contribution to Transport and the Institute

Cormac McBride



Hauling CILT out of the financial doldrums and into the future has been a key part of Cormac McBride's influence within the sector, taking over as National CILT President in 2017 and steering the Institute through some tumultuous times.

At the time of stepping into the President's chair, Cormac found the Institute with dwindling membership and income with a vocal resistance to change. But if CILT was to survive, significant change and true leadership would be needed – both of which Cormac was instrumental in.

Introducing a new finance and accounting system, cleaning up the membership database, writing off old debts, closing the official offices of CILT, spearheading a push for new membership, and overseeing the conversion of the then-printed quarterly magazine to a digital version were just some of the key milestones Cormac and the leadership team implemented, reflecting great courage and know-how.

It is this contribution that has seen Cormac awarded the winner of the Norman Spencer Memorial Medal, presented in honour of CILT's inaugural New Zealand president back in 1959.

Cormac has enjoyed a long history in the transport sector and has worked in some interesting roles during his time. His career has included time with the Intelligent Transport Systems Sector, Traffic Design Group, Hyder Consulting, Waka Kota NZ Transport Agency and even a stint as a traffic cop.

Speaking to the award, CILT Bay of Plenty/Waikato Section Chair Dave Stewart says

Cormac qualifies on every count and has left an indelible mark on CILT.

"Cormac is fearless and unfailing when faced with a challenge. He didn't just break the eggs to make the pancake, he drove a truck through the hen house with lights on and horn blasting. But the pancake was good, the goal was achieved and the efforts worthwhile."

Congratulations Cormac, and on behalf of all members, a big thank you for your contribution to the Institute.

## Other awards



In other awards, Ben Bowie (top picture) was named the recipient of the Opzeeland Award for Outstanding Research Achievement for a Master's Dissertation or Thesis 2022 for his focus on the impact of COVID-19 on Perishable Export Supply Chains in New Zealand.

The four judges unanimously agreed the thesis to be a solid piece of work, and well executed within the constraints imposed by COVID. The lessons learnt might be relevant sooner than expected given the increasing frequency of global disruptions to commerce and personal travel.

Meanwhile, capping off the awards function, joint winners Mobli and Super Shuttle NZ were named as recipients of the Dexion Award for Innovation. The award follows the design of a new user-friendly platform for booking shuttle transportation services, it also includes options for shared or exclusive rides and gives feedback to users and drivers to keep everyone up to date.



The room was good, the food excellent, the networking fantastic, and the awards well deserved. All in all, a very successful evening.



# CILT Young Achiever of the year

If success can be measured by hard work, there's little wonder as to why Andrew Daniell has been awarded CILT's 2022 Young Achiever of the Year award (sponsored by C3), recognising more than a decade of experience with Foodstuffs South Island and highlighting a career in management.

## ANDREW, WHO IS NOW RESPONSIBLE

for up to 80 staff on any one shift, recalls his initial opening with Foodstuffs as a part-time picker/packer during his final years of high school. Since that entry-level role, he has worked his way through the tiers and is now a Shift Manager - alongside eight other supervisors within his team at the Hornby-based distribution warehouse.

For Andrew, 28, the award came as "one helluva surprise" and something he was "stoked" to be recognised for. Adding to this proud moment were the numerous well-wishes and congratulatory messages from friends, family, colleagues, and senior management.

"It's given me great confidence to know I'm doing something right, and to be recognised across all different sectors of the business has been really cool," Andrew said.

"We also have a weekly newsletter come through from the GMs, and there was a wee mention in that, so it's great to have the recognition at that level too."

As Andrew continues to bask in the glow of the accolade, there's little time to enjoy the spoils as the orders continue to hit the packing sheets. It's back to business with Andrew and his team responsible for supplying supermarkets throughout the Foodstuffs chain with their orders in full, on time and without damage – 24 hours a day, six days a week.

It's no secret the industry has faced its challenges in recent years, like many sectors, struggling to find staff and navigating through long wait times for stock and international supplies to arrive. Though Andrew says the key has been flexibility and showing a willingness to adapt.

"There have certainly been some frustrations, particularly with staff shortages and illnesses, but as a business, we've been able to react and adapt to the situation at hand. We've done that really well, I'd say.

"If there was ever anything in the news, people seem to respond immediately. With the drop of the hat, we could find our order count increasing by 50 per cent, so we have



Young Achiever of the Year: Andrew Daniell

had to be very reactive, pull the right levers at the right time, change things around and adapt to things as and where we need to.

"The way we see it, if we can't supply the supermarkets, people aren't eating, so that's definitely a critical role that we play in the chain."

So, with the award now pride of place at home, what's next for this Foodstuffs' protégé?

"I've always had aspirations to continue moving up the chain, and I've been fortunate in my role to have a broad range of experiences and interactions with people that have really helped me develop. As for what's next, it's definitely exciting to see where it can go from here. I'm hungry to see what is out there for me and what the next

steps might be, so hopefully, I'll take the opportunities as they come.

"Overall though, people are definitely one of my passion points and I see that as probably the most rewarding yet challenging part of the job. The growth you see in people throughout this business is fantastic, and to play a part in that, that's what really gets me going."

Outside of work, Andrew is busy studying for a Diploma in Supply Chain Logistics, enjoys spending time with his partner and stepdaughter, and often frequents the gym. It is all a balancing act that fittingly reflects his organisational skills and leadership ability, and obvious attributes that have seen him recognised with this year's honour among his industry peers.



# Rising Star: Young employee of the year

When Tim Batchelor isn't out catching waves on the Canterbury coast, he's riding a surging career wave with Foodstuffs, knuckling down and showing exceptional talent and leadership at just 22-years-old.

**THAT'S WHY TIM** is this year's Rising Star Young Employee of the Year (sponsored by DRD Consulting), acknowledged for his efforts with Foodstuffs and the career progress he has achieved in what has been a matter of a few years with the distribution giant in Hornby.

And for Tim, who was simply minding his own business supervising his daily team of 10 employees (entirely oblivious to any awards function), the award certainly hit him from left field - leaving him speechless and "mighty proud".

"Honestly, it was kind of crazy being in that room for the awards evening, surrounded by the who's who of the industry. My heart was pounding when they were announcing the recipients, and when they said my name, it was such a surreal moment," Tim said.

Initially leaving school and taking up computer science and astrophysics at the University of Canterbury, it didn't take long for Tim to realise the lecture hall wasn't for him - prompting him to look for a new direction. And what better way to start with Foodstuffs than joining the crew as a store person in the chillers?

Taking little time to find his groove and understand the industry, Tim began to show immense promise and before long had worked his way through the ranks, first taking on the position of Inward Goods Supervisor, before moving into his present role as Supervisor of two departments in the Temperature Control Distribution Centre, located adjacent to the Foodstuffs South Island Distribution Centre in Hornby.

Adding to his credentials, Tim was fortunate enough to find himself being mentored by Nick Barnes – the current Supply Chain GM for Foodstuffs South Island – a beneficial opportunity and one that he remains eternally grateful for.

"To have Nick as my mentor and have him in my corner, it's incredible. It's amazing to be able to gain some great insights from his experience and learn really useful information from him, which will help



Rising Star Young Employee of the Year: Tim Batchelor

me reach my goals to move into a senior leadership role down the track," Tim said.

"For now though, it's about getting back to the warehouse, grinding away, building my skills and biding my time. I have always had my sights set pretty high, but first, I really want to set myself up for the future and that may mean taking on some more qualifications such as a supply chain degree and/or a diploma of sorts. Whatever is next, I think it's an exciting chapter ahead."

Outside of work, Tim loves to surf and often finds himself out at his favourite hotspots before work. He also enjoys playing country cricket with his older brother and in recent months has taken on golf, too.

"It's fair to say I don't like having too much downtime, and where possible, I try and pack

my weekends up as much as possible – that's just the kind of person I am.

"My partner and I have been together for six and a half years, and with her career as a florist, we often go out foraging around the red zone or out on the farm. There's always something to keep us busy. She's actually been such a huge support to me and my rock, particularly on those days that seem pretty tough. It's been great to talk things through and that's been a real key to this, so as well as my family, friends and managers, I really want to acknowledge her support."

So, with such a fantastic accolade now under his belt, Tim has put down a clear marker as one to watch going forward - and no doubt, this won't be the last time his name will be up in lights.





A 'shunt' service from the Rolleston hub with 44 wagons snaking through Lyttelton Port with the tail end still coming out of the tunnel. At over 700 metres long, these shunts can be longer and heavier than some of the main line trains. Photo: Glen Anthony

## Connect, build and grow

**IN AUGUST 2022**, Peter Reidy was appointed CEO of the country's rail infrastructure and freight company KiwiRail Ltd. It was his second time in the top job as he returned after four years away. Murray King talked to him about his observations on returning, and his vision for KiwiRail.

When Mr Reidy arrived back at KiwiRail in August, he said his return "feels like coming home", adding that KiwiRail is a "special place to be".

The environment now is different though, he says.

"Then it was about sustaining what you had from existing assets which were underinvested; now it is about growth, and driving performance from the significant Government investment to revitalise the New Zealand rail system. We're in a build and grow phase - unlike last time."

On his return, Mr Reidy embarked on a "voyage of discovery" around the business, meeting with customers, the Board, the leadership team, staff and government. He found pluses and minuses.

- Many things are working well and the grassroots spirit is good. "There is a level of passion and confidence in

the future of our industry, with people involved."

- In network planning and prioritising, procurement and delivery are gaining momentum in the context of the Rail Network Investment Programme (RNIP), which is integrated into the National Land Transport planning and funding system.
- The use of data has improved. "There are now better data platforms, and better business information – better commercial data about sectors, freight movement, utilisation and safety. This has enabled a better approach to pricing and yield, based on the economic value added, by customer."
- There has been "a marked increase in the value our customers – and their customers – place on sustainability and emission considerations. Export businesses are already under pressure to show their progress towards being carbon-free throughout the supply chain. Customers see that rail has a long-term future with long-term funding, and is a desirable transport option to help them meet their own sustainability goals."
- KiwiRail is working on end-to-end digital transparency. It has signed up to digitise

wagons to improve visibility of their location and provide real-time reporting. Crew rosters and timesheets have been digitised using modern systems. However, the train plan needs to be more flexible to adapt to change in customer demand.

- KiwiRail is leveraging off technology in other innovative ways, including e-learning and worksite safety protection.

However, there are also more changes needed to deliver on performance goals.

- The business needs to focus on consistent service reliability for customers, offering a clear point of difference in the product and service proposition for each market segment in freight and passenger.
- The 'Above Rail' customer operations have to be economically self-sustainable by 2025, with growth funded from cash flow. Future Government investment will only be available for network infrastructure such as bridges, viaducts, networks, sleepers and ballast through the RNIP, supporting rail as a platform for growth for all users.
- There are existing capacity issues in meeting growing demand due to years of underinvestment. However, there has been substantial investment in new



wagons in the last three years. New locomotive power, train control systems and shunt vehicles are all on the way and will enter service by 2025.

- Changing market demands, such as shipping lines now favouring 40ft containers, will need to be reflected in the wagon fleet.

He noted that safety had not improved since he left in 2018. “The systems and processes were okay, but the visible leadership around safety had flatlined.”

### Managing growth

Growth requires realignment across the business – reflected in the “connect, build and grow” strategy.

“With the funding now available, we can focus on getting stronger around our customer and product and service promise.

“Growth is quite different to business as usual, and we will need different skill sets – we will have to build the right people, platforms and systems for growth.”

With two new rail-enabled ferries being built in South Korea, and new terminal infrastructure to be developed in Wellington and Picton, an enhanced service offering and significant capacity uplift will come to market from 2025. “As well as being 20 per cent longer and 50 per cent wider than Aratere, there will be a 40 per cent reduction in Interislander carbon emissions on day one”.

Growth is already underway with a third daily train from Auckland to Christchurch, with 12 wagons. When the new Interislander ships enter service, there will be an opportunity for four trains. Mr Reidy says having that capacity will mean having to tap into new parts of the market, such as less time-pressured freight, or servicing different time-gates out of Auckland.

“The market elsewhere is also changing. The rise of freight hubs has changed the freight landscape in Christchurch, and in the North Island, the Tainui Ruakura hub could be a game-changer, rearranging the movement patterns for containers.

“Hamilton is the new South Auckland as far as freight distribution is concerned, and rail is a key part of the Ruakura offering.”

### Passenger rail

The latest KiwiRail Integrated Report says KiwiRail supports passenger rail and encourages the transport planning process for any new rail public transport service.

Mr Reidy says that as cities become regions, rail is the connector that unlocks value.



An artist's impression of one of the new Stadler locomotives KiwiRail has bought to service the South Island. Photo: KiwiRail

The fundamental step in getting a passenger transport service up and running is to get it into the regional plan so it can eventually be funded. KiwiRail is encouraging councils to engage with them on rolling stock, infrastructure and operational expertise when assessing the value add of a new service.

“The return from these trains accrues to the region in non-monetary ways, and that means the regions are best placed to fund them.”

### Decarbonisation

Mr Reidy says rail can be – and needs to be – a leader in shaping and driving sustainability across the whole of the supply chain, as well as reliability, safety and cost. As an example, work is well underway on a plan to decarbonise KiwiRail’s locomotive fleet.

Already KiwiRail is measuring its Scope 1 and 2 emissions (resulting from consuming fossil fuels and purchased electricity). It is now looking at its material Scope 3 (indirect) emissions.

“We also have a key role to play in other organisations’ Scope 3 emissions as part of their supply chains – our job is to help drive Scope 3 emissions reduction throughout the whole freight supply chain, building on our leadership in low-emissions freight transport.

“We are signing up for the Climate Leaders Coalition and are working to meet the requirements of its Statement of Ambition 2022.”

### Conclusion

Significant investment presents KiwiRail with a significant opportunity to revitalise rail in New Zealand. “A focus on ‘connect, build and grow’ will help deliver transformational change for our nation’s rail system, and build

a strong foundation for the future of New Zealand,” Mr Reidy says.

“Our culture will be the differentiating ingredient for our growth ambitions, which will focus on service reliability for customers and decarbonising the land transport system. Our sustainability initiatives will ensure we not only keep pace with the need for change, but lead the way.”



### Peter Reidy KiwiRail Chief Executive

Peter re-joined KiwiRail as Chief Executive in August 2022. He had previously held the same position from 2014 to 2018, before holding the role of CEO Fletcher Construction from 2018-2022. Before his time at KiwiRail, Peter was CEO of Downer New Zealand, and then held senior leadership roles with Downer Group in Australia and Singapore. He has also held senior leadership roles with Todd Energy and Freightways New Zealand. More recently, Peter was Co-Chair of the NZ Government Construction Accord.



# Auckland network rebuild

**KIWI RAIL RECENTLY ANNOUNCED** that major work will be required to bring the formation of the Auckland Rail Network up to scratch, ready for the workload that the City Rail Link (CRL) will impose on it, and for future growth beyond that. *Logistics & Transport NZ* caught up with KiwiRail's Chief Operating Officer Capital Projects David Gordon to talk about the project, known as the Rail Network Rebuild (RNR).

The aim of the RNR is to ensure the network is up to standard, is reliable, and can safely handle the growth that is coming, explains David Gordon.

"It is a major piece of work with upgrades focused on replacing the formation - the track foundation below the rail and ballast, across 15 per cent of the 184km Auckland Metro Network. That's the equivalent of building 26km of new rail line."

Auckland Transport (AT) will not be able to run more frequent services without this work being done and running more frequent services is the desired outcome when the CRL is completed in the mid-2020s.

"The CRL will change the way Aucklanders commute on their rail network. The current schedule will lift to greater frequencies, enabled by a CRL that substantially increases capacity within the city centre, and across the wider network. Higher service frequency, combined with a more reliable and resilient network, means Aucklanders can have greater confidence that they can get to where they need to be using rail as public transport. And these factors will also encourage more Aucklanders out of their cars and onto electrified rail - which will help reduce Auckland's transport emissions.

"The key priority for KiwiRail is to complete the majority of the work before CRL opens, while minimising the impact on commuters and ensuring our staff are kept safe. Doing the work after CRL opens would have introduced further delays and unreliability."

## Background to the RNR

Though there have been a number of rail improvement projects in Auckland over the last few decades - such as double tracking the Western Line, construction of the Onehunga and Manukau Lines, station rebuilds, new signaling, electrifying the network and new trains - the resulting growth in rail services



A dynamic track stabiliser. Photo: KiwiRail

in Auckland was not matched with funding for ongoing maintenance. This resulted in a reactive approach to maintenance and an increasing number of temporary speed restrictions being put on parts of the network, to ensure that services could continue to operate safely.

As well, due to the age of the Auckland network (which started being built in the 1870s) and service growth, KiwiRail has known for some time that formation on the Auckland network needed replacing at some point. Mr Gordon explains that as a general rule, 60-70 per cent of top faults (e.g., with rail or sleepers) are actually due to weaknesses in the formation, often caused by poor drainage.

In addition, construction standards have changed. What was acceptable in the 1870s suited the weight and speed of the rolling stock at the time - locomotives weighing 20-25t, on 3-4 axles (axle load under 7t) and very light wagons (only 10-12t gross on 2 axles, so the axle load was 5-6t). Even 100 years ago the largest locomotive weighed only 74t, with a maximum axle load of 14.6t. So, poorly consolidated fill and incompetent materials such as steam locomotive ash were acceptable to use.

Now locomotives weigh 108t, and wagons up to 72t, with the axle load in both cases 18t.

Passenger and freight traffic is many times that when parts of the network line was built, and runs at much higher speeds as well as heavier weights. Formation has to be properly designed and engineered to provide reliable and safe services.

Work of this scale, which essentially involves removing and replacing a rail line, requires significant planning, design and scheduling.

"We were at the start of this planning work when tiny cracks were discovered on rail lines in Auckland, caused by rolling contact fatigue between steel train wheels and steel tracks," Mr Gordon says.

"Emergency works to replace or repair damaged rail took precedence and were carried out over an eight-month period from August 2020. This work had to be done urgently so that trains could continue running safely.

"To also do the formation replacement work then would have required rail lines to be closed for longer, and we had not yet had the time to do the required planning to carry it out."

Planning for the broader renewals then resumed, with funding provided by Waka Kotahi NZ Transport Agency to meet revised costs for the project. Detailed discussions with AT about how to schedule the bulk of the RNR started in the second half of 2021.

The approach to carrying out the bulk of the RNR, including confirming the dates of the first two stages, was finalised in September 2022, and publicly announced the following Monday, 3 October.

“KiwiRail and AT’s aim was to inform the public about the schedule of work as quickly as possible after it was approved and the Minister and Mayor advised. Our focus was on ensuring there was enough time before the first stage of work began, for commuters to be made aware of the upcoming disruption and plan transport alternatives.”

### Why do the lines have to be closed for long periods?

“To actually do the work, the track and ballast have to be removed, and the existing formation dug out and replaced. To operate machinery safely during the work, the 25,000 volt overhead power lines have to be turned off, so electric trains cannot run, even on adjacent lines.”

To manage maintenance across an operational railway, KiwiRail generally works in short blocks of line spread over a longer timeframe. Given the scale of works required for the RNR, and with CRL completion being the key driver for delivery, Mr Gordon says a longer timeframe to carry out the work was not suitable.

“Once CRL is open there will be fewer windows available for ongoing routine maintenance. The RNR will raise the base standard of the network, allowing that standard to be maintained in the access windows available. Without being at this base standard in time for CRL, routine maintenance would not be able to keep pace with wear and tear, resulting in network performance deteriorating.

“If KiwiRail was to undertake the work in its existing Auckland maintenance windows – evenings, weekends and holiday periods – the RNR could take until 2041 to complete. This was considered unacceptable as it would mean ongoing disruption for much longer and would not allow for more frequent trains when CRL opens.”

KiwiRail and AT considered a complete network closure for a year to allow work to be carried out at numerous worksites across the Auckland Metro Network at one time. This was discounted in part due to the limited availability of labour and specialist rail equipment.



Old style formation building, Swanson 1941. Photo: Papers Past (NZ Herald)

“Even if more people were available, the physical constraints of the rail network with a narrow corridor and limited access points to get machinery to work sites would restrict the number of work sites that can be operating at any one time. Not to mention the impact on commuters would be far greater, given no metro rail services at all would be operating.”

Mr Gordon says a staged approach was considered the most realistic.

“We looked at several approaches, including a request from AT to maintain a level of commuter service by having single line running in the peak hours which would have seen trains travelling into Britomart in the morning and vice versa in the afternoon. This was discounted as it would have significantly extended the time to complete the works beyond CRL opening and would have increased safety and operational risks.

“The recommended option was to undertake the work by progressively closing segments of the network to commuter services. This option will see work in segments of the Auckland Metro Network completed prior to the opening of CRL with work on some lower patronage and outer lines taking place after CRL opens.

“Closing one segment at a time impacts fewer commuters as the rest of the network

remains open. It also provides incremental benefits with each reopened section of the network enabling more reliable commuter services.”

Mr Gordon says this staged approach also reduces safety and operational risks especially by being able to turn off the overhead power line and has realistic resourcing demand.

“It will improve productivity, by removing the need to repeatedly mobilise and demobilise to accommodate commuter services. Closing sections for a period of time allows us to create lay-down areas for our specialist machinery and equipment which will reduce bottlenecks and restrictions to our time schedule.

“Importantly it also allows the majority of rail freight to continue moving. Given Auckland is part of New Zealand’s busiest rail freight corridor any significant disruption to freight services would have had impacts across the national supply chain.”

KiwiRail will use a ‘design access’ approach to the work, which has shown a 300 per cent increase in productivity, when used in recent blocks of line.

The aim is to enhance productivity by ensuring different types of work flow immediately on from one another, with minimal mobilising and demobilising





Modern engineered formation, Tar Barrel deviation, Marlborough 2021. Photo: Tonkin and Taylor

downtime, and continuously enhancing production methods and implementing new value engineering. The intent is to improve productivity as processes and methods are fine-tuned during each stage of work.

More than 130 people will be working on the RNR, about 60 per cent KiwiRail staff and 40 per cent civil and specialist contractors. KiwiRail has doubled the number of its track teams in Auckland and has secured additional plant and staff from around the country to support them.

KiwiRail will also make significant use of specialist plant to increase safety and productivity such as panel lifters to remove large sections of rail and sleepers, stabilisers to shake and consolidate formation, and tampers to align rails and pack ballast underneath.

While approximately 90 per cent of services on the Auckland Metro Network are AT's electric multiple units (EMUs), Te Huia and the Northern Explorer will still operate as, like the freight services which will also continue to run, they are diesel-hauled and do not need the overhead power to be active. These services will be able to switch tracks to avoid worksites, and their infrequency, relative to EMU services, means any impact on work progress will be manageable.

### Maintenance practices

The programme of work methodologies, sequencing and modeling required to carry out the RNR were developed in consultation

with AT and Auckland One Rail and independently reviewed by UGL Australia.

Mr Gordon explains that KiwiRail is in the process of changing its approach to maintenance delivery and capital projects.

“We’re looking at every rail discipline and the systems, processes, equipment, training and work methodologies needed to support network growth and resilience.

“Over the next few years the entire approach to rail maintenance in Auckland will be redesigned to allow a more proactive approach, with much more efficient planning of line closures to minimise disruption.

“With the integration of CRL, automated inspection technology, early intervention maintenance regimes and greater use of specialist plant to maintain the metro lines, the aim is to significantly improve performance and productivity. This change process will take time, but we expect to have the proactive maintenance approach in place by the time CRL begins operating.”

### Summary

With a number of rail projects underway ahead of CRL, Mr Gordon acknowledges this is a disruptive time for Aucklanders.

“We’re working hard to co-ordinate and optimise what we’re doing so in time we can deliver a much-improved rail network for Aucklanders.”



**David Gordon**  
Chief Operating Officer – Capital Projects and Asset Development, oversees KiwiRail's strategic capital projects.

David joined KiwiRail in 2007 when he began working on the Wellington Regional Rail Programme as Project Director. More recently, David has held the roles of Acting Chief Executive, GGM Asset Management and Investment, and GM Network Performance. Before joining KiwiRail, he worked as a consultant in the transport infrastructure business, was Planning and Development head for Wellington International Airport and a Senior Manager in the strategy consulting team of Ernst and Young.

# Decarbonising transport: Let the market decide or help it to?

BY RICHARD MEADE

## THE IMPERATIVE TO DECARBONISE

transport systems is growing increasingly more urgent. However, the challenge is great. At its heart it is a collective choice problem, for which reliance on individual decision-making is far from guaranteed to produce socially desirable outcomes. At least in the timeframe over which meaningful decarbonisation is required, and in an efficient, equitable and orderly way. But there are policy levels – some perhaps counterintuitive – that can be used to accelerate the transition, and to ensure it progresses in such a “good” way. That is, if vested interests can’t be relied on to lead a socially desirable transition for their own reasons.

In other sectors like electricity generation, or polluting manufacturing, system-level changes can be implemented by influencing the behaviour of a manageable number of players. In transport, however, decarbonisation does not occur until millions of vehicle-owning households choose to adopt cleaner transport technologies or modes. Influencing their choices is much more challenging.

Doing so hinges intimately on other long-term choices those households make, such as where they choose to work and play, relative to where they live. Hence, even skyrocketing petrol prices will not be enough to induce rapid and widespread change in transport, given how costly it can be to change where we live and work.

Even if this were not the case, it would be a mistake to assume that decarbonising transport is something that will happen quickly, efficiently, equitably and in an orderly way if we all just “do our bit”. Such a decarbonisation also hinges on whether and how households collectively choose mutually reinforcing or conflicting alternatives to their polluting transport defaults. For example, if confronted with competing clean transport technologies, some households might opt for one (e.g., battery electric vehicles), while others adopt or await alternatives (such as hybrids, or hydrogen vehicles (H2Vs)).

Such potential for split household decision-making means that rival clean transport technologies may need to vie against each

other, in the face of a highly dominant fossil fuel default. That is a sure way to delay a transition to low-emissions transport, and to prolong the use of fossil fuel transport. Not least because of the scale economies and network effects inevitably featuring in the infrastructures required to import, produce, store and/or distribute the clean fuels required for low-emissions transport (e.g., BEV recharging networks, hydrogen production and refuelling, etc).

This points to even further dimensions of the collective choice problem in decarbonising transport. Whether or not households gravitate towards one or another clean transport alternative to their default polluting options will determine whether the infrastructure required to refuel that technology is viable or not. But of course, this is a chicken and egg problem – households will be more likely to gravitate towards the solution that promises them the greatest convenience and reliability of accessing clean fuels, when and where they need them. Who blinks first? How much transition occurs in a timely way if the mass market chooses not to blink at all?

It is tempting to think that these coordination problems will be adequately addressed through either technical considerations or pricing mechanisms alone. Neither is adequate. The “well to wheel” efficiency of BEVs is often touted as a reason why other technologies like H2Vs either will not, or should not, be the successor to fossil fuel vehicles (FFVs). But FFVs are even less efficient, yet for most vehicle owners they still represent the most compelling choice in terms of upfront cost, convenience, and performance (even if current rocketing fuel prices make their running costs uncomfortably high).

Likewise, even if mass-market BEVs were available at prices most households could afford, that would matter little if recharging infrastructure was not available to ensure timely and convenient recharging. Conversely, having all the recharging infrastructure needed would matter little if vehicle manufacturers were not producing the types of vehicles necessary to induce households to abandon their existing vehicle choices.

Clean energy infrastructures represent a “platform” linking clean vehicle manufacturers on the one side with households who might buy and use their vehicles, on the other. All three elements need to come together for a clean transport transition to occur.

Current fuel prices might affect short-term decisions by vehicle suppliers, refuelling infrastructure suppliers, and vehicle-owning households, but only “at the margin”. It would take major changes in vehicle and other (e.g., housing) prices to induce material mass-market changes in vehicle ownership and usage – e.g., the running cost of BEVs isn’t a barrier to their uptake, but high upfront vehicle costs and anxiety about accessing recharging infrastructure are. In turn, it would take major shifts in consumer preferences to induce infrastructure investors to make the long-term investments required to ensure convenient and reliable clean refuelling supply.

So, how to resolve the chicken and egg problems associated with transitioning to clean transport? A radical approach would be simply to ban the use of fossil fuels – in principle, something that could be done overnight by legislation. However, that would clearly be economically disruptive – indeed, destructive – and highly impractical. Any better way has to involve presenting households with a compelling alternative to their status quo transport options. Vastly improved public transport, and urban redesign centred around active and public transport, could achieve this to a degree, but not for all households (e.g., those in less-populous areas), and certainly not in any short timeframe.

Another way is to rely on vested interests to roll out clean energy infrastructures for their own purposes. Coal mine and factory owners in Industrial Revolution Britain are an example, who built canals and railroads not because they saw these as profitable public transport ventures, but because it made their existing activities more profitable. A modern equivalent is BEV manufacturers in major markets like the US rolling out recharging infrastructure because that helps them to sell more vehicles.



A similar example closer to home is the Hiringa joint venture, which is developing hydrogen supply and refuelling infrastructure for heavy transport, benefitting both the suppliers and users of such transport. So long as such vested interests align well with wider social interests, this could be a highly effective way to roll out a clean energy infrastructure that ultimately serves the mass market as well, in a timely, efficient, and orderly way (if not necessarily in an equitable way).

But what about vested interests that might be opposed to such a rollout? The owners of fossil fuel infrastructures might prefer that there be no transition to low-emissions alternatives, so they can profit longer from their existing activities. That could change, of course, if they could be sure that repurposing their existing activities to clean alternatives – e.g., biofuels, e-fuels and/or green hydrogen – had a sufficiently large customer base.

This is where policy could play a role. One possibility would be for government to mandate a particular clean energy platform, which would alleviate chicken and egg problems between investors in the required infrastructures, and for households contemplating which clean vehicle technology to adopt. It would also be highly risky, especially if the mandated technology became out of step with later directions taken by vehicle manufacturers and fuel suppliers. It would, however, accelerate the transition to a new clean transport technology, even if not to the new clean technology (assuming ongoing technology change won't lead to a variety of new clean technologies anyway – e.g., personalised flight).

Another possibility would be to use “franchise bidding,” by which a time-limited monopoly right to build a clean transport infrastructure could be auctioned to the highest bidder, on a technology-agnostic basis, and with prespecified requirements for how any transition to such a new technology might proceed (i.e., to achieve a timely, efficient, equitable and orderly transition). Prices for using the new technology could be regulated to address market power concerns, and any auction proceeds could be hypothecated to subsidise the uptake of the required clean vehicle technology (addressing equity concerns, and creating a virtuous circle for uptake). A similar approach is often used to accelerate the development of toll roads and other infrastructures. It was also used in New Zealand to accelerate the uptake of fibre-based broadband in New Zealand.

Perhaps counter-intuitively, creating such a monopoly right can improve competition – albeit competition for the market (i.e., for a

clean transport platform) rather than in such a market (i.e., having multiple clean energy rivals). In network industries this can be the preferable route to simply letting alternatives compete, since it helps to accelerate the achievement of scale economies and network effects (i.e., by using a clear platform choice to better coordinate synergistic decisions between vehicle manufacturers and users).

Importantly, such an approach would also fundamentally change the incentives of existing fossil fuel suppliers regarding the rollout of clean energy alternatives. As above, by creating a clear pathway forward to households in terms of which vehicle technology to pursue, this could make the demand for, and hence economics of, repurposing existing fossil fuel infrastructures to clean alternatives more compelling.

More fundamentally, even if fossil fuel infrastructure owners would prefer no clean transition at all, by a franchise bidding auction being held they face the prospect of being left owning sunset assets while some other party reaps the benefits of the rising infrastructure. Hence, while they might prefer there was no auction at all, if it was to be held, their least bad outcome would be to win it (given it confronts them with a prisoner's dilemma). Since the cost of repurposing their existing infrastructure might be less than that of building a new one, this could also be highly socially efficient. Once again, New Zealand's rollout of fibre-based broadband provides an illustration – most of the rights to roll out fibre went to the incumbent owner of the country's copper network. That operator had a head start in rolling out and managing communications infrastructure.

In fact, there are a great many policy levers that might be deployed to accelerate decarbonisation in transport. I compare and critique them in a report prepared late in 2021 (available at <https://bit.ly/3XSE643>). If combined well, they too might ensure the transition is timely, efficient, equitable and orderly. However, whether a suite of such policies is deployed, or other measures such as those discussed above, any transition to clean transport will need to resolve chicken and egg coordination issues of the sort outlined in this article, with commitment to a particular clean energy infrastructure being an important way to do so.

Leaving competitive forces to resolve the coordination problem is definitely an alternative approach. However, platform competition – of the sort of characterising competition between infrastructures – does not ensure socially desirable outcomes, especially if the clean transport transition is to occur in a timely, efficient, equitable

and orderly way (and not necessarily at all in terms of equity – since competition at best promises efficiency, and not even that in the presence of scale economies or market imperfections).

Competition between clean energy infrastructures could worsen strategic uncertainty for households regarding which clean alternative to choose (for fear of choosing the wrong one), as opposed to whether they should transition to a clean alternative to FFVs or not. Or it could result in an inferior clean technology becoming entrenched, delaying the uptake of a better one. Or it could simply prolong the dominance of strong, incumbent fossil fuel technologies. Hence there is reason to consider whether the market should be left to decide how to transition to clean transport, or whether it might need help – through policy choices – to do so. Especially if the clean transport transition is to be timely, efficient, equitable and orderly.



### **Dr Richard Meade**

Principal Economist at Cognitus Economic Insight, a Research Fellow in economics and public policy at the Auckland University of Technology, and President of the Law & Economics Association of New Zealand. Through Cognitus, he has undertaken a range of studies exploring policy and regulatory responses to technology and business disruptions in transport and energy sectors. Richard holds a PhD in Industrial Organisation and Regulation from Toulouse School of Economics. Research funding for the 2021 study cited in this article was provided by companies owning electricity and/or natural gas distribution networks. The views expressed in that study, and this article, are the author's alone.



The beginning of the fit out of the tunnels as part of the City Rail Link project. Photos: City Rail Link

## 2022 a year of achievements for City Rail Link

BY SEAN SWEENEY

**THE CITY RAIL LINK** is now past the halfway mark and has achieved some significant milestones this year.

Most notably, in September our team made the final of four tunnel breakthroughs at Te Waihorotiu Station (Aotea), marking the completion of twin 1.6km tunnels up to 42m below New Zealand's busiest and biggest city, Auckland.

This is a major achievement, something which has never before been attempted in New Zealand. The tunnels are the cornerstone of the country's first rapid transit rail network and will enable a transformational change in Tāmaki Makaurau.

It is worth noting some of the logistical achievements during the tunnel-boring phase: The Tunnel Boring Machine, Dame Whina

Cooper, travelled more than 3.2km, placed 2,118 segment rings and removed 260,000 tonnes of spoil. More than 64,200m<sup>3</sup> of concrete was used to build the tunnels, the equivalent of 25 Olympic-sized swimming pools.

Now the tunnelling is complete, we have transitioned from civils to systems and the fit-out of the stations and tunnels. We are making good progress in building the two new stations at Karanga-a-Hape and Te Waihorotiu, while the work on the tunnels themselves is truly a fit-out for our future.

This includes installing the tracks, sleepers, electronics, safety systems and other essential componentry. The logistics involved are boggling: more than 16kms of rail track, 816kms of signal cables, 247kms low voltage

cables, 86km traction cables, 74kms cable containment, more than 5,100m<sup>2</sup> metal cladding and more than 4,000m<sup>2</sup> of glazing.

We've also established a systems integration facility (SIF) at the old Chief Post Office, recently reopened to public acclaim, to integrate the CRL software and hardware into the KiwiRail and Auckland Transport systems.

As anyone who follows transport infrastructure projects knows, this programme of work is difficult and critical to the success of the CRL when it opens.

It's taken seven months to acquire all the software and hardware (COVID-19 disrupted the supply chain), with two kms of cable required just to connect the SIF and before it is even integrated into the system.





The final breakthrough and completion of tunnelling the City Rail Link.

It will take significant innovation to design, build and integrate the system, with an 18-month timeline for completion.

COVID has impacted all facets of the project, from loss of workers and hours, labour, shipping and materials costs to supply chain disruption and resource constraints. During the past two years we have had four lockdowns totalling 9.5 months, 280 days' restricted working conditions, 3.2 million hours lost through illness to the year June 2021 and more than 800 workers struck down with illness.

To describe these conditions for building New Zealand's largest transport infrastructure project in its history as 'challenging' would be a massive understatement.

It's important people understand that the project would still be within its budget and timetable if COVID had not hit. Cost and time overruns for major infrastructure projects are a global problem and under COVID conditions these problems have metastasised.

In Australia, state governments have spent 21 per cent or A\$34 billion more on transport infrastructure projects than budgeted for, and mega-projects in Australia were 30 per cent over budget on average.

The CRL has its critics – people with actual experience of building large infrastructure,

however, are notably absent – but we would have been targeting to deliver to budget and on time if it were not for a once-in-a-Century event called COVID.

It is also worthwhile to focus on the benefits the CRL will deliver: a world-class underground rail network capable of carrying up to 54,000 per hour; a doubling in capacity across the rail network; a train arriving at a CRL station in less than 10 minutes; improved travel options and a doubling of the number of Aucklanders within 30 minutes of the CBD.

The CRL will also deliver significant economic benefits. A PwC analysis found the CRL will deliver total economic benefits of \$11.9 billion in the 60 years from 2022. The biggest impact is on travel time for public transport users, which PwC has assessed as delivering \$4.543 billion in benefits across the next 60 years.

Agglomeration benefits worth \$4.229 billion are also delivered via the project. Agglomeration is a broad-based measure that accounts for the additional employment density and business investment which is expected to occur with the CRL. This leads to a corresponding lift in GDP as a result of increased productivity and economic output.

The significant economic benefits serve to reinforce the importance of the project and more than justifies the public expenditure to complete it.



#### **Dr Sean Sweeney**

He began work as the Chief Executive Officer of City Rail Link Ltd on 2 July 2018. He is an engineer with a PhD in construction economics from the University of Melbourne. On his appointment, City Rail Link Ltd board chair Sir Brian Roche said Dr Sweeney brought a wealth of relevant and current experience to the position, as well as a strong academic background. He said both of these put the CRL project in a great position as it heads towards the delivery of major contracts.



# Sea rise: Preparing for changes to people and businesses

Global warming and the resultant rise in sea levels have started to impact our day-to-day life, but its effect on the future of Aotearoa New Zealand and the rest of the world is largely unknown.

As a response to the uncertainty surrounding the impact of global warming on New Zealand's coastal areas, the Ministry of Business, Innovation and Employment launched a five-year research programme in 2018 titled NZ Searise: Te Tai Pari O Aotearoa.

The \$7.1 million project is hosted by Victoria University of Wellington and led by Associate Professors, Richard Levy and Tim Naish. The programme will find accurate predictions of sea level rises in Aotearoa New Zealand, to the year 2100 and beyond.

With the two biggest contributors to international sea-level rises being the thermal expansion of the oceans and melting polar ice sheets, measuring the impact of this, vertical land movements and changes to sea-surface height will provide information necessary to mitigate risk. This will help us forecast what is best for New Zealand and the plethora of industries and businesses most likely to be affected.

The transportation industry's connection to this threat is twofold. Mobility plays a vital role in society and whilst transportation has been engineered to withstand changes in weather and temperature, there is no way to rely on historical climate predictions for global warming's future risk. Also, the transport industry is typically one of the greatest producers of greenhouse gases, and whilst there must be ways to maintain efficient and accessible transport for all, it must not jeopardise the planet's health.

As climate change increases the frequency and intensity of extreme weather events, as seen recently here in Nelson and abroad in Pakistan, heat waves are expected to be more severe (like in China), and sea levels may increase the number of storms and throw up more intense precipitation. These changes would increase the risk of delays, disruptions, damage, and failure across land-based, air and marine transportation systems. It is for reasons such as this, and many others, that the work of NZ Searise is so vital, so we can

come to understand how the Earth's future climate may affect investments in the past, present, and future.

So far, the NZ Searise programme has released location-specific sea level rise projections to the year 2300, for 2km of the coast across the country. These projections can be explored through an online tool developed by Takiwā, a data management and analytics platform. New Zealanders will have the ability to see how much and how fast sea levels are set to rise beside their stretch of the coast. This means they will be able to see how this force of nature is set to impact them and their neighbourhood.

With this tool, users can click on a particular location on the coast and see how much the sea level is expected to rise and by when under different climate change scenarios. Currently, the sea levels rise on average is 3.5mm per year. This rise is caused by the thermal expansion of the ocean, melting glaciers and the melting of Greenland and Antarctic ice sheets. However, sea levels are also expected to rise due to the up-and-down movement of the land. These vertical land movements take place when we experience earthquakes.

During this time there are less obvious shifts taking place. These smaller shifts occur continually and take place in and around the larger seismic events. These incremental changes build and in areas that are subsiding, the annual rate of sea level rise can in fact double. This vertical land movement data has been linked to climate-driven sea level rises, providing locally relevant sea level projections.

In preparation for such sea level rises, organisations such as Waka Kotahi NZ Transport (NZTA) and KiwiRail have begun to factor this thinking into their infrastructure costs, overall sustainability, and the vast majority of upcoming projects.

In fact, as part of this planning, KiwiRail is working to improve its asset management systems, which heavily include climate change adaptation. KiwiRail Chief Operating Officer Rail Operations Siva Sivapakkiam says this work will assist KiwiRail in improving network resilience, including the effects of the future impact of climate change.

"Engineering and design specifications will be critical to this process of integrating climate risk and resilience into the overall asset management system," Mr Sivapakkiam says.

"It is likely that increasing the resilience of new and existing assets to withstand the impacts of climate change will have additional costs associated with it, and that's something we have to be prepared for."

As part of KiwiRail's Resilience Programme, potential sites exposed to sea level rise and other climate change impacts have been listed, and are subject to greater design protection. For example, the new Interislander terminal programme and Drury Railway Stations are both identified as needing additional focus on combating the effects of sea levels rising and climate change-driven events.

Much the same as KiwiRail, NZTA is taking a serious long-term approach to climate adaptation, with extreme weather and the frequency of events continuing to place growing stress on the organisation's capacity and funding.

NZTA National Manager Programme and Standards Vanessa Browne says they are addressing the impacts of climate change in their emergency works programme, including mounting disruptions and expenditure, through the development of a Climate Change Adaptation Plan.

"The Plan will outline the priority actions and approaches WK will take to enable the land transport system to prepare for, and respond to, the effects of climate change," Vanessa says.



# Paving the way for other vulnerable contractors

In its landmark decision issued on 25 October 2022, the Employment Court held that four Uber drivers were employees, not independent contractors.

BY ANNE WILSON

“By the end of 2022, NZTA will publish and begin applying our Climate Adaptation Plan. We’ll also develop a separate implementation plan and monitoring framework alongside the Plan, with the Plan translating the priority actions into specific activities with associated timescales, ownership and resourcing.”

Ms Browne pointed out NZTA is starting to look at investment policies, processes, tools and guidance to best support any required response - as well as building climate change adaptation into their infrastructure planning.

“This includes looking at climate-related risks to strategic assets, specifically project assessments and requirements. The climate and geography of New Zealand mean that most parts of our transport system are vulnerable to the impacts of rising sea levels and natural hazards, such as severe weather and seismic activity.

“We can’t stop these events from occurring, but it is important to prepare for them and build resilience into the transport system and that’s what we continue to do.”

Within our own logistics transport sectors, NZ Searise’s data will help us prepare for changes to people, businesses, and industries like ours. The findings will also be used to update the previous iteration of the Coast Hazards Guidance document for the Government, which advises communities, planners, businesses and infrastructure providers across the country on how best to adapt to avoid drastic coastal hazards.

Whilst we can better prepare through the work of NZ Searise, we can trust that the innovation and development of automated mobility and intelligent traffic management systems will point the transport industry towards a cleaner, greener future - and with major organisations clearly marking this area on their radar, the industry appears to be in safe hands moving forward.

For more information, visit [www.searise.nz](http://www.searise.nz)



The Employment Court’s decision that four Uber drivers were employees may have broader impacts on the company given the uniformity of the way it operates. *Photo: Supplied*

The decision highlights the importance of properly classifying workers and the growing risk that technology platforms and companies using gig workers could be in breach of minimum employment standards. The decision contrasts with the Employment Court’s previous decision in 2020 also concerning the status of an Uber Driver, Mr Arachchige, that held he was an independent contractor.

The status of a worker as either an employee or independent contractor is important because it determines the worker’s right to claim minimum legislative entitlements including the minimum wage, holiday pay and compulsory employer contributions to KiwiSaver. The Courts will consider relevant factors to determine the true nature of the relationship irrespective of the contractual arrangements in place.

Other jurisdictions including the UK, Australia and Canada have considered the same issue with mixed results.

## Arachchige decision – Arachchige v Rasier NZ Limited and Uber B.V.

Mr Arachchige was an Uber driver from 2015 until he was dismissed in 2019. He sought a declaration from the Employment Court that he had been a driver of Uber and therefore could raise a personal grievance for unjustified dismissal and minimum employment entitlements.

Uber argued that Arachchige was an independent contractor, or a ‘driving partner’ and this was reflected in the contracts he had knowingly signed. It said that Mr Arachchige was allowed to run his own business, paid his own insurances, maintained his own car, had the ability to decide his own hours and seek work through other ride hailing platforms.

Cont. on page 20

Arachchige's lawyers argued that Arachchige was simply a driver for Uber without any potential to grow his business or have a share in the corporation's success, and that this work did not reflect the true definition of an independent contractor. Arachchige had no input into pricing strategy, operational policies, the community guideline policies or any other terms and conditions. There was a complete imbalance of power and Arachchige had no seat at the 'partnership' table, therefore he was an employee for the purposes of section 6 of the Employment Relations Act 2000.

The Employment Court ultimately decided that Mr Arachchige was an independent contractor focusing on the intent of the parties that Mr Arachchige would operate his own business in the manner, and at the times, he wished and found that Uber did not direct or control Mr Arachchige.

### Latest decision – E tū Inc & Another v Raiser Operations BV & Others

The most recent case centred around four Uber drivers who had written agreements with Uber at different points between August 2016 and May 2022. The written agreements all specified that the Uber entities were not employers but rather simply providers of the App that connects drivers to the digital platform and facilitators of the interactions on the platform.

Uber's position was that the written agreements accurately described the relationships and that the four drivers were independent contractors. The four drivers sought a declaration that the real nature of the relationship was that of an employee and employer.

In reaching her conclusion, Chief Judge Inglis acknowledged the Employment Relations Act's purpose to protect vulnerable workers and minimum employment standards and, in doing so, adopted a broad approach to the interpretation of the definition of employee in section 6 of the Employment Relations Act saying that:

"Employment Relations legislation calls for an interpretative approach which acknowledges and advances the underlying social purposes of the statute.

"In a nutshell, the question to be asked and answered is whether section 6 construed purposefully, was intended to apply to the relationship at issue when viewed realistically."

The Court followed the leading Supreme Court case on employment status, *Bryson v Three Foot Six* decided 20 years ago before the emergence of gig economies

and technology platforms. In that case, the Supreme Court held that a non-exhaustive list of factors needed to be weighed to reach a conclusion, although the traditional fundamental test and tests of integration and control were still useful in determining the true nature of the relationship.

Judge Ingles highlighted six matters that were relevant to assessing the real nature of the relationship between the drivers and Uber which were:

- the nature of the Uber business and the way it operated and practised;
- the impact of the Uber business model and its operation on the drivers;
- who benefited from the work undertaken by the drivers;
- who exercised control over the drivers' work, the way in which it was conducted and when and how it was conducted;
- any indications of intention, including what can be drawn from the nature, terms and conditions of the documentation between the parties; and
- the extent to which the drivers identified as and were identified by others as part of the Uber business.

The Employment Court held that the drivers were subject to very effective direction and control exercised by Uber in a subtle way, including via the rating system, the incentive scheme, prompts, "encouragements", a warning system, the disciplinary system and deactivation. The Uber drivers were not in business for themselves, they had no ability to set their own rates, market themselves or to contact their customers. The only way they could increase their earnings or profits was to work longer hours. The flexibility and choice the drivers had was common in employment relationships and not exclusive to a contractor relationship.

In dealing with the previous Arachchige decision, Judge Inglis noted that, although consistency of approach is desirable in the Employment Court, it cannot be the controlling principle and the case must be dealt with on its own merits by applying the applicable law to the facts. It was for the Court of Appeal and the Supreme Court in New Zealand to right the course if that was appropriate.

### The implications of the decision on Uber

Judge Ingles acknowledged that the Court's latest judgment only applied to the four drivers but emphasised that it may have a broader impact on Uber given the uniformity of the way it operated. Uber will appeal the

decision. But, in the meantime, the Unions that supported the case are now calling for other Uber drivers to come forward to claim their minimum employment rights and, in doing so, to join the union. So, we can expect to see significant back pay claims and the unionisation of Uber's workforce if the appeal is not successful.

While some may lament what appears to be the beginning of the end of cheap rides, most of us wouldn't complain if this decision meant our friendly Uber drivers walked away with more in their pockets or alternatively, had more control over their businesses.

### What does this mean for employers?

Employment status cases are very fact specific and do not have a direct application to others. However, businesses that use gig workers should be reviewing their contractor arrangements in light of the above decision. Further, all employers who use independent contractors should regularly review the status of the relationship to ensure that its workers are properly classified and that it is meeting minimum obligations.

Employment status is the gateway to minimum employment rights and protection from exploitation. Not only will this decision protect workers in the merging gig economy, but it will continue to pave the way for other vulnerable contractors such as courier drivers and food delivery drivers to bring claims seeking to enforce minimum employment rights.

The New Zealand Government is currently considering reforming the law around the classification of employees and minimum rights for contractors but no legislation has yet been introduced and we are unlikely to see any certainty in this space for some time.



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