

# One network road classification - functional classification

ROAD & STREET CATEGORIES/CRITERIA	FUNCTIONAL CRITERIA AND THRESHOLDS										
	MOVEMENT OF PEOPLE & GOODS				ECONOMIC AND SOCIAL						
	LINK		PLACE		LINK		PLACE				
	TYPICAL DAILY TRAFFIC (AADT) <sup>1</sup>	HEAVY COMMERCIAL VEHICLES <sup>2</sup> (daily flows)	BUSES (urban peak) <sup>3</sup>	ACTIVE MODES <sup>4</sup>	LINKING PLACES	CONNECTIVITY	FREIGHT - INLAND PORTS/PORTS (per annum)	AIRPORT PASSENGER NUMBERS (per annum) <sup>5</sup>	TOURISM <sup>6</sup>	HOSPITALS	
<b>NATIONAL</b> Meet 3 criteria (incl. at least 1 of Typical Daily Traffic, HCV or Buses & 1 economic or social)  <b>(HIGH VOLUME)</b> Meet at least 1 high volume (Typical Daily Traffic or HCV)	U: > 25,000 15,000	R: >	>800	Significant numbers of pedestrians and cyclists (urban peak) or part of identified cycling or walking network	>100,000 population <sup>8</sup>		>2 million tonnes (or >\$3 billion) <sup>9</sup>	>3 million <sup>10</sup>			
	U: > 35,000 20,000	R: >	>1200								>40 buses or 2000 people per hour
<b>REGIONAL</b> Meet 2 criteria (incl. at least 1 of Typical Daily Traffic, HCV or Buses & 1 economic or social)	U: > 15,000 10,000	R: >	>400		>40 buses or 2000 people per hour	>30,000 population <sup>11</sup>	Linking remote regions (regional councils) or sole connectivity in urban areas	>1 million tonnes <sup>12</sup>	>500,000 <sup>13</sup>	Top 5 tourist destinations	Access to tertiary hospitals
	U: > 5,000 3,000	R: >	>300		>15 buses or 750 people per hour	>10,000 population <sup>14</sup>	Critical Connectivity (no alternative routes)	>250,000 <sup>15</sup>			Access to regional hospitals
<b>PRIMARY COLLECTOR</b> Meet 1 criteria (incl. at least 1 of Typical Daily Traffic, HCV or Buses)	U: > 3,000 1,000	R: >	>150		>6 buses or 300 people per hour	>2,000 population				Regionally or locally significant tourist destinations or significant scenic routes	
<b>SECONDARY COLLECTOR</b> Meet 1 criteria (incl. at least 1 of Typical Daily Traffic or HCV)	U: > 1,000 > 200	R:	>25			>250 population					
<b>ACCESS</b> All other roads  <b>(LOW VOLUME)</b> Meet low volume Typical Daily Traffic	U: < 1,000 < 200	R:	<25		<250 population		<1 million tonnes	<250,000			

### Functional Classification

There are criteria and thresholds for each category, based on the functions the road performs within the network. To be included in a particular category a road must meet the agreed criteria and thresholds, including at least one of either – typical daily traffic (AADT), heavy commercial vehicles (HCV), or bus (urban peak) as appropriate.

#### The six functional categories are:

- **National:** These are roads that make the largest contribution to the social and economic wellbeing of New Zealand by connecting major population centres, major ports or international airports and have high volumes of heavy commercial vehicles or general traffic. They must meet the thresholds for 3 criteria, including at least one of the following movement criteria (Typical Daily Traffic, Heavy Commercial Vehicles or Buses, Urban Peak) and at least one of the economic and social criteria (i.e. 3 in total). To be included in the high volume subset a road must meet one of the high volume criteria for typical daily traffic or HCVs.
- **Regional:** These roads make a major contribution to the social and economic wellbeing of a region and connect to regionally significant places, industries, ports or airports. They are also major connectors between regions and in urban areas may have substantial passenger transport movements. As well as meeting at least one of the following movement criteria (Typical Daily Traffic, Heavy Commercial Vehicles

or Buses, Urban Peak) these roads need to meet at least one of the economic and social criteria (i.e. 2 in total).

- **Arterial:** These roads make a significant contribution to social and economic wellbeing, link regionally significant places, industries, ports or airports and may be the only route available to some places within the region (i.e. they may perform a significant lifeline function). In urban areas they may have significant passenger transport movements and numbers of cyclists and pedestrians using the road. As well as meeting at least one of the following movement criteria (Typical Daily Traffic, Heavy Commercial Vehicles or Buses Urban Peak) they also need to meet at least 1 other criteria (i.e. 2 in total). The other criteria should then be considered to provide a local 'ground truthing' check, and in some instances by considering these this may result in a road moving up or down a category to reflect the function of the road.
- **Primary Collector:** These are locally important roads that provide a primary distributor/collector function, linking significant local economic areas or areas of population. They may be the only route available to some places within the region and in urban areas they may have moderate passenger transport movements and numbers of cyclists and pedestrians using the road. These roads need to meet at least one of the movement criteria (Typical Daily Traffic, Heavy Commercial Vehicles or Buses Urban Peak - (i.e. 1 in total). The other

criteria are then be considered to provide a local 'ground truthing' check, and in some instance by considering these criteria, this may result in a road moving up or down a category to reflect the function of the road.

- **Secondary Collector:** These are roads that provide a secondary distributor/collector function, linking local areas of population and economic sites and may be the only route available to some places within this local area. These roads need to meet at least one of the movement criteria (Typical Daily Traffic or Heavy Commercial Vehicles - i.e. 1 in total). The other criteria are then be considered to provide a local 'ground truthing' check, and in some instance by considering these criteria, this may result in a road moving up or down a category to reflect the function of the road.
- **Access:** These are all other roads. Low volume roads within this category will fall into the low volume subset.

In the Primary/Secondary Collector and Access road categories we propose that the criteria other than the Typical Daily Traffic, Heavy Commercial Vehicles, Bus Urban Peak can be used to move a road up a category on the basis of local knowledge. For example, an Access road may provide critical connectivity or provide access to a regionally or locally significant tourist destination warranting it moving up a category to Secondary Collector even though it does not conform to the movement criteria for that category.

1. Proxy for traffic generators with both economic and social dimensions such as employment, shopping areas and schools/tertiary institutions
2. Proxy for economic productivity – connecting major industrial/commercial and distribution centres to markets.
3. Proxy for bus link and density of 'exchange' place function
4. Proxy for density of 'exchange' place function
5. Proxy for economic productivity
6. Proxy for economic productivity
7. U - Urban, R - Rural
8. Top 7 cities as defined in the Transport Agency Planning Policy and Funding Manual – Auckland, Hamilton, Tauranga, Napier/Hastings, Wellington, Christchurch, Dunedin.
9. Top 8 ports – Tauranga, Auckland, Christchurch, New Plymouth, Marsden, Dunedin, Wellington, Napier plus Auckland International Airport. Break point in tonnages/values.
10. Top 3 airports – Auckland, Wellington, Christchurch. Break points in data.
11. Statistics NZ definition of main urban area
12. Next 3 ports – Picton, Nelson, Bluff
13. Next 2 airports – Queenstown, Nelson
14. Statistics NZ definition – secondary urban area
15. Next 5 airports – Dunedin, Palmerston North, Hamilton, Rotorua, Napier