

# Rail regulator



RAIL REGULATION UNIT

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## Auckland trespass hot spots prompt action plan

New Zealand's rail agencies are combining their resources to reduce trespass on Auckland's expanding rail network.



ONTRACK psychologist and human factor specialist Margaret Ryan says that people do not see the rail network as dangerous. 'They lack a perception of the risk they take.'

Identifying trespass hot spots has revealed several Auckland stations as the worst sites for trespass.

'It can vary from day to day – sometimes a driver may only see two or three people, on other occasions there are up to 200 people on the tracks during a single day. In other places, children spill on to the track from neighbouring parks.'

ONTRACK, the Ministry of Transport, Land Transport NZ, Police, Toll Rail, Auckland Regional Transport Authority and Veolia are developing an integrated plan involving engineering options, education and enforcement.

'Engineering solutions being developed include new legitimate crossings or access ways, fencing, signage and altering platforms to prevent people walking across the tracks, but in the long term there needs to be a culture change. This will take time and require education and enforcement.'

Land Transport NZ Senior Policy Advisor Rob Gould says trespass on the rail corridor is a major issue.

'We must work together to reduce the number of incidents involving trespassers on the rail network.'

'Enforcement is one tool to show we are serious about the trespass problem, while education will highlight the dangers of walking on or near tracks. Many people are unaware walking on a rail track is illegal unless they are using an approved crossing.'



'Trespass on the rail corridor is a major issue.' Rob Gould

Illegal behaviours on the Auckland rail corridor include taking a shortcut across tracks, using tracks as footpaths, vagrancy, tagging, graffiti and vandalism. Trespassing on the rail corridor can incur fines of up to \$10,000.

Developing Auckland's Rail Transport (DART) will focus on basic rail infrastructure, double-tracking the western line, rebuilding the Newmarket Junction, improving signalling and a possible spur line to Manukau. Electrification of the Auckland network is scheduled for completion by 2013.

'The DART project will mean more Metro passenger services operating across the Auckland rail network, increasing the need for awareness of the dangers of trespassing,' Rob Gould said.

There were 11 fatalities from 19 collisions with people trespassing on the national network over three years to July last year, three of them on the Auckland network.

## Safety gets close attention from rail regulator

Land Transport NZ's Rail Regulation Unit will be maintaining a 'rail safe' watching brief during upgrades of rail networks in Auckland and Wellington and the transition of the rail and associated businesses of Toll Rail Holdings NZ to Crown ownership.

National Manager Rail Regulation John Oldroyd said that, during periods of change, increased vigilance by the safety regulator is needed to ensure safety practices and systems are maintained or enhanced.

There are more than 90 rail licence holders in New Zealand and the Railways Act 2005 requires licence holders to present a safety case that details how they will operate safely. Variations to the safety case must be approved by Land Transport NZ.

'Rail safety cases are a key to ensuring safe practice by access providers and operators. The rail safety case outlines agreed safe operating practice by access providers and operators. It is a reference document to be kept close at hand.'

Improvements to Wellington's rail network include double-tracking and electrification through to Waikanae, which is due to be completed by 2010. Ninety new electric trains will be introduced to the Wellington network by Metlink beginning next year.

A \$660 million project to upgrade Auckland's rail transport (DART) is also well advanced and will include double-tracking the western line, rebuilding Newmarket Junction, improving signalling and electrification of the Auckland network.

## No compromise on safety

Safety is a 'no compromise' area, heritage and tourism rail operators were told at their annual FRONZ conference in Hamilton.

Land Transport NZ National Manager Rail Regulation John Oldroyd said licence holders carried the responsibility for safety 365 days a year.

'It is a significant responsibility. We do not wish to see safety compliance costs as a barrier to fulfilling ambitions, but there are basic requirements that must be met.

'Compliance with safety requirements is an important component in meeting public expectations and enhancing the reputation of rail as a safe mode of transport.'

He said heritage and tourism operators were 'stepping up to the plate' through training programmes to ensure staff and volunteers have the 'tickets to do the job'.

Australian and New Zealand tourism and heritage operators have similar issues. These include developing and maintaining capability, understanding the increased risk of heritage operators running on main trunk lines and ensuring adequate incident and accident reporting.

'Rail has been revitalised and faces significant growth, particularly in metropolitan centres like Auckland and from an increased freight task.'



FRONZ president Paul Dillicar riding the Victoria Battery Tramway in Waihi during a conference field trip.

## Rail safety vital for licence holders

### Questions and answers about rail safety cases

#### Q Can anyone get a rail licence?

A Yes, subject to meeting the full terms and conditions required under the Railways Act 2005. These include detailing the exact nature of the rail-related activities to be undertaken, and a rail safety case including evidence of the competencies of the people who will be responsible for ensuring the requirements of the safety case are implemented.

#### Q What kind of rail-related activities are included in the safety case?

A Things like the nature of the operation, the type of motive power, rolling stock and other equipment used, track network and assets employed, train control, signalling and communications systems. A geographical route map or depiction of the railway is also required.

#### Q How do you assess the safety risks of the rail operation?

A Requirements for the safety case include a risk assessment and how those risks will be controlled. We need to know the risks, how they are assessed, how they are managed, by whom and when. There is also a need for a check system to ensure risks are being managed.

#### Q What is required to show a safety system has been put in place?

A Safety-related policies and documentation need to be included, together with a management structure and who owns, or is responsible for, safety aspects of the operation

#### Q How do you know rail personnel are undertaking safety-critical tasks and activities and are trained appropriately?

A The safety case spells out the system for recruitment and training and supervision required for on-the-job training. There must also be a regular review of working practices and procedures to determine if they remain relevant. Contracted suppliers must also comply. The regulator checks the content and frequency of training programmes to ensure they are appropriate for specific tasks.

#### Q Do the safety cases require evidence, measures and processes to show safety systems are working?

A Yes. They must show how the evidence is gathered, and have a safety system based on quality management principles of continuous improvement. There is also a requirement for internal audits. Documentation includes key performance indicators, accident and incident reports, and responses to audits and assessments.

#### Q What about rail personnel and their ability to do the tasks required?

A The safety case describes policies to ensure staff are fit for duty and who deals with them if they are not fit, or are impaired in some way.

#### Q Why is the rail regulator interested in change processes?

A Proper management of change is required to maintain safety. The safety case must describe how the safety case itself will be kept up-to-date with changing circumstances. This includes managing risks at times of change. If the changes required to the safety cases are significantly different, then a variation must be sought from Land Transport NZ.

#### Q What kind of organisation holds a rail licence?

A All access providers and rail operators must hold licences. There are:

- major rail participants such as ONTRACK, TOLL, Veolia
- tourist and heritage operators, eg Mainline Steam, Taieri Gorge Railway, Christchurch Tramway, Shantytown, Kingston Flyer
- industrial operators like Fonterra, DB Mainland Brewery, Shell Todd Oil Services and Alliance Group.

## High-impact message planned for rail safety

'Look and live' is one of the themes to be developed during the Australasian Rail Safety Awareness Week (ARSAW), which includes Land Transport NZ, the rail industry and the Chris Cairns Foundation.

Running from 21 July to 29 July, ARSAW aims to improve safety at rail crossings and reduce trespass on rail tracks.

It is a joint activity involving ONTRACK, TOLL, Veolia, Ministry of Transport, Auckland Regional Transport Authority, Greater Wellington Regional Council, Chris Cairns Foundation and Land Transport NZ's Rail Regulation Unit.

'We are keen to get the message across that tracks are for trains only,' said Rail Safety Advisor Anna Cleary, who is running the project for Land Transport NZ.

Australian-made television advertisements featuring accident scenarios at level crossings and illegal track crossings will run throughout the week, supported by print and radio advertisements.



'They are high impact and designed to get people thinking about their own behaviour around the rail network. We want to raise awareness that inattention at a railway crossing can have catastrophic consequences. People do not seem to understand that a train cannot stop quickly nor can it swerve.'

Anna said Australian research had revealed one in four motorists did not realise they were on a rail crossing until they had crossed.

Trespass is also a significant issue, particularly in Auckland, where double-tracking and increased train frequency is contributing to safety concerns at the large numbers of people who illegally cross tracks.

'Rail safety is important and by taking a long-term view of the problem, we aim to make a significant difference over time,' said Anna.



## New information system for rail

Safety cases for New Zealand's licensed rail operators will be accessed through a new secure database that will improve efficiency through a 'one-stop' information system.

Land Transport NZ's Rail Regulation Unit rail information system will store safety cases, audits and details of rail licensees, while daily incidents will be compiled onto a master schedule to monitor trends.

National Manager Rail Regulation John Oldroyd said the system has been specifically developed for the rail unit.

'We are keen to be seen as customer focused and that means being able to easily access data to service the needs of our access providers and participants who include rail operators.'

Rail operators and access providers must hold a rail licence.

'All licence information, including safety cases, assessments and recommendations, will be held in the information system. All rail incidents reported to Land Transport NZ will also be stored on the information system and, in time, trends will emerge that can be reported back through to operators and access providers,' John said.

The system is protected by a secure log-on and only approved users are permitted to access the data.

Developed by SBC Information Technology, the rail information system is seen as a further step in the Rail Regulation Unit's move to improve its service to access providers and rail participants.

## Railway level crossings target of new survey

Proposed new assessments of New Zealand's railway level crossings will raise awareness of safety risks.

Land Transport NZ principal engineer Bob Gibson said assessments have already been completed in Auckland and on some crossings in Waikato using the Australian Level Crossing Assessment Model (ALCAM).

He said the assessment of the remaining 1550 public level crossings and some private crossings will be spread over the next three years.

'Factors likely to contribute to a crash at a level crossing are evaluated with the model to provide an indication of the level of risk at the site.'

'The system is being applied across all Australian states by road and rail authorities. In New Zealand, ONTRACK and Land Transport NZ will manage the assessments.'

'Data from site surveys will be entered into a national database.'

'Application of the ALCAM model will identify remedial work, which will reduce the level of risk at each surveyed crossing.'

'Some of the work, such as upgrading signs and markings or removing vegetation to improve visibility, will be managed through normal road and rail maintenance programmes.'

'More extensive upgrades will require proper planning and funding and ALCAM will help set priorities across the country.'

# Sustainability focus of rail research

Land Transport NZ's National Manager Rail Regulation John Oldroyd said Beca Carter Hollings and Ferner will undertake research on how rail participants, in association with government transport agencies, can improve sustainability within the rail industry.



Representatives of Beca (from left) Planner Paul McGimpsey and Business Director Greg Pollock meet with Land Transport NZ's National Manager Rail Regulation John Oldroyd and Senior Policy Advisor Rob Gould, to discuss details of the rail sustainability research.

'The primary purpose of the research is to identify opportunities and barriers to improving sustainability within the rail industry. This is a first step, which may lead to further work as options that emerge from the research are explored in more depth.'

Land Transport NZ and its Rail Regulation Unit both have a responsibility to promote land transport sustainability and safe transport on rail.

'We aim to be a smart regulator and respond to the changing rail environment by encouraging awareness of rail as a significant player in the growth of land transport in New Zealand,' John said.

Announcing the purchase of Toll Rail Holdings Ltd by the Crown, Prime Minister Helen Clark said a modern rail system can lessen the carbon footprint of the wider transportation network, taking pressure off roads and allowing trucking and shipping businesses to operate more efficiently.

The Ministry of Transport Update to the New Zealand Transport Strategy predicts passenger rail in Auckland will increase six times to 30 million trips a year by 2030, while freight will grow to nine billion tonne-kilometres from its current level of 3.9 million tonne-kilometres.



The Land Transport NZ Rail Regulation Unit plays an important role in keeping rail participants and the rail infrastructure safe through annual assessments of licenced operators. Primary roles of the Rail Regulation Unit include:

- assessing performance
- monitoring and profiling operators
- licensing rail participants
- developing rail safety guidelines and assessing standards
- developing a rail regulatory framework
- undertaking rail safety promotion and education.

It is a co-regularity role where licence holders share in the responsibility of maintaining and enhancing the application of regulations and good safety practice into their everyday activities.

The Land Transport NZ Rail Regulation Unit will keep you informed about issues facing rail and work with you to ensure your community is protected through education about safety issues.

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