One Network Framework (ONF)

Detailed Design - D02:2022

Waka Kotahi NZ Transport Agency

17 November 2022

Version 1.0

WAKA KOTAHI NZ TRANSPORT AGENCY

Te Kāwanatanga o Aotearoa New Zealand Government

Disclaimer

Waka Kotahi has endeavoured to ensure material in this document is technically accurate and reflects legal requirements. However, the document does not override governing legislation. Waka Kotahi does not accept liability for any consequences arising from the use of this document. If the user of this document is unsure whether the material is correct, they should refer directly to the relevant legislation and contact Waka Kotahi.

More information

Document owner: Waka Kotahi NZ Transport Agency
Published (online): November 2022 - Version 1

More information about the One Network Framework (ONF) is available on the Waka Kotahi website at www.nzta.govt.nz/onf

If you have further queries:

- Contact the ONF team via email: onf@nzta.govt.nz
- Call our contact centre on 0800 699 000
- Write to us:

  Waka Kotahi NZ Transport Agency
  Private Bag 6995
  Wellington 6141

Version history

This table shows a record of all changes to this document.

Version	Date	Role and organisation	Reason
1.0	17/11/2022	ONF integration programme - Waka Kotahi	All draft document information and feedback reviewed - Version 1 approved.

Contents

List of Figures

List of Tables

Terminology used in this document

Term	Definition
AADT	Annual average daily traffic
Adjacent land-use	Land-use types that tend to be along the side of the road or street category
Classification	Categorising roads based on the main function(s) each category of road performs
Corridor	• The area of land utilised to provide a transport link between two points. Usually constrained within the land area of the road reserve • The collection of routes utilised to provide a transport link between two key points by all available modes which may sometimes be expanded to include off-road modes such as railways and dedicated cycle paths that provide the link
Form	How a road or street looks
Function	The purpose or role in the network that the road or street performs
Intensity of use	Indication of the time spent by pedestrians in an area in a range from very high to low
Movement function	How people and goods move down and across roads and streets by any mode
Network	• Collective term for all roads and streets under the control of a Road Controlling Authority • National Network: All roads and streets in New Zealand • Highways Network: All state highways in New Zealand
Place function	The extent to which the land use along the side of a road or street is a destination that people want to visit or spend time in
Road Controlling Authority (RCA)	A local or regional council, territorial authority, or public organisation such as Waka Kotahi and Department of Conservation that operates a part of the NZ Land Transport network
Road reserve	The land area set aside for the purpose of providing for land transport, usually incorporating the entire area between property boundaries
Spatial planning	A 20–30-year strategy that sets the strategic direction for a community to form the basis for the co-ordination of decision-making, infrastructure, services and investment. It is a means of aligning other council plans, as well as providing a visual illustration of the intended future location, form and mix of residential, rural and business areas, along with the critical transport and infrastructure required to service those areas and any relevant environmental constraints (for example, natural hazards)[1]
Street category	The specific classification assigned to a road, street, or part of the transport network from the two Street Families based on its intended movement and place function

[1] https://www.lgc.govt.nz/assets/Wellington-Spatial-Planning/Wellington-Region-Spatial-Plan-Report-May-2016.pdf

Term	Definition
Street family	Group of street categories that are grouped according to the urban and rural context they refer to
Te Araroa	The Long Pathway is New Zealand's long distance tramping route, stretching circa 3,000 kilometres along the length of the country. It is made up of a mixture of tracks and walkways, and link sections alongside roads
Trip	Is a one-way person movement by a mode of transport, having two trip ends. The start of the trip is called as origin and the end of trip is called as destination
Trip generation	Trips generated by a destination
Urban design	Design of towns and cities, streets and spaces. It is the collaborative and multi-disciplinary process of shaping the physical setting for life – the art of making places for people. Urban design involves the planning and design of urban form and buildings, groups of buildings, spaces and landscapes and establishing frameworks and procedures that will deliver successful development by different people over time[2]

[2] https://www.udg.org.uk/about/what-is-urban-design

Introduction

Context

The One Network Framework (ONF) is a tool to classify roads and streets within the New Zealand transport network.

The One Network Framework (ONF) evolves the One Network Road Classification (ONRC) to a two-dimensional classification framework focused on movement and place[3].

The ONRC was developed by the Road Efficiency Group (REG) following recommendations from the Road Maintenance Taskforce in 2012. A national road classification with levels of service enabled an operational and cultural change in road activity management and improved prioritisation of investment. This built on the 2011 State Highway Classification to help manage the future State Highway network more effectively.

The **place function** within the transport network acknowledges that roads and streets are destinations and places for people, as well as transport corridors for vehicle movements. It also ensures that the ONF is fit for purpose in more complex urban environments with a range of modes to accommodate and competing demands on limited road and street space.

By introducing a stronger multi-modal focus, the ONF also brings more distinction to both urban and rural networks. It highlights the strategic importance of each mode to the overall objective of moving people and goods efficiently and effectively.

The ONF makes the following key shifts:

- A shift from the volume of vehicles on the network to the network's functional importance for moving people and goods, by any mode.
- It considers adjacent land use, and the role the transport network plays as part of the wider public realm.
- When fully implemented, it will consider both the current and future movement and place function of the network. This will allow gaps to be identified and guide network changes and investment decisions seeking to close the identified gaps.
- It includes walking, cycling, freight, public transport, and general traffic networks, some of which include off-road routes.

[3] The ONF was approved by the Waka Kotahi Board in February 2021.

Benefits of the ONF

Bringing **movement function** and **place function** together will:

- improve the integration of land use and transport planning
- position an agreed future vision for movement and place at the heart of how we plan, design, and manage maintenance and operations
- support more strategic and informed decision-making
- create a common language for discussing the function of roads and streets – from spatial planning, transport planning and urban design to modal priorities, the ways network's function, and maintenance and operations
- provide an easy-to-understand mechanism to have more informed conversations about the complexity of transport networks, including competing demands, strategic objectives, and potential investment.

Including the place function in strategic planning and investment decision-making recognises that shared, integrated planning between transport and land-use will result in better outcomes.

The ONF provides a foundation for nationally consistent conversations. The ONF isn't designed to provide transport solutions, but it helps to establish the **function** of a road or a street. While it contributes to design or investment conversations, the ONF doesn't seek to determine the **form** of a road or street. Other guidance such as the Aotearoa Urban Street Planning and Design Guide is available to support that purpose, alongside local centre plans and street design manuals.

When fully implemented, the ONF can be used to benchmark performance and align performance measures and outcomes.

The ONF also introduces modal layers of walking, cycling, public transport, and freight, recognising that our roads and streets have different functions for different modes.

Purpose

This detailed design document sets out and describes the components of the ONF:

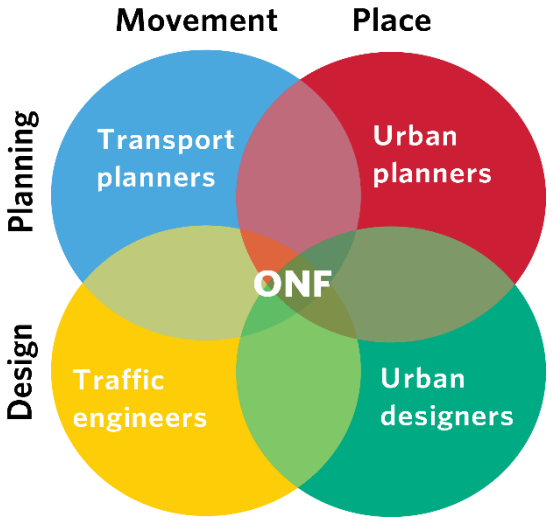
- Explains the meaning of **place** and **movement** in the context of the ONF.
- Sets out the urban and rural street families.
- Provides an explanation of each street category from each of the street families, including functional descriptions and defining attributes.
- Explains how to classify roads and streets under the ONF.
- Provides an explanation of terms and tables for each of the modal layers.

Who is this document for?

The information in this document is designed to help practitioners working at Road Controlling Authorities (RCAs) to gain a detailed understanding of the technical components and structure of the ONF. The information in this document will also assist RCAs to collaboratively classify their networks using the ONF.

These include strategic transport planners, urban design and land use planners, asset managers, and multi-modal specialists from both local and central government.

Figure 1 - Collaboration between practitioners



Place

Roads and streets are not just corridors that people use to travel along – they're also places where people live, work, shop, play, meet and gather with others. For the ONF, **place function** is defined as:

The extent to which the land use along the side of a road or street is a destination that people want to visit or spend time in.

The classification of place should achieve the following outcomes:

- Reflect the planned and intended function of the specific location.
- Relate to the on-street activity generated by adjacent land-use and its need for access.
- Consider the interaction with the movement function of the corridor, including the need for lateral movement across the road or street.
- Be informed by adjacent land-use, and the density of activity occurring off-street.

The level of on-street activity shows the importance of a destination for people and gives a direct pointer to the classification of place. As the level of activity increases, so does the classification of **place function**.

In general, the amount of pedestrian[4] activity and their willingness to spend time there, indicates a vibrant place with good urban design and accessibility. This is an important measure of a high place value location, particularly the numbers of people spending time in the area.

As levels of on-street activity increase, accessibility requirements also increase. High pedestrian numbers means more people crossing the road or street, requiring slower speeds and somewhere to cross safely. In turn, these impact on the **movement function** along the road or street.

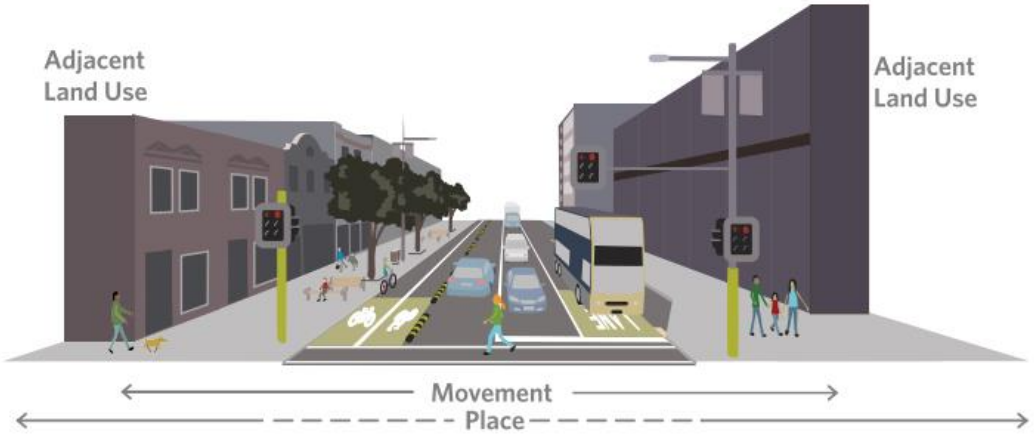


Figure 2 - Place function

[4] Pedestrians also include wheelchairs and mobility devices such as scooters.

The following table sets out the ONF five-point scale for the classification of place function for P1 to P5:

- On-street activity describes what a casual observer would experience in terms of the level of activity and the opportunity for the crossing of the road or street by pedestrians.
- The adjacent land-use sets out the typical types of land-use generating the on-street activity under the different Place functions.
- Pedestrian volume is a useful proxy to identify the level of on-street activity

Note: this is indicative only – there may be times where high-rise office blocks and apartments are the adjacent land-use along a street with a place function of P2.

Table 1 - ONF five-point scale for classifying place function

Place function ranking	Level of on-street activity	Typical adjacent land-use	Level of on-street activity – pedestrian volume
P1	• Very high on-street activity – very high numbers of pedestrians • Very high numbers of people spending time in the location • Major movement across the carriageway	High rise office blocks and apartments, central city shopping and entertainment, major commercial centres, streets with this level of place are most likely to be located within the CBD of major cities	>1000 /hour at peak > 5,000 /day
P2	• High/very high on-street activity – high numbers of pedestrians • High numbers of people spending time in the location • Significant movement across the carriageway	Office blocks, low rise apartments, entertainment venues, retail, commercial businesses, community facilities	>2,500 /day
P3	• Medium to high on-street activity • Some people spending time in the location • Some movement across the carriageway	Office blocks and low-rise apartments, retail, entertainment venues, commercial/trade businesses, community facilities, industrial	>1000 /day
P4	• Low to medium on-street activity related to people going about their lives • Limited movement across the carriageway	Residential, schools, community facilities, low intensity commercial/industrial	<1000 /day
P5	• Little discernible on-street activity	Mostly rural except for State Highways (motorways/ expressways) in urban areas	Negligible pedestrian movement

The factors described in the table are derived from several local and overseas movement and place frameworks, including those used by Transport for London, City of Toronto, VicRoads (Victoria, Australia), Transport New South Wales, and Auckland Transport.

ONF Street Families

Introduction

The ONF Street Families bring together the movement and place function elements to determine an overall classification for the road or street.

There are two street families – urban and rural (figures 3 and 4). Differentiating between urban and rural recognises that the level of people and goods movement as well as the factors that determine place are different in each context.

Note: The level of on-street activity in P3 and P4 in the rural matrix is at a much lower level than a P3 or P4 street in the urban context.

Figure 3 - Urban Street Family

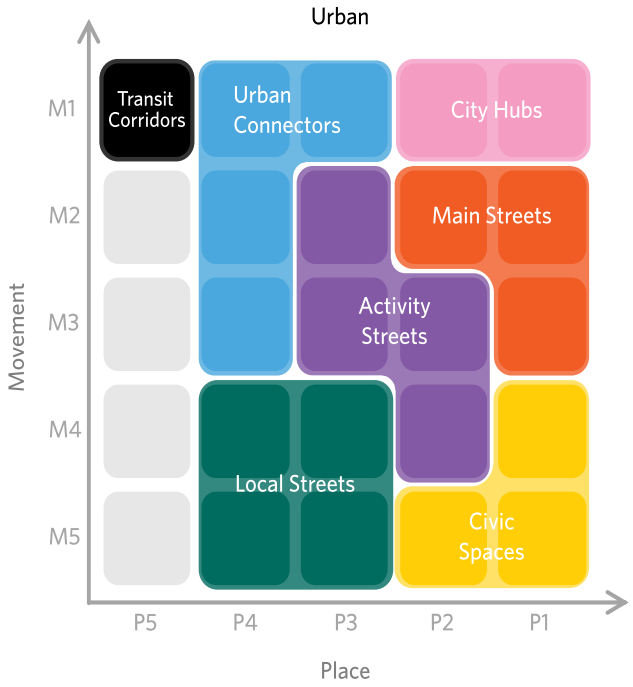
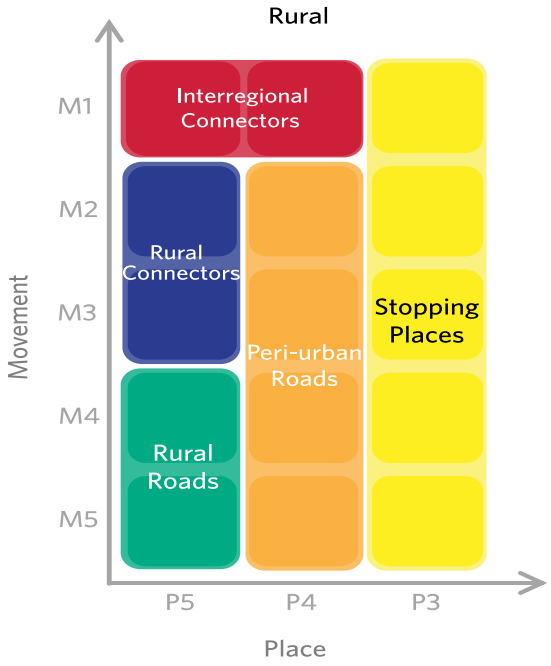


Figure 4 - Rural Street Family



Differentiation of urban and rural

The ONF definition of urban or rural is different from the ONRC definition, which was determined mainly by the speed limit of the road or street.

For ONF, whether a road or street is in the urban or rural street family is based on the adjacent land-use, with the district/unitary plan zone being the main indicator. For example, if the land the road passes through is a rural land-use zone then the road is rural.

Urban and Rural Street Category descriptions

The next section explains each of the ONF urban and rural street details required to help classify roads and streets into the ONF categories.

Name

Each street category name suggests the nature of a particular road or street when the level of movement of people and goods, and the place function of adjacent land use and activity are factored into the classification. They form part of the common language to be used when referring to similar categories of streets and roads and are easier to remember than technical alphanumeric codes like M2P3.

Description

This provides a general functional description of each street category.

Function

This sets out the function or purpose of the road or street category.

Density of on-street activity

This sets out the density of on-street activity for a road or street in a range from very high to low. Density of on-street activity is a combination of pedestrian activity, numbers of people spending time in the area (dwell time) and the density of land-use along the side of the road or street.

Intensity of use – dwell time

This is an indication of the typical time pedestrians spend in an area, ranging from very high to low

Adjacent land-use

This is a typical list of land-use types that tend to be along the side of the road or street for that category. In the urban street family, there is a graduation as you move from City Hubs, the category with the highest density adjacent land-use, down to Local Streets, the category with the lowest land-use density. Note, this is indicative only – there will be instances, for example, when main streets have high rise office blocks and apartment buildings along the side of the street.

Place function – primary attributes

This sets out the primary attributes of place that you would expect to see for the category.

Movement function – primary attributes

This sets out the primary attributes of movement that you would expect to see for the category.

Examples

These images represent current examples of each of the categories.

Urban Street Family

City Hubs

City hubs are dense and vibrant places. They're the central point of a city where people spend time working, shopping, meeting people, and visiting entertainment venues and businesses. They support very high levels of through movement of people, particularly by public transport, walking and cycling.

Place/Movement rankings:

- P1/2
- M1*

Note: M1 in the context of City Hubs is very high numbers of people walking, cycling and travelling by public transport rather than motor vehicle traffic which is a determining characteristic of Urban Connectors.

Function:

Access to adjacent land-use for all modes but very high pedestrian numbers and people travelling by public transport.

High quality places where people want to visit, spend time, meet and gather.

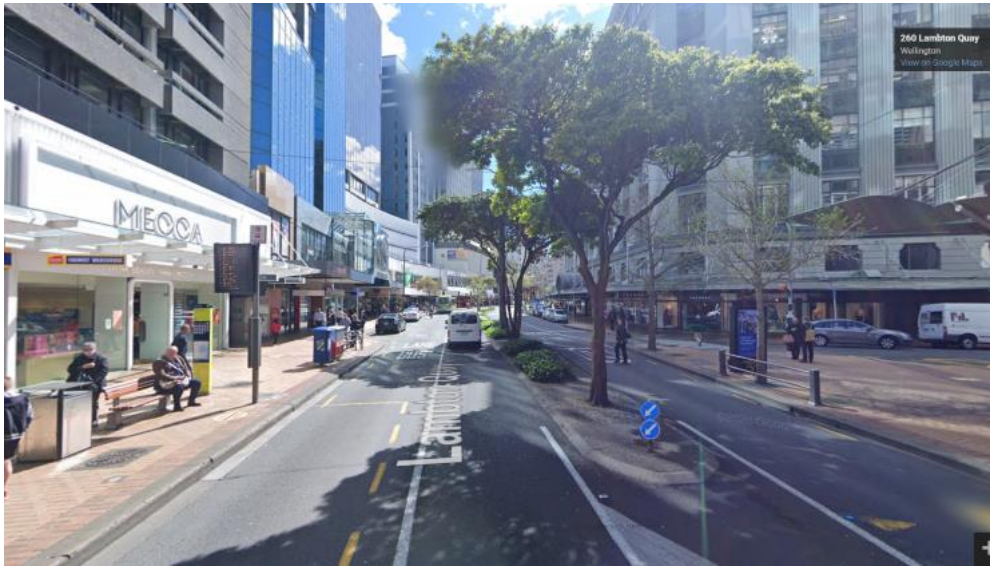
Accommodates very high levels of movement of people, particularly travelling by public transport and walking/cycling.

Focal point – centre of public and social life of city, both day and night.

Density of on-street activity	Intensity of use (dwell time)	Adjacent land-use (indicative)	Place function - primary attributes	Movement function – primary attributes
Very high	Very high	• High rise office blocks and apartments • Central city shopping and entertainment venues • Major commercial centres • City Hubs are located within the CBDs of major cities	• Very high pedestrian numbers accessing adjacent land-use • On-street amenities (e.g., al fresco dining, street furniture, green spaces, planting, public art works) • High numbers of people spending time in the area (e.g., visiting businesses, meeting other people, gathering at destinations)	• Very high pedestrian numbers and people travelling by public transport • All modes but particularly high frequency public transport access and movement of pedestrians and cyclists • Very high pedestrian movement across the street/road • Narrow kerb to kerb distances and crossing opportunities at key intersections allowing for easy crossing of the road/street • Cycle parking facilities • Limited time-bound, or no parking for private motor vehicles

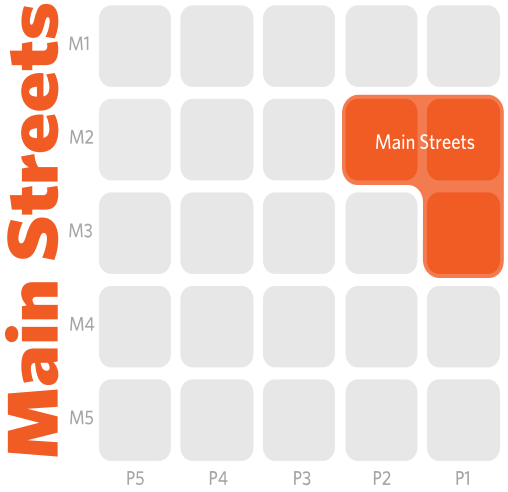
Queen Street, Auckland

Lambton Quay, Wellington



Main Streets

Main streets generate high levels of on-street pedestrian activity by people working, visiting shops, businesses, and entertainment venues. They aim to support this while making sure there are excellent connections with the wider transport network. Main streets need to balance the interaction between on-street activity and movement of people and goods. They accommodate medium to high levels of people walking, cycling, using public transport, or driving through.



Place/Movement rankings:

- P1/2
- M2/3

Function:

Access to adjacent land-use for all modes but particularly pedestrians.

Attractive environment that encourages people to spend time in location.

Accommodates high/medium levels of through movement for all modes.

Density of on-street activity	Intensity of use (dwell time)	Adjacent land-use (indicative)	Place function – primary attributes	Movement function – primary attributes
High	High/very high	• Office blocks • Low rise apartments • Entertainment venues • Retail • Commercial businesses • Community facilities	• High pedestrian numbers accessing adjacent land-use • On-street amenities (e.g.,, al fresco dining, street furniture, green spaces, planting, public art works) • People spending time in the area (e.g.,, visiting businesses, meeting other people, gathering at destinations)	• All modes - high pedestrian numbers • In cities often a primary public transport route • Often on-street, time-bound parking for motor vehicle drivers to be able to access desired destinations. • Regular formal crossing opportunities as high movement across street/road. • Cycle parking facilities

Different contexts – same function

Featherston Street, Wellington

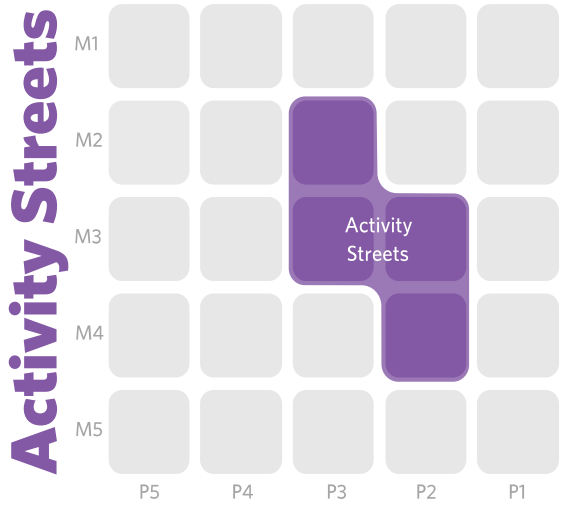
Riccarton Road, Christchurch

Queen Street, Masterton

State Highway 79, Geraldine

Activity Streets

Activity Streets provide access to shops, entertainment venues, community facilities and commercial, trades and industrial businesses for everyone. People spend a significant amount of time, working, shopping, eating, residing, and undertaking recreation. They support medium to high levels of people walking, cycling, using public transport, or driving through the area.



Place/Movement rankings:

- P2/3
- M2-4

Function:

Access to adjacent land-use for all modes.

Accommodates medium to high levels of through movement for all modes.

Density of on-street activity	Intensity of use (dwell time)	Adjacent land-use (indicative)	Place function – primary attributes	Movement function – primary attributes
Medium	Medium/high	• Office blocks • Low rise apartments • Retail • Entertainment venues • Commercial/trades • Community facilities • Industrial	• In CBDs of cities high pedestrian numbers accessing adjacent land-use • Some on-street amenities (e.g., al fresco dining*, street furniture) • Some people spending time in the area, particularly in cities (e.g., visiting businesses and gathering at destinations)	• All modes - high pedestrian numbers in cities • Often public transport routes in cities • Often on-street parking or driveway access for motor vehicle drivers to be able to access carparks of desired destinations • Formal crossing opportunities to facilitate pedestrian movement across street/road. • Limited cycle parking facilities.

Note: For Activity Streets, people spending time in the area and engaging in activities such as al fresco dining is indicative of a place value of P2.
Different contexts – same function

Ward Street, Hamilton

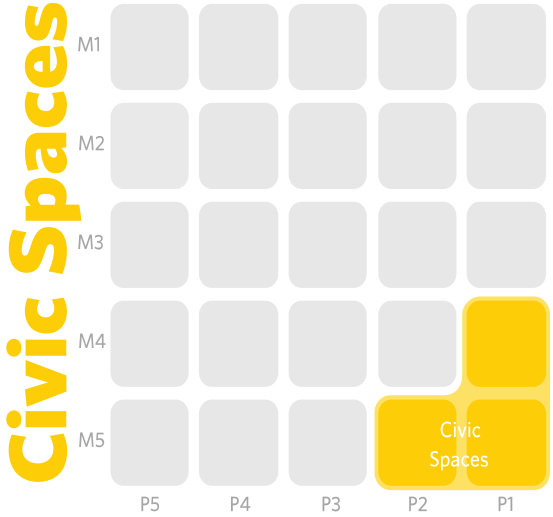
Cameron Road, Tauranga

State Highway 6, Blenheim

Gracefield Road, Lower Hutt (Industrial)

Civic Spaces

Civic Spaces are roads or streets that people are encouraged to spend time in and where people on foot can relax and move freely. There is usually street furniture and other amenities to encourage and support people to linger and spend time in these spaces. Very high numbers of pedestrians move around and through the space while there is little or no through movement for motor vehicles.



Place/Movement rankings:

- P1/2
- M4/5

Function:

Access to adjacent land-use primarily for pedestrians.

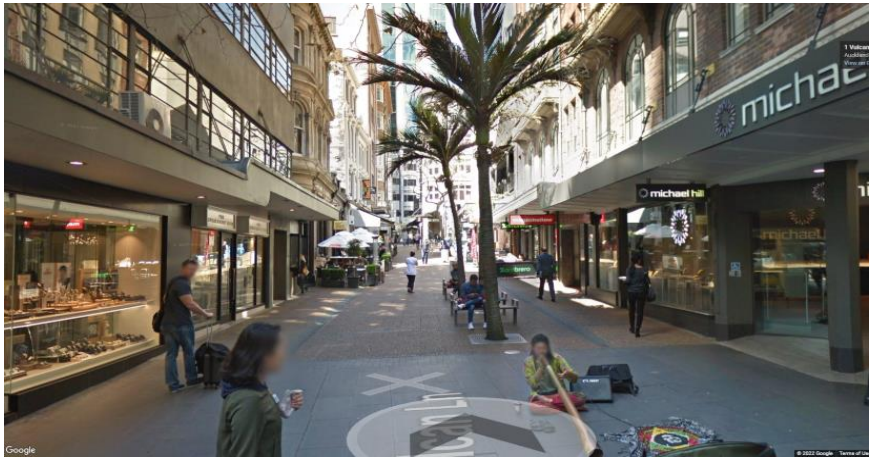
High quality places where people want to visit, spend time, meet, and gather.

Density of on-street activity	Intensity of use (dwell time)	Adjacent land-use (indicative)	Place function – primary attributes	Movement function – primary attributes
Very high to medium	Very high	• Office blocks • Apartment buildings • Shopping & entertainment venues • Commercial businesses • Community facilities	• Very high numbers of people spending time in the area (visiting businesses, meeting other people, gathering at destinations) • On-street amenities (al fresco dining, street furniture, green spaces, planting, public art works)	• Very high numbers of pedestrians moving around and through the space • Pedestrians can move freely across the road/street/space • These spaces provide pedestrian priority over vehicular movement • Little or no through movement for motor vehicles

Note: Civic Spaces occur in urban areas – from our major cities to provincial towns

Different contexts – same function

Vulcan Lane, Auckland



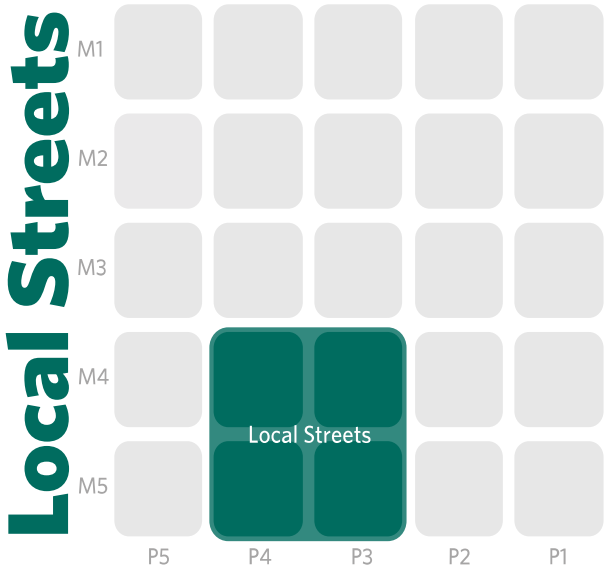
Tainui Street, Greymouth

Trafalgar Street South, Nelson

Cuba Street, Wellington

Local Streets

Local Streets primarily provide quiet and safe residential access for all ages and abilities. They are part of the fabric of our neighbourhoods and facilitate local community access. Local Streets are the most common and most diverse streets in urban areas. There are low levels of on-street activity and movement by people walking, cycling, and driving.



Place/Movement rankings:

- P3/4
- M4/5

Function:

Access to:

- People's homes.
- Schools and community facilities (e.g., churches).
- Low intensity commercial/ industrial businesses in mixed use zone.

Density of on-street activity	Intensity of use (dwell time)	Adjacent land-use (indicative)*	Place function – primary attributes	Movement function – primary attributes
Low - medium	Low - medium	• Residential use • Schools • Community facilities • Low intensity commercial/ industrial	• Low levels of on-street activity associated with residents going about their daily lives • In some particularly quiet streets the carriageway can often be used as a play area by local children	• Low levels of movement of all modes • Due to the low levels of vehicle movement, people can usually cross the street at any point

Note: Sometimes Local Streets may also provide access to schools, community facilities and low intensity commercial/industrial businesses in mixed use zones. In these circumstances, destinations either do not significantly elevate on-street activity or daily trip totals or have distinct short trip generation periods such as dairies or day care centres. Sometimes these destinations might be located near or adjacent to each other.

Different contexts – same function

College Street, Wellington

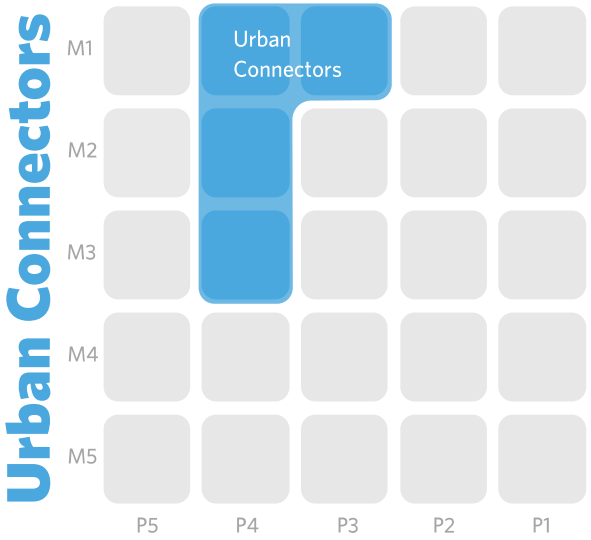
Clifton Road, Hamilton

Dunrobin Street, Dunedin

Mahars Road, Christchurch

Urban Connectors

Urban connectors make it safe, reliable, and efficient for people and goods to move between different parts of urban areas. There are high levels of motor vehicle traffic, including freight. They often support public transport and provide major routes for people cycling. There are low levels of pedestrian activity associated with people moving along the road.



Place/Movement rankings:

- P3/4
- M1-3

Function:

Provides safe, reliable, and efficient movement of people and goods between different parts of urban areas.

Density of on-street activity	Intensity of use (dwell time)	Adjacent land-use (indicative)	Place function – primary attributes	Movement function – primary attributes
High to low	Low	• Full range of urban land-use – from suburban residential to the CBDs of cities • Connector roads in industrial areas	• Low levels of pedestrian activity associated with people moving through an area or along the side of the road/street	• High levels of motor vehicle traffic, including freight • Often public transport route • Often major routes for cyclists • Usually on-street parking • Formal crossing opportunities for pedestrians across the main carriageway at bus stops, major intersections, and mid-block where activities such as schools, shops, parks, and recreational destinations located

Different contexts – same function

Pukepoto Road, Kaitaia

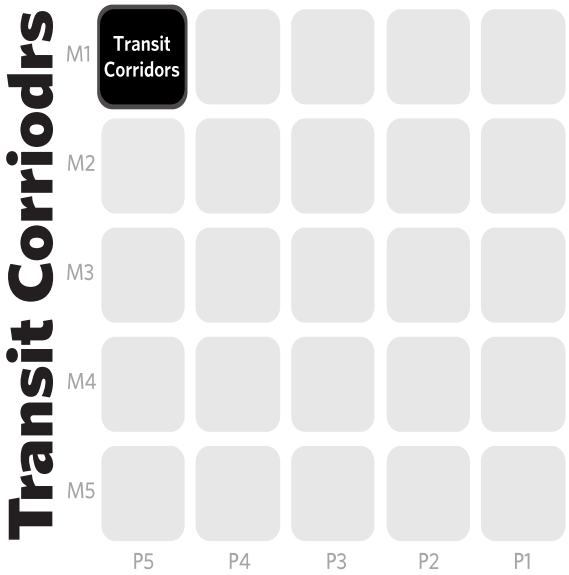
Rocks Road, Nelson

Jervois Quay, Wellington

Cobham Drive, Hamilton

Transit Corridors

Transit corridors make it fast and efficient for people and goods to move within urban areas. They are mass transit corridors for private motor vehicles, freight and public transport and include motorways and urban expressways. They are usually separated from surrounding land use so there are no people walking or cycling on these roads. Transit corridors also include heavy rail networks and busways.



Place/Movement rankings:

- P5
- M1

Function:

Motorways/expressways provide fast and efficient movement of people and goods within urban areas.

Density of on-street activity	Intensity of use (dwell time)	Adjacent land-use (indicative)	Place function – primary attributes	Movement function– primary attributes
Low	Low	• Low density residential or industrial usually separated from the Transit corridor	• Motorways and expressways usually separated from adjacent land use so no on-street activity	• Mass transit corridors for private motor vehicles, freight, and public transport (also includes heavy rail networks)

Different contexts – same function

Ngauranga Gorge, Wellington

Te Rauponga, Whangārei

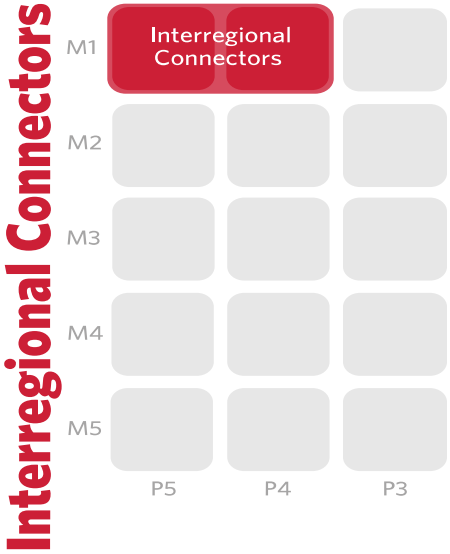
State Highway 1, Dunedin

Southern Motorway, Auckland

Rural Street Family

Interregional Connectors

These are national State Highways that make it safe, reliable, and efficient to move people and goods between and within regions. These roads run through farmland and natural areas so there are low levels of roadside activity. These roads carry significant levels of motor vehicle traffic, including freight.



Place/Movement rankings:

- P4/5
- M1

Function:

Safe, reliable, and efficient long-distance movement of people and goods between and within regions.

Density of on-street activity	Intensity of use (dwell time)	Adjacent land-use (indicative)	Place function - primary attributes	Movement function – primary attributes
Low	Low	• Farmland • Conservation land • Natural areas	• Low levels of roadside activity associated with residents going about their daily lives	• Very high/high levels of motor vehicle traffic, including freight

Different contexts – same function

Desert Road (SH1), Central Plateau

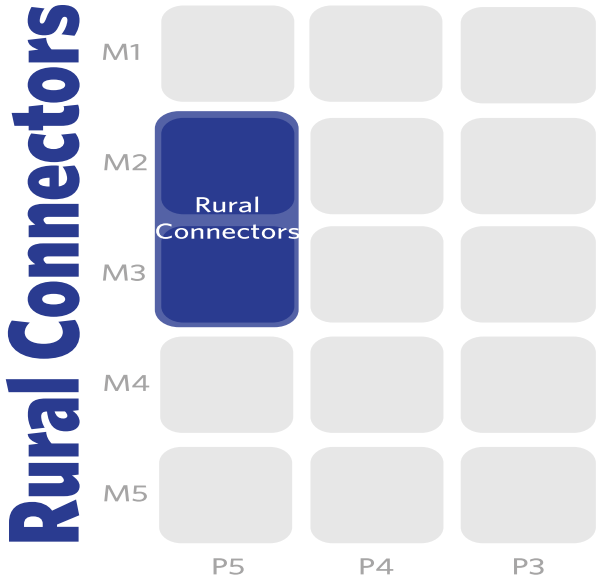
Te Anau-Milford Road (SH94), Fiordland

Kāpiti Expressway (SH1), Paraparaumu

Brynderwyn Hill (SH1), Brynderwyn

Rural Connectors

Rural Connectors make it easy for people and goods to move between different parts of rural areas, and link Rural Roads with Interregional Connectors. They support an increased level of traffic moving through the area, while also providing access from the land they pass through. Land around rural connectors is usually farmland, and these roads may also run through national parks or other natural areas. There are low levels of roadside activity related to the way surrounding land is used.



Place/Movement rankings:

- P5
- M2/3

Function:

Movement of people and goods between different parts of rural areas.

Linking rural roads with State Highway network.

Access to adjacent land use.

Density of on-street activity	Intensity of use (dwell time)	Adjacent land-use (indicative)	Place function - primary attributes	Movement function – primary attributes
Low	Low	• Farmland • Conservation land • Natural areas	• Low levels of roadside activity associated with residents going about their daily lives	• High-medium levels of motor vehicle traffic, including freight

Different contexts – same function

SH80, Aoraki/Mount Cook

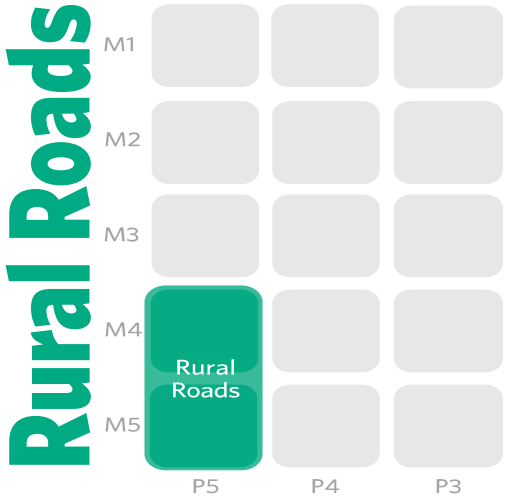
Canal Road, Temuka

Glen Murray Road, Churchill, Waikato

Masterton-Castlepoint Road, Wairarapa

Rural Roads

Rural Roads provide access to rural land. They are the most common and diverse roads in rural areas. There is low levels of traffic and roadside activity from local people going about their daily lives. Some Rural Roads are important for freight, collecting dairy and forestry and other primary produce from their source, while others, where volumes of vehicle traffic are very low, can provide safe and pleasant recreational and tourism routes.



Place/Movement rankings:

- P5
- M4/5

Function:

Access to rural land.

Density of on-street activity	Intensity of use (dwell time)	Adjacent land-use (indicative)	Place function - primary attributes	Movement function – primary attributes
Low	Low	• Farmland • Conservation land • Natural areas	• Low levels of roadside activity associated with residents going about their daily lives	• Low levels of motor vehicle traffic, including freight

Different contexts – same function

Hakataramea Valley Road, South Canterbury

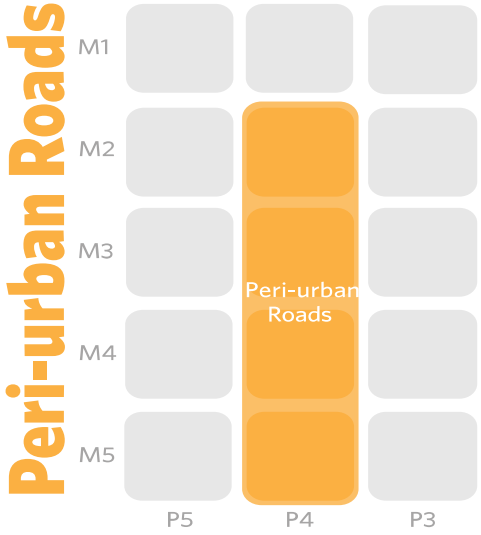
Central Road, Upper Moutere

Koromatua Road, Ohaupō

Mangahei Road, Dannevirke

Peri-urban Roads

Peri-urban roads provide access to residential property in rural settlements, lifestyle blocks, sub-divisions and on the edge of urban areas where the main surrounding land-use is residential, but at a lower level than that found in urban residential locations. There are low levels of local street activity with residents going about their daily lives. Levels of motor vehicle traffic and freight will range from very high to low, depending on whether the peri-urban road is connecting to an interregional connector or rural road.



Place/Movement rankings:

- P4
- M2 - M5

Function:

Access to residential property where the predominant adjacent land-use is residential, but at a lower density than that found in urban residential locations.

Density of on-street activity	Intensity of use (dwell time)	Adjacent land-use (indicative)	Place function - primary attributes	Movement function – primary attributes
Low	Low	• Small rural hamlets/settlements • Residential properties on outskirts of towns and cities • Life-style blocks • Sub-divisions	• Low levels of roadside activity associated with residents going about their daily lives	• Levels of motor vehicle traffic (including freight) will range from very high to low depending on the connecting category of road (e.g., a State Highway with high volumes of motor vehicle traffic changing from Inter-regional connector to peri-urban on the outskirts of a provincial town)

Different contexts – same function

Rural settlement – Robert Avenue, Pukemiro

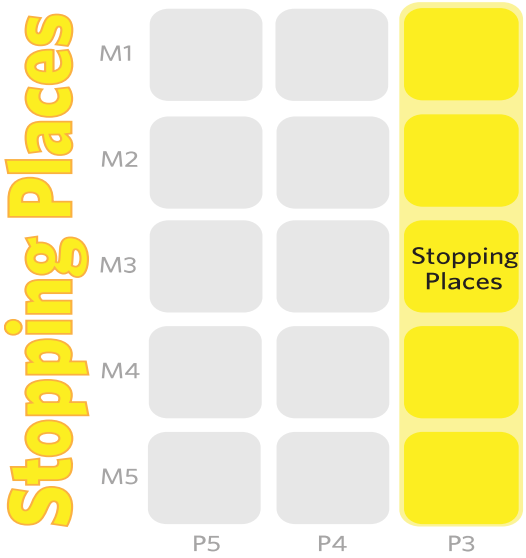
Life-style blocks – Clarke Road, Te Puna

Sub-division – Mapleham Drive, Pegasus

Urban fringe – Belvedere Road, Carterton

Stopping Places

Stopping Places are rural destinations that increase activity on the roadside and directly uses the road for access. There are more people walking, cycling, and driving in these locations, including people often crossing the road.



Place/Movement rankings:

- P3
- M1 - M5

Function:

Identifies a rural destination that increases activity on the roadside and directly uses the road for access and where some type of intervention is required, for example to mitigate safety issues caused by the increased activity on higher movement corridors.

Density of on-street activity	Intensity of use (dwell time)	Adjacent land-use (indicative)	Place function - primary attributes	Movement function – primary attributes
Low - medium	Low - medium	• Rural schools • Marae • Community facilities • Tourist attractions • Scenic sites	• Increased pedestrian activity within the section of corridor designated as a Stopping Place	• Increased activity by all modes at these locations including pedestrians often crossing the road

Different contexts – same function

Punakaiki, State Highway 6, West Coast

Turakina School, Turakina

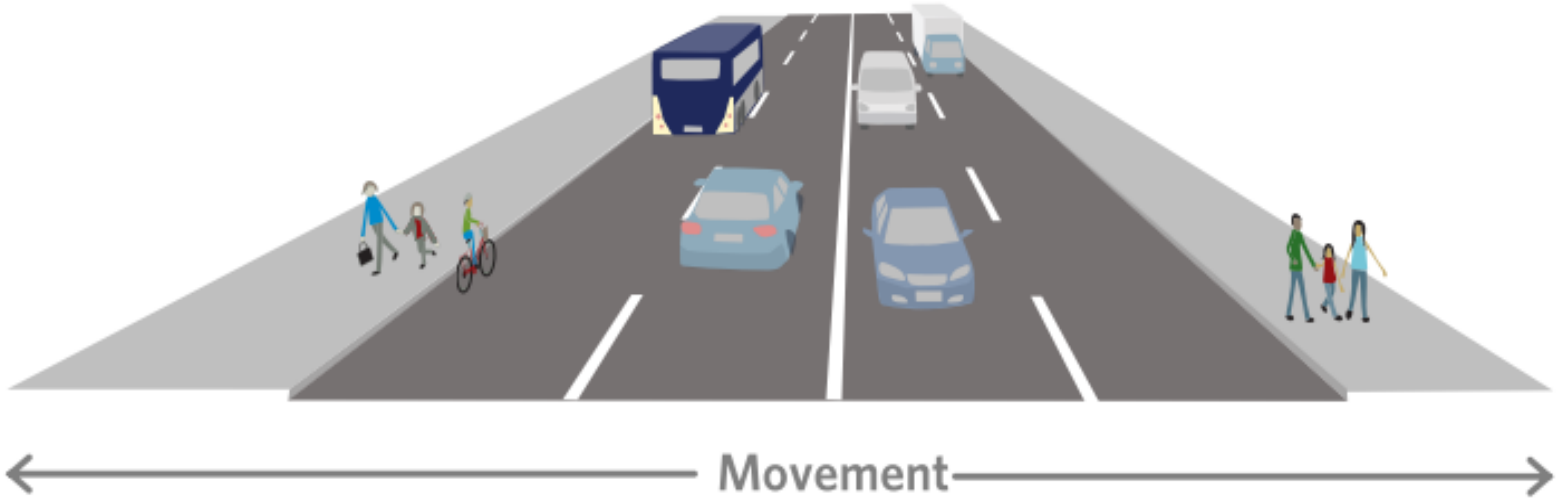
Te Araroa Trail, Waitangi

State Highway 80, Aoraki/Mount Cook

Movement of People and Goods

For the ONF, movement relates to how people and goods move along and across roads and streets by any mode.

Figure 5 - Movement function



The ONF uses a five-point scale for the classification of movement – M1 to M5. Table 2 below sets out definitions of each of the movement scales and provides a metric for the volume of people movement by all modes.

Table 2 - Characteristics of Movement function

Considerations to determine Movement Significance		Nature of Movement	Scale of People Movement (all modes)
M1	**Major**	Mass movement of people and/or goods on roads or streets that are of major importance in urban areas, within and between regions or nationally.	Typically > 20,000 per day
M2	**Significant**	Movement of people and/or goods on inter-regional routes or primary roads and streets linking main centres or significant destinations and travel hubs within a city/town or region.	10,000 – 25,000 per day
M3	**Moderate**	Movement of people and/or goods around a city, town or region	3,000 – 12,000 per day
M4	**Minor**	Local movement by people making short trips or connecting to connector roads	300 – 4,000 per day
M5	**Low**	Local movement by people going about their daily lives	Typically < 500 per day

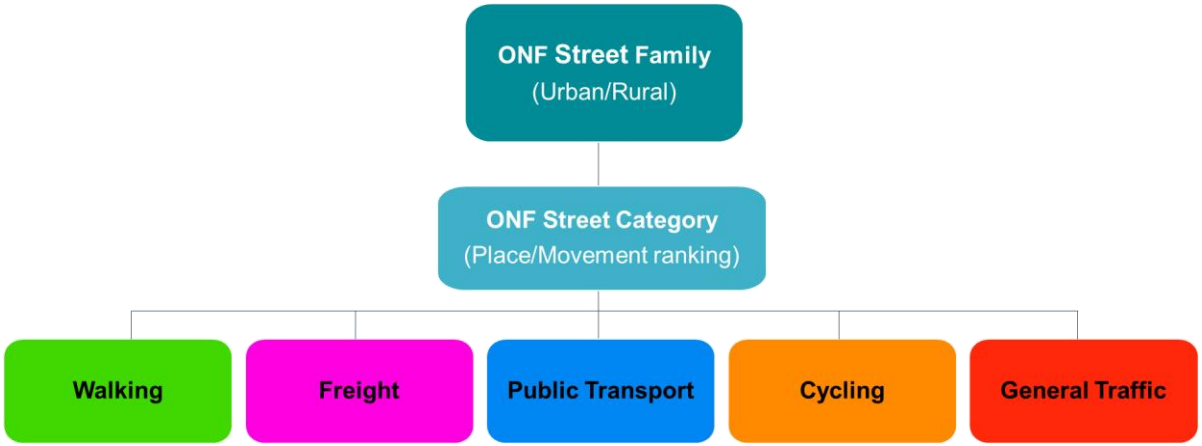
A fundamental shift from the One Network Road Classification is definition of movement as people and goods, rather than the number of buses, cars and trucks using a corridor. This approach better recognises the contribution of other modes, such as pedestrians and cyclists, to the classification of overall movement. This means that M1 applies to both a City Hub, such as Queen Street in Auckland with very high pedestrian numbers and public transport users, and an Inter-regional Connector with very high numbers of cars and trucks, such as State Highway 1 north of Wellington.

The classification of overall movement should achieve the following outcomes:

- Recognise the contribution to movement of all modes of transport, including active modes.
- Focus on the movement of people and goods along a corridor, not simply the number of vehicles.
- Provide a principles-based method for classification that's both prescriptive and intuitive. That is, the approximate classification can be derived using quantitative measures, and refined using qualitative factors.
- Feel right when the movement and place classification for the corridor is compared against the street category that classification places it in – the intended function of the corridor is consistent with its movement class.

Figure 6 sets out the relationship between the ONF Street Family, road or street category, movement/place function ranking and the modes. The modes will sit under each road or street category and will be given a modal ranking based on how the road or street fits into the modal network or the strategic significance of that mode. For example, an Urban Connector with a place/movement function ranking of P4/M2 may be a primary public transport corridor and therefore have a Public Transport modal class ranking of PT3.

Figure 6 - How the modes fit within the ONF



General Traffic

General Traffic will continue to use the 8 levels of classification of the One Network Road Classification framework for the following reasons:

- For much of the network, the current ONRC classification can be directly transcribed over to the One Network Framework.
- The ONRC classifications for general traffic are well known throughout the sector.
- Existing approaches to performance monitoring and reporting for carriageways can be retained.

When classifying general traffic, it's important to look at the function the corridor is providing, not just the volume of traffic. For example, urban motorways don't have to be capable of supporting 35,000 cars a day if their main purpose is to connect to a strategically important location.

Table 3 - General Traffic

Class	Related ONRC Class	Strategic Significance	ONRC Metric / class differentiator	People movement per day
GT1	ONRC - High Volume.	The high-volume movement of people nationally or to nationally significant locations. Nationally significant routes.	Urban > 35,000, Rural > 20,000 VPD	Urban > 40,000, Rural > 25,000
GT2	ONRC – National	The movement of people nationally or to nationally significant locations	Urban > 25,000 Rural > 15,000	Urban > 30,000 Rural > 18,000
GT3	ONRC – Regional	Connectors providing significant movement of people between cities and regions.	Urban > 15,000 Rural > 10,000	Urban > 18,000 Rural > 12,000
GT4	ONRC – Arterial	Connectors providing significant movement of people through or between neighbourhoods and towns.	Urban > 5,000 Rural > 3,000	Urban > 6,000 Rural > 3,500
GT5	ONRC – Primary Collector	Major collectors that link neighbourhoods to townships/districts.	Urban > 3,000 Rural > 1,000	Urban > 3,500 Rural > 1,200
GT6	ONRC – Secondary Collector	Minor collectors that link local areas to neighbourhoods.	Urban > 1,000 Rural > 1,000	Urban > 1,200 Rural > 1,200
GT7	ONRC – Access	Movement within a local area or to access areas outside the local area.	Urban < 1,000 Rural < 200	Urban < 1,200 Rural < 250
GT8	ONRC – Low Volume	Low volume movement within a local area	Urban < 200 Rural < 50	Urban < 250 Rural < 60

Freight

As for general traffic, the ONRC categories for freight are being maintained.

The AADT metrics for each category are a proxy for goods movement. This will continue to be the case until access to accurate and comprehensive information about the tonnage of goods being moved on the road network is available.

Converting AADT to goods movement at present is a simple arithmetic exercise of multiplying the number of vehicles by an assumed average load size. To date, no work has been done around quantifying the correlation between tonnage of goods moved and movement of people, and therefore it is difficult to factor goods movement into overall movement. Strategic importance of the route for freight, both in terms of volumes of freight able to be moved and providing links between significant places is still a valid methodology for classifying Freight Movement. The framework also allows for the inclusion of railway lines as part of the freight network. This allows for a corridor planning approach to freight movement, providing for mode shift from road to rail as part of strategic network transport planning.

Table 4 - Freight

Class	Related ONRC Class	Strategic Significance	ONRC Metric / class differentiator	Goods Movement
F1	ONRC - High Volume.	The high-volume movement of goods nationally or to nationally significant freight hubs	> 1,200 VPD	> 30,000 Tn/day
F2	ONRC – National	The movement of goods nationally or to nationally significant freight hubs	> 800	> 20,000 Tn/day
F3	ONRC – Regional	Connectors providing significant movement of goods between cities and regions.	> 800	> 10,000 Tn/day
F4	ONRC – Arterial	Connectors providing significant movement of goods through or between neighbourhoods and towns	> 300	> 7,000 Tn/day
F5	ONRC – Primary Collector	Major collectors that link neighbourhoods to townships/districts.	> 150	> 3,500 Tn/day
F6	ONRC – Secondary Collector	Minor collectors that link local areas to neighbourhoods.	> 25	> 600 Tn/day
F7	ONRC – Access	Generally low volume but may have periods of high freight movement within a local area or to access areas outside the local area. For example seasonal freight, temporary logging use	< 25	< 600 Tn/day
F8	ONRC – Low Volume	Low volume freight movement within a local area	< 25	< 600 Tn/day

Public Transport

The classification for public transport (PT) movement has been developed in consultation with specialists in PT and multi-modal transport within Waka Kotahi.

To standardise the contribution of PT to the movement function of a corridor, a distinction needs to be made between a PT service and PT use of a corridor. A PT service has attributes such as frequency (services per hour) and headway (the time between vehicles), and service start and end points, that don't necessarily apply to the corridor. A corridor may support more than one PT service, so the cumulative result of all services using a corridor will be what defines the PT movement classification, for example PT1-PT5.

The following explains each of the column headings in Table 5:

- **Public transport service level descriptor**: A useful short-form label for each of the PT classes that quickly invokes the nature of the PT corridor.
- **Strategic significance**: Describes the extent to which the corridor contributes to the PT network. For PT this ranges from dedicated corridors that support rapid transit to corridors where low volumes of targeted PT services operate.
- **Indicative vehicle volume**: Vehicle volume is the combined number of services per hour, an average between 7am-7pm, that is observed for all services passing a point on the section of corridor. Where the corridor supports more than one PT service then the vehicle frequency will be higher than for the individual services. For example, if two services, which both have a 15-minute headway at peak (4 services per hour), use the same corridor for part of their route, the effective vehicle volume would be 8 services per hour along that section of corridor. Vehicle volume is then an indication of the total demand on the corridor's section by PT. Vehicle volumes usually increase as PT routes get closer to central business districts and key transport interchanges, as services tend to converge.
- **Indicative people movement**: Public transport is a very efficient means of moving people. In terms of corridor space, a fully laden 44 seat bus equates to at least 35 private vehicles. Higher occupancy PT vehicles like double-decker buses have further efficiency benefits. Trains and light rail have even more people movement efficiency again. ONF focuses more on people movement rather than vehicle volumes. Using the movement of people or freight along a corridor over a period (standardised to daily counts) also allows for direct comparisons across transport modes in their contribution to transport outcomes.
- **Description**: This column is provided to give you an idea of each PT class using intuitive terminology, descriptions and metrics. It's not intended to be a requirement or set criteria.

School buses can be included within the classification consideration of a particular corridor if the route the school bus takes is shared with other public transport services. If the route is only used for school buses, then the corridor would be classified as Targeted.

Table 5 - Public Transport

Class	Public Transport Service Level descriptor	Strategic Significance (Role in Public Transport Network)	Indicative vehicle volume (Bi-directional)	Indicative People Movement (Bi-directional)	Description
PT1	Dedicated	Strategically significant corridors where **rapid transit** services are operated, providing a quick, frequent, reliable, and high-capacity service that operates on a permanent route (road, rail or sea lane) that is dedicated to public transport or largely separated from other traffic.	≥ 4 services per hour	≥1000 per day	Dedicated or largely separated public transport corridors provide for the fast and efficient movement of people by rapid transit. They only service public transport (except rail lines that can also provide a goods movement function under the freight mode).
PT2	Spine	Strategically significant corridors where many frequent services operate and **many different PT services merge together to create very high frequencies and overall passenger movement**. Any deficiencies on these corridors affect multiple services and large parts of an urban area.	≥ 20 services per hour	1000 to 10000+ per day	Spine corridors are where many public transport services operate on the same corridor, usually within city centres or near major transport interchanges as PT services converge. Much of the street space can be dedicated to public transport infrastructure, including significant space that could be utilised for bus stops.
PT3	Primary	Strategic corridors where **frequent public transport services operate, providing regular** services across most of the day, seven days a week.	≥ 4 services per hour	≥ 500 per day	Primary public transport corridors occur on the parts of the network where frequent service can be expected. This could be for part of route where the collection of services operating results in a better than 15-minute headway frequency of that part of the route. These corridors are more likely to be on major arterial roads.

PT4	Secondary	Corridors where **PT services operate at most times of day,** but less frequently. The main focus of PT services using these corridors is to provide basic access and coverage.	< 4 services per hour	100 to 1000 per day	Secondary public transport corridors occur in the parts of the network providing local access and coverage, but at reduced schedules. Routes typically traverse local streets and minor arterial roads
PT5	Targeted	Corridors where services only operate at certain times of the day (e.g., peak only) or for specific trip purposes (e.g., school buses only).	N/A	Variable	These services provide a basic level of access to public transport, but on a much-reduced schedule, typically only once a day return, such as school bus services, and long-distance commuter services, or at peak times only.

Note: Not all classes of Public Transport will be applicable to all RCAs. It is expected that only large metropolitan councils will likely have corridors rated as PT1. Some smaller authorities also may not have corridors that would have the required frequency of operation or level of people movement to be classed as PT2 or even PT3. Councils are welcome to classify ferry-based public transport services in line with whichever PT class they feel is more appropriate to reflect the strategic significance of the service.

Cycling

The project team has collaborated with active mode subject matter experts within Waka Kotahi and the transport sector to co-design and develop the base guide shown in the table below.

Strategic significance: For cycling that primarily takes place within urban areas there are currently 3 classes (C1 to C3) comprised of two classes for the primary and secondary strategic cycle networks and the third class being every other street or path that forms part of the recognised cycling network. The three classes are intended for utility cycling, that is, cycling done for transport where the purpose of the trip is to get to a destination at the journeys end.

Class CS (Cycling Special) is a class for corridors supporting cycling within rural areas. It is intended that roads in rural areas will only be classified for cycling where there is a discernible (greater than casual and occasional) use of a particular corridor by cyclists. This could be for routes providing connections between settlements, for example as part of the NZ Cycle Trail, or routes known as popular with road cyclists.

Rural cycle routes don't all have to be classified CS and they could be classified as primary or secondary where they form part of the strategic cycling network and provide at least in part a utility cycling function. In this case the section of corridor fulfilling that function could be classified as C1 or C2. Recognising the descriptions below C2 is more likely than C1.

All cycling classes are intended as applicable to both cycling that occurs on the carriageway of roads and streets, as well as off-road routes such as dedicated cycle paths, shared paths, and pathways through parks. For an off-road route, which class it will be allocated will depend on where that off-road route fits within the strategic cycling network for the RCA (C1, C2 or C3). This decision could be supported by considering the volume and frequency of movement along the route. The cycling network may be integrated with other modes (e.g., shared paths and cyclist access in bus lanes).

The **description** text in table 6 is to give you an idea of what each class of cycling network does, perhaps where it goes and what features it connects. This is purely to create a mental picture for the corridor, it is not a requirement or set criteria.

Table 6 - Cycling

Class	Strategic Significance	Description
C1	The primary strategic cycle network provides the backbone of the overall cycle network catering for higher volumes of cycle movement, longer, and more efficient journeys.	The network connections provide access through and across areas with high amenity and commercial value, also between residential areas and educational or employment centres. The network provides key connections to educational centres (such as high schools, colleges and universities, community facilities (such as hospitals, sports centres etc), major employment (e.g., CBDs etc) or public transport hubs and high-frequency PT services, etc.) The cycling network may be integrated with other modes (e.g., shared paths and cyclist access in bus lanes).
C2	The secondary strategic cycle network joins local roads to the primary strategic cycle routes. They also support key local cycle movements.	The network connection provides access to schools (for example local primary schools), local shopping centres, suburban workplaces, and public transport.
C3	The supporting network is the remaining part of the recognised completed cycling network that typically links to C2.	This network provides localised cycling movement along and across residential roads or is where longer cycling trips start from. This class includes local roads where the volume and average speed of traffic can create a safer environment for cycling.
CS	Cycling Special: These routes typically occur in the rural context and provide for longer cycle journeys that can be utility cycling, or cycling activity that is undertaken for the purpose of recreation or tourism.	This network typically provides rural based cycling trips that are for utility cycling journeys to school or work, or cycling activity that is undertaken for the purpose of recreation or tourism, i.e to experience the journey rather than to reach the destination. These routes include all the off-road sections of the NZ cycle trail, as well as the touring stages of that network, the pieces of the road network that provide link between the off-road portions. This class can also be used for routes known to be popular as training circuits with road cyclists. Excluded from this class and from inclusion in the cycle network overall are specialist cycling facilities such as the trails within mountain bike parks.

Walking

The One Network Framework team has collaborated with active mode subject matter experts within Waka Kotahi and the transport sector to co-design and develop the table below. While walking is a mode of transport, pedestrians are also closely correlated with the place function of a street so classifying walking networks needs to be considered regarding the place classification given that the existence or volumes of pedestrians in an area is often an indication of the importance, or quality, of the place function.

Strategic significance: for walking primarily taking place within urban areas there are 3 classes (W1 to W3) comprised of the primary and secondary strategic walking networks and the third class being other streets or paths that form the remainder of the recognised walking network. The three classes are intended for walking networks that connect origins and destinations rather than areas where people dwell, however there is often a close correlation between these ‘movement’ and ‘place’ functions for walking networks.

For walking that primarily takes place within urban areas there are currently 3 classes (W1 to W3) comprised of two classes for the primary and secondary strategic walking networks and the third class being other roads or paths that forms part of the recognised walking network.

Walking Special (WS) is a class for walking that is undertaken mainly for recreational and tourism purposes and predominantly in the rural context. This recognises the significance of walking corridors such as Te Araroa and Department of Conservation tracks and allows for these routes to be identified in overall walking network planning, to ensure they interface safely with movement corridors, and are not severed. WS routes that traverse urban areas and share their route with the defined urban walking network should be classified either W1, W2 or W3 as should sections of rural road that have footpaths provided for local trips rather than longer distance tourism-based trips. All other rural roads will usually have no movement classification for walking, except where specific provision is made for local movement.

The **Description** text in table 7 is to give you an idea of what each class of walking network does, perhaps where it goes and what features connects. This is purely to create a mental picture; it is not a requirement or expectation.

Table 7 - Walking

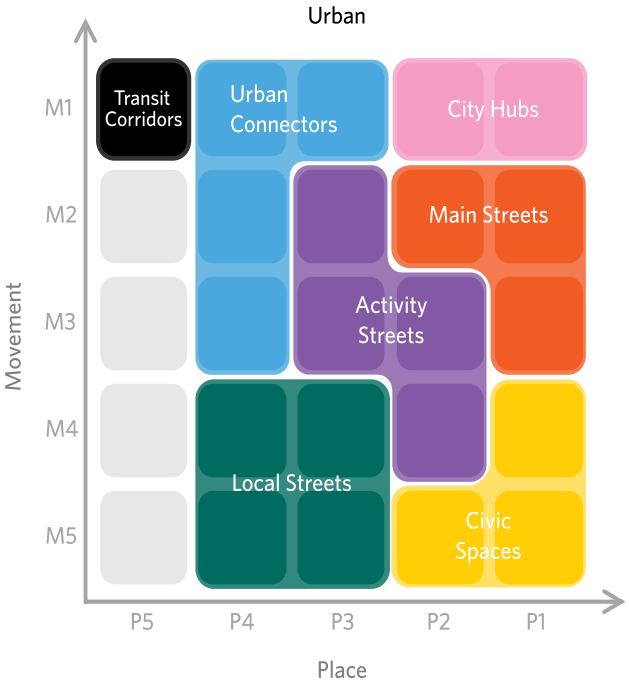
Class	Strategic Significance	Description
W1	The primary strategic walking network provides the backbone and is the most intensely used pedestrian network	This network provides key routes connecting pedestrians with key destinations and places of significance and to places that play host to significant activity. This includes access to and within the city centres and suburban / local centres. To key destinations such as workplaces, community facilities, Hospitals, significant educational and recreational facilities (for example University and Polytechnic Campuses, sports arenas) and near transport hubs and PT corridors. W1 can include traffic free environments and routes away from motorised traffic where “place” is significant (e.g., city hubs, waterfront esplanades etc).
W2	The secondary strategic walking network joins local roads to the primary strategic walking routes. They also support key local walking trips.	This network provides connection to and between W1 routes, connects to locations of local pedestrian activity such as primary schools and to residential and suburban catchments. It supports local based trips as well as being part of longer journeys on foot. W2 can include off-road routes away from motorised traffic.
W3	The supporting network is the remaining part of the recognised walking network that typically links to W2.	This network provides localised walking movement along and across residential roads or is where longer walking trips start from. This class includes local roads where the volume and average speed of traffic can create a safer environment for walking. This class also can include any off-road routes, such as paths through parks. W3 routes connect to and support access to W1 and W2 networks.
WS	These routes typically occur in the rural context and provide for recreation or tourism and so provide a reduced transport function. Includes rural parts of Te Araroa, DoC tracks.	This network typically occurs in the rural context and is used for walking activity that is predominantly undertaken for the purpose of recreation or tourism (e.g., routes include Te Araroa, Department of Conservation walking tracks etc). Where local pedestrian facilities form part of designated sections of Te Araroa etc., these sections of the network should be classified as either W1, W2, or W3.

Applying the ONF

Applying the ONF brings together the movement and place function elements to determine an overall classification for the road or street.

The relationship between the Movement function and Place function is displayed on a 5x5 matrix (see Figure 7). The horizonal axis shows the scale of Place function and the vertical axis shows the scale of Movement function.

The labelling is in reverse order, with 5 denoting the lowest rating and 1 the highest rating. So, M5 P5 signifies a road or street with a low movement and limited place function, and M1 P1 signifies a road or street with major movement and very high place function.



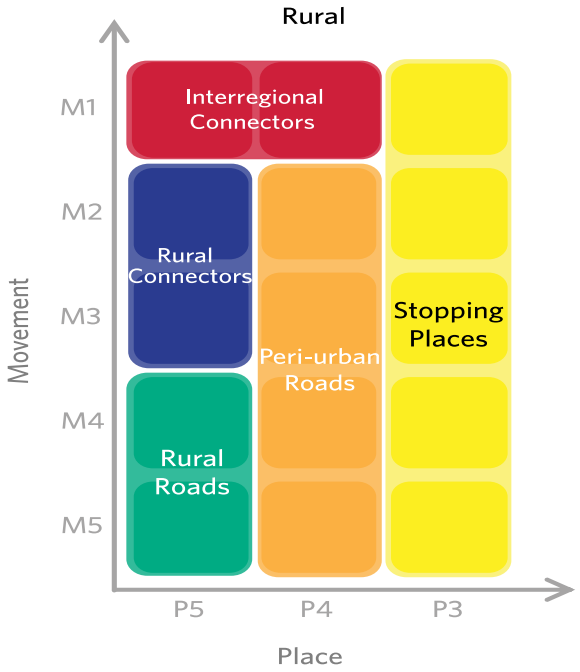


Figure 7 - Urban and Rural Street Families

The ONF classification process involves the following main steps:

1. Is the road or street in the Urban or Rural Street Family?

Whether a road or street is in the urban or rural street family is based on the adjacent land-use with the district/unitary plan zone being the main indicator. For example, if the land the road or street runs through is within a rural land-use zone then the road is rural.

2. What is the function of the road or street?

It is critical to establish the function of the road or street as this will predominately determine its ONF category. In many cases the function will be obvious – a street in a residential neighbourhood will be a Local Street, a road in a rural area providing access to several farms will be a Rural Road, a major arterial road connecting different parts of an urban area will be an Urban Connector.

Where the function isn't obvious refer to the previous explanation of each category that sets out the functional descriptions and defining attributes.

3. What are the place and movement function rankings for the road or street?

Once the function or predominant function of the road or street has been established the place and movement rankings then need to be determined. Sometimes this will help in determining the function of a road or street if it's unclear. This can often be the case when determining the difference between Main Streets and Activity Streets.

Movement also relates to all modes (refer to movement table above for scale of people movement) although depending on the function of the road it may also be useful to refer to the specific modal tables.

4. Is the classification of the road or street consistent with others in the network?

Consistency of classification is critical for the ONF, both between RCAs and within an RCA's network. When the classification of a road or street has been established check there is consistency of the following across the network:

- Function of roads and streets of the same category in your network – that is, a Main Street in one part of your network has the same function as a Main Street in another part of the network
- Place and movement rankings across the network – for example, the use of a P2 ranking is consistent across all roads or streets with that place ranking.

Appendices:

Revision of Movement and Place Network Classification Detailed Design

Explanation of changes

Purpose

This section sets out the changes made through the process of revising the original 'Movement and Place Network Classification Detailed Design' (March 2021). The explanation below follows the layout of the original draft document.

Introduction

- Edited and updated to include content from National Moderation report.
- 'What's in it for you?' section deleted as didn't describe clearly why the ONF is useful for practitioners at RCAs. Some of this content also included in revised introductory section under 'Benefits' and 'Who is this document for?'.
- Principles deleted as either not principles or content already included in other parts of introductory section.

Glossary of Terms

- Revised and updated – much of original content included in revised 'Terminology used in this document' section.

Place

- Place diagram included in revised document.
- Place table significantly revised to focus on the main attributes of on-street activity for each of the place function rankings (P1-5), typical adjacent land-use and pedestrian volume as a proxy to identify the level of on-street activity.
- Detailed changes to the original Place table were:
    - Place function descriptive name column (e.g., Provincial/regional): deleted as descriptions confusing for RCAs trying to relate them to the individual place function ranking of individual roads/streets.

- Nature of Place column: content amended and included in ‘Level of on-street activity’ column in revised table. Revised content describes a graduated series of attributes that are used to define ‘place’ – on-street activity, numbers of pedestrians, people spending time in the area and movement across the road or street.
- Level of On-street Activity column: removed as content included in ‘Level of on-street activity’ column in revised table.
- Indicative land-use: amended to be more specific and show a graduation in the types of land-use from P1 to P5. Included in ‘Typical adjacent land-use’ column in revised table.
- Catchment significance: Removed as not clear how catchment relates to place function in guidance.
- Level of On-street Activity: this metric included in the revised table.
- Interaction with Movement: column removed as lateral movement across the road/street included in ‘Level of on-street activity’ column in revised table.
- Indicative Adjacent Land-use: column removed as regional moderation showed this and the catchment significance columns were confusing when RCAs reviewed their automated layer as this information was taken too literally – i.e. if a street is situated within or adjacent to a university or polytechnic campus it is P1 regardless of its actual function.
- Catchment significance: this metrics column removed as per previous comment on indicative adjacent land-use.
- Intensity of use: column removed as included in ‘Level of on-street activity’ column in revised table. Also probably not needed as a specific measure as data likely difficult/expensive to collect and subjective assessment of the use of area by pedestrians arguably just as useful.

Street Families

- Explanations of each of the urban and rural road/street categories revised to include:
  - Findings/decisions from the national moderation process, if applicable.
  - General definition.
  - Place/movement rankings.
  - Function.
  - Table that sets out:
    - Density of on-street activity.
    - Intensity of use (dwell time).
    - Adjacent land-use (indicative).
    - Place function – primary attributes.
    - Movement function – primary attributes.
    - Photos showing current examples of each of the categories.

Movement

- Movement function diagram included in revised document.
- Movement table revised. Detailed changes were:
    - ‘Nature of Movement’ and ‘Strategic Hierarchy’ columns combined into one ‘Nature of Movement’ column and content combined.
    - Addition of ‘all modes’ to column heading to make this clear.

Modal information

- Included in Appendices.
- Edited.
- Modal tables not changed.

Approach to classification

- Revised and updated to include a general overview of classification.

Classification Guidance

More movement and place classification resources, including ONF Classification Guidance can be found on this page or at www.nzta.govt.nz/onf.