



# 1.0 Introduction

# Urban street planning and design guide

## Purpose

This guide sets out the policy context and criteria for planning, designing and evaluating streets. It is a practical tool to support good outcomes by linking high-level spatial planning and network planning, with planning and design for street space in urban centres and neighbourhoods.

The guide connects concepts of movement and place function with decisions on what activities get prioritised where, as informed by the One Network Framework ('ONF') tool of Waka Kotahi. It also makes linkages between transport network planning and the urban design of well-functioning urban environments that should inform street solutions.

The process and main components for planning and designing of streets, to support good practice is set out in this guide. It provides guidance on planning and investing in street change (via a pilot and using staged or adaptive changes, as well as permanent street change). The guide is a companion document to:

- **multi-modal guidelines**, including the pedestrian guide, cycling guide, public transport guide, and guides to using e-scooters and mobility devices
- **parking management guidelines**
- **adapting streets and tactical urbanism hand book.**

The guide supports safety guidance related to safe system principles:

- **Speed Management guidelines**
- **Standard safety interventions.**

## This guide:

- aligns with the work Road Controlling Authorities are leading in street planning and design
- presents Waka Kotahi street planning and design objectives, methods and best practice
- builds on the a common language of the ONF for street planning and design, recognising movement and place function
- demonstrates how streets can support equitable outcomes for all including vulnerable road users
- improves understanding of how the government's Transport Outcomes Framework translates to, and can be realised by, changes at the street scale
- demonstrates how more integrated approaches to urban streets can contribute to a higher quality and more integrated urban form to create more sustainable and resilient urban places
- operationalises Waka Kotahi and government policy direction, in particular around safety, multi-modal transport, and the urban system shifts needed to address rapid environmental and social changes.

This guide also supports the development of further resources, case studies and toolkits by Waka Kotahi and central government, and Road Controlling Authorities. This enables a common ground so a focus can be placed on local plans, manuals and standards.

## Who is this guide for?

This guide is for anyone who participates in the planning, design, construction, operation and maintenance of street networks – clients, consultants, contractors, project managers, stakeholders and communities.

Waka Kotahi staff whose work and actions affect urban mobility, multi-modal and urban design outcomes will use this guide.

Waka Kotahi central and local government partners can use this guide in relation to public street network infrastructure in urban environments. Use of this guide on privately funded street projects may be appropriate with the agreement of the relevant road controlling authority, client or landowner.

Local government partners can use this guide to provide national direction on the context for change, principles to guide, and scope of considerations for the planning and design of urban streets. This sits alongside the use of council plans and policies, design guidelines, manuals and codes/standards that provide the localised direction for urban streets that reflects the diversity of differing urban contexts and communities across the motu.

Like the ONF, at its heart this guide is designed to help practitioners to work collaboratively on street planning and design that addresses movement and place function. This includes strategic planners, transport planners, land use planners, urban designers, asset managers, traffic engineers and multi-modal specialists from both local and central government.



# Urban street context

## What a street is

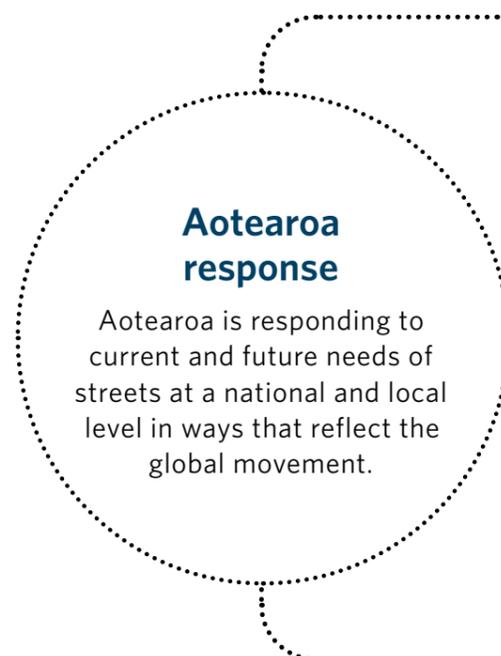
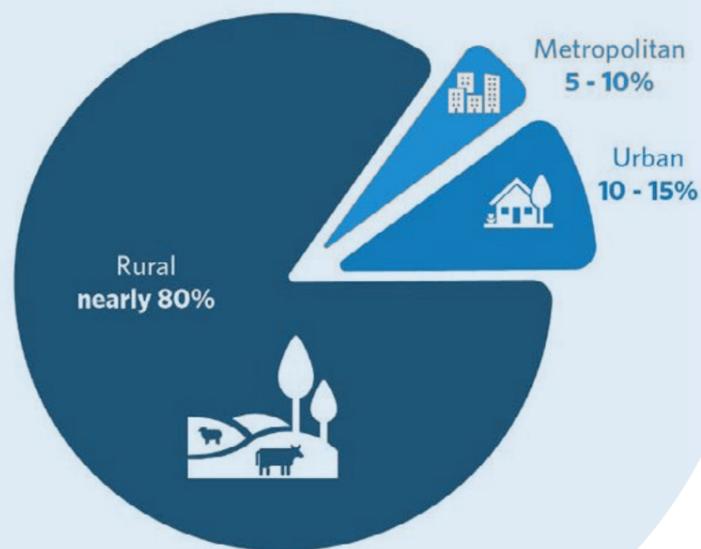
A street is the basic unit of urban space through which people experience an urban area. It is often thought of as the two-dimensional surface that vehicles drive on when moving from one place to another, however a street is a multi-dimensional space for people consisting of many surfaces and elements with connectivity considered along and across the street.

Streets stretch from one property line to another, including the building edges, land uses and setbacks that define each side of the property. They offer space for movement and access and facilitate a variety of uses and activities (day and night). Streets are dynamic spaces that can adapt over time to support the ways towns and cities change.

## Urban streets in the context of the national network

The Waka Kotahi One Network Framework (ONF) recognises that:

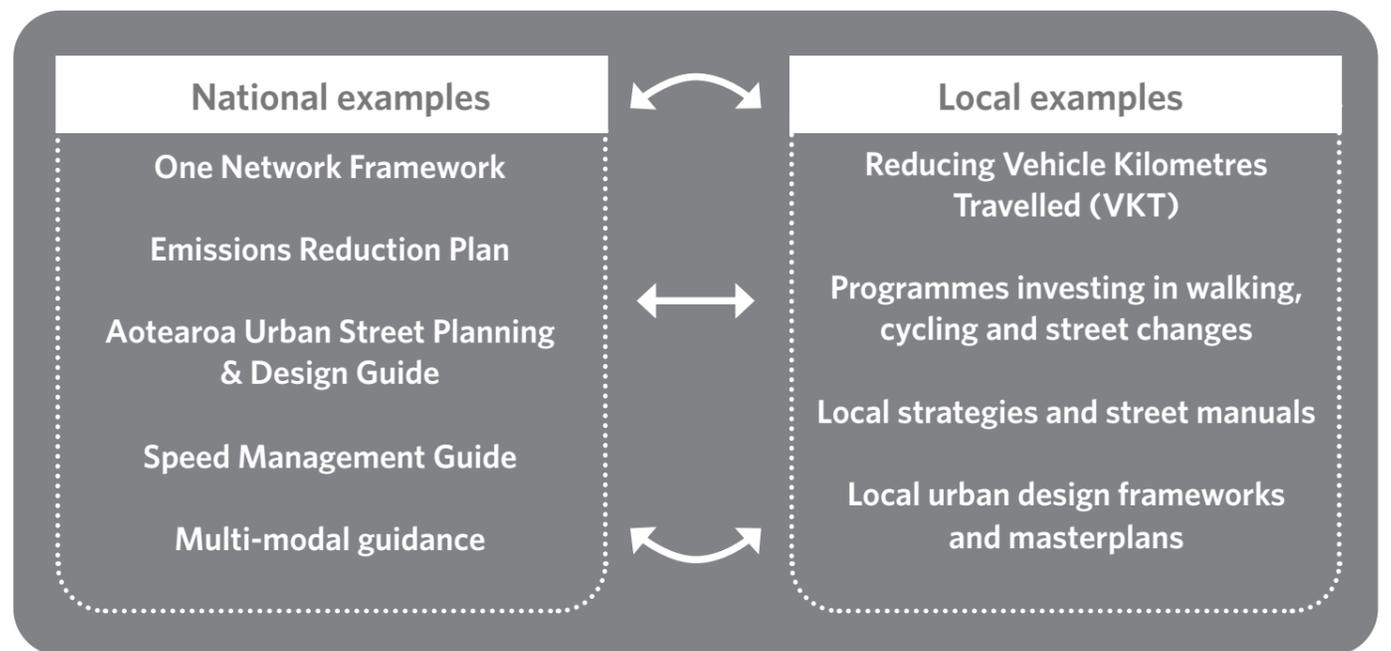
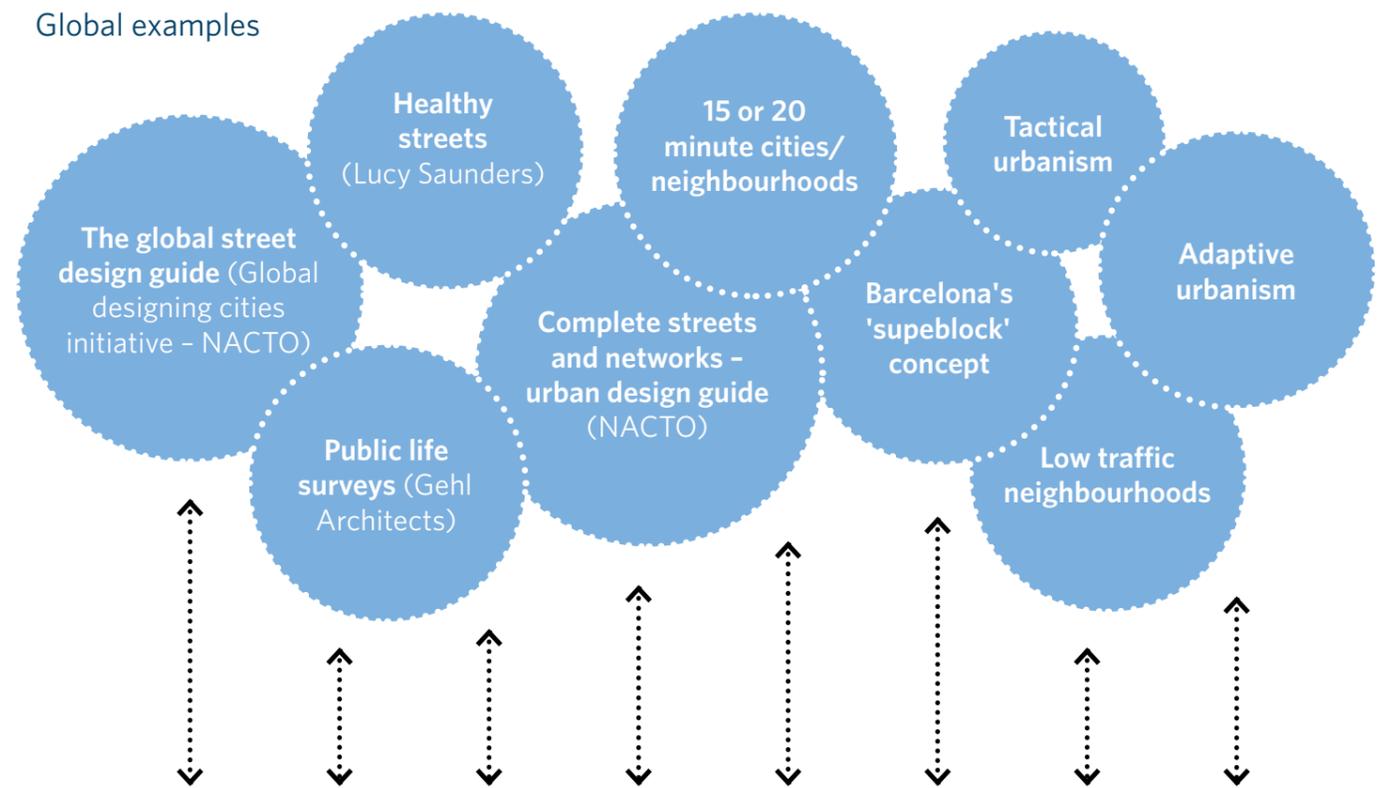
- 5-10% of the Aotearoa land transport network is in heavily urbanised metropolitan areas with limited corridor space, complex interactions and tensions between transport modes at different times of the day that need in-depth analysis
- another 10-15% of the network is in wider urban areas, mostly residential, with different scales of complexity
- most of the network (around 80%) is rural
- urban streets, while representing only a small proportion of New Zealand's total road network, play a critical role in supporting the majority of people in Aotearoa on any given day.



## Global street scene

A global movement is redefining urban streets in the 21st century

Global examples



# Urban street users and capacity

## Global Street Design Guide (NACTO) user hierarchy

The Global Street Design Guide (NACTO) establishes a street user hierarchy based on the vulnerability of users and spatial efficiency of mode and mobility choices to make a significant contribution to a safe, healthy and sustainable future.

The illustration (below) from the guide shows a street hierarchy that puts people first.

### 1. Pedestrians



### 2. Cyclists and transit riders



### 3. People doing business and providing city services



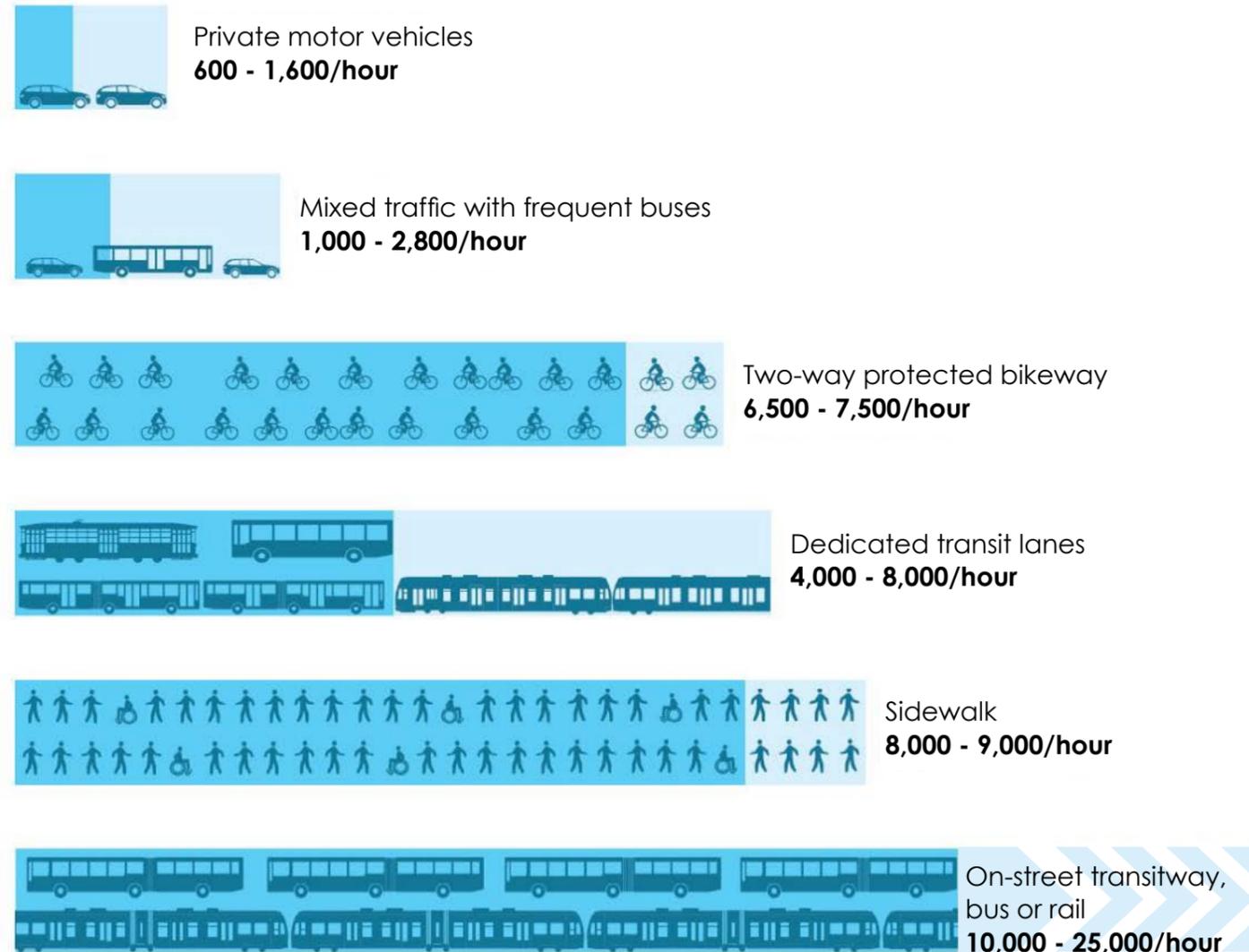
### 4. People in personal motorised vehicles



**Figure 2:** User hierarchy places the most vulnerable users as the top priority in street design. Image Source: Global Street Design Guide (NACTO)

## People capacity of different modes

The illustration (below) shows the hourly capacity of a 3m-wide lane (or equivalent width) by different modes at peak conditions with normal operations. Ranges relate to the type of vehicles, traffic signal timing, operation, and average occupancy.



**Figure 3:** Capacity of modes. IMAGE SOURCE: Global Street Design Guide (NACTO)

### Links

- [Safe System with Movement and Place for Vulnerable Road Users \(Austroads, 2020\)](#)
- [Global Street Design Guide \(NACTO, 2016\)](#)
- [Intervention Hierarchy \(Waka Kotahi, 2017\)](#)
- [Multi-modal Transport Planning \(Waka Kotahi, 2022\)](#)
- [Urban Mobility and Liveable Cities \(Waka Kotahi, 2022\)](#)





# 1.1 Policy and direction

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# Government direction driving street change

## Government policy to changing urban streets

The recent change in government policy direction focused on the impacts of the transport system on four important challenges:

- the safety and health of the population
- biodiversity and environmental sustainability
- climate change, particularly emissions
- aligning transport and land-use in urban development outcomes.

This section summarises the statutory and non-statutory policies and strategies that set this guide's direction for the future of urban streets in Aotearoa. For further detail on additional policy and frameworks see the links section.

The Government Policy Statement on Land Transport (GPS) sets out how money from the National Land Transport Fund is allocated towards achieving the Government's transport priorities. It defines funding ranges for activities such as public transport, state highway improvements, local and regional roads and road safety. These are called activity classes. Each GPS is reviewed and updated every three years and covers a 10-year period.

The Government Policy Statement on Land Transport (GPS) draws its priorities from the outcomes identified in the Ministry of Transport Te Manatū Waka Transport Outcomes framework. The 2021 GPS identifies that the 'purpose of the transport system is to improve people's wellbeing and the liveability of places'. Improving the way transport proposals better accommodate 'place' is a tangible way of addressing this intent.

The most recent GPS on Land Transport 2021 identified four strategic priorities for investment:

- **safety** - developing a transport network where no-one is killed or seriously injured
- **better travel options** - providing people with better transport options to access social and economic opportunities
- **climate change** - developing a low carbon transport system that supports emissions reductions while improving safety and inclusive access
- **improving freight connections for economic development.**

## Transport outcomes framework 2018

The Ministry of Transport Te Manatū Waka Transport Outcomes Framework 2018 sets a strategic approach for the government and the transport sector and defines a purpose for the transport system centred on the well-being of people and liveability of spaces. Five outcome areas contribute to the purpose: inclusive access, healthy and safe people, environmental sustainability, resilience and security and economic prosperity (see Figure 4). The changing urban policy landscape for these outcome areas as it relates to urban streets is described in the following pages.

## Government Policy Statement (GPS) on Land Transport



### Inclusive access

Enabling all people to participate in society through access to social and economic opportunities, such as work, education, and healthcare.

### Economic prosperity

Supporting economic activity via local, regional, and international connections, with efficient movements of people and products.

### Environmental sustainability

Transitioning to net zero carbon emissions, and maintaining or improving biodiversity, water quality, and air quality.

### Healthy and safe people

Protecting people from transport-related injuries and harmful pollution, and making active travel an attractive option.

### Resilience and security

Minimising and managing the risks from natural and human-made hazards, anticipating and adapting to emerging threats, and recovering effectively from disruptive events.

**Figure 4:** Transport Outcomes Framework 2018, Ministry of Transport Te Manatū Waka, 2018.

## Arataki

Arataki is the Waka Kotahi 10-year view of what is needed to deliver on the government's priorities and long-term objectives for the land transport system. It identifies the main drivers for change and the significant changes needed to deliver on the government's direction. (Figure 5.)



**Figure 5:** Arataki, Our Plan for the Land Transport System 2021-31, Waka Kotahi.

## Links

- [Better Travel Choices \(Waka Kotahi, 2019\)](#)
- [Te Āhei ki te Whakamahi Ara - Accessible Streets \(Ministry of Transport, 2020\)](#)
- [Arataki \(Waka Kotahi, 2022\)](#)
- [Keeping Cities Moving \(Waka Kotahi, 2022\)](#)
- [Government Policy Statement on Land Transport \(Ministry of Transport, 2021\)](#)
- [Transport Outcomes Framework \(Ministry of Transport, 2018\)](#)

# Healthy and safe people

## Vision Zero approach

Vision Zero is an ethics-based approach to a safe transport system that was developed in Sweden in the 1990s and is having success globally. In Aotearoa, Vision Zero is underpinned by the Safe System approach to road safety (see Figure 6). Safe System is a holistic approach to addressing all facets of the transport system. It applies multiple layers of evidence-based measures to mitigate the effects of human error to avoid death and serious injury. Vision Zero acknowledges human error and fragility but doesn't accept that death or serious injury should be an inevitable or acceptable outcome of using the transport system. Using the system includes travelling and spending time in public environments such as streets, cycleways and footpaths, and accessing public transport.



**Figure 6:** Relationship of Waka Kotahi Safe System approach to Vision Zero.

## Road to Zero: New Zealand's Road Safety Strategy for 2020 - 2030

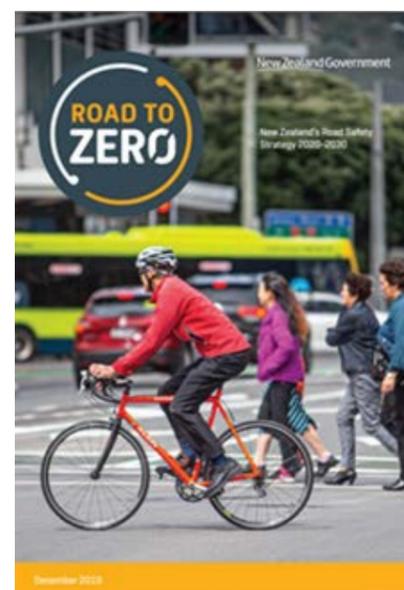
The Road to Zero strategy sets out principles. It adopts Vision Zero, no death or serious injury from travelling on the roads is acceptable. (See Figure 7).

The Road to Zero strategy makes the safety of people a priority through four principles:

- We promote good choices but plan for mistakes.
- We design for human vulnerability.
- We strengthen all parts of the transport system.
- We have a shared responsibility.

The strategy identifies the importance of updating guidance to reflect Road to Zero. A three-year action plan beginning in 2020, outlines 15 initial actions across the focus areas to reach a target of a 40% reduction in deaths and serious injuries by 2030. The action plan includes a review of infrastructure standards and guidelines to embed the Safe System approach in them. The action plan points to a planning and design street guide as the mechanism to support this integration.

Figure 8 envisages the positive feedback system created through the Safe System approach. Streets become safer, healthier and more people-centred following design changes, which results in more people feeling comfortable walking, cycling and taking public transport. This contributes to ongoing reductions in vehicle kilometres travelled, compounding the associated benefits of reduced emissions and air pollution, and fewer crashes and fatalities. This feeds back into a safer, healthier and more people-centred environment and the cycle continues.



**Figure 7:** Road to Zero. 10 year road safety strategy for Aotearoa, (Waka Kotahi, 2019).



**Figure 8:** Infographic shows the Aotearoa Road to Zero framework (Waka Kotahi 2022, unpublished)

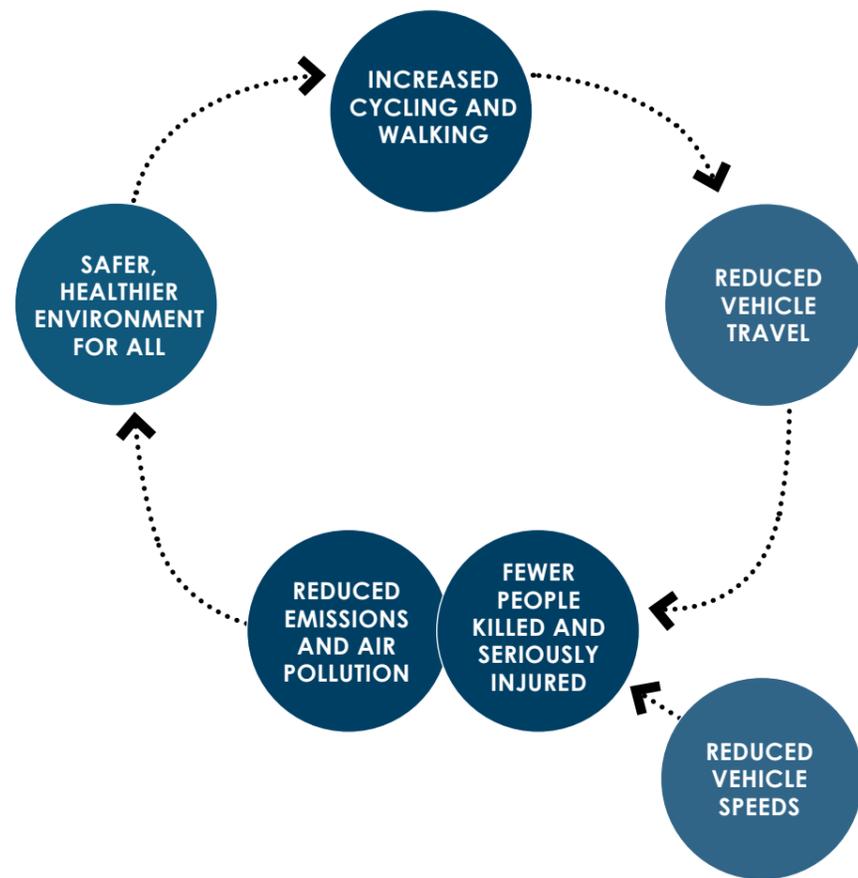
## Links

- [Vision Zero for System Designers \(Waka Kotahi, 2022\)](#)
- [Vision Zero - Road to Zero \(Ministry of Transport, 2020\)](#)
- [Healthy Urban development \(Ministry of Health, 2022\)](#)
- [Air Quality \(Ministry of Health, 2020\)](#)
- [Integrating Safe System with Movement and Place for Vulnerable Road Users \(Austroads, 2020\)](#)

# Health and inclusive access

## Environmental and health benefits of a safe system approach

The following diagram illustrates the positive feedback cycle that can be generated by a Safe System approach to speeds.



**Figure 9:** Environmental and health benefits of a Safe System Approach. Source: Waka Kotahi Speed Management Guide

## Inclusive access and urban design

A Safe System approach recognises the importance of designing for all users.

Designing accessible streets for people, including disabled people, older people and children means:

- determining the movement and place function and street category
- identifying place factors
- determining land use priorities
- identifying movement
- determining the transport mode priority
- identifying and accessing Safe System requirements
- prioritising treatments
- integrating selected treatments with the surrounding network.

While movement and place functions inform street categories, prioritisation, and space allocation for different modes of transport, the base level of determining accessibility and inclusive access should be consistent across all streets. For example, while some low movement areas such as shared spaces can allow non-disabled pedestrians to move freely across the carriageway, an accessible path must still be provided for those less able or confident in crossing the carriageway.

## Inclusive access (universal design) and user equality

Road users such as people who walk, wheel and cycle, or use electric scooters are more likely to suffer serious injury or death on our streets than vehicle drivers. This is due to historic street designs that expose people to conflict with vehicles and their speed. Waka Kotahi refers to these users as 'vulnerable road users'. Designing safe streets for all users is crucial for meeting the goals of the Road to Zero strategy and supporting increased walking and cycling, which in turn supports emissions reduction goals.

This guide supports safe and appropriate speed limits, safety interventions, space re-allocation and re-prioritisation for people by directing street designers to consider place function as well as movement function, and the needs for vulnerable road users.

Streets with higher place function can require less exposure to traffic and speeds to function and support a space for people, safer movement for active modes and the reallocation of space. Higher movement and speed streets require separated facilities or alternative routes to protect people using active modes from conflicts.

## Making cities walkable

A shift in emphasis to movement and place functions, and the safety of people is part of working towards the government's mode shift goals. Section 4.1 introduces the concept of walkable cities and catchments and how it should be a foundation when planning urban street networks.

Making streets work for active travel has the following benefits:

- long term sustainability
- improved health
- less noise
- lower emissions
- supports public transport
- supports social equity
- is space efficient
- is low risk to others.

To develop your understanding further, see Austroads, Integrating Safe System with Movement and Place for Vulnerable Road Users: A process for integration (2020). [↗](#)

## Crime prevention through environmental design

Crime Prevention through Environmental Design is a multidisciplinary approach to crime prevention under the design and management of the built environment. The general principles of this approach align with and assist in the design of streets for all users. Specialist audits may be required where issues are identified in existing environments or to review street change proposals.

### Links

- [Integrating Safe System with Movement and Place for Vulnerable Road Users \(Austroads, Dr Bruce Corben, 2020\)](#)
- [Integrating Safe System with Movement and Place for Vulnerable Road Users \(Austroads, 2020\)](#)
- [New Zealand Human Rights. Your Rights \(Human Rights Commission, 2022\)](#)
- [Healthy Urban development \(Ministry of Health, 2022\)](#)
- [Air Quality \(Ministry of Health, 2020\)](#)
- [National Guidelines for Crime Prevention through Environmental Design in New Zealand, \(Ministry of Justice, 2005\)](#)
- [Te Āhei ki te Whakamahi Ara: Accessible Streets \(Ministry of Transport, 2020\)](#)
- [Sustainable and Safe: A Vision and Guidance for Zero Road Deaths \(World Resources Institute, 2018\)](#)

## Accessible streets

The Accessible Streets regulatory package (Accessible Streets) proposes rule changes to clarify how people are permitted to use footpaths, shared paths, cycle paths, cycle lanes and roads. The proposals allow cyclists on the footpath, provided they follow behavioural requirements (such as giving way to pedestrians and following a speed limit), allow councils to make changes to spaces using resolutions (without the need for lengthier processes), and mandate a minimum overtaking gap for motor vehicles when passing cyclists, pedestrians, horse riders and others.

Accessible Streets is one of 15 actions proposed in the initial Road to Zero action plan and an important step in a Safe System approach to improving safety for road users.

Waka Kotahi consulted the public on these proposals in 2020. People were largely supportive but raised additional risks. The next steps for Waka Kotahi is to carry out additional analysis on the proposals considered high risk and to investigate changes that would limit the risks raised during consultation. This work is expected to include:

- completing a disability impact assessment about the proposals
- further work and potential changes to the proposed definitions of devices/vehicles (proposal 1)
- analysis of land allocation and potentially changing the proposed rules relating to footpath and shared path use
- investigating how berms are defined.

Once these tasks have been completed, Accessible Streets will progress as a full package.

## Reshaping streets

The Minister of Transport is currently proposing changes to legislation to make it easier for road controlling authorities (like councils) to make street changes that support public transport, active travel and placemaking. These proposals would enable road controlling authorities to make street changes more efficiently and provide new ways for communities to be involved in changes that affect them.

The proposed regulatory changes include:

- a new Street Layouts land transport rule for local authorities, as road controlling authorities (RCAs), to use for changing street layouts, piloting street changes, restricting vehicles, establishing Community Streets and School Streets, and for deciding on other street changes
- amending sections in the Local Government Act 1974 (LGA1974) covering pedestrian malls, transport shelters (like bus shelters), and temporary road closures
- changes to other rules and regulations so that local authorities can reduce speed limits as part of pilots, trial Traffic Control Devices (TCDs) more effectively, and to make legislation more accessible.

The Minister of Transport and Cabinet will review feedback before finalising any proposals and deciding whether to progress any or all of these changes.

# Environmental sustainability

## Climate change response

At Waka Kotahi we have an important role in environmental and social responsibility. Our environment includes our people, places and planet. It's affected directly and indirectly by the activities we undertake, so we take our responsibilities seriously. Toitū Te Taiao sets out our approach to demonstrating our environmental and social responsibility in everything we do (Figure 10).

The land transport system impacts our environment but is also impacted by our environment. Toitū Te Taiao, our new sustainability action plan, supports Arataki, Waka Kotahi 10 year plan by setting out the actions we will take to tackle climate change and create a sustainable land transport system.

Our vision is for a low carbon, safe and healthy land transport system. Toitū Te Taiao sets out how we will achieve this by reducing land transport emissions, helping to improve public health, reducing environmental harm and reducing our own corporate emissions. This type of change will take time so we must start now if we are to meet our 2050 targets. Toitū Te Taiao is a long term, significant change programme that will be delivered in partnership with many others.

Toitū Te Taiao is supported by Aotearoa's Emissions Reduction Plan released by the Ministry for the Environment in May 2022, which focuses on three areas to reduce emissions from the transport system:

1. Reducing reliance on cars and supporting people to walk, cycle and use public transport
2. Rapidly adopting low-emission vehicles and fuels
3. Beginning work now to de-carbonise heavy transport and freight.

Te Hiringa o te Taiao Our Resource Efficiency Strategy describes what we need to do to enable changes in behaviour, innovation and ways of doing business that drive sustainable sourcing and use of materials, waste minimisation and emissions reduction, while providing the same service benefit. This is all about how we use resources sustainably with minimal environmental impact. Waka Kotahi has committed to delivering land transport in a resource-efficient manner, which helps minimise environmental impacts, contributes to reducing carbon emissions and the potential to cut costs. There is a relationship between resource efficiency and emissions reduction goals, as indicated on the below graphic (Figure 11).

## Links

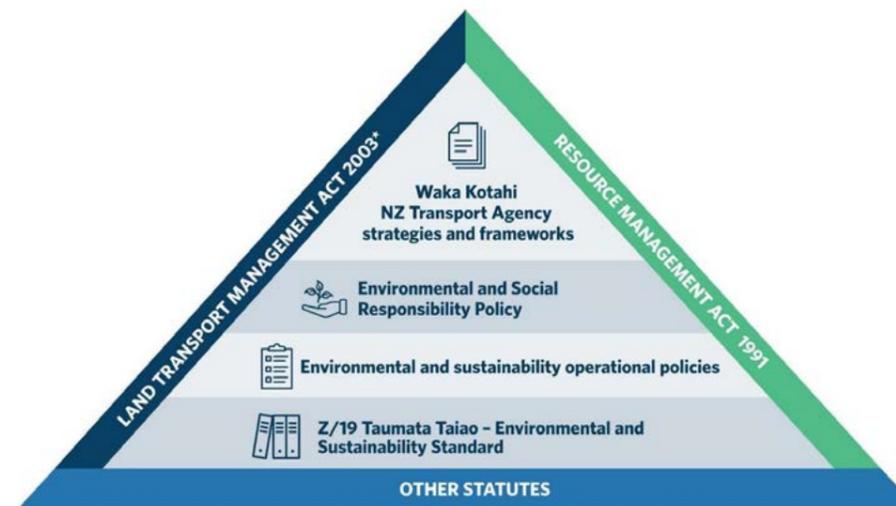
- [National Adaption Plan \(Ministry for the Environment, 2022\)](#)
- [Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy \(Department of Conservation, 2020\)](#)
- [Sustainability Rating Scheme Policy \(Waka Kotahi, 2020\)](#)
- [Te Hiringa o te Taiao - Our Resource Efficiency Strategy \(Waka Kotahi, 2021\)](#)
- [Toitū Te Taiao - Our Sustainability Action Plan Sustainability \(Waka Kotahi, 2022\)](#)
- [Z/19 Taumata Taiao - Environmental and Sustainability Standard \(Waka Kotahi, 2022\)](#)
- [Resource Efficiency Policy for Infrastructure Delivery & Maintenance \(Waka Kotahi, 2022\)](#)

## Urban streets that increase resilience

Minimising and managing the risks from natural and human-made hazards is one of the five outcome areas of the Transport Outcomes Framework to improve wellbeing and liveability. The Aotearoa urban street system needs to adapt to changing climate and environmental conditions, with resilience measures that enable faster and more effective recovery from disruptive events and emerging threats and forces of change.

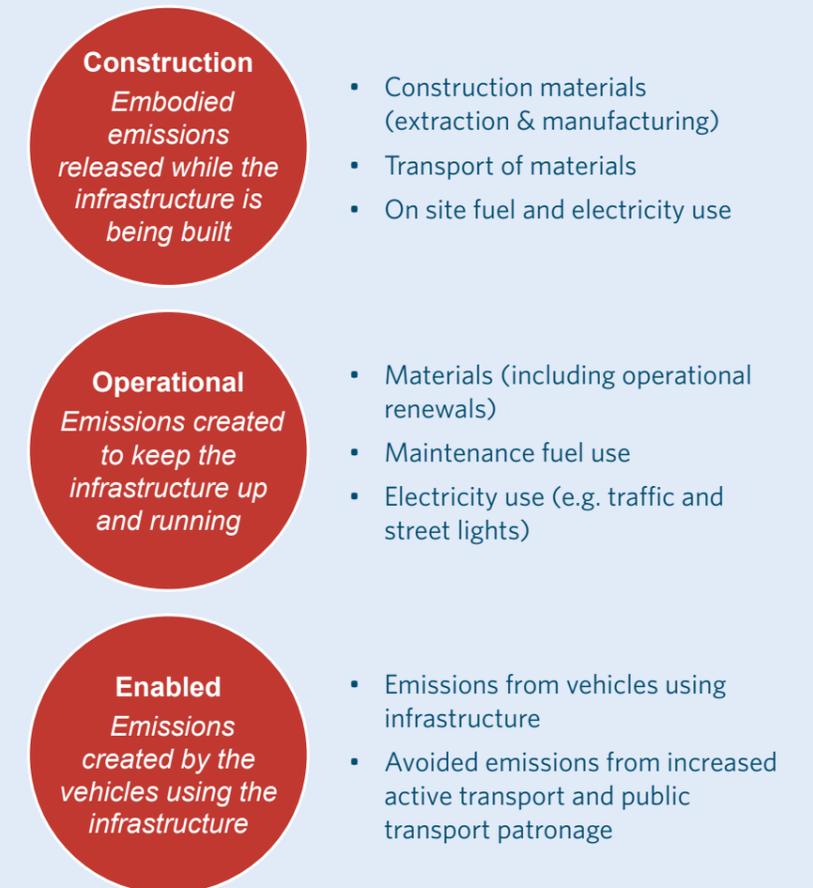
Our systems and networks for urban streets (planning, investment, operations) need to transition more rapidly and nimbly to the fast pace and wide reach of environmental and societal change we will continue to experience now and in the future.

The National Adaptation Plan supports all New Zealanders to adapt, live and thrive in a more damaging climate. It looks at the impacts of climate change with us now and into the future and sets out how Aotearoa can adapt. Different urban areas will face different risks from flooding, erosion, sea level rise, drought and other weather hazards. For urban streets, increasing climate resilience will mean adapting to rising sea levels and increased areas of frequent flooding. This underpins the importance of new standards and infrastructure to support the water management and blue-green infrastructure roles of streets in particular.



**Figure 10:** How Waka Kotahi gives effect to environmental and sustainability policies, strategic objectives, outcomes and legal requirements

## Example of resource efficiency in planning and design of urban streets, focusing on emissions.



**Figure 11:** An understanding of addressing emissions reduction goals through applying a resource efficiency lens to urban streets.

# Well functioning urban environment

Urban development and planning policy in Aotearoa New Zealand is rapidly evolving and changing to address future growth projections and housing needs within the context of climate change. This changing urban policy landscape is illustrated in Figure 12. They point to the extent of widespread change and challenges in urban areas for the 21st century (Figure 13). The wide-ranging nature of this change underpins the need for this guide and the themes and guidance areas it addresses.

Particular areas relevant to urban streets where policy shifts have emerged include:

- closer integration between spatial planning and network planning in ways that set the relationship between modes (for example, walking and public transport use, which streets support public transport routes and which play an important role for traffic movement)
- changes in the distribution, scale and form urban development (e.g. greater density around public transport stations)
- the roles streets play in connecting development and transport as well as public space (in ways that put people in focus).

Aligning with the changes in climate change response and resilience planning, spatial planning and urban development, street planning and design will also need to provide ways to transition networks and streets through adaptive approaches. The Waka Kotahi Streets for People programme has been set up to help our communities more effectively transition in this adaptive way whilst building capability and communities of practice to enable more widespread change over time.

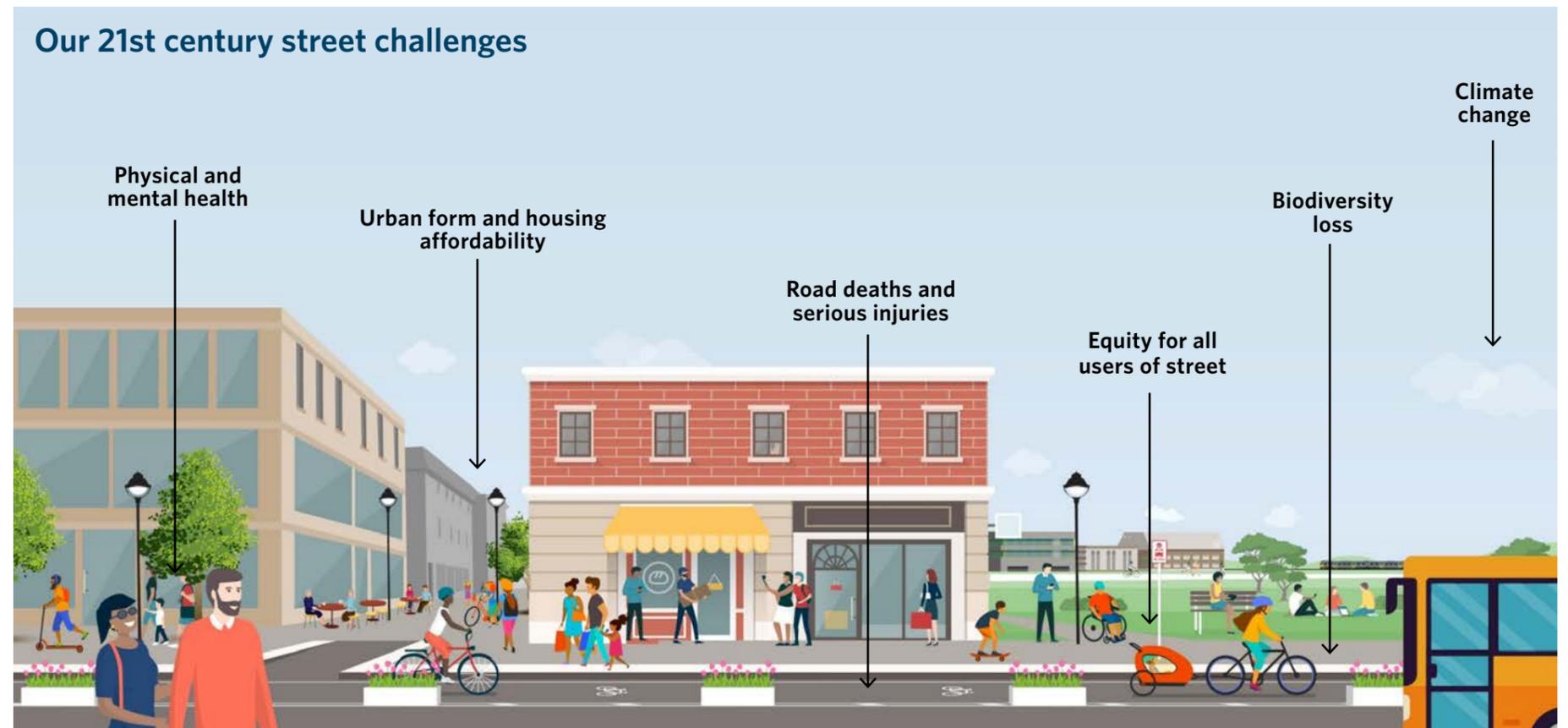


Figure 13: Urban Streets in the context of our 21st century challenges (modified Waka Kotahi graphic).

## Urban policy influencing well functioning urban environments

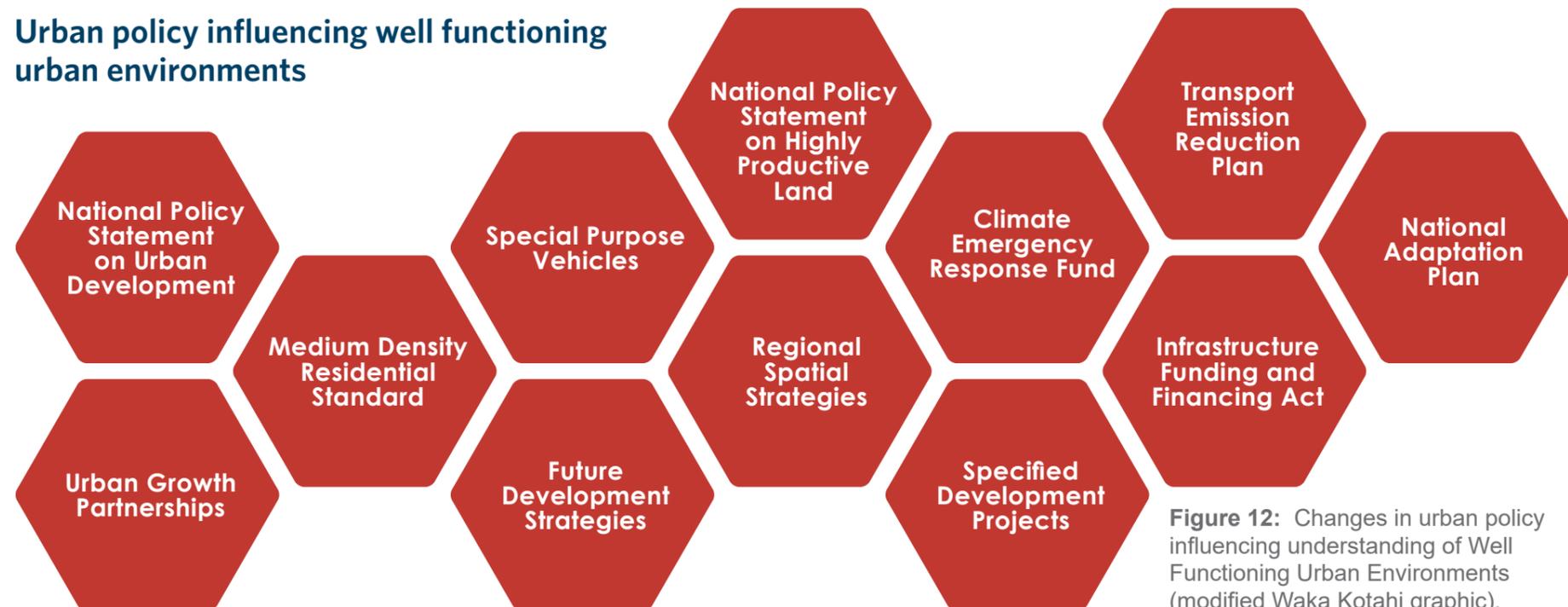


Figure 12: Changes in urban policy influencing understanding of Well Functioning Urban Environments (modified Waka Kotahi graphic).

### Links

- [Emissions Reduction Plan \(Ministry for the Environment, 2022\)](#)
- [National Adaptation Plan \(Ministry for the Environment, 2022\)](#)
- [National Policy Statement on Urban Development, \(Ministry for the Environment, 2020\)](#)
- [Urban Development Act \(Ministry of Housing and Urban Development, 2020\)](#)
- [Streets for People Programme \(Waka Kotahi, 2021\)](#)

# Movement and place

## One Network Framework

The One Network Framework (ONF) replaces and evolves from the One Network Road Classification to take a movement and place approach to classifying roads and streets, recognising place and movement functions, as well the surrounding context of the street.

The ONF provides a useful tool for integrated planning, based on a five-point matrix that links place and movement functions to inform a set of street categories (see Figure 14). The urban street categories are based on a matrix and this informs the type of network function for the design of the street and what modes are prioritised can then be defined, as well as the safe and appropriate speed limit range.

A street category is defined as part of a bigger network context, and the Framework recognises a street network (or even a single corridor) can have multiple street categories along its length reflecting changes in its location and the form, function and activities of adjacent land uses.

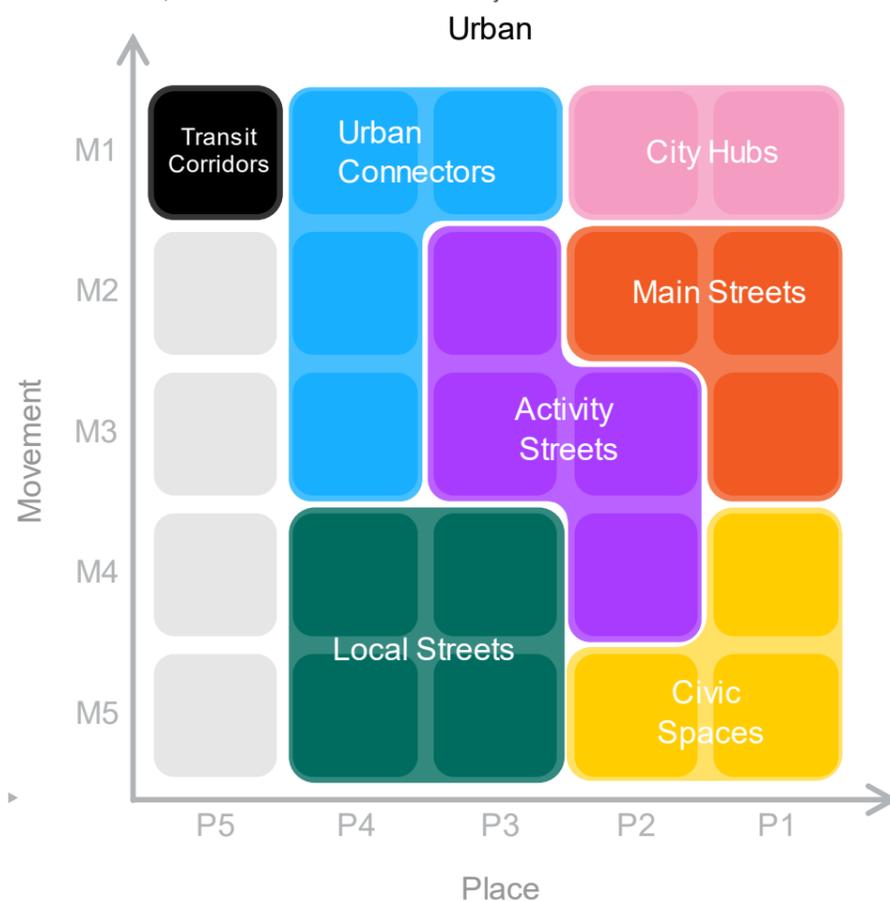
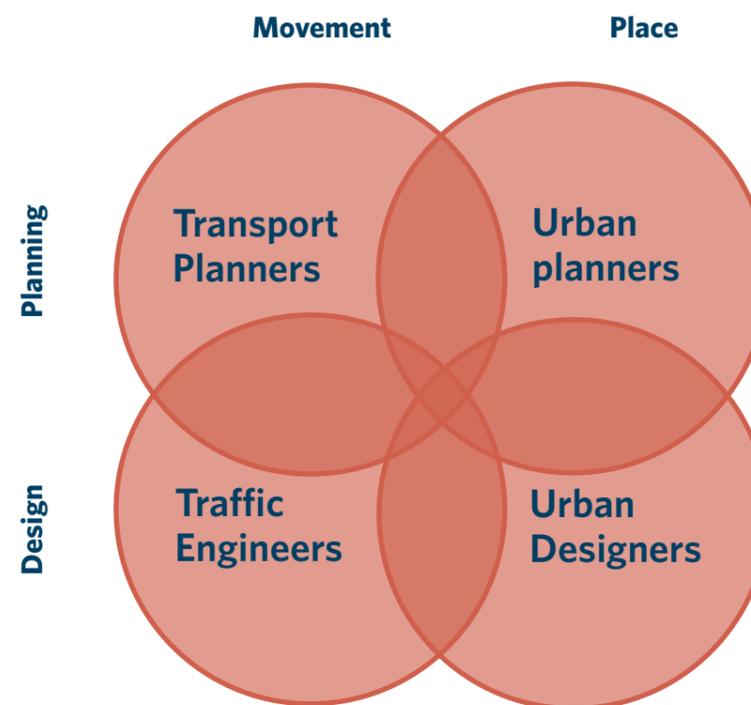


Figure 14: One Network Framework Place and Movement Matrix, Waka Kotahi and explanatory graphic of who the ONF is for.

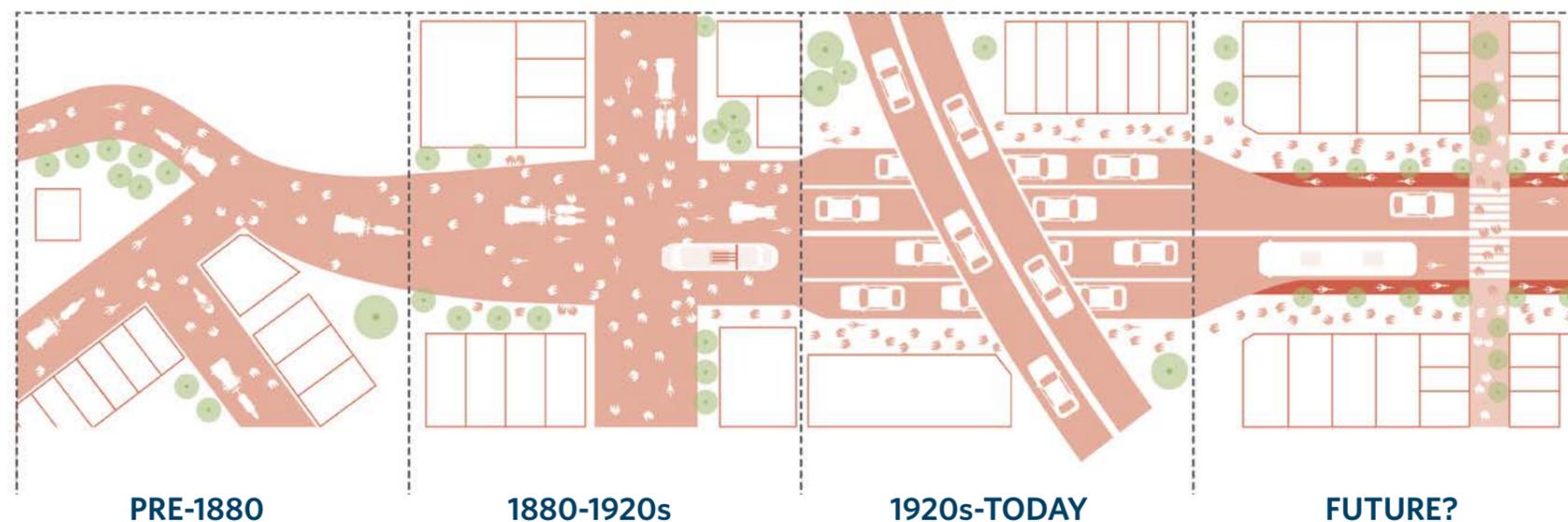
### Links

- [Integrating Safe System with Movement and Place for Vulnerable Road Users \(Austroads, 2020\)](#)
- [One Network Framework \(Waka Kotahi, 2022\)](#)

## The ONF is a planning tool for collaboration between practitioners



## The evolution of streets - movement and place





# 1.2 Why an urban street guide

# A guide to address the complexity of streets in urban places

There is a lot to consider in planning and designing urban streets. For example, changing our streets to create a safe system, within which people are able to make more trips, with smaller environmental and place impacts. Streets that enable greater densities of urban development and cater more readily to everyday needs, as well as continuing to provide essential infrastructure and utilities that are resilient and adaptive to a changing climate, are further considerations. Together these create a complex set of closely interconnected considerations to be addressed in street planning, design and operations.

The spatial constraints of urban street space, and the increasing density of the built environments and people activity they sustain, especially in our biggest and busiest urban centres, accentuates the complexity.

Integrated planning and design approaches are the answer to addressing the challenges of accommodating so many interrelated functions within limited space. At the street scale, integrated spatial arrangements, within which elements that are multi-functional and that collectively deliver multiple co-benefits, are the way to harness the creative tension of this complexity to improve well-being and the environment.

Sections 2, 3, 4 and 5 of this guide provide resources and direction on how to address this complexity at the system, spatial and network planning scales and at the street level.

## At a street level

 <b>Walking</b>	 <b>Cycling</b>	 <b>Inclusive Access</b>	 <b>Public Transport</b>	 <b>Driving</b>
 <b>Loading and Deliveries</b>	 <b>People Doing Business</b>	 <b>Parking</b>	 <b>Play</b>	 <b>Health</b>
 <b>Safety</b>	 <b>Green Infrastructure</b>	 <b>Climate Change Response</b>	 <b>Utilities</b>	 <b>Urban Development</b>

**A considered approach is required to integrate multiple functions into spatially constrained street environments in ways that improve wellbeing and the environment.**

# Roles and responsibilities for street planning and design

The partnership between central government and local government (road controlling authorities) is important for street planning and design. Local government is responsible for improving, operating, regulating (aspects such as parking), and maintaining local networks and setting speed limits on local streets and roads. Central government has an interest in local street networks because the cost to build, operate and maintain local networks is shared between central government (through Waka Kotahi) and local councils. Central government also co-funds roading, public transport services, and walking and cycling infrastructure and improvements on national state highway networks (which include urban streets). The roles and responsibilities of this system are shared, and the partnership approach necessary to support well-functioning urban environments is shared.

Local government operates within the regulatory and funding context set by central government. This means that while local government has more control over the local street network than central government, central government support and influence the planning, design and management of local streets in partnership. This influence is achieved through rules, regulation, standards, guidelines and incentives.

Waka Kotahi is committed to working with its local partners at all scales from spatial planning to local network planning (under the One Network Framework), on projects (funded from the National Land Transport Fund and other sources), and through business cases using the street guide to connect these systems. (For further guidance on investing in urban streets, see 3.2: Establishing the case for change).

## The street guide includes

- setting the scene globally, locally including the policy context
- principles in street planning and design
- key components to street planning and design
- direction on planning and design processes
- understanding street context for street design and planning
- the form and function for streets based on the One Network Framework (urban street categories)
- shared challenges to streets
- case study guidance based around key street themes
- resources and links.

## The street guide is divided into six parts

### Section 1.0 Introduction

Describes the street design guide, its background and policy context  
Purpose

- 1.1 Policy and direction
- 1.2 Why an urban street guide

### Section 2.0 Design principles

Establishes the design objectives and methods, principles and objectives that guide our approach to street design  
Framework of principles

- Objectives
- Principles

### Section 3.0 Planning and process

Sets out guidelines for how to plan and design streets  
3.1: Planning and design process  
3.2: Establishing the case for change

### Section 4.0 Creating good urban streets

Outlines how to understand and design a street network in urban areas and illustrates the different types of urban streets and how to design them.  
The urban spectrum  
Street networks and urban places  
ONF urban street categories guidance  
4.1: Street networks and urban places  
4.2: ONF urban street categories guidance

### Section 5.0 Putting it into practice

Provides thematic guidance based on shared challenges to creating good urban streets.  
Building a community of practice  
Shared challenges to urban streets  
Thematic case study guidance

### Appendices

- i) Resources and links
- ii) Adaptive urbanism

Through the objectives and methods set out in Section 2, the street guide sets out what the investment in our streets should be achieving. The street guide does not include detailed design of specific streetscape treatments or a street specification