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**Rethinking infrastructure performance** Breaking new ground with New Zealand's first AutoStore New research identifies disturbing behaviour at level crossings



The Chartered Institute of Logistics and Transport

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#### ON THE COVER

Nearly half of New Zealand motorists do not always stop at level crossing 'Stop' signs or prepare to stop at 'Give Way' signs, a new study has found. *Photo: TrackSAFE NZ* 



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#### In the next edition

The editorial team welcomes expressions of interest for submitting an article for the September 2025 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 September 2025 edition: 8 August 2025.** 



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# TruckSafe sets a new benchmark for transport safety in New Zealand

A MAJOR STEP toward lifting safety, wellbeing, and compliance standards across New Zealand's road freight industry has been launched with the rollout of TruckSafe New Zealand, an independently audited, industry-led Safety Management Accreditation System.

Developed by the New Zealand Trucking Association (NTA), the initiative is now live and accepting operator registrations.

TruckSafe's release marks a coordinated response to persistent challenges in the transport and logistics sector, chiefly, the high rate of workplace injury and road fatalities, especially among heavy vehicle operators.

But it also reflects a growing appetite among operators to professionalise and future-proof their operations.

"This is about more than compliance," says David Boyce, CEO of the NZ Trucking Association and Director of TruckSafe New Zealand.

"TruckSafe certification is a way to show customers, contractors, and the public that you're committed to professionalism, safety, and continuous improvement."

At its core, TruckSafe is a comprehensive risk management system. Members are independently audited against a set of standards covering critical safety and operational areas such as driver competency, fatigue management, mass and load restraint, medical checks, training, vehicle safety, and systems for well-being and assurance.

Auditing is carried out through the digital platform Audit Compliance Solutions, delivered by Avid Plus. The use of digital onboarding and GAP analysis tools aims to make participation efficient and scalable, especially important for small operators who may lack internal safety infrastructure.

"We believe that TruckSafe will have a profound impact on road safety and operational standards," says Robyn Bennett of Avid Plus.



"Avid Plus is proud to be part of this transformative initiative, working together to achieve safer roads and healthier workplaces."

TruckSafe is designed to be accessible to all operators, from large transport companies to individual owner-drivers. This inclusivity sets it apart from many other schemes. Small operators, often the backbone of rural and regional logistics, will now have access to formalised guidance and support to help them meet the same level of compliance as their larger counterparts.

The programme's architecture is built not only around what's required by regulation but also around what's practical and effective for real-world operations. Key benefits for operators include:

- Improved safety and reduced
  exposure to harm or enforcement
  actions
- Greater competitiveness in tenders and commercial relationships
- Streamlined compliance and operational management tools
- Reduced insurance claims and vehicle incidents
- Recognition of commitment to worker well-being and ethical practice

"Unless we take a collaborative, industry-led approach to compliance, the injuries, fatalities, and costs will continue to rise. TruckSafe is our opportunity to change that trajectory, together," Mr Boyce says.

Participating operators join a national network of accredited businesses, each committed to lifting the standard for New Zealand's heavy transport sector. The TruckSafe team provides support throughout the accreditation process to ensure operators understand and meet the required benchmarks.

TruckSafe operates under the umbrella of the Transport Well New Zealand | Kawe Pai Aotearoa Charitable Trust, a newly established body with a systems-thinking approach to improving industry outcomes.

The Trust seeks to create better safety, mental health, and well-being outcomes by connecting workforce, regulatory, and operational systems in ways that enable long-term change.

This whole-of-sector lens is particularly relevant given the industry's staffing challenges, ageing driver workforce, and rising pressure on operators to do more with less. TruckSafe is one part of a broader commitment to respond to these issues with practical, scalable tools.

While TruckSafe is distinctively tailored for the New Zealand market, the move aligns with wider international efforts to improve safety outcomes in transport. In March 2025, the Australian Institute of Health and Safety welcomed a federal government funding boost to strengthen driver safety through the Healthy Heads in Trucks & Sheds initiative.

That programme, aimed at building psychological safety and workforce resilience, represents the kind of public– private partnership that could inspire complementary action in New Zealand.



TruckSafe is designed to be accessible to all operators, from large transport companies to individual owner-drivers. *Photo: Transport Well Charitable Trust* 

# WHY TruckSafe?



State Highway 1 crash: One dead, multiple injured after car and truck collide, four helicopters sent

### Fiery truck and car crash in central Hamilton

### One dead, four injured after truck and car collide

Two dead after separate crashes involving trucks in Hastings and Tararua

**Truck crashes into barrier, closing** SH1 in Auckland

#### To find out more and register your interest visit www.trucksafe.net.nz

What sets TruckSafe apart, however, is its industry origin and operational focus. Rather than waiting for regulation or funding, the New Zealand trucking industry has taken the lead in designing a solution that reflects both their operational realities and their collective aspirations.

The TruckSafe platform is now live. Operators can visit **www.trucksafe.net.nz** to learn more about the standards, register their interest, and begin the process toward accreditation. As part of its launch, the NTA is actively encouraging collaboration with government agencies, insurers, regulators, and commercial clients. Their support is seen as key to helping TruckSafe become a recognised, trusted badge of safety and professionalism across the industry.

"TruckSafe is built by the industry, for the industry," Mr Boyce says.

"It's our opportunity to lead from the front and set the standard for a safer, stronger transport sector."

# Rethinking infrastructure performance: How benchmarking can guide smarter investment

BY SHAMSHEER BENEPAL, BE (HONS), ME CIVIL ENGINEERING

NEW ZEALAND'S transport infrastructure is under increasing strain, from aging assets and climate resilience challenges to surging freight demands and limited public funding. With more than \$600 million invested annually in road maintenance alone, the question facing infrastructure leaders is clear: Are we investing wisely enough to build the resilient, efficient networks our economy demands?

A master's research project was undertaken at the University of Auckland in 2023/24 to help answer this question, supported by the New Zealand Transport Agency's (NZTA) Road Efficiency Group (REG) and under supervision from Dr Theuns Henning and Dr Seosamh Costello. The thesis, titled *Refining* the benchmarking of New Zealand RCAs through the Data Envelopment Analysis Technique, developed an objective, databased benchmarking framework to contribute to smarter, evidence-based guidance for infrastructure investment decisions. Engineering New Zealand has also recognised the impact of this research by awarding it with the Transportation Group's Tertiary Study Grant.

## The case for smarter infrastructure investment

Since the post-Global Financial Crash funding cutbacks, the condition of New Zealand's transport networks, particularly roads, has steadily declined, even as demand has increased. The 2024 Government Policy Statement (GPS) on Land Transport acknowledges this tension and shifts the focus from simply spending more to spending more effectively. That means using evidence, performance, and resilience as the new foundations for investment decisions.

To deliver value for money and better outcomes, infrastructure funding needs to be underpinned by accurate, consistent, and objective performance assessments something our current tools don't always provide.



High-level view of road networks in different regions, depicting variations in asset condition.

## The problem with traditional evaluation

Today, Road Controlling Authorities (RCAs) are assessed largely through self-reported frameworks assessed by NZTA and REG. These systems, while well-intentioned, may lack the consistency needed for fair cross-region performance comparisons. Yet they influence real-world decisions, such as funding allocation, asset planning, and strategy.

When performance assessment lacks objectivity, it becomes difficult to identify underperforming areas, make targeted improvements, or invest with confidence. This is where this research offers an alternative.

## A better benchmark for performance

This research introduces a more objective approach by utilising a globally recognised methodology known as Data Envelopment Analysis (DEA). Already widely used in logistics, healthcare, and finance, DEA enables fair benchmarking by comparing how effectively different organisations turn their resources into results.

Applied to New Zealand's RCAs, this model accounts for key factors like cost per kilometre and network condition. Crucially, it adjusts for local differences, such as traffic volume and the level of urbanisation, giving each authority a fair and realistic efficiency score. Improvements in data collection across RCAs, including environmental and geographical factors in the performance comparisons, would further help explain the variances and challenges faced by RCAs in network maintenance and operations.

What this delivers is not just another data tool – it's a benchmarking framework that can improve infrastructure investment decisions at the national level.

### Turning insight into action and Impact

One of the most valuable contributions of the model is how it triangulates objective performance scores against the current REG and NZTA assessments. In cases where performance scores and self-assessments don't align, it flags potential over- or under-investment, data quality gaps, or internal inefficiencies. This evidence-based insight can help:

- RCAs target their maintenance efforts more strategically.
- NZTA and central agencies fund programs based on true performance needs.
- Policymakers align infrastructure investment more closely with long-term economic and resilience outcomes.

It also supports broader goals outlined in the GPS, particularly value for money, productivity, and smarter infrastructure delivery in the face of climate pressures and regional variability.

Ultimately this project isn't just about measuring road maintenance performance – it's about shaping the way New Zealand invests in its infrastructure.

## Building the future of infrastructure strategy

Ultimately, this project isn't just about measuring road maintenance performance – it's about shaping the way New Zealand invests in its infrastructure. A smarter, more data-driven approach to performance benchmarking enables:

- Stronger returns on public investment
- More resilient and equitable transport outcomes
- Clearer alignment between local practices and national strategy

As funding constraints tighten and the pressure on networks grows, tools like this will be critical for keeping New Zealand's infrastructure fit for the future.





Freight moving across a well-maintained but very busy regional corridor, with direct impacts on infrastructure performance and economic activity.



#### **Shamsheer Benepal**

Shamsheer is a Civil Engineer with Beca's Transport Infrastructure Team, passionate about shaping better infrastructure outcomes across New Zealand. Since graduating from the University of Auckland in 2023, she has worked on major infrastructure design and asset management projects nationwide. In 2024, she completed a Master's research degree focused on improving road network maintenance through value for money and efficiency analyses using performance benchmarking. Her research, supported by NZTA's Road

Efficiency Group and recognised by Engineering New Zealand and CILT, reflects her strong interest in driving smarter investment and long-term value in transport infrastructure.



Douglas Pharmaceuticals has installed New Zealand's first AutoStore" system, powered by Kardex, at its headquarters in Henderson, West Auckland. Photos: Kardex

# Breaking new ground with New Zealand's first AutoStore

IN A FIRST for New Zealand's logistics and pharmaceutical sectors, Douglas Pharmaceuticals has utilised Kardex to install the country's first AutoStore<sup>™</sup> system at its headquarters in Henderson, West Auckland. The leap into robot-powered automation is already redefining warehouse operations.

Driven by increasing demand for its health and wellness products and expanding export markets, Douglas found itself running out of space. As one of the largest pharmaceutical companies and a leading supplier by volume into New Zealand's growing pharmacy channel, Douglas needed to expand its warehouse capabilities.

However, they didn't want to relocate or compromise on operational efficiency, so Douglas turned to automation instead of extending its building or restructuring existing manual systems.

AutoStore was the solution, thanks to its automated storage and retrieval system (AS/ RS) powered by global intralogistics partner Kardex. The system has transformed Douglas's fulfilment model from the inside out, quadrupling picking speeds, boosting accuracy, and compressing storage requirements into a fraction of the original footprint.

"They looked at extending the building, which came in at about \$2.7 million," says Grant Smith, Director of Business Development – Kardex AutoStore for Australia and New Zealand.

"But a new operations lead asked the simple question: Are we really making the most of the space we already have? That's what led them to AutoStore and the innovation Kardex offers. It's a smart, scalable system that maximises every cubic metre."

The result was a future-proofed warehouse operation that meets Douglas's nearterm growth targets while laying a flexible foundation for expansion.

Installed with minimal disruption alongside the existing facility, the new AutoStore system comprises approximately 6,500 bins arranged in a high-density grid, served by

#### **BY JAMES PAUL**

13 autonomous robots and a series of ergonomic pick stations.

Items are retrieved and delivered directly to operators, streamlining the fulfilment process and eliminating common sources of human error.

"From day one, the technology just worked seamlessly," says Mr Smith. "They're now picking four times faster than before, with an error rate of just one in 10,000. And it's not about replacing people. Douglas has always been a very people-oriented business. This was about enabling their team to grow sustainably, not shrinking it."

Douglas's leadership viewed automation as an enabler for growth, particularly across the company's consumer goods operation, which continues to scale. With plans to expand further into international markets, the company needed a warehouse solution that could match its ambitions without incurring unnecessary overheads or environmental burdens The AutoStore system's energy footprint was another deciding factor. Despite its fleet of robots, the system consumes remarkably little power (comparable to just two standard vacuum cleaners) thanks to its efficient design and intelligent battery recharging.

This allowed Douglas to avoid costly power infrastructure upgrades, one of the main barriers to adopting industrial automation in existing buildings.

"They didn't need to move, didn't need to retrofit the building, and didn't need to increase their power draw. The only real physical modification was grinding the warehouse floor to support the grid. Beyond that, it was all about smart design," Mr Smith says.

Scalability was equally important. The modular AutoStore design means Douglas can add robots, ports, or bins as needed, without interrupting day-to-day operations. This ensures the system will support their forecasted growth for at least five years, with additional capacity ready to come online as demand increases.

Seismic compliance, being a vital factor in any New Zealand-based infrastructure project, was also built into the grid's design and approved by Auckland Council.

The system's uptime expectation were exceeded. With each robot operating independently, the overall grid remains functional even if one robot needs maintenance. Kardex, which already services more than 300 assets across New Zealand, provides a full national support network, with diagnostics, remote access, and on-site technicians all available to ensure reliability.

However, the implications extend well beyond the walls of Douglas's Auckland site, Mr Smith says. For the broader logistics sector, this implementation represents a working example of automation that doesn't require warehouse relocation, massive capital infrastructure, or large footprints.

Mr Smith says it demonstrates that highefficiency, scalable fulfilment is attainable for New Zealand-based operations, even in cost-constrained or space-limited environments.

"Commercial real estate costs have exploded since the pandemic. Automation isn't just about saving time or labour anymore; it's about making every square metre count.

"This technology opens doors for companies of all sizes, not just big corporations. We've got installations planned for sites as small as 300 square metres."



The investment in the Autostore system has increased warehouse capacity by 30 per cent and picking accuracy reached 99.9 per cent.



The new AutoStore system comprises approximately 6,500 bins arranged in a high-density grid, served by 13 autonomous robots.

AutoStore also opens the door to 24/7 retail and e-commerce applications, with the potential to offer customer pickup ports and round-the-clock order access. While Douglas's primary focus is pharmaceuticals and health products, the system's flexibility makes it applicable across multiple sectors (think third-party logistics to food retail and small- to medium-scale manufacturers).

But for Douglas, the benefits are already tangible. With warehouse capacity increased by 30 per cent and picking accuracy hitting 99.9 per cent, the company is better positioned for the future. The investment has enabled them to defer costly property expansion, reduce picking-related errors, and provide staff with safer, more ergonomic working conditions.

"AutoStore empowered by Kardex is the future of fulfilment and we are impressed by how Douglas and the whole team have embraced the technology and made it such a key part of their business," Mr Smith says.



Infrastructure like green hydrogen company Hiringa Energy's refuelling stations could be an example of an asset that provides a broader but non-monetary public value by helping to decarbonise the transport sector. Photo: Hiringa Energy

# Exploring whether infrastructure can pay for itself

#### **BY JAMES PAUL**

PUBLIC INFRASTRUCTURE is essential to New Zealand's social and economic wellbeing, but with tightening fiscal conditions, the question is increasingly whether new infrastructure projects can help pay for themselves.

In its latest research, *Paying it Back*, the New Zealand Infrastructure Commission – Te Waihanga (the Commission) explores this question in depth. The report evaluates the extent to which infrastructure investments generate fiscal returns that can offset their capital and operational costs, drawing from case studies on local government growth infrastructure, major transport projects, and value capture mechanisms.

The Commission begins by acknowledging that the value of infrastructure often exceeds direct economic returns. Investments in roads, for instance, improve freight efficiency and safety, while hospitals and schools provide foundational public services.

However, all infrastructure projects must ultimately be paid for, whether by users, taxpayers, or future debt. Some may generate new revenue streams through user charges or by expanding the tax base, while others offer broader but non-monetary public value.

A key challenge is public resistance to higher charges. Survey data cited in the report show New Zealanders strongly support infrastructure development but are reluctant to pay more for it. This fiscal constraint means that governments must increasingly look for ways to generate additional revenue through growth, not just through taxation.

### How infrastructure grows the revenue base

The report outlines two main avenues for generating revenue: increasing charges on existing users or expanding the user/tax base. The latter is more politically feasible and central to the Commission's analysis.

For instance, investment in public transport might not only increase fare revenue but also raise nearby land values, thus broadening the local government's rating base. Similarly, healthcare infrastructure can boost workforce participation, leading to higher income tax receipts. However, the Commission notes that not all projects generate enough fiscal return to cover their cost, even if they produce societal benefits. The research focuses on three areas: local government growth infrastructure, selected large transport projects, and the potential of land value capture tools to close the fiscal gap.

The Commission studied seven urban councils (Auckland, Wellington, Christchurch, Hamilton, Tauranga, Queenstown, and Dunedin) over a 25-year period (2007–2031, or from 2012 for Auckland). It compared their growth-related capital and operational costs with revenues from development contributions and rates on new buildings.

The results varied significantly. Dunedin and Christchurch managed to fully recover their costs from growth-related revenue, with Dunedin exceeding 180 per cent recovery. Wellington came close at 84 per cent. In contrast, fast-growing councils such as Auckland (45 per cent), Hamilton (35 per cent), Tauranga (32 per cent), and Queenstown (51 per cent) fell short and required top-ups from general revenue. Three key factors influenced whether growth "paid for itself":

- Alignment of charges with actual costs. For example, Tauranga and Hamilton would have needed rates on new development to be five times higher to break even.
- Infrastructure growth in proportion to population growth. Hamilton and Tauranga are planning infrastructure expansion four times faster than their expected population growth.
- Scale of private development. In slower-growing councils, the ratio of private investment to public infrastructure cost was significantly higher, enabling better cost recovery.

## Major transport projects: High investment, low payback

The report also examined fiscal returns on four major transport projects using publicly available business case data: Ōtaki to Levin, Pūhoi to Warkworth, Warkworth to Wellsford, and Auckland's City Rail Link (CRL).

Across all projects, government revenue recovered just 9-25 cents for every dollar spent. While the CRL showed the highest recovery (21 per cent – 25 per cent, depending on the funding share), others, such as Warkworth to Wellsford, came in below 11 per cent.

Even when benefit-cost ratios exceeded 1.0 (typically considered a threshold for investment), most of the benefits were non-fiscal, such as time savings, reduced emissions, or safety improvements.

The Commission concluded that for a transport project to fully pay for itself fiscally, its benefit-cost ratio would need to be 5 or even 9 – far higher than standard practice. Projects with more users (like Pūhoi to Warkworth) delivered better returns, reinforcing the need for demand-driven planning.

The third scenario tested whether value capture tools, such as targeted rates or levies, could help bridge the fiscal gap. The rationale is that infrastructure often increases nearby land values, but this uplift is not typically taxed or captured.

The Commission modelled different project types (motorways and light rail) in both dense urban and rural settings, testing cost recovery under varying levy amounts.



The expansion of ports, as shown by the digital rendition of a proposed Northport development, is another example of monetary and non-monetary benefits. This project would boost the export economy while also connecting rail and sea freight due to the port's integration with KiwiRail's proposed Marsden Point spur. *Photo: Northport* 

Even when benefit-cost ratios exceeded 1.0 (typically considered a threshold for investment) most of the benefits were non-fiscal such as time savings reduced emissions or safety improvements.

Results showed that value capture can be effective, but only under two conditions:

- Relatively low project costs (high capital costs make full recovery via levies difficult).
- High population and development density (Denser areas generate more uplift and a broader rating base).

Under the right conditions, levies of \$1,000 to \$4,000 per household could cover a significant share of infrastructure costs, especially in dense urban environments.

### Four lessons for fiscal sustainability

The report concludes with four broad takeaways. First, the project quality matters. Cost-effective, high-demand projects are more likely to generate revenue. Second, a high bar for fiscal recovery is required, as many projects with positive societal benefits do not recover their costs financially. Third, incremental investment pays off. Scaling networks gradually may yield better long-term returns than large, one-off builds.

And lastly, revenue tools are essential. Attaching direct revenue streams, through user charges or targeted rates, can improve fiscal outcomes.

While infrastructure remains vital for New Zealand's well-being and growth, Paying it Back underscores the importance of aligning public investment with fiscal realism.

Not all infrastructure can or should pay for itself, but when planned wisely and supported with appropriate revenue tools, some can go a long way toward easing the fiscal burden.

To read the report in full, visit https://tewaihanga.govt.nz/our-work/research-insights/ paying-it-back-an-examination-of-the-fiscal-returns-of-public-infrastructureinvestment.



Private properties have been acquired and construction is underway along Ti Rakau Drive, East Tamaki, Auckland, for the Airport to Botany Rapid Transit public works project. Photo: Wynard Wood

# Why is reform needed for the Public Works Act 1981?

#### **BY JAMES PAUL**

MAKING IT EASIER to build critical infrastructure is the Government's aim in reviewing the *Public Works Act 1981* (PWA), with proposed amendments progressing through Cabinet since late 2024.

Land Information Minister Chris Penk announced in February 2025, the Act's "most significant reform in nearly 50 years to help unleash an infrastructure boom" as the regulatory framework is no longer fit for purpose.

"Removing barriers to make it faster and more affordable to build the homes Kiwis need, creating jobs through new projects and providing infrastructure to support better public services is a major part of the Government's economic growth agenda," Mr Penk says.

The PWA provides powers to enable land to be acquired for delivering public works, such as roads, schools, defence works, justice facilities, and water services. There is a range of users with different powers under the PWA.

Local authority entities (for example, councils, universities and Fire and Emergency New Zealand) and the Land Information Minister have direct access to the PWA. The Minister exercises these powers to acquire land for the Crown, primarily for agencies such as the NZ Transport Agency Waka Kotahi (NZTA) and the Ministry of Education (MoE).

The PWA sets out processes for how land is acquired, compensated for, and disposed of when no longer required for public works. The processes for acquiring land encourage reaching an acquisition by agreement and consist of negotiations and issuing notices. If necessary, land can be compulsorily acquired by proclamation of the Governor-General on the Minister's recommendation.

The PWA also allows landowners to raise objections with the Environment Court before compulsory acquisition and guarantees full compensation, on the principle that landowners should be no better or worse off following an acquisition.

Landowners may settle issues regarding compensation through the Land Valuation Tribunal. When land is no longer needed for public works, the Crown or local authorities must offer the land back to its former owners or their successors, unless exceptions apply.

In the last 25 years, the Crown has acquired over 7,500 interests in land under the PWA, over 95 per cent of which were by agreement. In the last five years, there have been 79 compulsory acquisitions, 14 for the Crown (13 for the NZTA, and one for the MoE) and 65 for local authorities.

Mr Penk calls into question these complex regulations and inefficient processes because they slow down development, and can result in blown-out budgets and added costs for taxpayers.

"A targeted review last year has found unnecessary duplication in the system, issues with outdated negotiation processes and disjointed government agency practices.

"Right now, it takes up to a year on average to acquire land. If compulsory acquisition is required, the process generally takes up to two years, with at least another year tacked on if objections to the Environment Court are made. We cannot afford this in the face of a productivity crisis and critical infrastructure deficit. A modernised Public Works Act will set the foundation for building better."

Infrastructure New Zealand Policy Director Michelle McCormick CMILT agrees that the current legislation leads to grossly inefficient and costly processes.

"These inefficient processes are born from what is out-of-date legislation and need to be remedied if we want to achieve an uplift in infrastructure development in New Zealand. The Public Works Act is a critical piece of the puzzle, and we welcome the progress the Government has made to reform it so far.

"The changes proposed go further than what was indicated by the review panel, which demonstrates the Government has listened to the sector's feedback and broadened the scope of its reforms," says Ms McCormick.

"Currently, there is significant duplication between the Public Works Act and the Resource Management Act. This leads to significant project delays and greatly increases the cost of developing critical public infrastructure.

"Providing the mechanism for government agencies to work together to acquire land and enabling the relocation of existing infrastructure through land acquisition are pretty basic functions that I think most New Zealanders would expect from modern empowering legislation. Currently, there is no provision for these things. "If we want New Zealand to succeed in the 21st century and continue to provide economic and social opportunities to our people, we need to make it far easier to build the infrastructure we need. Reform of the Public Works Act is another small but important step in that direction."

The first tranche of changes will:

- Delegate land acquisition responsibility: Empower government agencies like the New Zealand Transport Agency, which regularly use the Public Works Act, to enter into acquisition agreements with landowners. The Minister for Land Information will remain responsible for compulsory acquisition by the Crown.
- Enable collaboration between agencies: Allow government agencies to work together when acquiring land for connected public projects. Instead of each agency acquiring land separately, they will be able to coordinate the acquisition of land as needed to make the process smoother.
- Enable relocation of infrastructure: Allow both the government and local authorities to acquire land when they need to move existing infrastructure (like powerlines or pipes) that are in the way of new public works.
- Refine the role of the Environment
  Court: Clarify the factors that the
  Environment Court can consider when
  reviewing objections to land acquisitions
  for public works, with a renewed focus
  on individual property rights, removing
  overlap with the Resource Management
  Act.
- Require mediation for compensation disputes: Require that parties try to resolve disputes over compensation through mediation or alternative dispute resolution before going to the Land Valuation Tribunal, to avoid lengthy court proceedings where possible.
- Allow Transpower to bypass standard processes: Enable Transpower, the State-Owned Enterprise managing New Zealand's power grid, to use the Public Works Act to acquire land by agreement. This would streamline their process for building energy infrastructure.
- <sup>1</sup> Hon Chris Penk Going for Growth: Public Works Act overhaul | Beehive.govt.nz
- <sup>2</sup> Te Waihanga Build or maintain? Feb 2024 pg 5.
- <sup>3</sup> Te Waihanga Taking care of tomorrow today Asset Management State of Play Nov 2024 pg 6.

# Public Works Act reform – infrastructure asset management impacts

#### **BY MURRAY PUGH**

Proposed changes to the Public Works Act 1981, to be introduced in the Public Works Amendment Bill around the middle of 2025, are aimed at "removing barriers to make it faster and more affordable to build the homes Kiwis need, creating jobs through new projects and providing infrastructure to support better public services<sup>17</sup>.

While such an outcome is commendable, caution must be sounded that it is insufficient to clear barriers to build new infrastructure unless the whole of life maintenance, renewal, and eventual replacement of that infrastructure is considered and provided for up front.

Te Waihanga New Zealand Infrastructure Commission research indicates that 60 cents of every dollar spent on infrastructure in New Zealand needs to be invested in renewals and replacements<sup>2</sup> in order to maintain the service level provided by the existing infrastructure. Given that 99 per cent of the infrastructure we require to support our quality of life in 30 year's time<sup>3</sup> already exists, the allure of building new, even if made easier through changes to the Public Works Act, needs to play second fiddle to maintaining what we have already.

Professionals experienced in infrastructure asset management, who are qualified in and familiar with global standards of best practice that are contextualised to local conditions, are best placed to ensure that initial infrastructure investments realise their full value for the lifespan of the asset. Infrastructure business cases rely on long return on investment periods to justify the large upfront cost of building new or replacing existing infrastructure, on the assumption that the community's needs will consistently be met by that infrastructure for its full design lifespan.

Experience of foreign aid provided in some Pacific nations to build new infrastructure highlights the dangers of not adequately considering how new assets will be managed over their lifetime. A colloquially referred to Build Neglect Replace default strategy arising from inadequate provision for lifelong asset management is simply unaffordable and extremely wasteful. If asset management disciplines are not applied throughout the expected lifespan of an infrastructure asset, previous generations' (or donor's)

investments made on the assumption that the community will therefore thrive 'for all time', can fall substantially short of expectations and require new significant unplanned investment in order to restore the expected quality of life.

Investing in infrastructure asset management capability needs to be prioritised alongside the provision of the infrastructure itself. Training and supporting skilled professionals in managing existing and new infrastructure so that it consistently delivers services to the standard expected and required, often over generational time periods, is required. Overlooking this critical function will undermine the original investment and disappoint the future generations who are intended to rely on the efforts of today, providing a better tomorrow.



**Murray Pugh** Murray is Chief Executive of Āpōpō (the lead association for infrastructure asset management professionals).

# TDDA adds tramadol and fentanyl testing amid rising workplace detections

#### BY THE DRUG DETECTION AGENCY

NEW ZEALAND'S LARGEST workplace drug testing provider is launching new drug testing capabilities for New Zealand workplaces.

From March, The Drug Detection Agency (TDDA) will make it easier for New Zealand workplaces to screen for tramadol and fentanyl, two high-risk opioids that pose significant safety concerns in workplaces worldwide. This is the first time in New Zealand that these tests will be incorporated into enhanced oral fluid and urine screening devices instead of needing independent testing strips or other costly devices.

This industry-leading innovation expands TDDA's screening panel from seven to nine drug types without any additional cost. The updated devices, independently verified by an AS/NZS 4760:2019 & AS/NZS 4308:2008 accredited laboratory, will help businesses proactively mitigate risks associated with these potent, and widely abused, substances.

#### A rise in opioid detections

Globally, the use of opioids like tramadol and fentanyl poses a serious safety risk and New Zealand is now seeing an uptick in workplace detections. The 2024 New Zealand Drugs Trends Survey found that 27 per cent of respondents reported non-medical use of pharmaceuticals in the previous six months.

While the opioid issue affects all regions, the survey found that non-medical use of prescription opioids was highest in Southland and West Coast, signalling that employers may need to take action.

Additionally, TDDA's latest Imperans Report highlighted that during October – December 2024, opioid use in workplaces in New Zealand accounted for 12.1 per cent of positive workplace drug tests, up from 11.9 per cent in the same quarter of 2023.

"Any increase in detection rates represents a significant workplace threat, regardless of opioids being used while legally prescribed or in a non-medical setting. The emerging trend of abusing pharmaceuticals like tramadol and fentanyl is what keeps me up at night," says Glenn Dobson, TDDA Chief Executive Officer. "Until now, New Zealand largely avoided the opioid epidemic seen overseas, but there are indicators now saying otherwise. Any rise in detection rates is worth examination. As a workplace risk, opioids are at the top. Legally prescribed or illegally procured, they can cause workplace accidents, long-term addiction and lead to the loss of life in more ways than one."

## TDDA's 9-panel testing device rollout

TDDA is reinforcing its commitment to workplace safety with the addition of tramadol and fentanyl to its screening capabilities. These newly introduced screening strips are part of TDDA's ongoing innovation, ensuring businesses have access to the most advanced substance detection tools available. TDDA is helping workplaces mitigate health and safety risks by incorporating these substances into standard testing, and in doing so, helping businesses achieve workplace health and safety compliance.

"TDDA follows and acts on global drug trends to provide cutting-edge solutions for workplace safety. As New Zealand faces evolving drug trends, including the rising threat of opioids, no industry or region is immune. We have been carefully tracking the issues that both tramadol and fentanyl have created globally and have developed these new screening devices to help our clients manage business risks," says Mr Dobson.

"By integrating tramadol and fentanyl into our screening devices, we're helping businesses stay ahead of the curve and protect their people. These will now become our standard devices, ensuring companies can take decisive action to protect their workforce."

To provide flexibility, TDDA has implemented an opt-in/opt-out process, allowing businesses to determine whether these new drug tests align with their workplace policies and risk assessments.

TDDA recommends that businesses take a proactive approach to workplace safety by implementing comprehensive drug testing programmes, including pre-employment,



New drug testing capabilities are available for workplaces. *Photo: TDDA* 

reasonable cause, and random drug and alcohol testing. Every worker has a right to a safe environment, and business owners, managers, and supervisors have a legal duty to ensure they've created a drug and alcohol-free culture of safety.

Failing to act not only risks legal consequences but can also erode workplace culture. As a leader in workplace drug detection, TDDA is committed to helping businesses stay ahead of these challenges, fostering safer and more productive workplaces.

Recently released Q4 2024 workplace drug and alcohol findings, called the Imperans Report, provides New Zealand employers with an analysis of drug and alcohol usage trends.

This quarter, 3.99 per cent of the screens conducted by TDDA indicated the presence of drugs. THC (cannabis) continues to be the most prevalent substance detected in workplace drug tests, accounting for 59.1 per cent of cases.

Recent data also indicates a sharp increase in amphetamine-type substances and opioids compared to the same quarter last year. This suggests shifting patterns in substance use that require greater employer awareness and policy reinforcement, especially around non-medical use of pharmaceuticals.

Below are the most prevalent substances detected nationally in TDDA testing:

- THC (cannabis): 59.1 per cent (down from 63.8 per cent in Q4 2023)
- Amphetamine-type substances (including methamphetamine): 24.4 per cent (up from 18.8 per cent in Q4 2023)
- Opioids (including oxycodone): 12.1 per cent (up from 11.9 per cent in Q4 2023)
- Benzodiazepines: 3.5 per cent
- Cocaine: 1.1 per cent

"New Zealand workplaces must remain vigilant in addressing substance use. Working under the influence of amphetamines is also a major workplace hazard," says Mr Dobson.

"These substances impair vision, cause dizziness, and adversely affect coordination, increasing the risk of serious accidents. In high-risk environments like construction, transport, and manufacturing, impairment can be the difference between a routine workday and a fatal incident."

"The increase in amphetamine detections is a real issue, but opioid detections are what concerns me more. Until now, New Zealand has largely avoided the opioid epidemic seen overseas, so any rise in detection rates is worth examination. As a workplace risk, opioids are at the top. Legally prescribed or illegally procured, they can cause workplace accidents, long-term addiction and lead to the loss of life in more ways than one."

With shifting patterns in substance use, Kiwi employers can benefit from reviewing their testing protocols and support systems to ensure both compliance and workforce well-being. As members of the National Drug and Alcohol Screening Association and the California Narcotic Officers Association, TDDA closely follows and acts on global drug trends.

TDDA recommends that companies update drug and alcohol policies to include stronger measures addressing opioids and amphetamines, train managers to recognise impairment, particularly the subtle signs of opioid use, and ensure regular and random drug testing to deter misuse and protect workplace safety.

"Employers need to stay ahead of these trends, enforce policies consistently, and provide education to their workforce to prevent harm. With the right measures in place, businesses can protect their employees and maintain a safe, productive environment."

# Tracking the nation's networks with new Transport report

#### **BY JAMES PAUL**

#### THE MINISTRY OF TRANSPORT has

launched a new report, the *Transport Network Performance Report*, providing a comprehensive picture of how Aotearoa New Zealand's air, road, rail, port and public transport networks are performing at a national level.

For professionals across the sector, this new quarterly report offers data-backed insights that can support infrastructure planning, service investment, and operational improvements. Below is a summary of the Ministry's April 2025 *Transport Network Performance Report.* 

#### Road network: High use, mixed data availability

Demand remains high on New Zealand's state highway network, with 2024 monthly averages showing around 11.5 million light vehicle movements and 550,000 heavy vehicle movements. Despite strong use, recent telemetry gaps have limited the reliability of 2023 data, with January to October figures excluded due to a contractor handover issue.

Reliability and supply data remain notably absent from this mode, which may hinder performance evaluations for logistics operators. However, user satisfaction is strong, with 70 per cent of survey respondents rating their private vehicle journeys highly (8 or more out of 10) in 2024.

On safety, road fatalities dropped 14 per cent compared to 2023, although the total number of deaths and serious injuries remained broadly consistent. This suggests that while some progress has been made, serious non-fatal incidents continue to be a concern.

#### Public transport: Growth in use, but reliability gaps remain

Public transport networks, such as buses, trains, and ferries, showed modest growth in patronage in 2024, with bus boardings up 13 per cent, trains up 6 per cent, and ferries up 9 per cent. Notably, passenger kilometres grew even more (15 per cent for buses), indicating longer average trip distances.

Cancellations fell across all modes, especially for buses and ferries, which points to improved service delivery. However, punctuality declined slightly, with on-time departures falling by 3 – 4 percentage points compared to 2023. In contrast, overall service reliability improved, with fewer last-minute disruptions.

User experience also trended upward. In 2024, 5 percentage points more passengers reported a positive journey experience compared to the previous year, suggesting an improvement in service perception despite punctuality dips.

This data is especially valuable for local and regional planners. Where reliability is improving but punctuality lags, targeted operational changes may be needed to align timetables with real-world performance.

## Rail freight: Stable lift, reduced volumes

Rail freight volumes tell a nuanced story. While the weight of freight lifted remained similar to 2023, the total freight moved (tonne-kilometres) dropped by 6 per cent. This suggests shorter hauls or lighter loads overall (a potential signal for supply chain strategists to investigate modal shifts or regional demand fluctuations).

Reliability, however, was a bright spot. Rail services in 2024 were, on average, 2.3 percentage points more punctual in departures and 2.8 points better in arrivals than in 2023. Safety also remained strong, with zero deaths or serious injuries among KiwiRail staff during freight operations.

Unfortunately, customer satisfaction remains unmeasured for this mode, limiting visibility into operator–client dynamics. For freight and logistics professionals, the current punctuality



gains signal improved scheduling confidence, but broader performance tracking still has room to mature.

## Ports: Efficiency gains despite lower ship visits

In the port sector, container ship visits held steady, but overall port demand (including bulk and tanker ships) declined by 4 per cent year-on-year. Despite this, ports moved 10 per cent more containers in 2024 and achieved a corresponding 10 per cent increase in ship productivity, as measured by containers handled per hour.

These efficiency gains suggest that automation, process improvements, or demand clustering may be delivering better outcomes, even as ship traffic fluctuates.

From a safety perspective, there were two medical-related deaths in port zones in Q3 2024, but otherwise, no serious injuries or fatalities were reported in the second half of the year. Like rail, port customer satisfaction is not yet routinely measured, limiting a full assessment of service quality.

## Aviation: Domestic sector outperforms trans-Tasman

Aviation data is newly added to the report and provides fresh insights into both domestic and international passenger travel. In 2024, domestic passenger boardings increased 7 per cent, with international boardings rising 3 per cent. Summer months saw expected seasonal peaks in both sectors.

On competitive domestic routes, flights departed on time 79 per cent of the time and arrived on time 80 per cent of the time, well ahead of trans-Tasman flights, which had 65 per cent on-time departures and 69 per cent on-time arrivals. Cancellations across all routes stayed low, between 0.7 per cent and 2.5 per cent monthly.

Safety remained strong, with fewer than one injury or fatality per quarter, reinforcing commercial aviation's strong safety culture. However, customer satisfaction is not yet tracked, creating a blind spot for airlines and airport operators seeking to benchmark travel experience.

This inaugural quarterly report offers a foundation for sector-wide performance conversations. While some networks have mature datasets, particularly roads and public transport, others, like aviation and ports, are still building their reporting capabilities.

Key takeaways include:

 Data gaps in road supply and reliability measures should prompt investment in telemetry infrastructure to support freight modelling and congestion management.

- Public transport data is improving, but punctuality issues suggest a need to reconcile scheduling with real-time operations.
- Rail freight's reliability gains could support a case for shifting more volume from road to rail, especially if coupled with emissions data in future reports.
- Port productivity improvements, despite declining ship visits, may reflect smarter logistics management or post-COVID market adjustments.
- Aviation reporting lags in customer feedback, but current on-time performance metrics can still guide route planning and airport operations.

With quarterly updates ahead, professionals will be better equipped to track the impact of investment, policy, and innovation across the full spectrum of New Zealand's transport system.

To read the Transport Network Performance Report in full, visit www.transport.govt.nz/statisticsand-insights/transport-networkperformance.



IKEA New Zealand has officially opened their external warehouse at The Landing Business Park, Mängere, following a blessing of the building by Te Äkitai Waiohua. Photos: Ikea New Zealand

# IHEA officially opens local warehouse for countrywide product distribution

#### **BY JAMES PAUL**

#### LOGISTICS AND TEST SHIPMENTS are

underway for the completed warehouse, which will begin receiving products in May 2025.

IKEA New Zealand has officially opened their external warehouse at The Landing Business Park, Mängere, following a blessing of the building by Te Äkitai Waiohua. The 20,000 square-metre warehouse, designed and built by Auckland Airport, will ensure IKEA products can be stored locally for countrywide distribution via the IKEA Sylvia Park store.

On track to receive a 5 Green Star Certified Rating from the New Zealand Green Building Council, the warehouse will also have EV charging infrastructure for co-workers and electric delivery vehicles. Cardboard, timber and plastic waste from replenishment processes will be sorted onsite for recycling.

The external warehouse is expected to accommodate approximately 8,000 – 10,000 cubic metres of inventory each year. Multiple full 40-foot shipping containers are expected to be transported daily from the warehouse to the IKEA Sylvia Park store to ensure products are always readily available.

The first test shipment was conducted in November to plan for accurate forecasted lead times and to ensure that products comply with New Zealand standards. The various products contained in the shipment will be assembled for use across the warehouse office.

Adrian Pidgeon, Fulfilment Manager for the IKEA New Zealand Project says the completion of the first IKEA New Zealand external warehouse marks a pivotal milestone in the company's market entry.

"It has been the result of significant collaboration between IKEA, our construction partners Colliers and the Auckland Airport team. With the building now complete, many parts of the business are working together to ensure a great IKEA customer experience for New Zealanders supported by readily available products, no matter where they are located or how they choose to shop."

The decision to establish a separate warehouse was driven by the Sylvia Park store site's limitations and given the forecast for the first five to ten years, extra room was required to accommodate the volume. Given the lead time into New Zealand, this secures the right amount of cubic and safety stock that Ikea needs to support its customers.

Mr Pidgeon says forecasts indicate that IKEA New Zealand will move around 100,000 cubic metres of stock in its first year alone, with year-on-year growth expected beyond March 2026. The external warehouse is projected to accommodate between 8,000 and 10,000 cubic metres of inventory each year, ensuring a reliable supply of products.

However, with two facilities operating in Auckland, effective logistics management is crucial. Both buildings will be approved as transitional facilities through the Ministry for Primary Industries, allowing goods to be received directly. Maintaining product availability will require daily stock movements between the warehouses.

"We're predicting three to four 40-foot trailer loads per day moving between the two facilities. This movement will be essential for replenishing stock at Sylvia Park," Mr Pidgeon says.

Additionally, a proportion of inventory stored at the external warehouse will be used to fulfil customer orders directly. Online and in-store purchases of specific product ranges will be picked and dispatched straight from Mångere to customers' homes, reducing pressure on the retail store's logistics.

Auckland's traffic conditions pose a key challenge for daily stock transfers. Mr Pidgeon has had the pleasure of being in





IKEA New Zealand will move around 100,000 cubic metres of stock in its first year alone.

The external warehouse is projected to accommodate between 8,000 and 10,000 cubic metres of inventory each year.

Auckland a few times, and "it's certainly busy at certain times of the day,". They're currently working through what IKEA's operational hours will look like to minimise the impact of congestion, potentially operating at different hours of the day to optimize efficiency.

Beyond local transport logistics, IKEA's global supply chain strategy plays a role in sustainability. "One of the biggest things we've done in the supply chain further upstream is to reduce the need for wooden pallets.

"All products entering New Zealand arrive on paper pallets, significantly lowering our carbon footprint, improving fill rates, and reducing the number of required shipments."

The company will also soon confirm its local delivery providers but has already committed to ensuring that all last-mile deliveries within Auckland will be carried out using zero-emission vehicles.

"From day one, we are pushing for zeroemission delivery. We want to reduce our carbon footprint as much as possible, with an aim to expand our sustainable logistics beyond Auckland over time."

Daniel Byrne, Head of Property Development at Auckland Airport, said, "We're pleased to officially welcome IKEA to The Landing Business Park. IKEA has been



Multiple full 40-foot shipping containers are expected to be transported daily from the warehouse to the IKEA Sylvia Park store.

a fantastic partner, and we look forward to continuing to support their operation as they establish in New Zealand."

IKEA New Zealand will have two dedicated supply streams from Malaysia and China, with products coming from all over the world. The flatpacks will also play a part in enabling logistical efficiency. Their design, which aims to use space in the most efficient way possible, means more articles can be transported per shipment.



The transport of dangerous goods is governed by several organisations, and each mode of transport has its own set of compliance regulations outlining the legal requirements to ensure that dangerous goods are transported safely. *Photo: DGM* 

# From risk to reliability – mastering transport compliance with DGM

#### BY RYAN WATSON

THE TRANSPORT of dangerous goods plays a vital role in our modern economy within New Zealand and the rest of the world, facilitating the movement of essential materials that are crucial for various industries. From pharmaceuticals to manufacturing, many sectors rely on the safe and efficient transportation of hazardous materials to ensure their operations run smoothly. However, transporting these goods is not without its challenges. The potential risks associated with dangerous goods require strict compliance with regulations and safety protocols to protect people, property, and the environment.

Dangerous goods are classified as materials that can pose a significant risk during transportation due to their hazardous nature and require proper handling. Examples of dangerous goods that require special certification during transport include: Flammable Liquids: Items like petrol and ethanol, Explosives: Materials such as industrial explosives for controlled demolition and construction. Corrosive Materials: Substances like sulfuric acid and batteries that can cause severe damage to living tissues and materials upon contact. Toxic Substances: Chemicals such as pesticides and industrial solvents are essential for agriculture and manufacturing but can be harmful if mishandled. Gases:



Compressed gases like propane and oxygen are widely used in various industries, from healthcare to welding on building sites.

However, not only industrial materials but also everyday consumer commodity items that can be found around the house are classed as dangerous goods such as Deodorant cans, perfumes, Hair dyes and lithium batteries for electronic devices such as cell phones.

The transport of dangerous goods is governed by organisations such as the International Civil Aviation Organization for air transport, the International Maritime Organization for sea transport, and the Ministry of Transport for road freight transport. Each mode of transport has its own set of compliance regulations outlining the legal requirements, ensuring that dangerous goods are transported safely within their regulation's requirements.

Completing these requirements set out by the governed organisation is commonly known as dangerous goods certification. However, certifying dangerous goods for transport requires thorough training to meet international and national rules and requirements. This training covers to name a few, how to classify, package, mark, label, and document dangerous goods properly, along with handling and emergency procedures including state and operator regulations to ensure safety during transport. These requirements are so strict that if there is one small error or spelling mistake, the shipment will fail its acceptance and airlines, or shipping lines will reject the whole shipment. Regular refresher training, usually every two years, is required to keep up with any changes in the rules. Certification

is given after completing the course and passing an assessment, confirming the person is qualified to prepare and approve dangerous goods shipments safely and legally.

Unfortunately, it is all too common for businesses to either be unaware or blatantly ignore these legal requirements around dangerous goods qualifications/ training and certification for transport. Failing to declare or incorrectly certify a dangerous goods shipment can lead to serious consequences for businesses and individuals. Undeclared or improperly certified shipments pose significant safety risks during transport, endangering lives, property, and the environment. The regulatory authorities such as the NZ Police and the Civil Aviation Authority of New Zealand impose strict penalties, including hefty fines that can range from thousands to hundreds of thousands of dollars for both the individual and company and in severe cases, criminal charges or imprisonment. Such incidents lead to not only shipment delays but also legal liabilities, damaged reputations, and strained relationships with customers and partners.

In New Zealand, multiple factors are driving this expansion. One of the key contributors is the increasing production and introduction of modern products containing hazardous materials. A significant example is the rising use of lithium batteries, which are now an essential component in consumer electronics, electric vehicles, and renewable energy storage systems. Their widespread application has led to a surge in demand for compliant DG packaging, certification, and transportation solutions. Additionally, the industry is witnessing the introduction of new dangerous goods items, such as sodium-ion and sodiummetal batteries, which present additional unique challenges in classification, handling, and transportation. As technological advancements drive innovation, the need for businesses to safely and efficiently manage these materials continues to grow.

Another significant factor fuelling the demand for DG services is the rapid expansion of e-commerce. With more consumers and businesses relying on online shopping, freight volumes have risen dramatically, including shipments containing dangerous goods. From lithium batteries in consumer devices to aerosolbased products, perfumery items, and industrial chemicals, DG transport has become a vital part of global supply chains. Alongside the rise in freight volumes, the regulatory requirements surrounding DG transport are constantly evolving. Updates and amendments to DG transport regulations occur annually, introducing new classifications, information, and requirements that all businesses must adhere to. Navigating these complex and ever-changing regulatory frameworks can be overwhelming, particularly for companies without specialised expertise in DG compliance.

For any business handling or shipping dangerous goods, staying up to date with the latest regulations and training requirements is not just a compliance necessity, it is a critical component of ensuring safety and business continuity.

Dangerous Goods Management Ltd (DGM) has more than 30 years of experience transporting dangerous goods and therefore has a good understanding of the regulatory requirements needed to meet safety standards across all modes of transport. Whether it's certification, consultation or training, Freight forwarders, New Zealand's defence forces and airlines are among the companies that have engaged and have partnerships with DGM to undertake and take care of all their dangerous goods compliance needs.



#### Ryan Watson Business Manager

Ryan has over 10 years of experience in the dangerous goods industry. As an expert, he provides in-depth guidance on compliance and transport regulations, helping clients which include New Zealand's largest courier networks and leading freight forwarders navigate complex requirements, ensuring they meet the highest safety and regulatory standards.



Research of motorist behaviour at railway level crossings found that of over 3,600 drivers, 47 per cent failed to stop or prepare to stop at crossings with 'Stop' or 'Give Way' signs. *Photo: KiwiRail* 

# New research identifies disturbing behaviour atlevel crossingsBY PAUL ASHTON, KIWIRAIL ACTING COO

NEARLY HALF of New Zealand motorists do not always stop at level crossing 'Stop' signs or prepare to stop at 'Give Way' signs, a new study has found.

KiwiRail commissioned the research through WSP to monitor motorist behaviour at railway level crossings. Based on observations of over 3,600 drivers, 47 per cent failed to stop or prepare to stop at crossings with 'Stop' or 'Give Way' signs.

Earlier research had found that more than half of the deaths in serious level crossing collisions over a ten-year period occurred at crossings with 'Stop' or 'Give Way' signs. The new WSP research aimed to identify low-cost improvements that could be made to signage at crossings with 'Stop' or 'Give Way' signs, particularly those where there was a short distance between the tracks and a State Highway.

Under current guidelines, not all level crossings need to have additional 'Look for Trains' signs, but the research found the number of motorists who stopped to be significantly higher (93.4 per cent) when they were in place. Motorists were even less likely to exhibit safe behaviours if there were only Give Way signs. The research recommended that 'Stop' signs be used instead of 'Give Way' signs to improve safe driving behaviour.

Stopping compliance was almost twice as high for truck and trailer vehicles (66.7 per cent) compared with cars (35.4 per cent).

"While the results of this research are concerning, the number of incidents at level crossings last year was an improvement on previous years," says TrackSAFE Manager Megan Drayton. There were eight collisions at level crossings last year, compared with 17 the year before.

In support of International Level Crossing Awareness Day on 5 June, KiwiRail is sharing the research in the hope that motorists will take the NZ Road Code more seriously.

"Disappointingly, recent analysis of incidents shows that 95 per cent of collisions and 73 per cent per cent of near misses were at crossings that already have flashing lights and bells or barrier arms installed," Ms Drayton says. "This emphasises how important an individual's behaviour is when it comes to safety around railway tracks."

Collisions with trains are unforgiving, she says. "Trains and rail maintenance vehicles always have the right of way and travel faster than they appear to. Locomotive engineers (train drivers) can blow the horn and put on the emergency brakes, but there is often little else they can do to stop the train in a hurry."

Ms Drayton says even close calls at level crossings take a huge toll on train drivers and those who narrowly miss collisions or injury.

"The findings of this research are disturbing," says KiwiRail Acting Chief Operations Officer Paul Ashton. "KiwiRail urges drivers to take responsibility for the safety of everyone in their vehicles, and to follow the rules to keep themselves, other road users and KiwiRail staff safe."

"Level crossings are dangerous places. Protection comes from obeying the signs."