

One Network Framework - quick reference tables

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JUMP TO TABLE: [PLACE](#) | [MOVEMENT](#) **MODAL CLASSIFICATIONS:** [GENERAL TRAFFIC](#) | [FREIGHT](#) | [PUBLIC TRANSPORT](#) | [CYCLING](#) | [WALKING](#) **STREET CATEGORIES:** [URBAN](#) | [RURAL](#)

MOVEMENT AND PLACE

ONF DETAILED DESIGN 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Little discernible on-street activity 	Mostly rural except for State Highways (motorways/ expressways) in urban areas	Negligible pedestrian movement

ONF DETAILED DESIGN 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

MODAL CLASSIFICATIONS

ONF DETAILED DESIGN 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

ONF DETAILED DESIGN 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

ONF DETAILED DESIGN 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.

ONF DETAILED DESIGN 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.

ONF DETAILED DESIGN 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.

STREET CATEGORIES

URBAN

Street category	Description (general)	Function (category provides)	Density of on-street activity	Intensity of use ¹ (dwell time)	Adjacent land-use (indicative)	Place – primary attributes	Movement – primary attributes
City hubs: <ul style="list-style-type: none"> • P1/2 • M1² 	City hubs are dense and vibrant places as they are the central point of a city where people spend time working, shopping, meeting other people, visiting entertainment venues and businesses. They support very high levels of through movement of people, particularly travelling by public transport & walking/cycling.	<ul style="list-style-type: none"> • 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 through movement of people, particularly travelling by public transport & walking/cycling • Focal point – centre of public and social life of city, both day and night 	Very high	Very high	<ul style="list-style-type: none"> • High rise office blocks • High rise apartments • Central city shopping & entertainment venues • Major commercial centres • City Hubs are located within the CBDs of major cities 	<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • 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 formal crossing opportunities at key intersections allowing for easy crossing of the road/street • Cycle parking facilities • Limited time bound parking for private motor vehicles
Main streets: <ul style="list-style-type: none"> • P1/2 • M2/3 	Main streets generate high levels of on-street pedestrian activity by people working, visiting shops, businesses, and entertainment venues. They aim to support businesses and public life while making sure there are excellent connections with the wider transport network. Main Streets need to balance the interaction between the movement of people and goods and on-street activity ³ . They accommodate medium to high levels of people walking, cycling, using public transport, or driving through the area.	<ul style="list-style-type: none"> • 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 	High	High/very high	<ul style="list-style-type: none"> • Office blocks • Low rise apartments • Entertainment venues • Retail • Commercial businesses • Community facilities 	<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • All modes - high pedestrian numbers • In cities often a core public transport prioritised • 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.
Activity streets: <ul style="list-style-type: none"> • P2/3 • M2-M4 	Activity streets provide access to shops, entertainment venues, community facilities and commercial, trades and industrial businesses for all people, whether walking, cycling, using public transport, or driving. Activity Streets are where 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.	<ul style="list-style-type: none"> • Access to adjacent land-use for all modes • Accommodates medium/high levels of through movement for all modes 	Medium	Medium/high	<ul style="list-style-type: none"> • Office blocks • Low rise apartments • Retail • Entertainment venues • Commercial/trades • Community facilities • Industrial 	<ul style="list-style-type: none"> • In CBDs of cities high pedestrian numbers accessing adjacent land-use • Some on-street amenities (e.g., al fresco dining, street furniture)⁴ • Some people spending time in the area (e.g., visiting businesses and gathering at destinations) 	<ul style="list-style-type: none"> • 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 destination • Formal crossing opportunities to facilitate pedestrian movement across street/road. • Limited cycle parking facilities.

¹ Intensity of use is a measure of how much the off-carriageway space is being used, by people dwelling in the space, eating al-fresco, browsing market stalls, window shopping, or just relaxing on a bench seat

² Note, that 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

³ Particularly in provincial towns where the Main Street is a State Highway

⁴ Note, that 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

Local streets: <ul style="list-style-type: none"> • P3/4 • M4/5 	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.	Access to: <ul style="list-style-type: none"> • People's homes • Schools and community facilities (e.g. churches) • individual commercial/ industrial business in mixed use zone 	Low-medium	Low/medium	<ul style="list-style-type: none"> • Residential use • Schools • Community facilities • Low intensity commercial/ industrial⁵ 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Low levels of movement of all modes • Due to the low levels of vehicle movement, people can usually cross the street at any point
Civic spaces: <ul style="list-style-type: none"> • P1/2 • M4/5 	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. There are very high numbers of pedestrians moving around and through the space while there is little or no through movement for motor vehicles.	<ul style="list-style-type: none"> • Access to adjacent land-use primarily for pedestrians • High quality places where people want to visit, spend time, meet, and gather 	Very high - medium ⁶	Very high	<ul style="list-style-type: none"> • Office blocks • Apartment buildings • Shopping & entertainment venues • Commercial businesses • Community facilities 	<ul style="list-style-type: none"> • Very high numbers of people spending time in the area (e.g., visiting businesses, meeting other people, gathering at destinations) • On-street amenities (e.g., al fresco dining, street furniture, green spaces, planting, public art works) 	<ul style="list-style-type: none"> • 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
Urban connectors: <ul style="list-style-type: none"> • P3/4 • M1/3 	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.	Provides safe, reliable, and efficient movement of people and goods between different parts of urban areas	High – low	Low	<ul style="list-style-type: none"> • Full range of urban land-use – from suburban residential to the CBDs of cities • Connector roads in industrial areas 	<ul style="list-style-type: none"> • Low levels of pedestrian activity associated with people moving through an area or along the side of the road/street 	<ul style="list-style-type: none"> • 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
Transit corridors: <ul style="list-style-type: none"> • P5 • M1 	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 bus ways	Motorways/expressways provide fast and efficient movement of people and goods within urban areas	Low	Low	Low density residential or industrial usually separated from the Transit corridor	<ul style="list-style-type: none"> • Motorways and expressways usually separated from adjacent land use so no on-street activity 	<ul style="list-style-type: none"> • Mass transit corridors for private motor vehicles, freight and public transport (also includes heavy rail networks)

⁵ 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 (e.g. dairies, day care centres etc). Sometimes these destinations might be located near or adjacent to each other.

⁶ Noting that civic spaces occur in urban areas – from our major cities to provincial towns

RURAL

Street/road category	Description (general)	Function (category provides)	Density of adjacent activity	Intensity of use ⁷ (dwell time)	Adjacent land-use (indicative)	Place – primary attributes	Movement – primary attributes
Inter-regional connectors: <ul style="list-style-type: none"> • P4/5 • M1 	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. There are people cycling on the routes that connect to the NZ Cycle Trail.	Safe, reliable, and efficient long-distance movement of people and goods between and within regions	Low	Low	<ul style="list-style-type: none"> • Farmland • Conservation land • Natural areas 	<ul style="list-style-type: none"> • Low levels of roadside activity associated with residents going about their daily lives 	<ul style="list-style-type: none"> • Very high/high levels of motor vehicle traffic, including freight
Rural connectors: <ul style="list-style-type: none"> • P5 • M2/3 	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.	<ul style="list-style-type: none"> • Movement of people and goods between different parts of rural areas • Linking rural roads with State Highway network • Access to adjacent land use 	Low	Low	<ul style="list-style-type: none"> • Farmland • Conservation land • Natural areas 	<ul style="list-style-type: none"> • Low levels of roadside activity associated with residents going about their daily lives 	<ul style="list-style-type: none"> • High-medium levels of motor vehicle traffic, including freight
Rural roads: <ul style="list-style-type: none"> • P5 • M4/5 	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	Access to rural land	Low	Low	<ul style="list-style-type: none"> • Farmland • Conservation land • Natural areas 	<ul style="list-style-type: none"> • Low levels of roadside activity associated with residents going about their daily lives 	<ul style="list-style-type: none"> • Low levels of motor vehicle traffic, including freight
Peri-urban roads: <ul style="list-style-type: none"> • P4 • M2-M5 	Peri-urban roads provide access to residential property in rural settlements, lifestyle blocks, subdivisions 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.	Access to residential property where the predominant adjacent land-use is residential, but at a lower density than that found in urban residential locations	Low	Low	<ul style="list-style-type: none"> • Small rural hamlets/settlements • Residential properties on outskirts of towns and cities • Life-style blocks • Sub-divisions 	<ul style="list-style-type: none"> • Low levels of roadside activity associated with residents going about their daily lives 	<ul style="list-style-type: none"> • 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)
Stopping places: <ul style="list-style-type: none"> • P3 • M1- M5 	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.	Identifies a rural destination that increases activity on the roadside and directly uses the road for access. Often an intervention is required to mitigate safety issues caused by the increased activity on higher movement corridors	Low - medium	Low - medium	<ul style="list-style-type: none"> • Rural schools • Marae • Community facilities • Tourist attractions • Scenic sites 	<ul style="list-style-type: none"> • Increased pedestrian activity within the section of corridor designated as a Stopping Place 	<ul style="list-style-type: none"> • Increased activity by all modes at these locations including pedestrians often crossing the road

⁷ Intensity of use is a measure of how much the off-carriageway space is being used, by people dwelling in the space, eating al-fresco, browsing market stalls, window shopping, or just relaxing on a bench seat