



Katoa, Ka Ora

Auckland Speed Management Plan
2024 - 2027



**Calming streets,
protecting lives**







Find your way

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What is Katoa, Ka Ora?

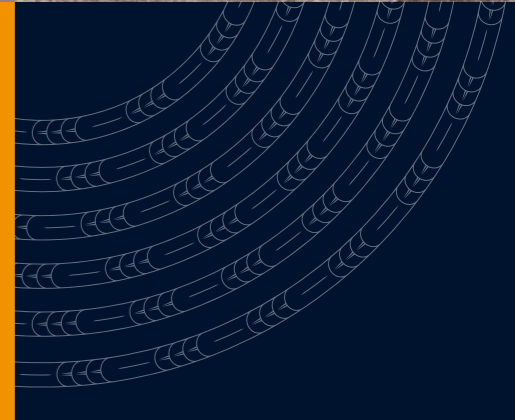
Katoa, Ka Ora is the speed management plan for Auckland roads

In te reo Māori, Katoa means 'everyone'.
Ka ora broadly means to be alive, well and safe.

Together, it means that everyone is alive and safe.
It is both the name, and the vision of our plan, because everyone using our roads deserves to get home safely.

1

Our story and why a speed management plan

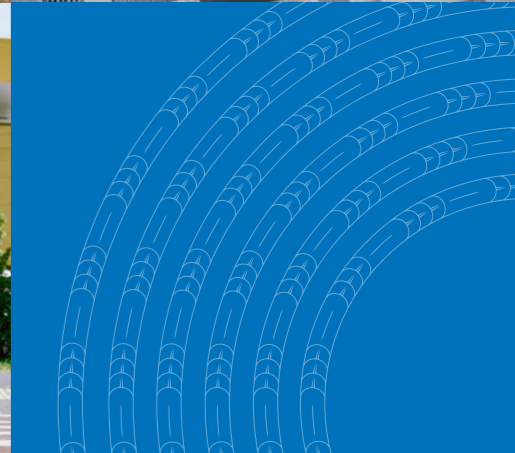


Our Vision

As our region grows, there will be more people walking, cycling, using public transport, and driving on our roads in future.

Our vision is that every one of them – including children, the elderly, and differently abled – is able to move about our city easily and safely in ways that contribute to their health and well-being.

Katoa, Ka Ora (Auckland's Speed Management Plan) is another step towards achieving this vision.



Partnering to create a safe system.

Katoa, Ka Ora is Auckland’s speed management plan. It includes roads controlled by Auckland Transport and Auckland Council. This 2024-7 plan is a living document, and able to respond to community requests and needs for speed limit review during this time.

In New Zealand and overseas the ‘Safe System’ approach is used to manage risk on the transport system. It is a globally recognised road safety method proven to reduce road harm.

As partners, we work together on all parts of the system; including enforcement, maintenance, education, system leadership, vehicle safety, intersection upgrades, and improvements to public transport.



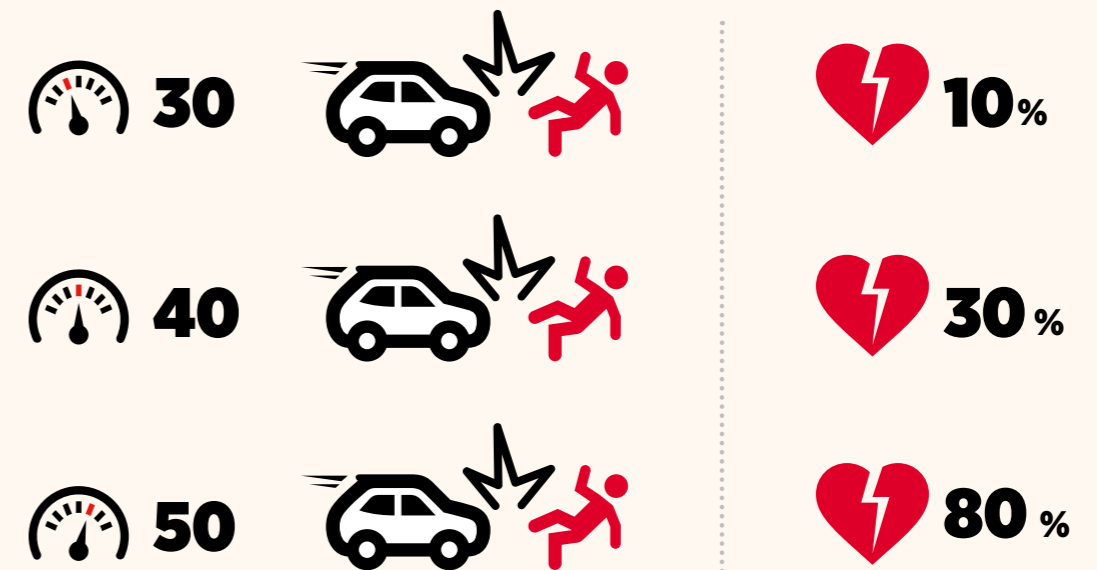
Speed is involved in more than **70%** of crashes causing injury in New Zealand ²

“There is a direct, causal link between speed and safety outcomes. Indeed, there are no other risk factors that have such a substantial and pervasive impact on safety as speed.” ³

Risk of death vs impact speed

Impact speed
Km/h

Death
Percentage risk



Survivability rates vary significantly based on a number of factors and scenarios. AT takes a preventative approach with respect to the survivability of people walking and cycling. Data taken from Research Report APR560-18 published in March 2018 by the Association of Australian and New Zealand Road Transport and Traffic Authorities.

² Understanding the role of Speeding and Speed in Serious Crash Trauma: A Case Study of New Zealand | Published in Journal of Road Safety.

³ Guide-for-Road-Safety-Interventions-Evidence-of-What-Works-and-What-Does-Not-Work, World Bank Global Road Safety Facility (GRSF), 2021.

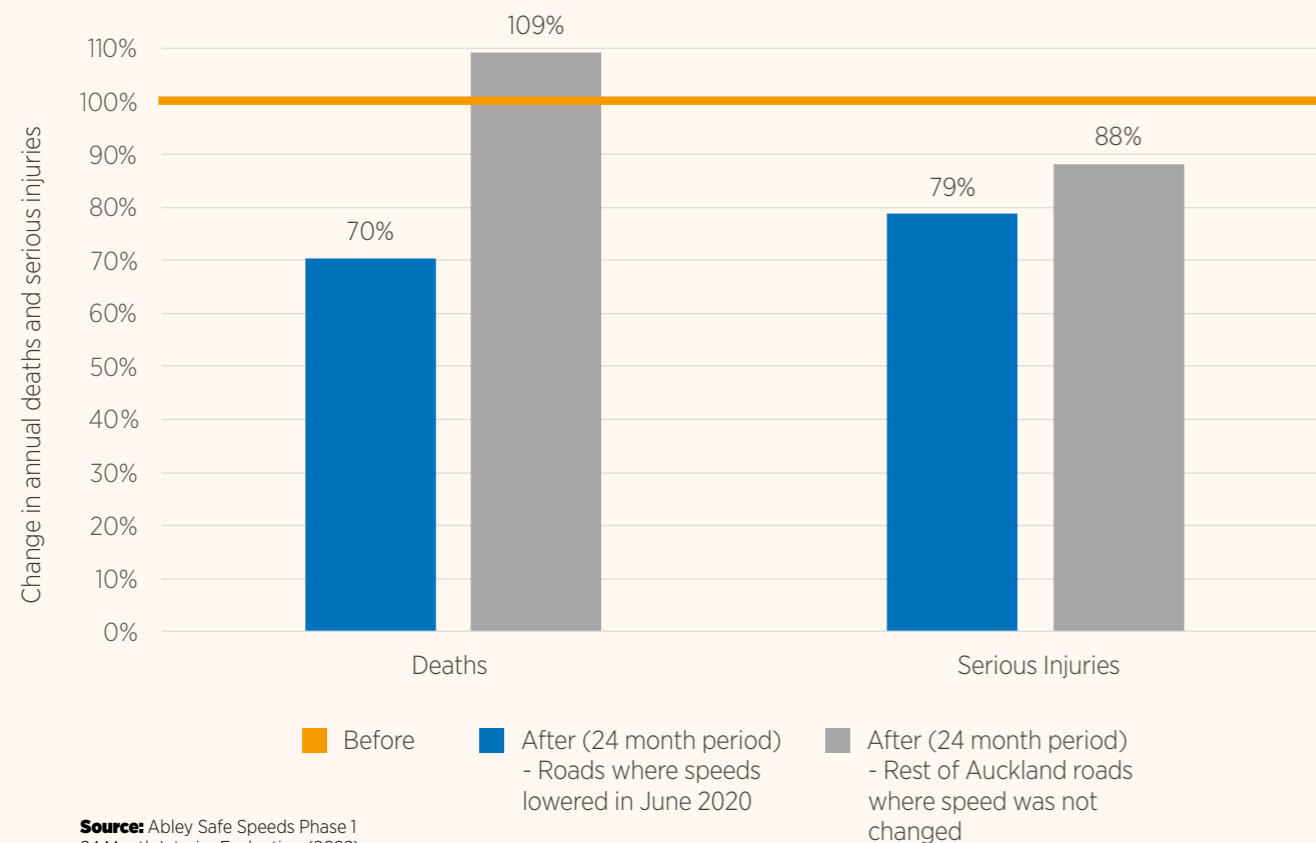
Evaluation Results

Data from the first phase of speed limit changes in Auckland shows a 30% reduction in deaths and a 20% reduction in serious injuries⁴ in the 24 months after safer speeds were introduced in June 2020.

In comparison, across Auckland roads where speed limits were unchanged, road deaths increased by 9% in the same period.

⁴ <https://at.govt.nz/media/1990901/auckland-transport-report-24-month-safe-speeds-tranche-1-monitoring.pdf>

Change in annual road deaths and serious injuries on Auckland roads where speeds were lowered in June 2020



Sources: Abley Safe Speeds Phase 1 24 Month Interim Evaluation (2022) death and serious injuries data from June 2020 until June 2022.

The cost of the alternatives

The cost of doing nothing

If we do nothing, over the next five years one in two Aucklanders will be personally connected to someone seriously injured or killed on our roads – based on assumptions that on average we each know at least 100 other Aucklanders and that current rates of road harm continue.⁵

The monetary costs of making roads safer for higher speeds

Urban roads

There are approximately 5,600 km of urban roads in Auckland. To upgrade the safety of 2,000 km of our busiest urban roads without speed reductions would cost between \$14 and \$26 billion, or about \$23,000 to \$43,000 per Auckland ratepayer.⁶

Measures such as restricting people to overbridges or tunnels to cross busy roads would be both expensive and negatively impact the quality of roads and streets as places to live, work and play.

2,000km of urban arterial upgrades = **\$14b - \$26b**



\$23,000 - \$43,000 per Auckland ratepayer

Rural roads

Installing wire rope barriers to prevent head-on and run-off-road crashes on the region's rural network would cost up to \$20 billion. This equates to about \$30,000 per Auckland ratepayer, with additional costs for road widening and straightening also being required.⁷ Further investment would be needed to address risks to motorists, people walking and cycling, and horse riders at rural intersections.

Increasing safety by upgrading infrastructure without safer speeds is unaffordable, would take decades, and create large scale and long-term disruption.

Rural road upgrades = **up to \$20b**



\$30,000 per Auckland ratepayer + additional costs

⁵ Based on a total of 7,614 road deaths and serious injuries, reported on New Zealand Transport Agency New Zealand Transport Agency Waka Kotahi's CAS between 2016-2020, for the Auckland Region. The serious injuries have been factored up in accordance with the under-reporting figures reported in Safety of People Outside Vehicles Research (Phase 2). The Auckland population of 1,571,718 was used, as per 2018 Census data. Assumes road harm is evenly spread throughout population, whereas in reality, some people may know several people in crashes and others, none. Assuming each person knows 100 individuals and there's no overlap, this equates to 1,571,718/100 = 15,717 contact groups, of which 7,614 have suffered death or serious injuries in the last five years (2016-2020), 15,717/7,614 = 2.06 (about 1 in every 2 Aucklanders).

⁶ Introducing Katoa, Ka Ora: Why we are making a speed management plan, 2022. <https://at.govt.nz/media/1992536/introducing-katoa-ka-ora.pdf>

⁷ Introducing Katoa, Ka Ora: Why we are making a speed management plan, 2022. <https://at.govt.nz/media/1992536/introducing-katoa-ka-ora.pdf>



2

How we got here: engagement and evidence

Alongside our other research and evidence gathering, as part of our extensive engagement journey, since early 2022 AT has surveyed almost 200 schools, held 64 workshops involving 21 Local Boards, Mana Whenua and 170 partners, stakeholders and community members; to listen to and understand aspirations and concerns around speed management. The public consultation received 7,927 submissions.

Speed and climate change

While safety is the reason for speed management, it also helps with reducing emissions

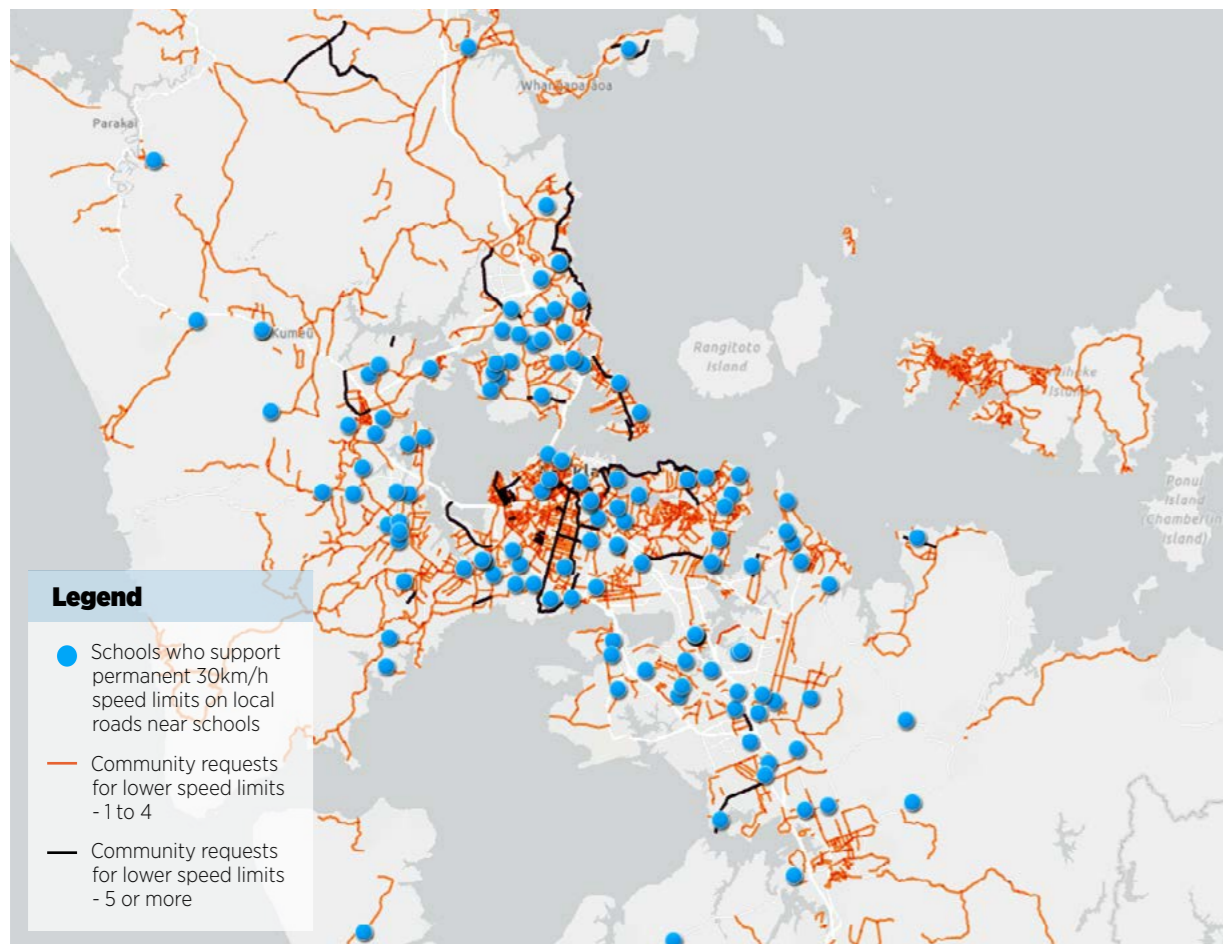
Recent research shows although changes in vehicle speed can affect emissions, the overall impact in Auckland is expected to be small.

To reduce vehicle emissions, we need to encourage more use of public transport, walking and cycling. By making it safer to walk and cycle, speed management is a critical component of our emission reduction pathway for Auckland and New Zealand.⁸

⁸ Emission Impossible (2023) The impact of speed on emissions: Summary report prepared by Emission Impossible Limited for Auckland Transport and New Zealand Transport Agency New Zealand Transport Agency Waka Kotahi.

Community requests and local board engagement

The map below shows the 1710 roads where community members have asked for lower speed limits since 2019. This includes requests made during safe speeds consultations in phases one to three, and other community, stakeholder and partner requests in-between times. It also shows schools who have supported lower speed limits. In survey responses from almost 180 schools, 78% supported permanent 30km/h speed limits on local roads near their school.



We have workshopped Katoa, Ka Ora with 21 local boards across Auckland in 2022 and 2023. During these workshops we shared requests for slower speeds received from communities, schools and other groups.

Feedback provided from local boards has been critical to understanding where and how much of each local board was reviewed for proposed speed limit changes in this plan.





Partnership with Māori

Early engagement to seek contribution from Treaty Partners for this plan since early 2022 has been guided by their advice and leadership, on both the process and the content of engagement.

As requested by mana whenua, we have sought governance direction from the Mana Whenua Kaitiaki Forum, workshopped with their Te Pou Oranga group, held a series of mana whenua operational transport hui and a wānanga on Katoa, Ka Ora. This extensive process guided by mana whenua has fostered their capacity to contribute to the development of this plan.

We have sought engagement with Mātāwaka through events and surveys and met with kura kaupapa following their requests for speed management.

What we heard and learnt:

1. Confirmation of the Mana Whenua Kaitiaki Forum objective to reduce road harm for Māori.
2. Support for a holistic response with focus on tamariki. We need to keep all children safe and think of future generations. This includes kohanga reo, kindergartens, kura and schools.
3. Need to understand the value and story of haukainga (true home) to Treaty Partners and the purpose of kura and marae for manākitanga. There is need for a safe speed limit to protect all who visit and use these locations.
4. Support safe speed limits near marae, papakāinga and kaumātua housing, kura kaupapa and schools, kohanga reo and kindergartens.
5. Marae are like schools, with many people moving around outside vehicles at many different times of day and night. Variable speed limit signs would be helpful for rural marae to manage busy occasions when people may be walking on the road, including during tangihanga.
6. Specific requests for Karioitahi Beach, Okahu Bay, Te Kura Kaupapa Māori o Piripono Te Kura Whakahou ki Ōtara and Te Kura Kaupapa Māori o Te Kotuku.

Voices of children

To hear children's perspectives on road safety, AT held an art competition during the April 2022 school holidays. Kids were invited to draw or write about "What would your neighbourhood look like if everyone could travel safely on our roads and footpaths?"

Our tamariki showed great awareness and understanding of road safety issues and speed. They want to walk, scoot and cycle to school independently, to the park and to local shops with their friends, siblings and pets.



One winning entry noted that vehicles don't always stop for them at pedestrian crossings, and wished they would.

Winning entries from Road Safety children's art competition.





Katoa, Ka Ora conversations

Eight independently facilitated workshops were held across mid and late 2022 to hear early feedback. Participants included elected members, technical experts, Fire and Emergency NZ, freight groups, health and transport groups, residents' associations and interested citizens.

Public consultation was held from 24 July to 28 August 2023. In total we received 7,927 submissions.

The feedback from these conversations and public consultation helped us understand that people shared concerns about:

- Improving transport safety, particularly for our children.
- The need for consistent data.
- Impacts on journey times, particularly for freight and emergency services.
- Making busy areas with lots of people and vehicles safer to move around.



(One of the) benefits will be less impact on infrastructure where you have a major incident. An accident can bring the city to a standstill...When state highway speed was dropped from 100 – 80km/h I thought well this is going to create impatient drivers but what it has actually done is everyone sits on 80, you get there at the same time, everyone is in a better mood, so I would say to people give the changes a chance. ”

Workshop participant, Shaun Pilgrim, Assistant Commander/Group Manager, Fire & Emergency New Zealand.

The full independent reports from both workshops are available on the [Auckland Transport website](#).



3

Our 10 year vision

Alignment with national and regional plans and policies



Katoa, Ka Ora is consistent with the strategic priority of safety in the Government Policy Statement 2024-2034 because it contributes to the outcome of a reduction in death and serious injuries.

The Government Policy Statement requires road safety and speed management to be delivered in an efficient and cost-effective manner with public sentiment and acceptability considered more directly. It continues to prioritise the safety of young New Zealanders outside schools.

This plan has been reviewed following the release of the 2024-34 Government Policy Statement and draft Land Transport Rule: Setting of Speed Limits 2024 to consider opportunities for consistency and alignment.

The table to the right shows how Katoa, Ka Ora is aligned and delivers on regional (Auckland Council and Mana Whenua Kaitiaki Forum) and national (NZ Government) transport safety plans, policies, and strategies.

Katoa, Ka Ora Auckland Speed Management Plan 2024-27

National Plans and Policies

Government Policy Statement on Land Transport 2024-2034

Goal of a transport network that enables people and freight to move around efficiently, quickly and safely.

Four strategic priorities; Economic Growth and Productivity, Increased Maintenance and Resilience, Safety, and Value for Money.

Land Transport Rule: Setting of Speed Limits 2022

This Rule is the current regulatory framework for changing speed limits. It permits road controlling authorities to make speed management plans, and plan for, consult on and implement speed management changes.

Draft Land Transport Rule: Setting of Speed Limits 2024

The draft setting of speed limits rule retains speed management plans with some amendments. These include requiring variable speed limits outside school gates and reversal of recent speed limit reductions.

Regional Plans and Policies

Draft Regional Land Transport Plan 2024-2034

Five key challenges to respond to; climate change and resilience, asset management, safety, travel options and access and connectivity.

Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan

Sets pathway to achieve emission reduction goals

Key immediate action 1.3.1 Rapidly deliver safe speeds across urban Auckland

Mana Whenua Kaitiaki Forum Strategic Plan 2030

Te pou oranga (wellbeing outcome) measure 4.5.2 Decreasing number of mana whenua killed or injured on Auckland roads by 2030

Vision Zero for Tāmaki Makaurau

Vision of no deaths or serious injuries on our transport system by 2050

Target of 65% reduction in deaths and serious injuries by 2030

Principles

These principles have been developed based on mana whenua, local board, partner, stakeholder and community engagement. They are intended to consistently guide how we will manage speed for at least the next 10 years.

Tiakitanga

The top priority of speed management is to keep people alive and well on Tāmaki Makaurau, Auckland's roads.

Easy to understand

Speed limits are a critical part of an integrated safe road system; we will ensure they are easy to understand.

Keeping children safe

Safe speeds around schools will ensure the safety of children (and all ages of people).

Safe speed limits

Speed limits align with government requirements.⁹ We consider complex factors ranging from the function of our roads and streets to how many people travel outside of vehicles.¹⁰

Safe infrastructure

Investment in engineering and safety improvements will be prioritised on roads that have high safety needs and provide active mode benefits.

Partnership

We work with our Te Tiriti o Waitangi/Treaty of Waitangi and other partners in governance, design, delivery, education, communication, enforcement and monitoring.

Healthy communities

Safe speeds support more walking and cycling; this improves health and is better for the environment.

Measure results

We constantly monitor the roads to evaluate any changes required to make our roads and streets safe.



⁹ current government guidance is found here: <https://www.nzta.govt.nz/assets/resources/speed-management-guide-road-to-zero-edition/speed-management-guide-road-to-zero-edition.pdf>

¹⁰ Utilising AT's Future Connect and Roads and Streets Framework.



Objectives and measures

The New Zealand Transport Agency speed management guide provides the following speed limit ranges for urban and rural roads.

The long term vision of Katoa, Ka Ora is to align with government requirements and guidance.

Urban Roads	Speed Limit (km/h)
Civic spaces	10
Local Streets	30
Activity streets, main streets, city hubs	30 40
Urban connectors	40 50 60
Transit corridors	80 100

Rural Roads	Speed Limit (km/h)
Stopping places	40 60 80
Peri-urban roads	50 60 80
Rural roads	60 80
Rural connectors	60 80 100

We will measure success by aligning to these indicators:



Intervention indicator

- % schools with safe and appropriate speed limits.



Safety outcome indicator

- # overall death and serious injury reduction.



Safety performance indicators

- % of road network where speed limits align with Safe and Appropriate Speed.
- Mean speed of vehicles (urban, rural, urban centres).

4

How we propose to manage speed

We take a network-wide approach to speed management planning. This means we consider the whole network together when planning speed limit changes, other safety infrastructure and safety cameras; rather than taking a piecemeal, road-by-road approach.

This includes working with neighbouring road controlling authorities to ensure consistency where our roads cross over boundaries.



Safety infrastructure and when to prioritise investment

We consider whether to invest in safety infrastructure, set a lower speed limit or invest in a combination of both.

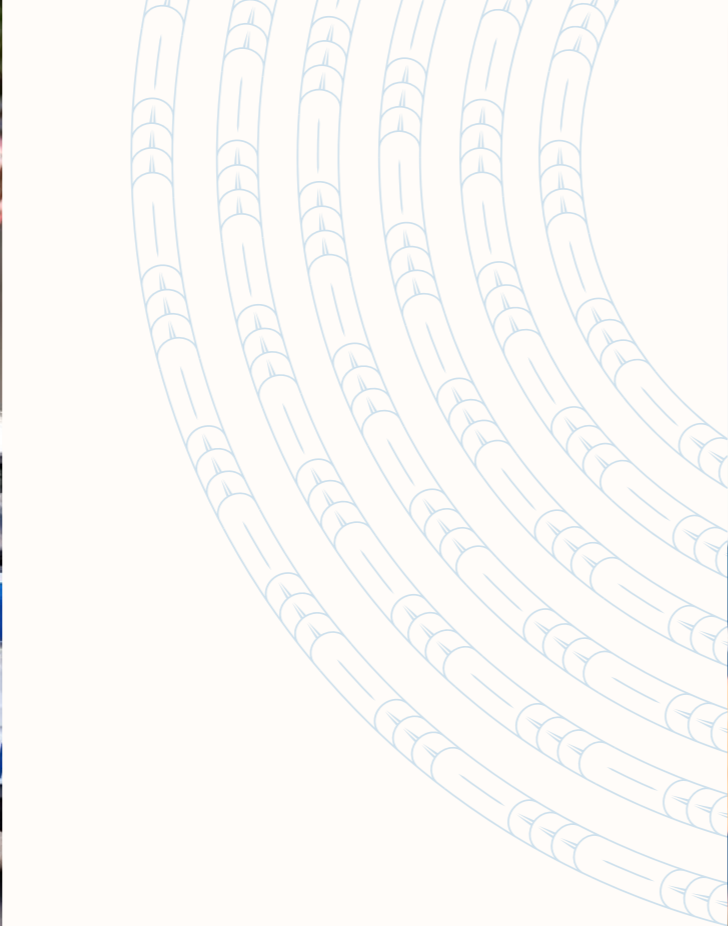
Installing safety infrastructure is complex. We have to consider many factors before making a decision to install infrastructure:

- Crash risk.
- Funding and technical constraints.
- Community, stakeholder and partner feedback.

If installing safety infrastructure is not possible or practical, then a speed limit review may be considered. Our monitoring and evaluation plan covers how we will know what is working and informs where we may need to adjust our approach over time.



Safety infrastructure; wire rope barriers, intersection speed zones, raised platforms and cycle facilities.



We currently have 72 safety cameras; 30 for speeding and 42 for red light running. We are working in partnership with the New Zealand Transport Agency on future average speed camera sites. Together, we continue to identify high risk locations with proven speeding issues, where we prioritise installation of safety cameras.

Safety cameras and enforcement

Enforcement of speed limits targets improving safety in areas of high risk. It is delivered through our partnership with NZ Police and New Zealand Transport Agency Waka Kotahi.

As with previous phases, when speed limits first change, NZ Police will take a highly visible, education-based approach together with widespread communications to ensure drivers have time to notice the new limits. After this time, partners will work together to achieve a general deterrence effect so drivers can expect enforcement anytime, anywhere and must stay within the limit to not receive fines.



Active monitoring and managing change

A key element of Katoa, Ka Ora is the active monitoring of the network to ensure that the speed management plan delivers the expected benefits, and any unexpected negative outcomes can be addressed.

After implementation, regular monitoring of these indicators will assist in planning for further interventions, which may include communications, engineering or enforcement as appropriate.

Before-and-after measurement and evaluation data used will include the crash and risk data, traffic flow and speed profiles, travel times, levels of active mode use, enforcement statistics, and community sentiment.



Safety Infrastructure Toolbox

These are some of the tools we can use to help make a speed limit easy to notice and follow. We choose a tool that best matches the safety issues, road type and speed environment for a specific location. Any significant engineering work is dependent on funding and consultation feedback and also needs to consider locations of freight and emergency service routes.



Driver feedback sign

Used to communicate speeds to drivers, often at higher risk places or high-speed locations.



Gateway treatment urban/rural

May have red surfacing, speed limit symbols, signage, or flush median road markings as appropriate to show where speed limits change.



Home zone sign

Used to communicate the change in road environment to drivers and increase their awareness.



Intersection treatment urban

Used to narrow intersections and shorten distance for people walking to cross and slow down the speed of traffic.



Raised crossing

Raised crossings for people walking and cycling, typically on 40 km/h or 50km/h roads.



Courtesy crossing

Raised courtesy crossing for people walking and cycling, typically on 40 km/h or 30 km/h residential roads.



Zebra crossing

Zebra crossings for people walking and cycling, typically on 30 km/h roads.



Signalised crossing

Signalised mid-block crossing for people walking and cycling, typically on 40 km/h to 60 km/h busier two lane roads.



Roadway artwork

Colours or roadway artwork in 30 km/h areas to remind drivers that people outside vehicles are out and about or that they are in a school zone.



Gateway for schools

Red surfacing used to show where safe school zone starts.



Pedestrian refuge island

Raised pedestrian refuge for people walking and cycling, typically on 40 km/h (or 30km/h).



Wider centreline

Used on rural roads to help to slow speeds and keep oncoming vehicles apart.



Modal filter

Modal filters are temporary tools to close the road to general traffic to eliminate 'rat running' but to allow access for cyclists and pedestrians.



Traffic island

Local area wide traffic calming measures such as speed humps or traffic islands can also be used to reduce the traffic speed for people walking and cycling.



Changes in parking configuration

Parking arrangements, such as alternative parallel parking, used in a way to encourage drivers to choose to drive at a safer speed.



Roundabout

Roundabouts reduce speed at intersections to make the intersection safer.



Planter boxes

Planter boxes – to help to narrow the road and encourage a more appropriate speed on residential streets.



Speed hump & speed table

Speed calming measures that aim to slow vehicles to a safe speed.



Chicane

Chicane/side islands to encourage drivers to choose to drive at a safe speed limit.

Glossary

Active road users People walking, cycling or using micro-mobility devices

Arterial road Regional arterial roads link districts or urban areas within the region, connect regionally significant facilities, and play a critical role in the movement of people and goods within the region.

Crash severity

- **Death/Fatal** A death occurring as the result of injuries sustained in a road crash within 30 days of the crash
- **Serious injury** An injury (fracture, concussion, severe cuts or other injury) requiring medical treatment or removal to and retention in hospital

Hapu Sub-tribe

Hui Formal gathering

Kaitiakitanga Guardianship

Katoa, Ka Ora In te reo Māori, Katoa means 'everyone'. Ka ora broadly means to be alive, well and safe. Together, it means that everyone is alive, safe and well.

Kohanga Reo Māori Immersive Pre-School or Māori Language Nest

Kura Kaupapa Māori Māori Immersive School

Mana Whenua Māori with ancestral relationships in certain areas in Tāmaki Makaurau where they exercise customary authority. Auckland Council recognises 19 tribal authorities as representing mana whenua interests in Auckland.

Manaakitanga Generosity and hospitality

Marae Gathering or meeting place

Mātāwaka Māori living in Auckland with Iwi affiliations outside of the 19 recognised Iwi

Micro-mobility Transport provided by very light vehicles, capable of carrying only one or two people. Examples include electric scooters, electric bicycles, powered skateboards, etc.

Rangatahi Māori Māori youth

Rat running Rat running is the practice by motorists of using residential side streets or any unintended short cut instead of the intended main road in urban or suburban areas.

Road Safety Prevention of death and injury to people on roads

Safe mobility The ability to move freely from place to place without risk of death or injury

Safe System A system approach to road safety that recognises that people make mistakes and are vulnerable in a crash. It reduces the price paid for a mistake so crashes don't result in loss of life or limb.

Social costs The social cost of a road crash and associated injuries includes loss of life and life quality, loss of output due to temporary incapacitation, medical costs, legal costs, and property damage costs.

Speed management Speed management is about matching the speed vehicles travel on a road to the purpose and function of the road in a way that keeps all road users safe. Speed limits are one part of speed management. Other parts include safety infrastructure and enforcement.

Speed management plan

A speed management plan is a state highway, regional or local (territorial authority) plan that outlines a ten year vision and a three year implementation plan for a whole of network approach to speed management.

It should address safe appropriate speed limits, infrastructure, and speed cameras.

Tāmaki Makaurau Auckland region

Tamariki Children

Te Ao Māori Māori worldview

Te Tiriti O Waitangi The Treaty of Waitangi

Transport Safety Prevention of death and injury to people using a transport network

Urban KiwiRAP Tool A NZ Transport Agency tool to assess the road safety risk on Local Authority road networks (not State Highways)

Variable speed limit A variable speed limit is a speed limit that can be changed at different times. If the sign is illuminated, the stated speed is the legal speed limit. If the sign is off, the normal signposted speed limit applies.

Vision Zero A safety strategy based on the principle that it isn't acceptable for people to be killed or seriously injured on the transport network.

Vulnerable road users Pedestrians, cyclists, motorcyclists and moped riders

Acronyms

ACC Accident Compensation Corporation

ARPHS Auckland Region Public Health Service

AT Auckland Transport

BAC Blood Alcohol Content

CAS Crash Analysis System

DSI Death and Serious Injuries from road crashes

ISA Intelligent Speed Adaptation

ITF International Transport Forum

MoT Ministry of Transport

NZTA New Zealand Transport Agency
Waka Kotahi New Zealand Transport Agency

OECD Organisation for Economic Co-operation and Development

SaAS Safe and Appropriate Speed

VKT Vehicle Kilometres Travelled

