

Delivering Safe System outcomes for Low Volume Roads

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LOW VOLUME ROADS WORKSHOP 2022

The road network in New Zealand is largely designed and operated outside the bounds of a Safe System.

This means when a mistake inevitably happens, despite extensive historic and ongoing driver behaviour change programmes, the impact of the speed and hence crash energy often results in death and/or serious injury.

Putting whānau at the heart of transport

A Safe Transport System is:

Where it's safe to drive to work and home again or visit whanau and friends.

Where it's safe to ride bikes and let tamariki walk to school.

Where transport improves our health and wellbeing, creating liveable places for our communities

We all have a part to play



Shared responsibility Duty of care

System managers' responsibility to implement and maintain a system that does not knowingly introduce risk of harm to the system users

System is revised

1

System is used

System managers' responsibility to alter the system when system users continue to be harmed from ongoing errors or non-conformity

The system users' responsibility to use the system in accordance with its design that does not knowingly introduce a risk of harm



Vision Zero, Safe System and Road to Zero make up the why, how and the what in our approach to road safety in New Zealand.





We promote good choices but plan for mistakes

We are human and are not able to perform perfectly 100% of the time. In any situation where a person may fail, the transport system should not.



We design for human vulnerability

Our bodies have a limited ability to withstand crash forces without being seriously injured or killed.

Accept we are human



We have a shared responsibility for improving road safety

Everyone involved in the transport system shares responsibility with road users for designing and operating a system that does not result in death or serious injury.



We strengthen all parts of the road transport system

If we strengthen all parts of the system, then when something goes wrong and one part fails, the other parts will still protect people. Manage the system

It is our responsibility as the system designers and managers to implement and maintain a transport system that does not knowingly introduce an unacceptable level of harm onto system users

Safe System in Action

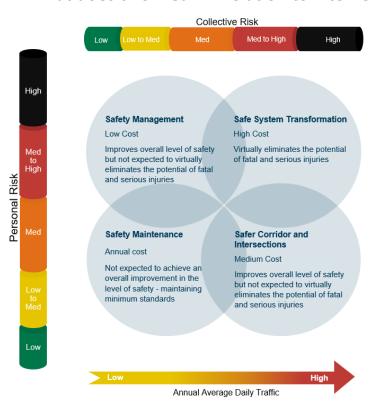
A Safe System is designing, maintaining and operating a Transport System where people can't hurt themselves or someone else

Errors are inevitable; death and serious injuries are not

Every Fatal and Serious Crash is a System Failure

What do Safe System treatments look like?

What does this mean in relation to interventions



Primary treatments are capable of virtually eliminating death and injury

Treatment Philosophy - Safe System Transformation

This includes interventions as a wire rope median barrier system, roadside barrier, roundabouts, etc.

Supporting treatments can transform the network a step closer to reducing the overall harm being caused

Treatment Philosophy – Safer Corridors and Safety Management

This includes interventions as wide centreline, shoulder widening at high locations, roadside barriers at high risk locations, ATP etc

To achieve our vision, we need safe speed limits and people traveling at safe speeds

Our understanding of safe and appropriate speeds has changed

"A safe and appropriate speed limit is a speed limit that is safe according to standards set by the Safe System and appropriate in terms of aligning with community wellbeing objectives as well as with the movement and place function, design and infrastructure of the street or road."



Infrastructure and Speed Management Focus Area

FOCUS AREA 1

INFRASTRUCTURE AND SPEED

We want to make the road network safer by investing in infrastructure changes that are long-lasting and proven to save lives. Evidence tells us that median barriers virtually eliminate the risk of head-on crashes. Rumble strips and side barriers help prevent run-off crashes. Roundabouts can help reduce the number of casualties at intersections. Safer travel speeds on our highest risk roads will save lives. They also reduce stress for other road users, including passengers, and help people feel safe to walk, bike, or travel with children. Safer speeds can also reduce harmful emissions.

KEY STRATEGIC DIRECTION

OBJECTIVE

Improve road safety in our cities and regions through infrastructure improvements and speed management

INITIAL ACTIONS

Invest more in safety treatments and infrastructure improvements

Review infrastructure standards and quidelines

Introduce a new approach to tackling unsafe speeds

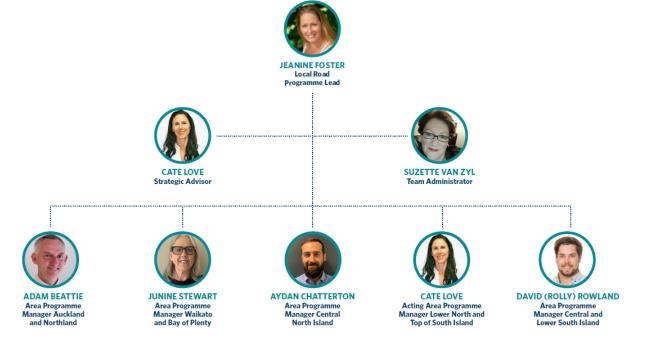
Enhance the safety and accessibility of footpaths, bike lanes and cycleways

Immediate action is that Waka Kotahi has a responsibility to provide and support to groups internally and externally that contribute to the delivery of Road to Zero

- Review and develop relevant operational policy, standards, guidelines to enable the design and delivery of cost-effective safe system interventions for RCAs.
- Support RCAs, project managers, network managers and system managers to ensure Safe System interventions are being scoped, designed and implemented appropriately.
- To ensure key Safe System interventions are being renewed and maintained to safeguard our current and future Road to Zero Investment.

Local Road Speed and Infrastructure Programme Team

The Local road team works closely with Local Government Partnerships and investment advisors to develop and support delivery of the local road programmes.



Our people

The SIP local road team is nationally based over five regions aligning with the Transport Services regional model.



Road to Zero 2030 Targets and Outcomes

What the evidence based How aligned the transport **Achieving sustained trauma** interventions are that will progress system is to a Safe System reductions on our transport system to reduce serious road trauma due to alignment to a Safe System the transport system towards a Safe System **Safety Outcomes Programme Delivery** Safe System Performance Intervention Indicators **Safety Performance Indicators Outcome Indicators** (Lead indicators) (Outputs) (Lag indicators) **Objective Objective Objective** To measure action plan outputs and hold To measure the degree to which the To measure and monitor the agencies accountable for delivery of transport system is aligned to Safe reduction in DSIs as a result of programme interventions improving Safe System alignment System principles Example **Example** Example % of the Safe Network Programme % of traffic volume on roads with a Number of DSIs due to head-on delivered (length of median barriers, speed limit above 80km/h that have a crashes number of roundabouts, etc) median barrier

Road to Zero Annual Monitoring Report

The annual monitoring report on Road to Zero, reports on progress made through implementing the strategy, and actions. It tracks progress against indicators set out in the strategy's outcomes framework.

A key commitment under Road to Zero is regular monitoring and reporting against indicators set out in the strategy's outcomes framework.

This can help drive action and hold relevant agencies accountable for the delivery of the strategy.

