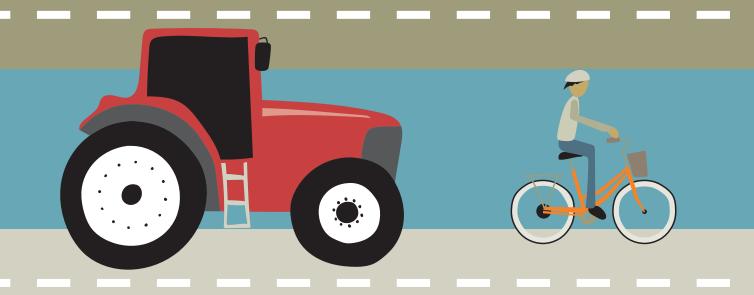
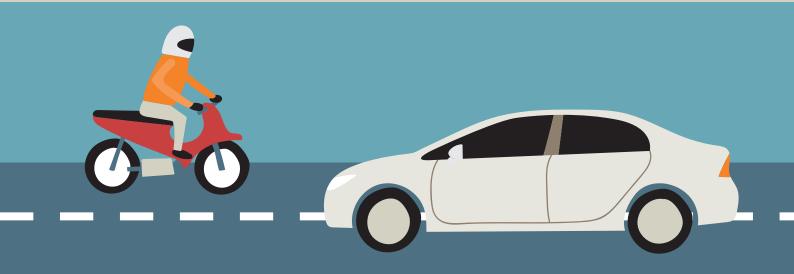
# One Network Road Classification (ONRC) Performance Measures

A General Guide





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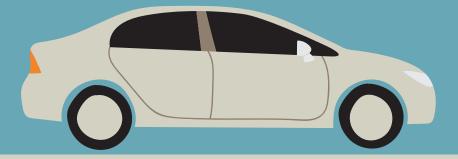


### Who should read this guide?

This guide provides an overview of the One Network Road Classification (ONRC) and important context for the detailed descriptions in the *One Network Road Classification Performance Measures: a guide to practical application.* 

If you are an elected member, council manager, contractor or other interested party, this document will help you understand the road management framework. You will be able to ask the right questions of road managers and contractors, to ensure that your region gets the best road network for money spent. You will be able to understand how your road infrastructure fits into local, regional and national priorities.

If you are reporting against the ONRC Performance Measures for a Road Controlling Authority (RCA), you should read this **first** – the high level priorities and messages will be invaluable when considering individual measures; building your business case for the National Land Transport Plan (NLTP); and in discussions with managers and elected members.



### Introduction

The One Network Road Classification (ONRC) supports a major shift in the road management framework at national and regional levels. Successful implementation requires not just a change in reporting, but also in our thinking about road infrastructure and its purpose. It is a **minimum requirement** that the ONRC is embedded in investment decision making for the 2018-21 NLTP.

The most important concept behind the ONRC is that it places the customer at the heart of every investment decision.

It is an opportunity to work smarter, moving beyond embedded maintenance schedules, which have in some cases led to major local variances in the quality of roads with similar user profiles. This inconsistency poses problems for transport companies and others seeking to get goods to market, when they must cover roads of widely and unpredictably varying condition. There are also equity issues where a producer in, say, Whangarei faces greater difficulty getting the same goods to market compared to a producer in Tauranga or Southland. The ONRC provides national standards for road activity management, in a step towards ensuring equity and consistency.



### What is the One Network Road Classification?

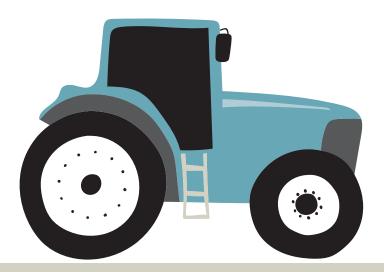
The ONRC divides New Zealand's roads into six categories based on how busy they are, whether they connect to important destinations, or are the only route available:

- National link major population centres and transport hubs
- Arterial link regionally significant places and industries
- Regional major connectors between and within regions; often public transport routes
- Primary collector link significant local populations and industries
- Secondary collector provide secondary routes, can be the only route to some places
- Access small roads facilitating daily activites

The ONRC was developed by local government and the NZ Transport Agency as a joint initiative and was completed in December 2013.

All councils submitted their classified networks for moderation in 2015.

Through this simple classification, RCAs and the Transport Agency can now compare the state of roads across the country, and direct investment where it is needed most. Users will see an increase in the quality of some roads, and a decrease in others that have been over-specified in the past. Overall, RCAs and their ratepayers will get the right level of road infrastructure where it is needed, determined by a robust, impartial, nationally consistent tool – the ONRC.



#### **The One Network Road Classification**

#### **ACCESS**

This is often where your journey starts and ends. These roads provide access and connectivity to many of your daily journeys (home, shops, school, etc). They also provide access to the wider network.

# SECONDARY COLLECTOR

These are roads that provide a secondary distributor/collector function, linking local areas of population and economic sites. They may be the only route available to some places within this local area.

# PRIMARY COLLECTOR

These are locally important roads that provide a primary distributor/collector function, linking significant local economic areas or population areas.



#### **REGIONAL**

These roads make a major contribution to the social and economic wellbeing of a region and connect to regionally significant places, industries, ports and airports. They are major connectors between regions and, in urban areas, may have substantial passenger transport movements.

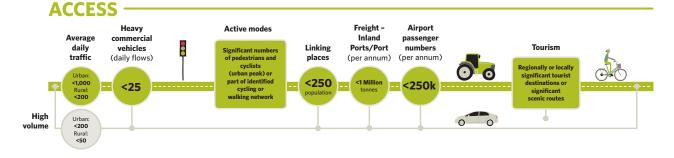
#### **ARTERIAL**

These roads make a significant contribution to social and economic wellbeing, linking regionally significant places, industries, ports or airports. They may be the only route available to important places in a region, performing a 'lifeline' function.

#### **NATIONAL**

These roads 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.

#### **The One Network Road Classification**



#### **SECONDARY COLLECTOR**



#### **PRIMARY COLLECTOR** -



#### **ARTERIAL** -



#### **REGIONAL**



#### **NATIONAL**



# **Customer Levels of Service**

Once a road has been classified under the ONRC, it should be maintained to the Customer Level of Service (CLoS) for roads of its type. The Customer Levels of Service are:

- Mobility (travel time reliability, resilience of the route)
- Safety
- Amenity (travel quality and aesthetics)
- Accessibility (land access and road network connectivity)



# **Performance Measures**

RCAs will know they are addressing their Customer Levels of Service by using the ONRC Performance Measures.

For example for a good Safety outcome, instead of measuring the length of roadside grass, you would evaluate whether motorists' sightlines are adequate. The focus shifts from technical solutions to customer outcomes, and because of this the performance measures do not prescribe specific operational tasks. RCAs can come up with their own solutions and work programmes, as long as they demonstrate good customer focus – the customer includes both users and tax/rate payers.

There are three types of ONRC performance measures:

- Customer Outcome
- Technical Output
- Cost Efficiency

Together, they measure an RCA's efficiency and effectiveness at meeting the Customer Levels of Service.

The Performance Measures are a key tool for RCAs when building their business cases for national funding. RCAs don't have to use every performance measure for every road, as long as they demonstrate that they are addressing all Customer Levels of Service. RCAs can also supply additional information if the performance measures do not adequately support the arguments for their business cases.

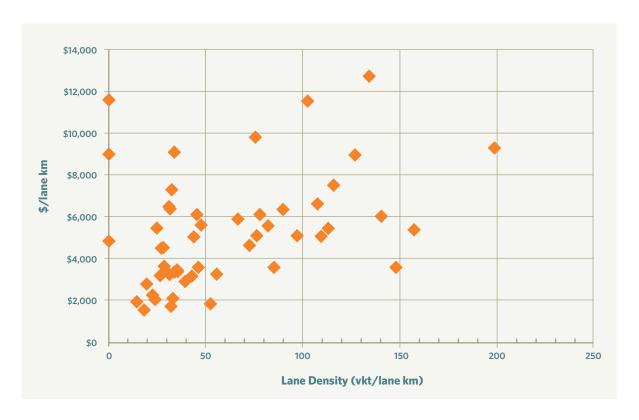


# **Benchmarking**

As the evidence base grows, the ONRC and its performance measures will enable us to benchmark the performance of each RCA's network. We will be able to easily identify varying levels of customer outcome across the country, and inconsistency of costs.

The graph below shows the maintenance, renewals and improvements expenditure of rural councils between 2004 – 2013 on the basis of cost per lane kilometre and lane density (traffic flow).

# Cost/lane km vs Lane Density — "Rural" Networks Maintenance, Renewals, Improvements Expenditure 2004-2013



Clearly there are wide differences in cost (and quite possibly data accuracy) between RCAs. There can be good reasons for cost inconsistencies – for example an access road in hill country costs more to maintain than an access road across flat, well-drained land. You will be able to use the nationally consistent ONRC data to assess and compare the cost of roads in your region:

- Do costs reflect over- or under- delivery of service?
- Is work meeting identified customer need?
- Are interventions timely?
- Are you getting the best outcome for the best cost?

In answering these questions, RCAs develop a compelling business case to address key areas of need.

#### **Applying the Performance Measures to your Business Case: an example**



When it is reporting and benchmarking customer outcome measures, an RCA finds it is under-performing on Resilience outcomes. Their customers on Primary and Secondary Collector roads lose an unacceptable number of journeys during minor flood events. They have identified a strategic case for change.



They use the ONRC Technical Output Measures as a guide in their Asset Management Planning, and by also working closely with neighbouring networks, the RCA is able to define the problem with consistent evidence.



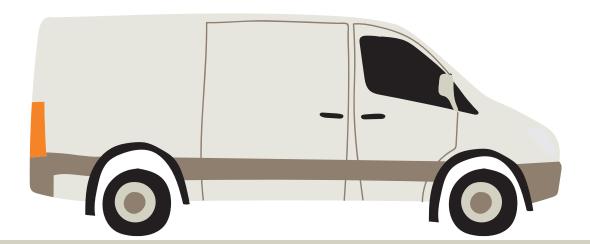
They can now pinpoint their vulnerable routes, the viable alternatives (including through neighbouring networks) and the specific interventions needed to manage the risk of closure to more acceptable levels and at the least whole-of-life cost. They also establish that they are not informing customers of closures quickly enough to influence their journey choices when closures cannot be mitigated.



On the other hand, they find their performance on Amenity outcomes is too high. Rather than compromising their cost efficiency by asking for more money, they reprioritise their investment out of Amenity and into making their routes more resilient, especially as journey reliability is a key contributor to economic productivity and growth.



The roading team is also collaborating with neighbouring councils, their regional council and NZ Transport Agency to utilise rainfall and river flow modelling, and also to communicate to customers via a central communication hub.



## How the ONRC creates new opportunities

The ONRC's customer levels of service and performance measures are a new way of working, and in the early stages this can seem onerous. Some may also be concerned that it will lead to budget cuts.

There is no question that value-for-money is driving this change in the funding structure. Spending on roads has increased unsustainably over the past decade, which cannot continue. However the ONRC has been created as a way of turning this limitation into an opportunity for smarter activity management and greater collaboration.

Once the ONRC is embedded, RCAs will have access to far better information about the whole road network. They will be able to exchange information and learn from each other, because they have consistent information to aid comparison – comparing apples with apples, instead of peaches or pears. For the same reason, RCAs will be able to collaborate across boundaries, achieving greater efficiencies and more consistency for the customer. New Zealand will have a stronger road network to support economic growth.

